



# Summit Avenue Regional Trail Plan

Saint Paul, MN | 2023

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### Partner and Agency Contribution

This icon indicates sections of the Plan that were shaped by contributions from and collaboration with partner agencies.



### Community Feedback Icon

Look for this icon in the document highlighting areas of focus generated by insights, feedback, and concerns from community members throughout engagement.

These topics will be important considerations for future phases of implementation, design, and engineering of a trail facility.

# Acknowledgments

## Design Advisory Committee\*

**\*NOTE:** Organizations listed reflect those of which project staff reached out to as part of the Design Advisory Committee process. The degree to which participants engaged in the process varied by organization.

**Acknowledgment does not reflect an organization's endorsement of the Regional Trail Plan.**

Summit Hill Association  
Capitol River Council  
Macalaster-Groveland Community Council  
Union Park District Council  
Summit-University Planning Council  
Friends of Saint Paul and Ramsey County  
Parks and Trails  
Disability Hub MN  
Saint Paul Bicycle Coalition  
Summit Avenue Residential Preservation Association (SARPA)  
Grand Ave Business Association  
Rondo Center of Diverse Expression  
Saint Paul Youth Commission  
Lexington-Hamline Community Council  
Governor's Residence  
Summit Manor Reception House  
University of St. Thomas  
Macalaster College  
Saint Paul College  
Hidden River Middle School  
Mitchell Hamline School of Law  
Cathedral of Saint Paul  
Ramsey Hill Association  
Saint Paul Parks Conservancy

## Technical Advisory Committee

City of Saint Paul  
*Parks and Recreation*  
*Forestry*  
*Operations and Maintenance*  
*Transportation Planning and Safety*  
*Civil Engineering and Street Design*  
*Structural Engineering*  
*Planning and Economic Development (PED)*  
*Heritage Preservation Commission (HPC)*  
*Natural Resources*  
*Real Estate*  
Bolton & Menk, Inc  
Minnesota Department of Transportation (MnDOT)  
State Historic Preservation Office (SHPO)  
Department of Natural Resources (DNR)  
National Park Service (NPS)  
Capitol Region Watershed District (CRWD)  
Capitol Area Architectural and Planning Board (CAAPB)  
Ramsey County  
Metropolitan Council  
*Metropolitan Environmental Services*  
*Metro Transit*  
*Community Development*

## Project Team

### City of St. Paul

Andy Rodriguez (*Director of Parks and Recreation*)  
Sean Kershaw (*Director of Public Works*)

### *Parks and Recreation Design and Construction*

Mary Norton  
Brett Hussong  
Katie Hamerlinck  
Alice Messer

### *Public Works*

Reuben Collins  
Barb Mundahl  
HunWen Westman  
Jimmy Shoemaker  
Eric McCarthy  
Nick Peterson

### *Parks and Recreation Forestry*

Rachel Coyle  
Zach Jorgensen  
Brianna Bacher

### *Planning and Economic Development*

Bill Dermody  
George Gause  
Allison Suhan Eggers

### *Communications*

Clare Cloyd  
Lisa Hiebert

### **Consultant Team**

#### ***Bolton & Menk***

Scott McBride  
Maddie Dahlheimer  
Cody Christianson  
Mikaela Isaacson  
Renee Barnes

# Acknowledgments

## Land Acknowledgment

Saint Paul stands on the ancestral, traditional, and contemporary Dakota homelands.

As we consider that the many legacies of violence, displacement, migration, and settlement has brought us to current day, we commit to understanding, respecting, supporting, and advocating for Indigenous People and for this land.

Let this land acknowledgment be more than a reminder. Let it be a marker in time of dedicating ourselves to be better and do better. Through this land acknowledgment, let us lead to make changes which respect history.



## Plan Name

Please note that the name of the 90% draft plan has changed. As the City of Saint Paul takes initial steps to acknowledge its role in systemic racism, we recognize the power of language. The term “master”, which is often defined as commanding control or being eminently skilled, has been identified as a word to remove in certain contexts due to its connection with the history of masters and slavery in the United States.<sup>1</sup>

<sup>1</sup> : Plan for Cedar Lake and Lake of the Isles | [https://www.minneapolisarks.org/park-care-improvements/park-projects/current\\_projects/cedar-lake-lake-of-the-isles-cedar-isles-master-plan/](https://www.minneapolisarks.org/park-care-improvements/park-projects/current_projects/cedar-lake-lake-of-the-isles-cedar-isles-master-plan/)





# Introduction and Planning Framework

## Statement of Need

A notable parkway within the City of Saint Paul, Summit Avenue has been an important civic thread for recreation and transportation since its inception in the late 1800s. A parkway characterized by its grand boulevards and distinctive residential architecture, formally designed to create a continuous park-like experience from downtown Saint Paul to the Mississippi River. As described in the City's 1986 'Summit Avenue Plan', Summit Avenue is "a major, critical spoke in the City's structure, providing the community both form and beauty."

This critical spoke has been a part of local and regional planning fabric for decades. The parkway experience shaped from these visionary plans creates recreational opportunities every day for many people along a green oasis in the City of tree-lined boulevards and wide green space medians.

Embedded in this parkway experience, the City of Saint Paul Parks and Recreation Department looks towards the future of recreation by planning for a regional trail across the City. This trail would move people along Summit Avenue, Kellogg Boulevard, and Eagle Parkway, creating connections between the Mississippi Gorge Regional Park to the Samuel H. Morgan Regional Trail.

### *The Summit Avenue Regional Trail*



## *A Parkway Connection Across the City*

# Statement of Need

## Local Bikeway

The local, on-street bikeway on Summit Avenue is one of the most heavily used bicycle routes in Saint Paul.<sup>1</sup> The bicycle lanes on Summit were introduced in the early 1990s making them some of the oldest bike lanes in the City.

The paved roadway space is currently striped on-street to create bicycle lanes, positioning the bicyclist between moving vehicles and parked cars. Creating the Summit Avenue Regional Trail would create a protected trail space, separating vehicles and bicyclists to increase comfort and perception of safety in a way that can suit all users and abilities.

Traffic along Summit Avenue ranges from 3,500 – 11,000 vehicles per day.<sup>2</sup> Federal, state, and local industry standards reflect recommendations to provide separated bicycle facilities when the number of average vehicles per day exceeds 6,500.

The Summit Avenue corridor has experienced a number of crashes along its approximately 4.5 mile length route from Mississippi River Boulevard to Kellogg Boulevard. Within a ten-year timeframe between **2012 to 2021 there has been a total of 31 bicyclist involved crashes along the corridor (or 3 per year on average), 90% of which resulted in an injury or fatality.**<sup>3</sup>

While the nature and circumstances of crashes vary, the less time a vehicle and pedestrian or bicyclist can potentially share the same space as a vehicle, the less opportunity there is for conflict.

<sup>1</sup> : Saint Paul Public Works Pedestrian and Bicycle Traffic Count | <https://www.stpaul.gov/departments/public-works/transportation-and-transit/bike-saint-paul/pedestrian-and-bicycle-traffic>

<sup>2</sup> : MnDOT Traffic Forecasting and Analysis | <https://mndot.maps.arcgis.com/apps/webappviewer/index.html?id=7b3be07daed84e7fa170a91059ce63bb>

<sup>3</sup> : MnDOT and Ramsey County Crash Data Reporting | see appendix



# Statement of Need



Proposed alignment accounts for community interests in a facility that increases access, safety, and comfort.

## Existing Roadway

Pavement conditions in the corridor reflect a variety of surface conditions and in many segments, a high-priority for either resurfacing or street reconstruction. Many segments of Summit Avenue have not been reconstructed since the 1930s - almost 100 years.

Over time, roadways need to be reconstructed to replace aging infrastructure. The most cost-effective opportunities to add pedestrian and bicycle improvements are when roads are being fully redesigned. Developing a regional trail along Summit Avenue would be an opportunity to coordinate infrastructure improvements (including watermain replacement, sewer structures, and deteriorating utilities) while creating a significant recreational parks amenity for the region.

A significant community priority and common thread identified during the planning process focused on the near-term need for improved surface conditions along Summit Avenue.

## Safety & Types of Bicyclists

People walking and bicycling are the most vulnerable roadway users and are most at risk for serious injury or death when involved in motor-vehicle related crashes.<sup>1</sup>

Evaluating both objective safety benefits from design standards as well as perceived safety are important design considerations in developing a regional trail that can not only serve existing trail users but can meet the needs of potential users as well. Perceived safety and comfort can have impacts on whether or not people choose to use a facility.

Bicyclists have a range of user profiles ranging from those that are interested, but concerned to those that are highly confident riders. Designing a regional trail facility that meets the needs of the interested but concerned bicycle users increases the potential that more people choose to bike for transportation and recreation. ***This user group accounts for 51-56% of the total population of adults who have stated an interest in bicycling, whereas the highly confident riders account for 4-7%<sup>1</sup>.***

<sup>1</sup> : <https://www.dot.state.mn.us/bike/bicycle-facility-design-manual.html>



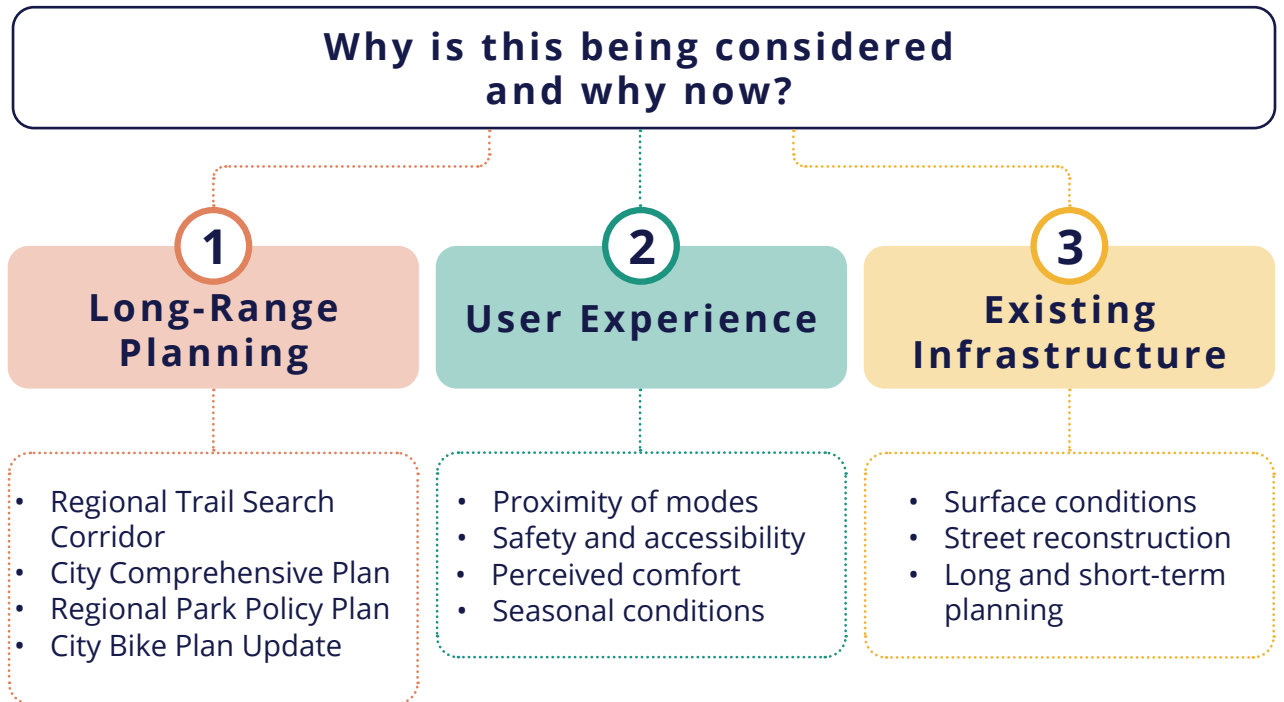
# Introduction

## Project Purpose

Summit Avenue has been an integral part of the Saint Paul community since the mid-1800s, and remains one of the most iconic and historic areas of the city. Over time, the purpose and use of this corridor has evolved with the needs of the community. This Plan aims to anticipate future needs of the corridor and plan implementation strategies that will maintain and preserve the important historic elements of Summit Avenue.

Project goals include:

- Evaluate and identify a regional trail alignment on Summit Avenue to improve recreation experience and safety for all users.
- Identify ways to balance the character of Summit Avenue when modernizing infrastructures including but not limited to trees, greenspace, parking, vehicles, recreation, and historical designation.
- Improve connectivity and public access to parkland.
- Support the evolving needs of users to create a more resilient, people-oriented corridor.



# Introduction

## Organization and Themes

The Plan includes analysis and recommendations at three scales:

- **Regional Scale:** includes the city of Saint Paul and adjacent cities; considers connections and access to regional amenities and existing transportation throughout the area
- **Corridor Scale:** focuses on the Summit Avenue corridor and adjacent streets
- **Segment Scale:** the corridor has been broken into seven segments to provide a more detailed look at each unique segment of Summit Avenue

Major themes explored within the Plan include:

- Regional greenspace amenities
- Mature canopy and greenspace
- Circulation, connectivity, and access
- Parking
- Historic and cultural context



Fig. 2-1 | Segments A-G within the Summit Avenue corridor



# Planning and Framework

## Metropolitan Council

### Regional Trail Search Corridor

The Summit Avenue Regional Trail has been designated as a regional trail search corridor in the Metropolitan Council's 2040 Regional Parks Policy Plan. Search corridors intend to connect regional park and trail amenities to one another. A key purpose of this document is to define an alignment for the Summit Avenue Regional Trail in order to achieve the goals set out in the 2040 Regional Parks Policy Plan.

The Metropolitan Council facilitates planning and funding for regional park and trail facilities including the proposed Summit Avenue Regional Trail corridor. A key objective for the Metropolitan Council within the Regional Parks System is preservation and restoration of natural resources to provide opportunities for recreation, stress reduction, and social interaction. As outlined in the Metropolitan Council 2040 Regional Parks Policy Plan, regional trails<sup>1</sup>:

- serve the entire metropolitan area
- are developed for one or more varying modes of nonmotorized recreational travel
- are a sufficient length to serve as a link between two or more regional parks
- connect public interest destinations
- serve as a backbone to local trail networks with regional trail functioning much like a regional highway
- include sufficient corridor width to

protect natural resources

- are off-road facilities; on-road facilities are acceptable when off-road trails are not feasible
- should not duplicate an existing trail
- should be placed where the trail treadway will have no adverse impact on the natural resources base

Regional trails are categorized further into Destination Trails and Linking Trails. These facilities meet all of the above characteristics and are distinct in that:

- **Regional Destination Trails** or Greenways are a sufficient length and highly scenic to be considered standalone destinations. They are preferably adjacent to high quality natural areas. Destination trails are visually separated from the road system (more than 50% off-road)
- **Regional Linking Trails:** when feasible, should attempt to connect to population, economic and social centers along its route. May be on-road separated facilities. The proposed Summit Avenue Regional Trail is a regional linking trail connecting the Mississippi Gorge Regional Park to the Samuel H. Morgan Regional Trail via downtown Saint Paul.

The designation type for units in the regional park system is based primarily on the function that unit will play in the system and does not specify how that unit is designed and developed. Regional Trails are



Plan document addresses community interest in Special Recreation Feature designation

designated to either connect two other units of the regional park system or to provide a trail setting along a high-quality natural area, usually with proximity to a body of water.

**Special Recreation Features** are designated to provide a highly-specific form of programming in a natural setting that is not available in other units of the regional park system. Special Recreation Features include in the publicly-owned parkland the building where that programming occurs (e.g. environmental education centers, farm buildings, or zoos/conservatories).

The Summit Avenue corridor is not planned to provide programming as an integral component of the corridor's design. The function of the corridor instead is to provide a recreational experience for walkers, bicyclists, and others wishing to connect to Mississippi Gorge Regional Park or to the Samuel Morgan Regional Trail. An alternative designation could be considered in the future if the function of the corridor changes over time and another designation type would better fit that future function. Existing planning documents adopted by the City provide parameters on how the Summit Avenue Regional Trail fits into the larger vision for the City. These planning documents are outlined on the following pages.

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<sup>1</sup> : 2040 Regional Parks Policy Plan | <https://metro council.org/METC/files/40/40d78518-295b-474e-a26c-e85f62b9e706.pdf>

# Previous Planning Documents

## 2040 Comprehensive Plan<sup>1</sup>

Saint Paul's Comprehensive Plan is a document meant to guide development in Saint Paul for the next 20 years. It includes policies to address physical development, focusing on racial and social equity, aging in community, community/public health, economic development, sustainability/resiliency and urban design. Key sections of the document are highlighted below.

**Celebrating Parks** is one of the core values shaping the comprehensive plan for the City. Summit Avenue with its wide vegetated medians is characterized by many as a linear park. The alignment and design elements of the regional trail will support this character and use.

**Community/Public Health** is listed as a focus area of the comprehensive plan. The existing corridor serves as both an active transportation and recreation corridor enabling people to meet their daily physical activity needs. Enhancing this aspect with the regional trail will expand this function of the corridor and the geographic reach of the recreational user. Implementation of the bike and pedestrian plans (outlined below) are included with the draft policy (policy # T-24 and T-25) to support community health for all.

Summit Avenue is identified as a major collector with an existing on-road bikeway.

Additionally, it has been identified as a Regional Bicycle Transportation Network (RBTN) Tier 2 Corridor.

### Regional Bicycle Transportation Network

The goals of the RBTN include establishing an arterial network of on-street bikeways and off-road trails throughout the metro area to accommodate bicycle trips connecting regional destinations.

Tier 1 and Tier 2 priority corridors are identified based on where they can most effectively promote active transportation mode choices (biking, walking, transit) and where supporting travel demand exists.

**Respecting our History and Culture** is an additional value listed in the Comprehensive Plan. Along with creating a safe and accessible regional trail facility, the implementation of this Plan offers the opportunity to preserve, rehabilitate, and reveal historic and cultural features within the corridor that reflect the multi-layered history of Summit Avenue and the region. The Heritage and Cultural Preservation chapter of the Plan recommends that City activities regarding historic preservation, rehabilitation, restoration, and reconstruction should be "sustainable and equitable; improve the quality of life for all residents and visitors; guide public and private investment; express a sense of place and pride; celebrate the racial, ethnic, and

cultural diversity of the community; and be embraced in all facets of the City's work"<sup>1</sup>. The **Transportation** chapter identifies the following goals. Notes on the subsequent policies which are applicable to this Planning process are included.

1. Investment that reflects the City's priorities
  - » T-3: Design per the following model hierarchy: pedestrians, bicyclists, transit, other vehicles
2. Safety and accessibility for all users
  - » T-7: Implement intersection safety improvements including pedestrian countdown times, leading pedestrian signal intervals, and other elements to lower motor vehicle speeds
  - » T-10: Design sidewalks, trails, and transit stops for personal safety (real and perceived)
  - » T-13: When street design changes involve the potential loss of on-street parking spaces, prioritize safety for all transportation modes. Explore mitigation of lost spaces where feasible and practical.
3. A transportation system that supports access to employment and economic opportunity.

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<sup>1</sup> :City of Saint Paul 2040 Comprehensive Plan | [https://www.stpaul.gov/sites/default/files/2022-01/CSP\\_2040\\_CompPlan\\_FinalAdopted\\_101521.pdf](https://www.stpaul.gov/sites/default/files/2022-01/CSP_2040_CompPlan_FinalAdopted_101521.pdf)

# Previous Planning Documents

4. True transportation choice throughout the city, with a shift from single-occupant vehicles toward other modes.
  - » T-21 Reduce vehicle miles traveled (VMT) by 40% by 2040
  - » T-24: Implement the Bicycle Plan
  - » T-25 Implement the pedestrian plan
5. Sustainable and equitable maintenance models.
6. Environmentally-sustainable design.
7. Functional and attractive Parkways.
  - » T-41: Maximize space for recreation and landscaping uses with Parkway rights-of-way, and prioritize recreation and landscaping in Parkway design in order to maintain a park-like feel, particularly on the Grand Round.
8. A system that responds to technology and shapes its implementation.

The **Land Use** chapter identifies the following goals. Notes on the subsequent policies which are applicable to this Planning process are included.

1. City-wide Land Use Goals
  - » LU-13: Support strategies, as context and technology allow, to improve off-street parking efficiency, such as shared parking agreements, district ramps, car sharing, electric vehicle charging and reduced parking overall.
  - » LU-15: Ensure that stand-alone parking uses are limited, and that structured parking is mixed-use and/or convertible to other uses.

2. Civic and Institutional Land Use Goals
  - » LU-54: Ensure institutional campuses are compatible with their surrounding neighborhoods by managing parking demand and supply, maintaining institution-owned housing stock, minimizing traffic congestion, and providing for safe pedestrian and bicycle access.

## The **Parks, Recreation, and Open Space**

chapter identifies the following goals. Notes on the subsequent policies which are applicable to this Planning process are included.

1. Equitable allocation of programs, resources and amenities.
2. People, programming and spaces responsive to changing needs.
  - » PR-9: Use customer and resident feedback on needs, satisfaction and trends to improve park experience, advance equity and bring in new users
3. Environmental and economic sustainability.
  - » PR-19: Improve the environmental sustainability and resiliency of parks through strategies such as shared, stacked-function green infrastructure; best management practices in stormwater management; increased tree canopy; increased plant diversity and pollinator-friendly plantings
4. A healthy network of community partnerships.

5. Strong and accessible connections.
  - » PR-35: Prioritize safety and equity when filling gaps in the trail and bikeway system to ensure seamless connections throughout the city for pedestrians and bicyclists of all ages and abilities.
  - » PR-36: Integrate parkways and trails with the city's broader transportation network to provide convenient and safe access to the park system.
  - » PR-38: Improve and encourage pedestrian and bicycle connections between park facilities and other significant destinations, such as lakes and rivers, schools, transit facilities and Neighborhood Nodes.
  - » PR-39: Emphasize safety, convenience and comfort when designing new trails or rebuilding those that already exist.
  - » PR-40: Provide interpretive elements to educate users about unique aspects of the park system
  - » PR-41: Provide consistent wayfinding signage in each project or park so that it is recognizable as part of the broader City system.
  - » PR-44: Support facility improvements that better connect neighborhoods to the Mississippi River

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<sup>1</sup> :City of Saint Paul 2040 Comprehensive Plan | [https://www.stpaul.gov/sites/default/files/2022-01/CSP\\_2040\\_CompPlan\\_FinalAdopted\\_101521.pdf](https://www.stpaul.gov/sites/default/files/2022-01/CSP_2040_CompPlan_FinalAdopted_101521.pdf)

# Previous Planning Documents

## 2040 Comprehensive Plan | Jobs, Transit, and Schools

Saint Paul's Comprehensive Plan includes a map with job concentrations and transit, highlighting the importance of Saint Paul's economic nodes and the need for safe, accessible transit to these areas<sup>1</sup>. The diagram below shows this map from the Comprehensive Plan, with the project corridor identified, and local schools noted with either a 1/2-mile radius (for elementary schools), or a 1-mile radius (middle and high schools, and colleges and universities). Adding these layers provides additional context for the proposed Summit Avenue Regional Trail not only for recreation and leisure, but as an important community connector to provide a safe way for people to get to school, work, and local businesses without a vehicle. More information about engagement with youth, and Safe Routes to School, see Chapter 2 of this document.

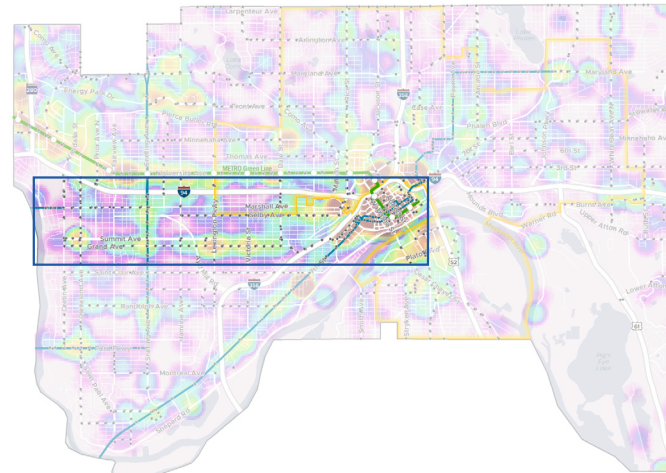
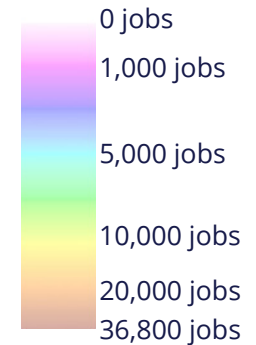


Fig. 2-3 | Job Concentrations and Transit Map from Saint Paul's 2040 Comprehensive Plan <sup>1</sup>

### Legend

- School Location
- School Walk Radius

### Job Concentration



<sup>1</sup> :City of Saint Paul 2040 Comprehensive Plan | [https://www.stpaul.gov/sites/default/files/2022-01/CSP\\_2040\\_CompPlan\\_FinalAdopted\\_101521.pdf](https://www.stpaul.gov/sites/default/files/2022-01/CSP_2040_CompPlan_FinalAdopted_101521.pdf)

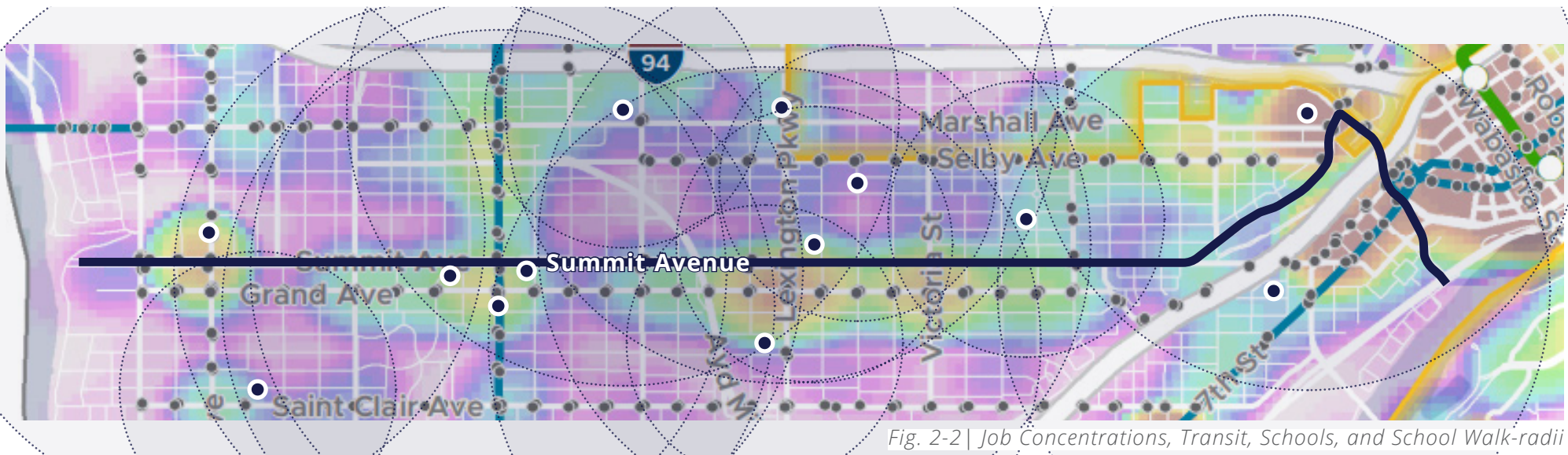


Fig. 2-2 | Job Concentrations, Transit, Schools, and School Walk-radii

# Previous Planning Documents

## 2015 Bicycle Plan<sup>1</sup>

Summit Avenue currently has in-road striped bike lanes from Mississippi River Boulevard to John Ireland Boulevard and, according to the 2015 Saint Paul Bicycle Plan, is a major bikeway. In the plan, Summit Avenue is categorized as an *in-street separated lane* which includes bike lanes, buffered bike lanes, one-way cycle tracks, or two-way cycle tracks.

Regional trail corridors are intended to provide for recreational travel along linear pathways for bicyclists, pedestrians, and other users throughout the metropolitan area. Regional trails must be designated by the Metropolitan Council and are intended to pass through or provide connections between components in the Regional Parks System. Regional trails are defined in the Metropolitan Council's Regional Parks Policy Plan. Regional parks and trails identified in the Regional Parks Policy Plan are eligible for other funding sources.

In urban areas such as Saint Paul, the regional trail network also plays an important function for transportation bicycling and often forms the backbone of the bicycle transportation network. Regional trail facilities are often developed along natural or linear features, which can limit the number of intersections, greatly enhancing safety and comfort for trail users.

The Saint Paul Bicycle Plan identifies the existing regional trail, other linear trails that pass through regional parks, planned regional trails, and regional trail search corridors. The regional trail search corridors include Summit Avenue. The Metropolitan Council requires implementing agencies to prepare a Plan document for all planned regional trails. Regional trail search corridors are defined by the Metropolitan Council in the Parks Policy Plan.

### Action Item 6.5.1

Actively pursue designation and development of additional regional trails...Identify regional trail alignments within the regional trail search corridors and prepare regional trail master plans for trails where alignments are known.

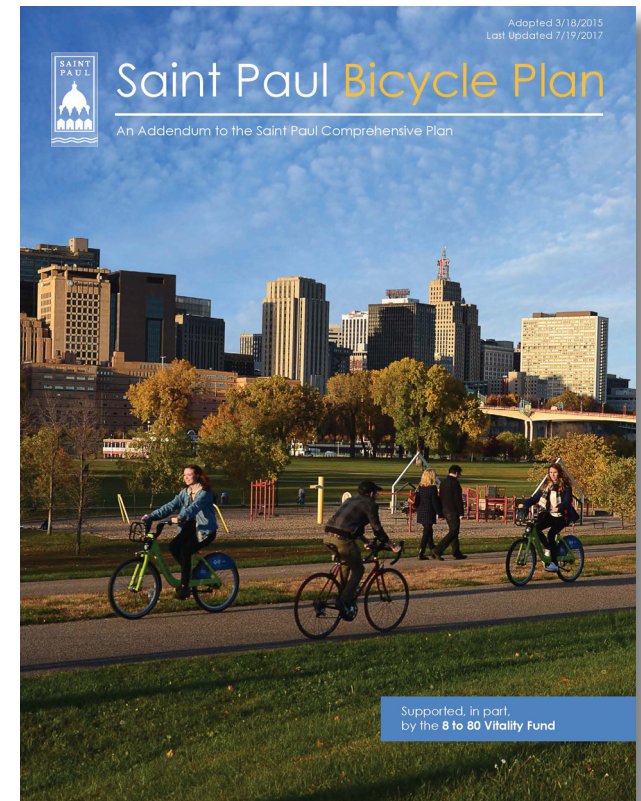


Fig. 2-4 | 2015 Bicycle Plan and Draft 2023 Bicycle Plan Update

<sup>1</sup> : Saint Paul Bicycle Plan | <https://www.stpaul.gov/sites/default/files/Media%20Root/Public%20Works/Saint%20Paul%20Bicycle%20Plan.pdf>  
<sup>2</sup> : [https://www.stpaul.gov/sites/default/files/2023-04/Saint%20Paul%20Bicycle%20Plan\\_DRAFT%2004.27.23c\\_0.pdf](https://www.stpaul.gov/sites/default/files/2023-04/Saint%20Paul%20Bicycle%20Plan_DRAFT%2004.27.23c_0.pdf)

# Previous Planning Documents

## 2019 Pedestrian Plan<sup>1</sup>

The Saint Paul Pedestrian Plan addresses citywide walking needs such as connecting the sidewalk system, providing safer ways to cross streets and education and enforcement programs to support safe walking. It includes recommendations to achieve the plan's vision: Saint Paul is a walking city—we are more healthy, resilient and connected when walking is safe and appealing for all.

Saint Paul community members have identified three priorities for making walking safer and easier:

- Crossing busy streets
- Filling sidewalk gaps
- Improving snow and ice removal

Summit Avenue from Hamline Ave to Lexington Pkwy and from St Albans St to John Ireland Blvd are identified as medium priorities based on census tracts for sidewalk investment. There are no priority segments of Summit Avenue identified as sidewalk gaps.

The following actions are included in the Saint Paul Pedestrian Plan to improve pedestrian safety and comfort at busy street crossings.

1-1. Plan, design, build and maintain the city's transportation system in a way that

prioritizes walking first, followed by bicycling and transit use and lastly other vehicles.

1-2. Advocate for a statewide reduction in urban speed limits as part of the city's legislative agenda. *Complete - speed limit on Summit Avenue is 25 mph.*

1-3. Follow best practices for marking crosswalks. Convert crosswalks marked with parallel bars to high-visibility crossings to improve visibility of crosswalks. Whenever possible, use durable crosswalk marking materials.

1-4. Ensure visibility of pedestrian crossings. Review street lighting, sign placement, street furniture, bus shelters, foliage growth, and parking restrictions at intersections as part of all reconstruction projects and requests for crossing improvements.

1-5. Establish a consistent process for reviewing, improving and prioritizing pedestrian crossings. Review and update policies as necessary to incorporate best practices and national guidelines. Apply these policies to all projects and requests that include crossing improvements.

1-6. Reduce pedestrians' exposure to motor vehicles and lower street design speeds. Pursue changes in street designs that lower design speeds and reduce roadway crossing widths.

1-7. Coordinate with transit providers and the Saint Paul Bicycle Plan to ensure pedestrian solutions complement bicycling and transit needs.

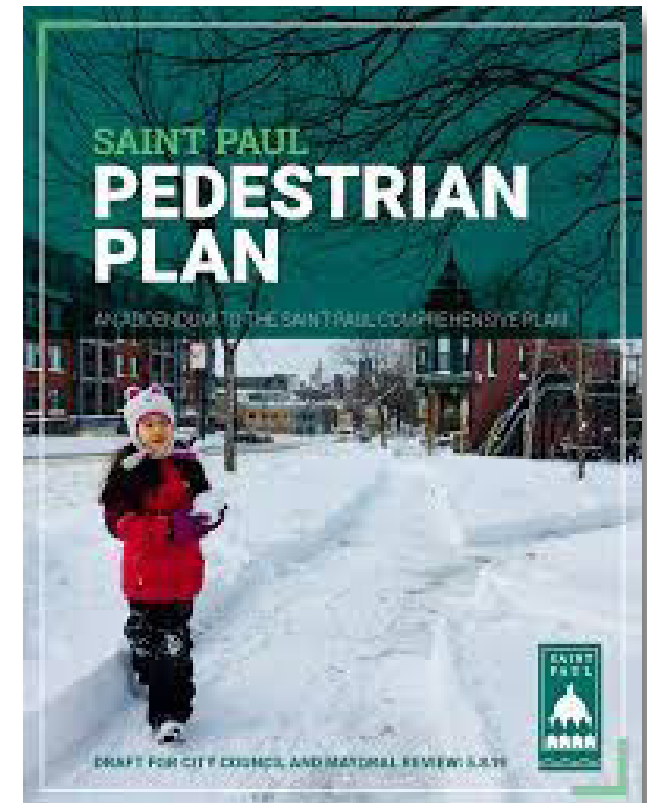


Fig. 2-5 | 2019 Pedestrian Plan

1 : Saint Paul Pedestrian Plan | <https://www.stpaul.gov/sites/default/files/Media%20Root/Public%20Works/Saint%20Paul%20Pedestrian%20Plan%206.13.19%20Compressed.pdf>

# Previous Planning Documents

1-8. Develop a program to proactively implement infrastructure improvements in high crash risk locations. Conduct a Pedestrian Systemic Safety Analysis to identify the highest risk locations for pedestrian crashes. Develop a prioritized list of candidate pedestrian safety improvements on high-risk streets and a five-year plan for implementation.

1-9. Dedicate additional funding to improve pedestrian crossings in conformance with best practices and support on-going maintenance of these treatments.

1-10. Provide regular crossing opportunities on collector and arterial streets, prioritizing streets in High Priority Areas for Walking Investments.

1-11. Work with partners to support safe walking environments through initiatives like Crime Prevention through Environmental Design, lighting improvements, neighborhood walks, and trash cleanup.

1-12. Identify resources to improve on-going maintenance of existing crossing facilities, including snow and ice removal at crossings, crosswalk markings and replacement of flexible traffic posts in temporary crossing improvements.

2-1. Design streets in accordance with Saint Paul's Street Design Manual to promote a

comfortable walking environment on all street types in Saint Paul.

3-1. Pursue opportunities to install and maintain interim pedestrian crossing improvements using low-cost materials.

3-2. Review and update the Saint Paul Department of Public Works Temporary Pedestrian Access Route (TPAR) policy (originally adopted 2014) to define requirements for TPAR implementation and mandate use of best practices identified by Public Right-of-Way Accessibility Guidelines. Proactively inspect TPARs and enforce contractor compliance with city policy.

3-3. Maximize impact of capital projects through coordination with partner jurisdictions such as Ramsey County, MnDOT and Metro Transit. Define internal structure for managing external partnerships and identifying opportunities to maximize use of resources during capital projects

## Saint Paul Climate Action & Resilience Plan<sup>1</sup>

This plan outlines a series of strategies to achieve the City's ultimate goals of carbon neutrality by 2050 and a 50% reduction in carbon emissions by 2030. Transportation is noted in the document to be the largest source of carbon emissions, and that

reducing carbon emissions is critical to meeting the City's resiliency goals.

The plan highlights the need for improved and additional bicycle and pedestrian infrastructure to ensure that communities are connected by a diverse range of transportation modes. The plan states a specific goal of ensuring that "85% of Saint Paul residents have safe access to protected active transportation facilities", with a target of constructing 300 miles of new bikeways by 2050. Key initiatives also recommend prioritizing protected bicycle facilities over unprotected or shared bicycle lanes.

The Climate Action & Resilience Plan also recommends an update to the Saint Paul Bicycle Plan to reflect best practices prioritizing protected facilities over unprotected or shared lane facilities. At the time that the Summit Avenue Regional Trail Plan is being developed (2023), updates to the Saint Paul Bicycle Plan are underway.

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<sup>1</sup> : Saint Paul Climate Action & Resilience Plan <https://www.stpaul.gov/sites/default/files/Media%20Root/Mayor%27s%20Office/Saint%20Paul%20Climate%20Action%20%26%20Resilience%20Plan.pdf>

# Previous Planning Documents



## Minnesota Statewide Historic Preservation Plan 2022-2032<sup>1</sup>

This Plan shares a vision for historic preservation in Minnesota and outlines preservation and protection guidelines for historic and cultural resources. The Plan puts a focus on the historic preservation process, highlighting the importance of equity and inclusion in preservation efforts. The document includes background on historic preservation in the state and how statewide trends can guide the process in the future, and strategies for achieving the statewide vision and goals for preservation by achieving the Plan's goals that focus on:

- **Goal 1:** Facilitate Connections and Cultivate Partnerships
- **Goal 2:** Expand and Share Information, Skills, and Access
- **Goal 3:** Develop Proactive Strategies that Advance Equity, Expand Access, Increase Diversity, and Foster Inclusion
- **Goal 4:** Promote Economic Benefits and Inspire Innovative Financial Opportunities
- **Goal 5:** Strengthen Links between Preservation, Sustainability, and Resiliency



Fig. 2-7 | Minnesota Statewide Historic Preservation Plan 2022-2032



## In-Progress - Saint Paul Transportation Safety Action Plan<sup>2</sup>

The City of Saint Paul is developing a Transportation Safety Action Plan to identify and eliminate fatalities and serious injuries from vehicle crashes for everyone (pedestrians, bicyclists, transit users, and drivers)<sup>2</sup>. Summit Avenue is a highly used corridor for pedestrians, bicyclists, and drivers, and safety for all modes of transportation is critically important, especially at intersections. As new guidelines and requirements regarding safety for these transportation modes are developed by the City of Saint Paul and other agencies, consider recommendations from these plans during design and engineering of the Summit Avenue Regional Trail.

<sup>1</sup> : Minnesota Statewide Historic Preservation Plan | [https://mn.gov/admin/assets/2022-2032\\_MNPresPlanFINAL\\_022522a%20FULL%20DOCUMENT\\_tcm36-528052.pdf](https://mn.gov/admin/assets/2022-2032_MNPresPlanFINAL_022522a%20FULL%20DOCUMENT_tcm36-528052.pdf)

<sup>2</sup> : Transportation Safety Action Plan | <https://www.stpaul.gov/departments/public-works/transportation-and-transit/transportation-safety-action-plan>

# Previous Planning Documents

## Neighborhood Plans

The Summit Avenue Regional Trail corridor is located within six of Saint Paul's 17 districts. The district councils or other community organizers have led the process for creating or revising district and small areas plans.

The districts that surround the Summit Avenue corridor and their corresponding district or community plans are listed below, along with excerpts from their district or community plans that support the vision of the Summit Avenue Regional Trail:

### ⑧ **Summit-University (District 8) Plan**

« <https://www.stpaul.gov/DocumentCenter/View/6/9165.pdf> »

- Create an environment in which traveling from one place to another is safe and convenient for all modes of travel including walking and biking.
- Encourage businesses to make parking lots available to others during non-peak or on-business hours.
- Develop strategies that provide for safe and efficient walking and biking within the neighborhood.

### ⑨ **District 9 Area Plan**

« <https://www.stpaul.gov/DocumentCenter/View/4/66861.pdf> »

- Link the community of West 7th to the amenities and opportunities within and

outside of the community.

- Respect the Mississippi River as a community asset, limit new building on the river and seek opportunities to connect the neighborhoods to the riverfront.
- Improve connections between parks to create a system of greenways.

### ⑬ **Union Park Community Plan**

« <https://www.stpaul.gov/sites/default/files/Media%20Root/Planning%20%26%20Economic%20Development/Union%20Park%20District%20Plan%202016.pdf> »

- Support improved means for pedestrians and bicyclists to reach transit lines safely.
- Support the implementation of the City of Saint Paul's bicycle plan in a way that maximizes effectiveness for all users of the right-of-way.
- Support efforts to create a safer biking environment by promoting strategies such as separated lanes, more visible striping, off-street bicycle paths, and lower vehicular speed limits on shared roads.
- Identify, evaluate, designate, and preserve historic resources in the District.
- Promote the design and implementation of historical interpretive signage around the District along transportation routes including bicycle paths.

### ⑭ **Macalester-Groveland Community Plan**

« [https://www.stpaul.gov/sites/default/files/Media%20Root/Planning%20%26%20Economic%20Development/D14\\_MGCC\\_PLAN\\_FINAL\\_ADOPTED\\_Flat.pdf](https://www.stpaul.gov/sites/default/files/Media%20Root/Planning%20%26%20Economic%20Development/D14_MGCC_PLAN_FINAL_ADOPTED_Flat.pdf) »

- Preserve and enhance existing parks and greenspaces.
- Increase use/ease of nonmotorized transportation.
- Advocate for the connection of districts' bike paths to the citywide network.
- Find creative solutions to new non-motorized transportation infrastructure.
- Dedicate more bike routes within the district and City.
- Partner with local businesses to encourage alternative transportation use
- Support the implementation of comprehensive citywide bicycle policies that are easily adaptable to a growing bicycle community.
- Integrate historic preservation into housing, land use, and environmental decision-making processes.
- Increase awareness, identification, and designation of historic resources within the neighborhood.

# Previous Planning Documents

①⑥ **Summit Hill/District 16 Neighborhood Plan**  
 « <https://www.stpaul.gov/DocumentCenter/View7/Summit%2520Hill%2520Plan%2520Summary-District%252016.pdf> »

- Preserve the pedestrian-friendly, historic residential and commercial character of the Summit Hill neighborhood by providing a healthy balance of transportation options.
- Improve pedestrian safety and improve the quality of pedestrian and bicyclist experience.

①⑦ **Downtown Saint Paul Development Strategy**  
 « <https://www.stpaul.gov/DocumentCenter/View4/3104.pdf> »

- Downtown Saint Paul will have a first-class, balanced, integrated transportation system that supports its economic vitality, mixed-use character and quality of life.
- Bicycle access to, within and through downtown will be enhanced.
- Improve the connection from adjacent bicycle trails to downtown streets
- Preserve and enhance heritage resources.



In addition to these, design and planning guidelines for the two historical districts that overlay Summit have been developed:

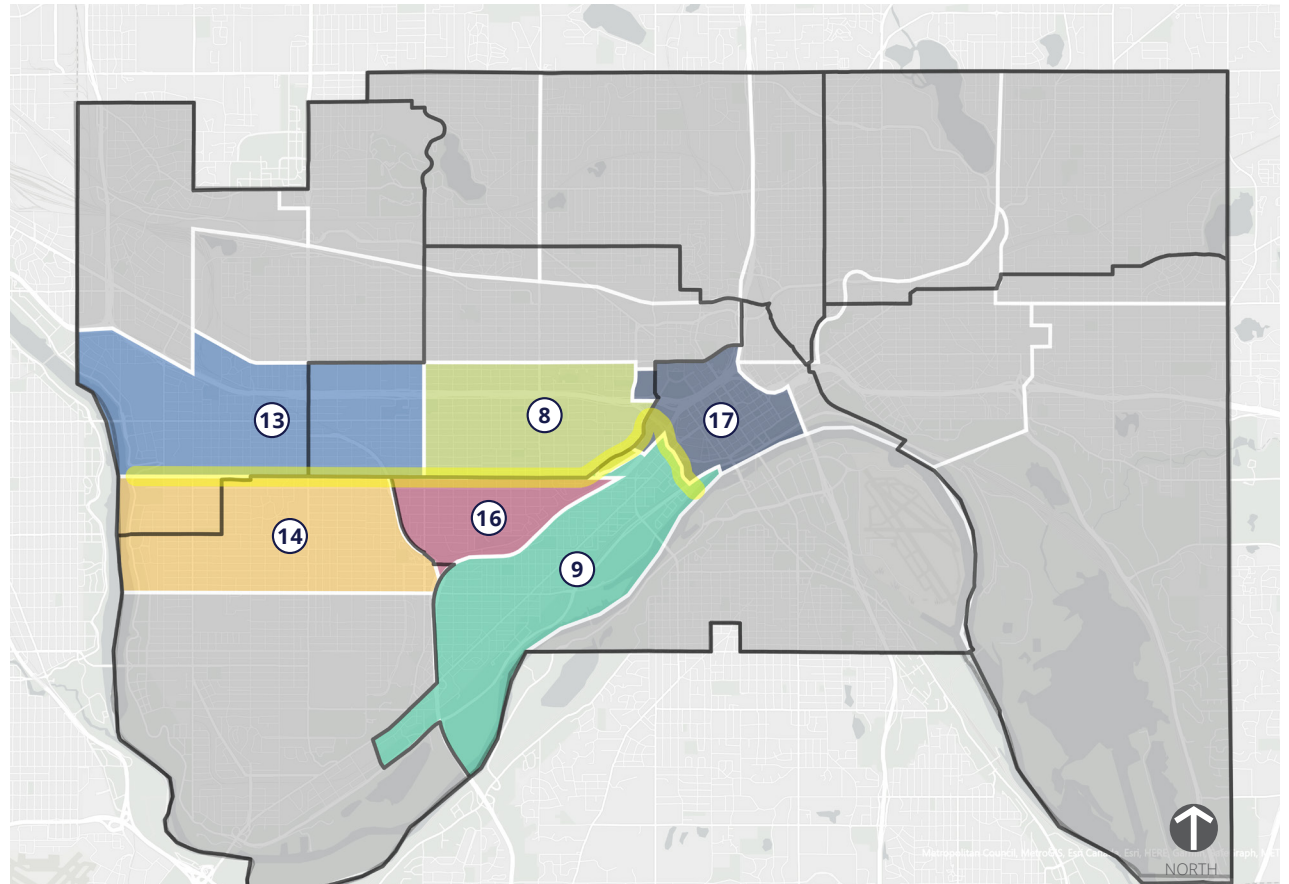


Fig. 2-8 | Saint Paul Neighborhoods and Wards

### Historic Hill District Guidelines

« <https://www.stpaul.gov/sites/default/files/Media%20Root/Planning%20%26%20Economic%20Development/15221.pdf> »

- Document provides guidelines for preserving and enhancing historic elements of the District.

### Summit Avenue West District Guidelines

« <https://www.stpaul.gov/sites/default/files/Media%20Root/Planning%20%26%20Economic%20Development/15222.pdf> »

- Document provides guidelines for preserving and enhancing historic elements of the District.



# Project Context

The project area encompasses approximately a 5.5-mile corridor along Summit Avenue, Kellogg Boulevard, and Eagle Parkway, beginning at Mississippi Gorge Regional Park and ending at Samuel H. Morgan Regional Trail.

The proposed Summit Avenue trail facility provides a connection to Mississippi Gorge Regional Park at its west end, and Samuel H. Morgan Regional Trail on the east end. The proposed facility also intersects with the bike trail at Ayd Mill Road, and provides a potential future connection at Lexington Parkway, both of which are designated as **regional trail search corridors**.

The proposed trail facility provides an important east-west connection between Regional Park and Trail facilities in the region. The trail also provides a regional amenity in Ward 1, a Ward that currently does not have any regional park or trail facilities.

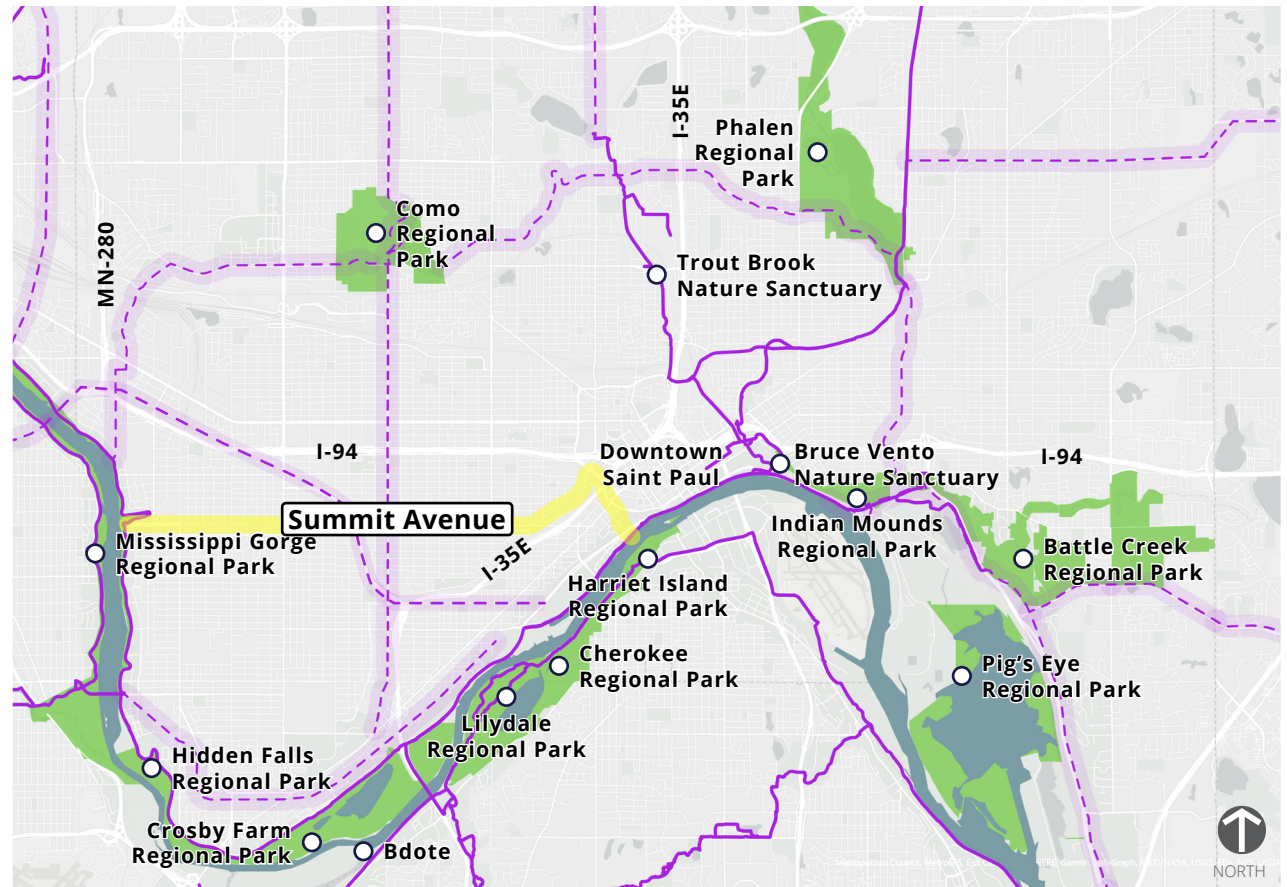


Fig. 2-9 | Regional Park and Trail Amenities

## Legend

- Project Area
- Regional Park
- Regional Trail
- Regional Trail Search Corridor

Hidden Falls Regional Park



Downtown Saint Paul



Harriet Island Regional Park



Sam Morgan Regional Trail



# Project Context

## Project Segments

In this Plan, the Summit Avenue corridor is broken into segments based primarily on roadway characteristics driven by public right-of-way widths.

Segments A and C are characterized by a wide grass median and a 200' ROW. Segment B is the only segment in the corridor with a double median condition, with two-way traffic in the center lane, and two one-way frontage roads on the north and south sides of the 200' ROW. The segments east

of Lexington have no median, with the exception of sporadic medians at larger intersections near Kellogg Boulevard. Generally, these eastern segments have a 100' ROW.

Each of these segments also has its own distinct character including park-like residential areas, institutional zones, historic corridors, and urban sections as the corridor enters downtown. The Plan examines each segment and considers the differences between them and how those differences influence the proposed trail.

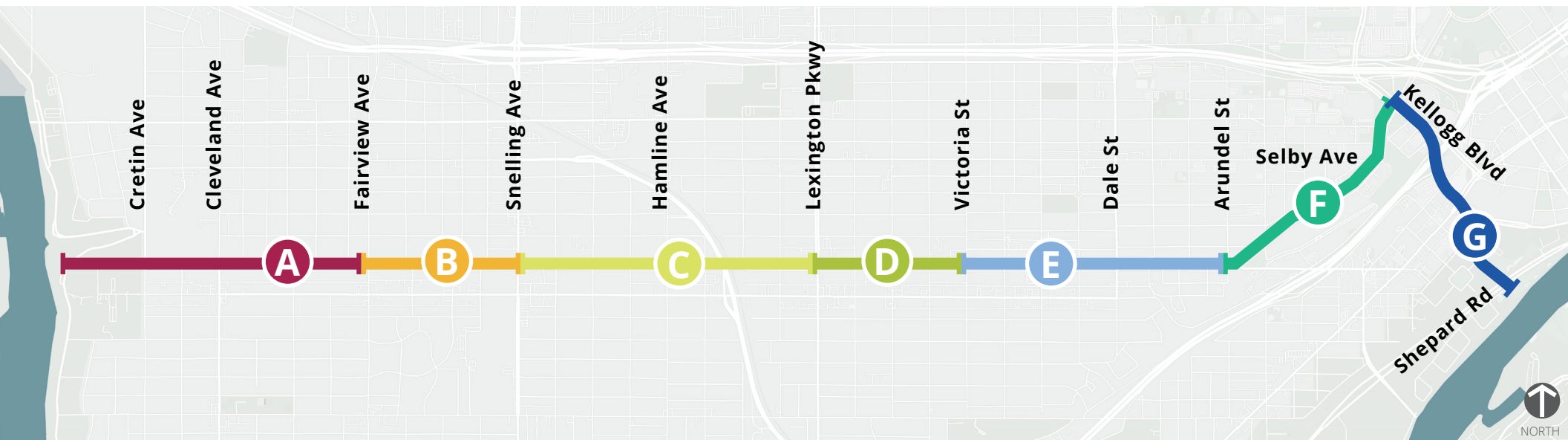


Fig. 2-10 | Summit Avenue Regional Trail - Segment Map

# Project Context

## Historical Context

### Land of the Dakota

Minnesota is the homeland of the Dakota. Bdote, the area surrounding the confluence of the Mississippi and Minnesota Rivers, is significant to the Dakota people as a place of origination.<sup>1</sup> With the 1837 US-Dakota Treaty, Americans pushed Dakota peoples away from this part of their traditional homeland. The United States took possession of the lands to the east of the river, but the Dakota continued to return to the camp on the west bank until the signing of the 1851 US-Dakota Treaty, which transferred millions of acres of land from the Dakota to the United States. In the decade after the signing of the treaty, over 100,000 European immigrants moved to Minnesota to live on the land that the Dakota had been coerced to cede. Through colonization and genocide the land was transformed. Railroads, breweries, and businesses were introduced to the landscape.<sup>1</sup>

**1680** | The encounter between the Dakota and the French marked a new epoch in the history of the Upper Mississippi and in the history of what is now the Twin Cities metropolitan area. For 10,000 years Native Americans had the river to themselves. From March 1680 forward, Europeans and then Americans would increasingly define human interaction and the river's physical and ecological character.<sup>2</sup>



Fig. 2-11 | 1840 Painting by Seth Eastman | village of Kap'óža and a burial ground on the cliff above the river. (Minnesota Historical Society)

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<sup>1</sup> : Indian Mounds Regional Park Cultural Landscape Study and Messaging Report | <https://www.stpaul.gov/sites/default/files/2021-01/IndianMoundsCulturalLandscape%20Study%2BMessagingPlan.pdf>

<sup>2</sup> : Samuel H. Morgan Regional Trail Master Plan | [https://www.stpaul.gov/sites/default/files/Media%20Root/Parks%20%26%20Recreation/SMRT%20Amendment%20to%20Master%20Plan%20Document\\_Aug2020.pdf](https://www.stpaul.gov/sites/default/files/Media%20Root/Parks%20%26%20Recreation/SMRT%20Amendment%20to%20Master%20Plan%20Document_Aug2020.pdf)

# Project Context

## Designed Parkway Landscape

Summit Avenue is one of the most recognizable public spaces in the Twin Cities with national recognition. There are both designated (national, state, or local) historic districts and individual historic properties found along Summit Avenue. Incorporating a regional trail connection between the Mississippi River to Downtown Saint Paul through this historic corridor requires careful consideration and sensitivity of the corridor context to create a value-adding amenity.

The following historic districts overlay Summit Avenue:

- **National Register of Historic Places** (National Park Service - NPS)
  - » West Summit Avenue Historic District: Summit Avenue between Lexington Parkway and Mississippi River Boulevard (corridor segments A-C)
  - » Historic Hill District: This district extends past Summit Avenue, but includes the corridor from Lexington Parkway to the intersection with Dayton Avenue (corridor segments C-F)
- **State Historic District** (State Historic Preservation Office - SHPO)
  - » Historic Hill District: This district extends past Summit Avenue, but includes the corridor from Ayd Mill Road to the intersection with Marshall Avenue (corridor segments C-F)
- **Local Historic Districts** (City of Saint Paul Historic Preservation)
  - » West Summit Avenue Historic District:

Summit Avenue between Lexington Parkway and Mississippi River Boulevard (corridor segments A-C). *The extents of the local and national districts vary slightly, but include the same corridor segments as part of this trail Plan.*

- » Historic Hill District: This district extends past Summit Avenue, but includes the corridor from Lexington Parkway to the intersection with Dayton Avenue (corridor segments D-F)
- Individual Historic Properties: Historic properties along the corridor include:
  - » Dr. Ward Beebe House, 2022 Summit Avenue (local and nationally listed)
  - » Pierce and Walter Butler House, 1345-1347 Summit Avenue (local and nationally listed)
  - » Irvine, Horace Hill, and Clotilde House (Governor’s Mansion), 1006 Summit Avenue (local and nationally listed)
  - » F. Scott Fitzgerald House (Summit Terrace), 587-601 Summit Avenue (local, state, and nationally listed)
  - » Burbank-Livingston-Griggs House (James C. Burbank), 432 Summit Avenue (local, state, and nationally listed)
  - » James J. Hill House, 240 Summit Avenue (local, state, and nationally listed)
  - » Cathedral of Saint Paul, 239 Selby Avenue/225 Summit Avenue (nationally listed)

# Project Context

## Laws and Responsibilities

Federal, state, and local laws apply to the work that occurs within or adjacent to the historically significant properties. These laws also dictate the parties that should be involved in decisions regarding the work within these properties.

### Federal Laws

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies consider the effects of undertakings/projects involving historic properties. An undertaking can be any construction project the federal government provides money to, permits, or has jurisdiction over. Therefore, a project with a federal tie must adhere to Section 106 regulations. An Effect is defined as “alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register.”

In addition to the NHPA guidance, the National Park Service (NPS) references Secretary of the Interior's (SOI) Standards for the Treatment of Historic Properties guidance on how to limit adverse effects of new construction within the boundaries of historic properties which includes standards and related guidelines. Additionally, the NPS has developed guidance specifically for Cultural Landscapes<sup>2</sup>. In the broadest sense a cultural landscape is a historically significant property that shows evidence

of human interaction with the physical environment. Even though the historic districts discussed below were listed prior to a formal definition of cultural landscapes by the NPS, it is important to take these guidelines for their treatment into consideration. The NPS guidance provided below will aid in the discussion about new features or designs that could be incorporated into the historic districts.

The designated federal agency has the responsibility to initiate and lead any Section 106 review and consultation process and decide (with consulting parties and the public) whether the proposed project will result in an adverse effect to historic properties.

### State Laws

The Minnesota Historic Sites Act (MS 138.661-138.669) states that the state, state departments, agencies, and political subdivisions (which responsible government unit [RGU], i.e. cities or municipalities) have a responsibility to protect the physical features and historic character of the properties listed in the National Register or in the State Register. If a project only has state or local involvement, the State Historic Preservation Office (SHPO) would be consulted regarding the undertaking, determine appropriate treatments, and seek ways to avoid, minimize, and/or mitigate any adverse effects on the designated or listed properties.

### Local Laws

Lastly, if a city has adopted a historic designation for districts or individual properties, they may have their own guidelines written in the municipal code that provide guidance regarding protecting the physical features and historic character of these properties. Specifically, the City of Saint Paul's Code of Ordinances Chapter 74, Articles I and II relate to the district's Summit Avenue West Heritage Preservation District and Heritage Hill Historic Preservation District, respectively.<sup>3</sup> The focus of the ordinance are the structures within the district rather than the streetscape, but there are a few references to public infrastructure, new construction, landscaping, and signs that will be valuable in guiding design within the districts. As specificity and details of the plan are finalized, Heritage Preservation Commission (HPC) staff will provide guidance through plan review and comment.

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<sup>1</sup> : National Park Service | <https://www.nps.gov/tps/standards/applying-rehabilitation/successful-rehab/new-construction.htm>

<sup>2</sup> : National Park Service | <https://www.nps.gov/Tps/standards/four-treatments/landscape-guidelines/index.htm>

<sup>3</sup> : The National Register listing names the Heritage Hill Historic Preservation District as Historic Hill District.

<sup>4</sup> : National Park Service | <https://npgallery.nps.gov/GetAsset/a8ab70fe-59a3-4d80-b71f-181710588c01>

<sup>5</sup> : National Park Service | <https://npgallery.nps.gov/GetAsset/a8ab70fe-59a3-4d80-b71f-181710588c01>

# Project Context

## Character Defining Features

### Historic Hill District

The Historic Hill District encompasses many more streets than just Summit Avenue and the bulk of the focus of this nomination is on the substantial structures in this district. For this early nomination character defining features are not called out directly, especially not in relation to the streetscape. The nomination is split into areas and “Area 2” is reserved just for the sixteen-block segment of Summit Avenue from Kellogg Boulevard to Lexington Parkway. The historic context does say that Summit Avenue was and still is home to large mansion-type residential properties on spacious lots. Summit Avenue was the first offshoot from the main downtown area, and it provided excellent building sites on the bluff’s edge. The nomination also points out it was undeveloped and a clean slate for development with plenty of space to build large homes.<sup>4</sup> It is expected that with these large homes, associated landscape and streetscape would also be very important. Other resources help to determine that the street width was planned early on. The 1888 and 1903 Sanborn Maps for Summit Avenue shows a 100-foot avenue. In comparison, adjacent streets Grand Avenue to the south

was 80 feet and Portland Avenue to the north was 66 feet. A review of other streets in Saint Paul on these maps indicate that 66 feet was the normal street width.<sup>5</sup> Thus the layout of Summit Avenue was unique and distinctive, relative to surround roadways, from a very early timeframe within the city.

It will be important to consider during future projects that additional survey and elevation of the districts may be warranted under any federal or state review, as the National Register documentation is considered incomplete by today's standards in terms of identification of character-defining features in the landscape.

In addition to the houses and standing structures, other characteristics may need evaluation as part of the Section 106 review including spatial organization (public/private), topography, vegetation, circulation features and other furnishings or objects such as statues or markers.

4 : National Park Service | <https://npgallery.nps.gov/GetAsset/a8ab70fe-59a3-4d80-b71f-181710588c01>

5 : National Park Service | <https://npgallery.nps.gov/GetAsset/a8ab70fe-59a3-4d80-b71f-181710588c01>



*James J Hill House, ca. 1905  
Credit: Minnesota Historical Society*

# Project Context

## West Summit Avenue Historic District

The West Summit Avenue Historic District encompasses mainly the parcels fronting Summit Avenue. This nomination was completed in the early 1990s and offers more insight into the character-defining features of the streetscapes. In the description of the property types found in the district it notes that the district includes “the parkway and its electric lighting stretching from Lexington to Mississippi River Boulevard, one marble sidewalk, wrought iron and/or brick fences, brick piers, a monument, a flagpole, and miscellaneous outbuildings.” It goes on to call out the “most visually distinguishing feature of the avenue is its width and median boulevard.” From Lexington to mid-block west of North Saratoga Street and from just east of North Wheeler Street to Mississippi Boulevard, Summit Avenue maintains a 200-foot-wide street with a median encompassing 90 feet of that width. The nomination goes on to state that this wide boulevard was accomplished by a group of citizens in 1886 who organized as the Summit Avenue Boulevard and Park Association to widen the street. Property owners along this stretch gifted the land to the city to accomplish this. The boulevard was started the next year. This interest in a boulevard also has its roots in the hiring of H.W.S. Cleveland, who consulted for the City of Saint Paul on the outline of the park system in the city. Cleveland noted Summit Avenue as an

excellent area for such a parkway with wide boulevards and he advocated that these were superior to isolated and discrete neighborhood parks.<sup>6</sup> Considering the interest in the public to create a street that was grand and noteworthy, Summit Avenue did experience some neglect in the beginning years as noted in park board annual reports from 1898, 1901, and 1903, but by 1907 it was noted that the avenue was in good condition and trees were trimmed. It remained a dirt road until sometime around 1913-1924 when it was completely paved.<sup>7</sup> Granite curbing is not called out in the nominations but was widely used throughout Saint Paul and is still used in portions of Summit Avenue. If an inventory of the remaining granite curb along Summit Avenue has not been completed recently, it is recommended that is done before any work on the street is performed.

Character defining features include but are not limited to:

- The width of Summit Avenue
  - » 100 feet between Kellogg Blvd and Lexington Pkwy
  - » 200 feet between Lexington Parkway and Mississippi River Blvd
- Maintaining the 90-foot median where it exists between Lexington Pkwy and Mississippi River Blvd
- If granite curbs or marble sidewalks do still exist, these should be considered character-defining features and

incorporated back into place if possible.

- Maintaining the general rhythm of trees and manicured lawn/vegetation in the median and on the boulevards.

## Heritage and Cultural Preservation

### Saint Paul Comprehensive Plan

The City’s Comprehensive Plan outlines strategies for heritage and cultural preservation within Saint Paul: “The City’s activities associated with the preservation, rehabilitation, restoration, and reconstruction of historic and cultural resources should be sustainable and equitable; improve the quality of life for all residents and visitors; guide public and private investment; express a sense of place and pride; celebrate the racial, ethnic, and cultural diversity of the community; and be embraced in all facets of the City’s work”.<sup>8</sup> The Plan emphasizes a process that is educational and inclusive, and that is integrated with other components of the Comprehensive Plan.

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<sup>6</sup> : <https://npgallery.nps.gov/GetAsset/109d6f44-c9af-4cb2-8f63-4ad938f772f0>

<sup>7</sup> : <https://npgallery.nps.gov/GetAsset/109d6f44-c9af-4cb2-8f63-4ad938f772f0>

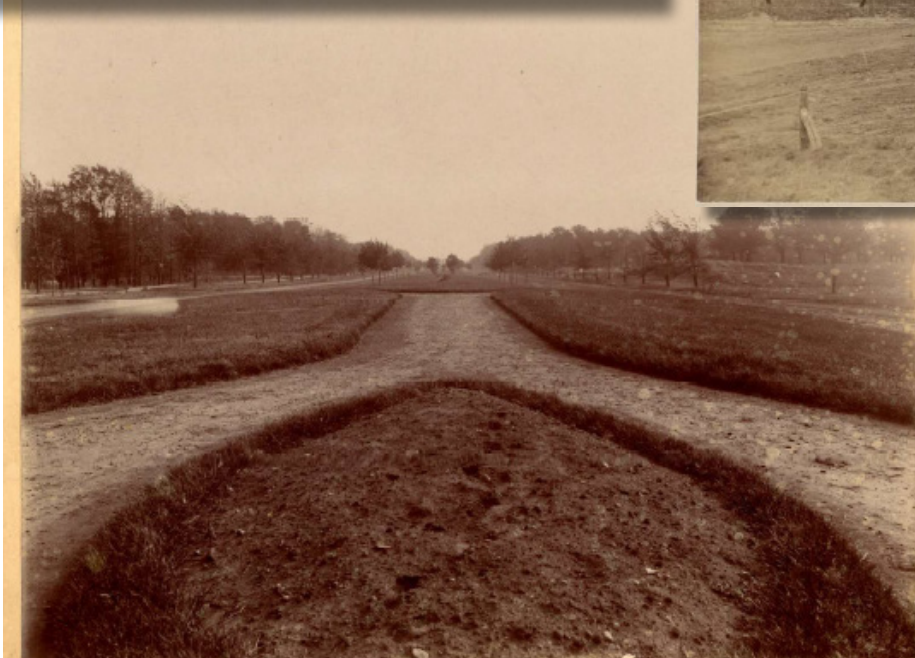
<sup>8</sup> : [https://www.stpaul.gov/sites/default/files/2022-01/CSP\\_2040\\_CompPlan\\_FinalAdopted\\_101521.pdf](https://www.stpaul.gov/sites/default/files/2022-01/CSP_2040_CompPlan_FinalAdopted_101521.pdf)



View of Summit Avenue from rooftop,  
looking northwest, circa 1900  
Credit: Minnesota Historical Society



View of Summit Avenue near Macalester  
College, looking west, 1890  
Credit: Minnesota Historical Society



View of Summit Avenue looking west, circa  
1900  
Credit: Minnesota Historical Society

# Project Context

## Pre-European Settlement

Dakota Tribal land

Saint Paul stands on the ancestral, traditional, and contemporary Dakota homelands.

As we consider that the many legacies of violence, displacement, migration, and settlement has brought us to current day, we commit to understanding, respecting, supporting, and advocating for Indigenous People and for this land.

Let this land acknowledgment be more than a reminder. Let it be a marker in time of dedicating ourselves to be better and do better. Through this land acknowledgment, let us lead to make changes which respect history.

## 1880s

First major wave of home construction along Summit Avenue

Summit Avenue Improvement Association formed to encourage property owners along Summit Avenue to donate their land adjacent to the roadway to widen the public ROW, creating the iconic park-like median

## 1890s

City of Saint Paul creates single- and double-family residential zoning district along Summit Avenue

## 1805

Under orders from Thomas Jefferson, Lt. Zebulon Pike purchases a tract of land from the local Dakota tribe that consists of nine miles of land along the Mississippi River, including present day Summit Avenue.

## 1887

Cable car line constructed on Selby Avenue

## 1887

James J. Hill House constructed



## 1862

US-Dakota War

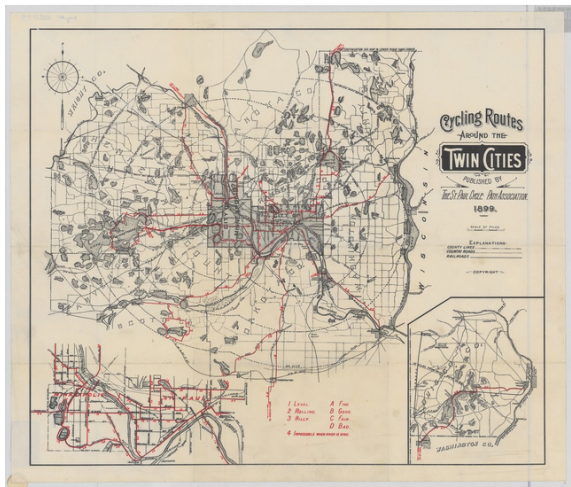
## 1855

First house of Summit Avenue built by Edward Duffield

## 1890

First streetcar in Saint Paul constructed on Grand Avenue





**1890s**

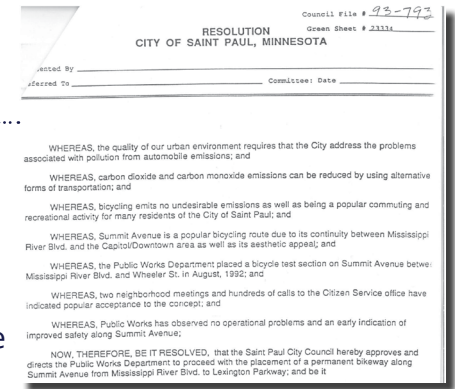
National "Bike Boom" - bikes became safer, lighter, and more affordable. Saint Paul residents advocated for more bike routes through the city

**1986**

The "Summit Avenue Plan" is developed by City Planning and Economic Development

**1993**

City of Saint Paul implements on-street bike lanes on Summit Avenue



**1929-1933**

Great Depression: Construction of new homes on Summit Avenue slows significantly during this time period

**2008**

The American Planning Association (APA) names Summit Avenue as one of its 10 Great Streets

**Future**

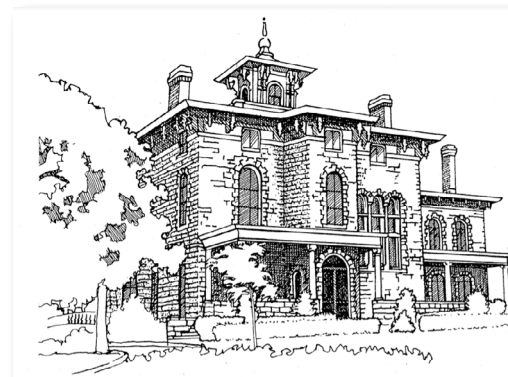
Construction and implementation of Plan elements

**1976**

Creation of Historic Hill National Register District

**2021-2023**

Development of Summit Avenue Regional Trail Plan to guide future development along the Summit Avenue corridor



Historic Hill Heritage Preservation District - Guidelines for Design Review

"Other cities have constructed cycle paths earlier in the history...but few, if any have such routes which are more enjoyable or picturesque than will be that which the wheelmen of Saint Paul are to build..."  
 "All the way it runs through a beautiful country, and for the most part over roads of long standing, where the foundation is already firm enough for the ideal cycle path."

Excerpt from the Saint Paul Daily Globe, May 10, 1896

# Related Projects and Agencies

## Saint Paul Public Works

### **Summit Avenue Reconstruction (Lexington Parkway - Victoria Street)**

In 2021, when the segment of Summit Avenue between Lexington Parkway and Victoria Street was scheduled for reconstruction as part of the Public Works 5-year Capital Improvements Plan, the need for this corridor-wide regional trail planning process came into focus. Reconstruction of this segment of Summit Avenue has been postponed to ensure a long term plan is available corridor-wide.

Community members have expressed a more immediate need for improving pavement in the corridor. Near term improvements include surface treatments of the roadway between Lexington Parkway and Victoria Street, and portions west of Snelling Avenue, in 2024. While this work is not a long-term solution, after surface treatments are complete, bicyclists and drivers can anticipate a smoother roadway experience in general as an interim condition.

### **Capital City Bikeway**

The Capital City Bikeway is a planned network of bicycle facilities through downtown Saint Paul. A segment of the bikeway is planned on the north side of Kellogg Boulevard between John Ireland Boulevard and Sibley Street. This facility is planned to be a two-way protected bikeway on the south side of Kellogg Boulevard. Coordination between the Capital City Bikeway and the Summit Avenue Regional Trail will be explored through the alignment concepts.

### **Summit Avenue Resurfacing**

Saint Paul Public Works has completed a number of mill and overlay (resurfacing) projects along Summit Avenue in 2022, and will continue to address surface level road conditions in 2023 and beyond as necessary.

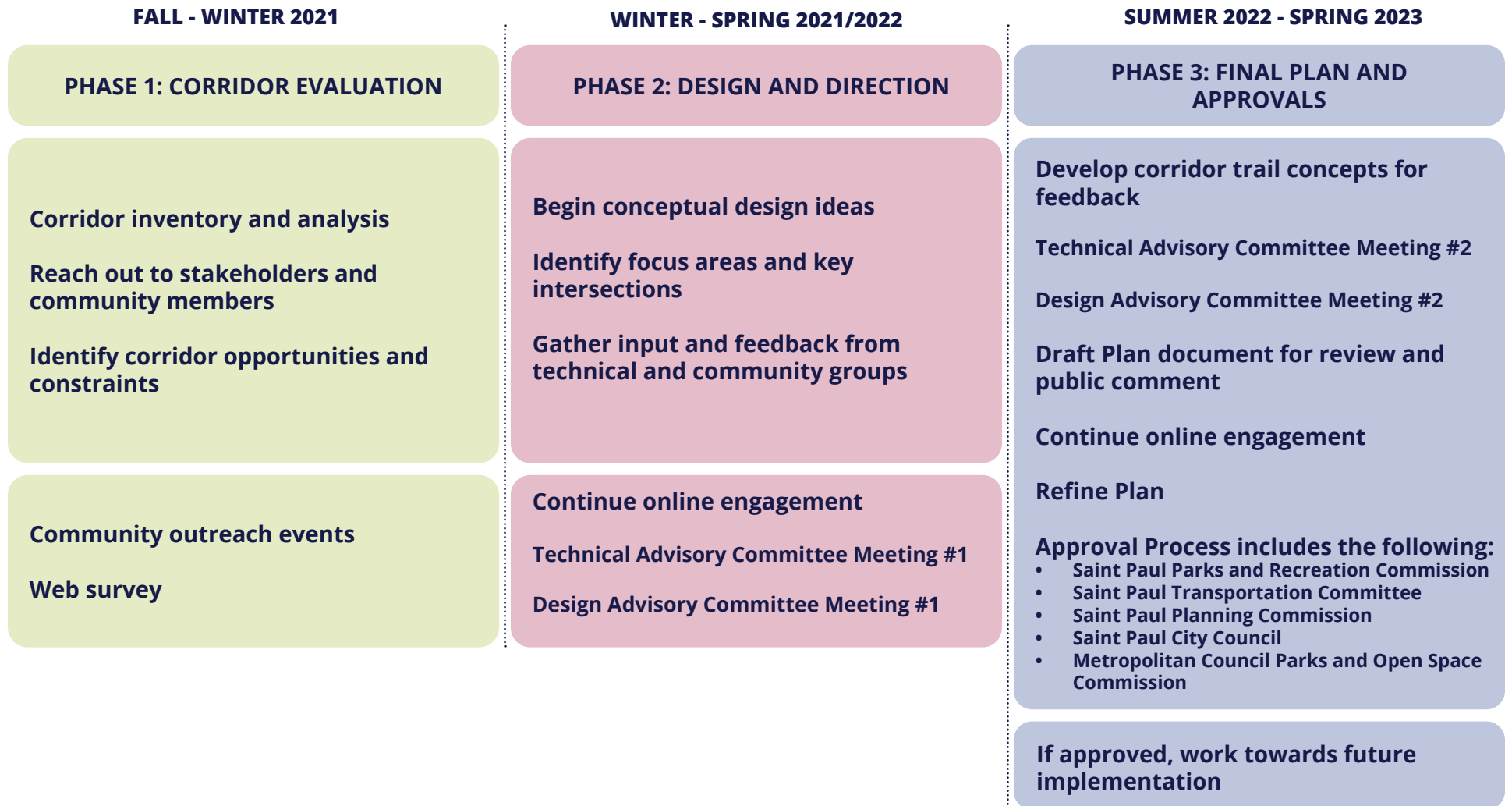
### **Grand Avenue Reconstruction**

Planned for construction in 2024, the Grand Avenue Reconstruction project includes work on Grand Avenue from Snelling Avenue to Fairview Avenue to address safety issues for pedestrians and vehicles at intersections along the corridor, specifically near the Macalester College campus. Community engagement will begin in 2022 with the opportunity to coordinate with the planning and engagement efforts for this Planning process.

### **Ayd Mill Road (completed 2020)**

The Ayd Mill Road Improvement Project implemented a new 3-lane street design and a new shared pedestrian and bicycle trail along the east side of Ayd Mill Road between Interstate 35E and Selby Avenue.

# Planning Schedule



# Demand Forecast

Today, Summit Avenue is one of the most used locations for both cyclists and pedestrians. Data collected in 2019 reports that several segments of Summit Avenue are some of the most popular walking and biking destinations in the City. Given the current and projected recreational trends in this corridor, the proposed facility responds to projected usage.

## 2019 Data:<sup>1</sup>

Top bicycling locations in Saint Paul:

1. Marshall Avenue Bridge
- 2. Summit Avenue east of Fairview Avenue**
3. Ford Parkway Bridge
4. Marshall Avenue west of Cleveland Avenue
5. Mississippi River Boulevard south of Emerald Street

Top walking locations in Saint Paul:

- 1. Summit Avenue east of Cleveland Avenue**
2. Cleveland Avenue south of Summit Avenue
3. Mississippi River Boulevard south of Jefferson Avenue
- 4. Summit Avenue east of Fairview Avenue**
- 5. Summit Avenue east of Western Avenue**

The Metropolitan Council also conducted a 2019 report estimating use of the Regional Parks system, including both regional parks and trails. Key findings from this report include:<sup>2</sup>

- An estimated 63.3 million visits were made to the Regional Parks System. This is a 6.3% increase over 2018 and the most estimate visitation on record.
- Summer 2019 visitors included approximately 12,000 scooter-riders, and 387,000 cyclists. The regional system includes almost 400 miles of trails, with annual trail use reaching over 15 million visits.

## Population Trends

Looking at overall population trends within the Twin Cities Metropolitan region, a 2021 report from the Metropolitan Council predicts that between 2020 and 2050:<sup>3</sup>

- The Twin Cities region will gain 818,000 residents
- Black, Latino, and Asian populations will more than double
- The population of residents over 75 years old will double by 2030, and triple by 2050

The study also estimates that by 2050, 44% of Twin Cities residents will be people of color, and that 22% of Twin Cities residents will be over the age of 65. A 2016 visitor study conducted by the Metropolitan Council found 80% of users of regional trails

came from within five miles of the trail. Consequently, population growth in Saint Paul and the greater Metropolitan region is expected to increase usage of the Summit Avenue Regional Trail.

Looking at the current use of Summit Avenue for bicycling and walking and current usage trends in the regional parks system, it is anticipated that a regional trail on Summit Avenue would not only support current use but also provide additional access opportunities for new users as the population in the Twin Cities grows.

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<sup>1</sup> : Saint Paul Public Works Pedestrian and Bicycle Traffic Count | <https://www.stpaul.gov/departments/public-works/transportation-and-transit/bike-saint-paul/pedestrian-and-bicycle-traffic>

<sup>2</sup> : Metropolitan Council Play Features | <https://metrocouncil.org/Parks/Publications-And-Resources/PARK-USE-REPORTS/Annual-Use-Estimates/PlayFeatures-Visits-to-the-Regional-Park-System-in.aspx#:~:text=An%20estimated%2063.3%20million%20visits,most%20estimated%20visitation%20on%20record.&text=The%20top%2Dvisited%20regional%20park,with%20about%203.8%20million%20visits.>

<sup>3</sup> : Metropolitan Council MetroStats | <https://metrocouncil.org/Data-and-Maps/Publications-And-Resources/MetroStats/Land-Use-and-Development/Twin-Cities-Forecasted-to-Reach-Four-Million-Resid.aspx#:~:text=The%20Twin%20Cities%20region%20will,population%20to%204%2C001%2C000%20in%202050.&text=Black%2C%20Latino%2C%20and%20Asian%20populations,doubling%20between%202020%20to%202050.>



# Community Engagement

## Summary of Engagement Opportunities and Participation

The project used a variety of engagement activities to reach a broad range of community members across the City. Opportunities included in-person events, virtual drop-in sessions, Design and Technical Advisory Committee meetings, and a dedicated engagement website for capturing ideas and feedback.

Throughout each process, feedback on a proposed regional trail facility was mixed. Many people shared concerns for potential impacts to vegetation and historic districts and advocated for changes to surface conditions such as high-visibility treatments to existing bike lanes.

Many other community members expressed support for separated facilities that would create a more comfortable, safe experience for all users and abilities.

Each step in the project was met with robust engagement and helped shape an approach for a one-way regional trail facility that utilizes the existing roadway footprint.



### Partner and Agency Contribution

This icon indicates sections of the Plan that were shaped by contributions from and collaboration with partner agencies.



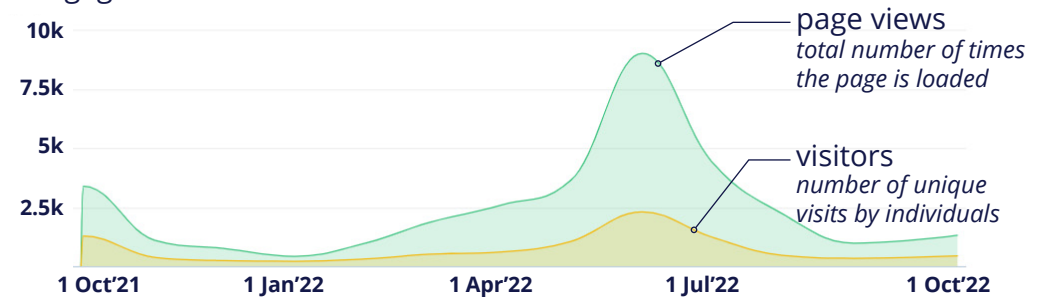
### Community Feedback Icon

Look for this icon in the document highlighting areas of focus generated by insights, feedback, and concerns from community members throughout engagement.

These topics will be important considerations for future phases of implementation, design, and engineering of a trail facility.

## Visitor Summary

Engage Saint Paul from 01 Oct'21 to 17 Oct'22



**\*NOTE:** Organizations listed in as part of the Design Advisory Committee in document acknowledgments reflect those of which project staff reached out to as part of the Design Advisory Committee process. The degree to which participants engaged in the process varied by organization. **Acknowledgment does not reflect an organization's endorsement of the regional trail Plan.**

# Community Engagement

## Opportunities and Participation

Design is an iterative process and one that evolves throughout a project. In order to create the best possible outcome for a regional trail that reflects community priorities, staff led an ongoing effort to review public comments, feedback, concerns and ideas generated during each phase of document development. This informative process helped shape a vision for the proposed regional trail facility in the Summit Avenue corridor.

- 1,316

Survey Participants  
Engage Saint Paul Site  
10/01/2021-10/17/2022
- 119

Public Information Session\*  
June 2022 - 30% design update  
\* Figure reflects registered participants
- 289

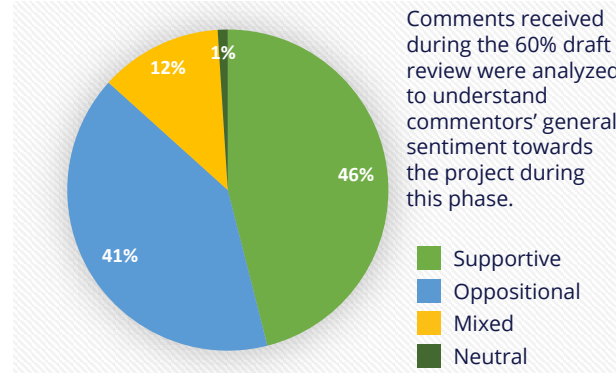
Community Open House\*  
October 2022  
\* Figure reflects registered participants
- 593

Comments received  
60% Draft Document -  
Engage Saint Paul
- 720

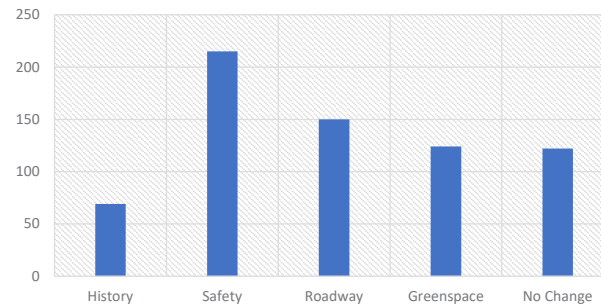
Comments received  
90% Draft Document -  
Engage Saint Paul

## 60% Draft: Comment Period

### Sentiment Analysis

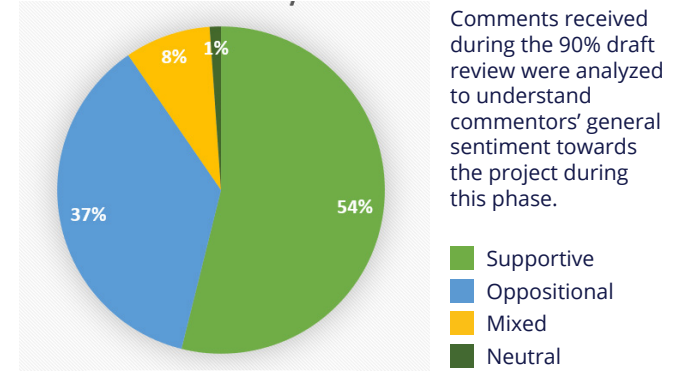


### Key Issues Analysis

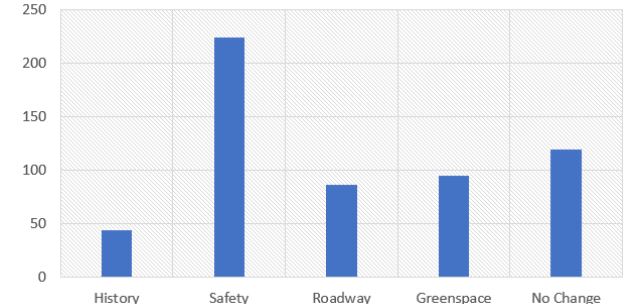


## 90% Draft: Comment Period

### Sentiment Analysis



### Key Issues Analysis



Comments received during both the 60% and 90% draft review periods were categorized to understand various perspectives and identify common threads in community priorities. The issue of safety was a top issue for respondents.

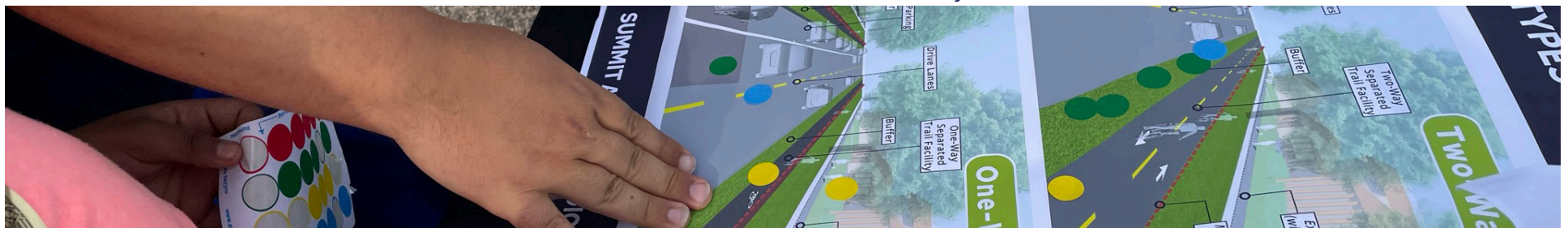
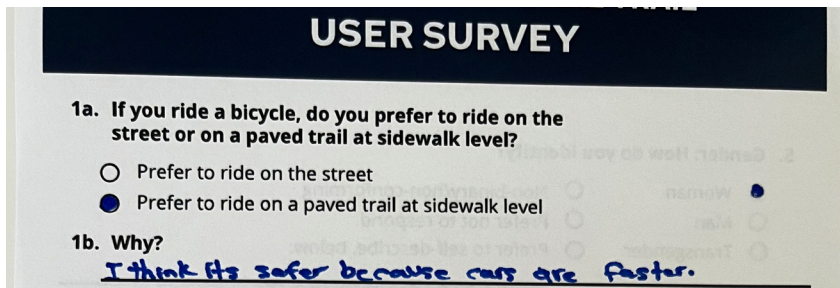
# Focused Engagement

Focused engagement efforts were conducted in order to reach current and potential trail users who were demographically not represented in the initial outreach and community engagement survey data. Opportunities for focused engagement included both in-person and virtual events for feedback as well as meetings with local community partner organizations and programming.

- Short user surveys to identify barriers for use of current bikeways were available in both paper and online formats
- Geographic region for this engagement included under-represented groups within district council neighborhoods close to the corridor and expanded outreach efforts through partner organizations to reach regional stakeholder groups.
- Initial project surveys continued to be circulated - more feedback captured to represent a more complete demographic picture of region.

## Focused Engagement Efforts Include:

- » Twin Cities Marathon with children and families in attendance (10/03/2021)
- » Saint Paul Farmers market with children and families in attendance (10/08/2021)
- » Engagement tables were set up along Summit at University of St. Thomas and Macalester to get input from students as the moved between classes (10/12/2021)
- » Meeting with City Adaptive Recreation and Accessibility Coordinators (3/21/2022 & 01/03/2023)
- » Safe Summer Nights children and families in attendance (7/14/2022)
- » Little Africa Festival children and families in attendance (08/07/2022)
- » Right Track summer celebration children and families in attendance (08/11/2022)
- » Mobility Mingle at Mears Park, families and downtown residents in attendance (09/14/2022)
- » Public Art and Wayfinding with Summit-University District Council (09/22/2022)
- » Safe Routes to School meeting attendance with SPPS representative Open House at Hidden River, a mini bike course was set up to engage kids and families (10/27/2022)
- » Youth Commission (04/10/23)
- » Comments from families we have heard from along the way, also reflected in 60% & 90% public comment periods available online
- » Safer Summit: Community advocacy group developed by local community members



# Equity Analysis

## 2040 Regional Parks Policy Plan

Equity is identified in the 2040 Regional Parks plan as one of the five desired outcomes for the regional vision along with stewardship, prosperity, livability, and sustainability. Thrive MSP 2040 states that the Council will “strengthen equitable use of regional parks and trails by all our region’s residents...”.

An equity analysis is “a process to examine who benefits and who is affected by the development of the resources in terms of race, ethnicity, national origin, income, ability, age, and other pertinent character to the analysis will identify communities that may be underserved by the Regional Parks System, and the impacts on these communities”. Answers to the following questions help determine if the Plan has met these requirements.

### Project Data:

**Scope: What are the boundaries and demographics of the public engagement area?**

- The proposed Summit Avenue Regional Trail would span four wards and connect communities within six districts of the City of Saint Paul to local amenities, downtown Saint Paul, and the Mississippi River. Summit Avenue threads a context that has residential neighborhoods, community schools and large institutions along a linear

parkway of Victorian era architecture. This context draws in visitors, creating overlap between both local and regional stakeholders. Local and regional stakeholders were identified early in the planning process, information gathered from surveys, and in-person engagement events helped to confirm primary and potential users for a future regional trail facility.

1 : Minnesota Compass | <https://www.mncompass.org/>

### Project Data and Demographics by District Neighborhoods within Trail Service Area<sup>1</sup>

#### **Race and Ethnicity:**

Current demographic data represents a majority white or Caucasian race living in the neighborhoods adjacent to Summit Avenue. The City’s comprehensive plan estimates Ramsey County is projected to be 45% people of color by 2030. Of the five neighborhood districts, District 8, the Summit-University Neighborhood has the highest percentage of population for those identifying as people of color at 48.5%.

#### People identifying as White Race by Neighborhood:

Macalester Groveland, 86% | Summit Hill, 84.5% | Union Park 80% | Downtown, 67.6% | Summit-University, 50.2%

#### **Age:**

#### Population 17 yrs. and younger Age Group by Neighborhood:

Macalester Groveland, 17.6% | Summit Hill, 17.6% | Union Park 16.3% | Downtown, 10.1% | Summit-University, 22%

#### **Ability:**

#### Population with a disability by Neighborhood:

Macalester Groveland, 8% | Summit Hill, 9% | Union Park 9.5% | Summit-University, 12.5% | Downtown, 12.8%

#### **Transportation:**

#### Population with no vehicles per household by Neighborhood:

Macalester Groveland, 6.9% | Summit Hill, 5.3% | Union Park 12% | Summit-University, 19.2% | Downtown, 25.3%

# Equity Analysis

*Context: What is known about future stakeholders, underserved populations, and how the region's history created present-day inequitable outcomes?*

- In general, The City of Saint Paul, Ramsey County, and the greater region is growing more racially and ethnically diverse and has a growing population of elderly people.
- The City's Comprehensive Plan estimates that the population of Saint Paul will grow by 30,000 residents between 2020 and 2040. Between 2000 and 2015 the percentage of people of color living in Saint Paul increased from 36%-46%. Ramsey County has increased from 13% people of color in 2000 to 30% people of color in 2014, and it is projected to be 45% people of color by 2030. In 2010, 24% of the region's population were people of color. By 2040, that number is projected to be 40%.
- Ramsey County is projected to experience a 48% increase in residents 65 and older between 2015 and 2030, and another 10% increase in this age group between 2030 and 2040. The Metropolitan Council projects that those age 65 and older will be the fastest growing segment of our region's population, doubling in absolute numbers by 2030 and becoming one in five of the region's residents by 2040.
- **Racial Covenants:** Racial covenants

are clauses that were inserted into property deeds to prevent people who were not White from buying or occupying land<sup>1</sup>. Real estate developers and urban planners implemented covenants under the idea that "mixed-race residential areas were hazardous and should be eliminated"<sup>1</sup>. The use of racial covenants in the Twin Cities region has contributed to continuing racial inequities, particularly as they relate to homeownership. 78% of White families own homes in the Twin Cities, while only 25% of Black families are homeowners. Although racial covenants were deemed unenforceable by the Supreme Court in 1948, property records still include the language used in the covenants.

- Other discriminatory housing practices such as zoning and redlining have been used in tandem with racial covenants to restrict homeownership among non-White people. Between 1935 and 1940, federal agents of the Home Owners' Loan Corporation assigned grades to different areas of cities across the U.S. to reflect "mortgage security", cities receiving a grade from A (minimal risk to banks) to D (considered hazardous)<sup>2</sup>. These practices were informed by racial discrimination and made homeownership for non-White people more difficult.
- A more diverse demographic exists

further away from the trail corridor due in part to racial and economic inequities and has been influenced by the historical practice of real estate redlining. It is important to recognize these layers and present-day inequitable outcomes and their impact on future stakeholders as the Metropolitan Region grows.

*Much of this data comes from the Mapping Prejudice project, based in the University of Minnesota Libraries. To date, the project has transcribed 80,000 property deeds in Hennepin and Ramsey counties.*

<sup>1</sup> : <https://mappingprejudice.umn.edu/racial-covenants/what-is-a-covenant>

<sup>2</sup> : <https://dsl.richmond.edu/panorama/redlining/#loc=5/39.1/-94.58&text=intro>

<sup>3</sup> : <https://www.startribune.com/the-racist-covenants-embedded-in-ramsey-county-deeds/600182442/>

# Equity Analysis

## Historic Redlining Maps

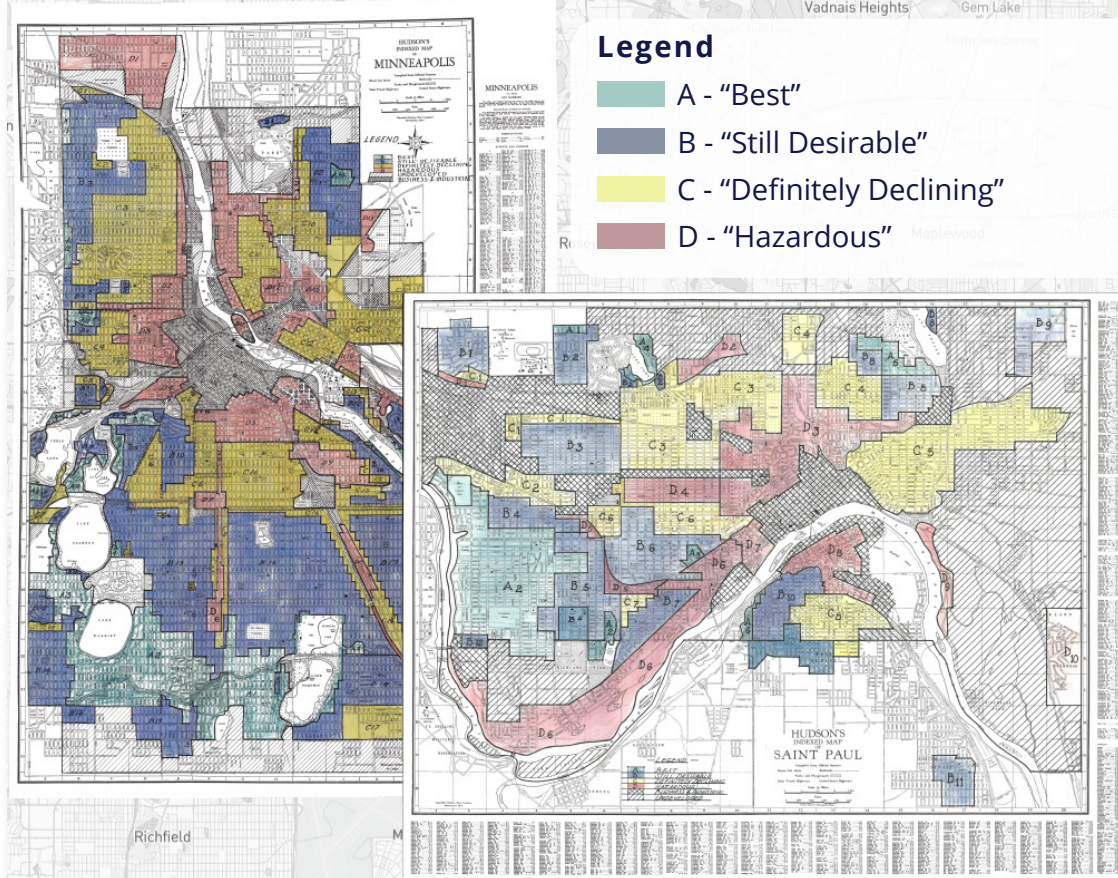


Fig. 2-12 | Original Redlining Maps - Saint Paul and Minneapolis<sup>2</sup>

## Racial Covenants

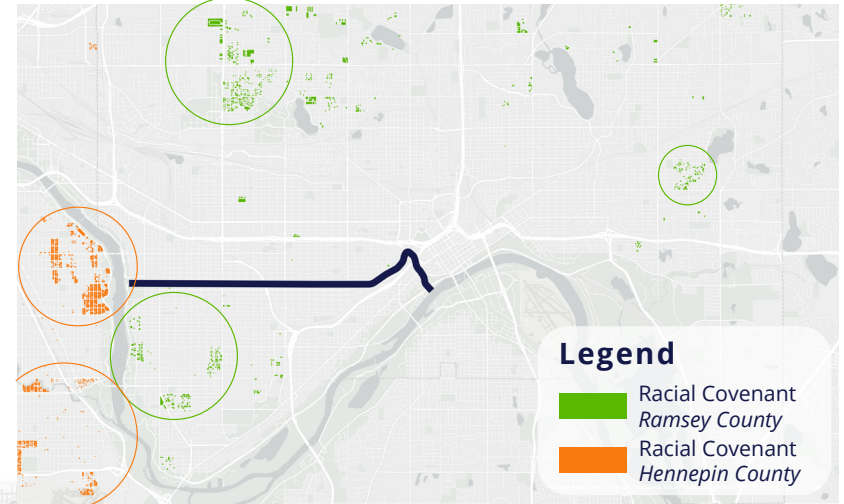


Fig. 2-13 | Regional Racial Covenants

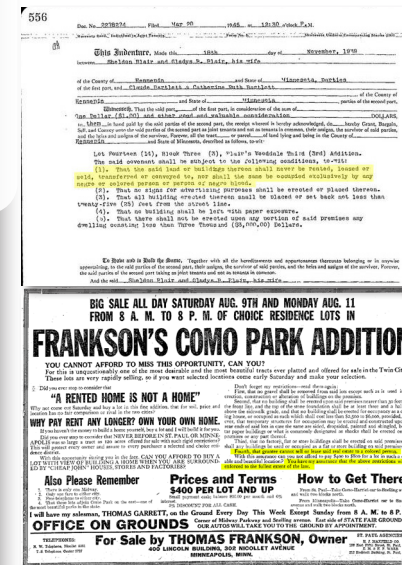


Fig. 2-14 | Racial covenants embedded in property deeds<sup>2</sup>; real estate developers advertised racial covenants in new neighborhoods<sup>3</sup>

- <sup>1</sup> : <https://mappingprejudice.umn.edu/racial-covenants/what-is-a-covenant>
- <sup>2</sup> : <https://dsl.richmond.edu/panorama/redlining/#loc=5/39.1/-94.58&text=intro>
- <sup>3</sup> : <https://www.startribune.com/the-racist-covenants-embedded-in-ramsey-county-deeds/600182442/>

# Equity Analysis

## Public Engagement and Participation:

*Participants: Which stakeholders, such as future stakeholders, underserved populations, and those effected by the region's history and present-day inequitable outcomes contributed to the planning effort?*

Throughout the project, staff connected with outreach liaisons and community leaders in programming for services to people with people of color, disabilities, and youth communities. Leaders helped to facilitate engagement by circulating project surveys or sharing feedback and considerations for the regional trail plan.

*Engagement: What engagement, outreach, and communication was conducted for stakeholders described above?*

The project took a multi-faceted approach to engagement to connect with underserved populations and stakeholders that have been historically marginalized. When the project began in Fall 2021, communities continued to navigate the effects of the global Covid-19 pandemic. An important part of the project was to have an engagement process that provided many different opportunities and formats to engage throughout 2021-2022. This range

of formats helped to adapt to a variety of community needs and abilities to participate. Virtual formats provided an option that was safe for participation during the Covid-19 pandemic, especially for those with more vulnerable health conditions or with limited physical mobility.



Community Engagement efforts that focused on future stakeholders and underserved populations included the following:

### Community Events:

Staff participated at community events by tabling with image boards, schematic trail concepts, and a user survey.

### Discussion and Listening Sessions:

Project staff met with community leaders from several of focused engagement groups to learn more about priorities, design considerations, and current barriers to recreational use in the Summit Avenue corridor.

### User Survey:

A survey was created that focused on understanding people's current user preferences, access, and barriers for bicycle use in general and for the existing bikeways on Summit Avenue.

# Equity Analysis

## *Public Participation: What did you learn from the engagement conducted?*

Through focused engagement efforts, several themes emerged as important considerations for the plan. These themes included the following:

### **Access to Trail Facilities:**

Based on the User Survey shared during focused engagement, 42% of those who do not currently use the bikeways on Summit, indicated either accessibility or the on-street bikeway experience as a barrier to their use. Other barriers to use included not having ADA parking spaces with loading areas adjacent to a facility.

Public trailhead parking lots such as the one at Mississippi River Boulevard and Summit Avenue is an example of a parking area that is currently utilized by adaptive recreation programs to access the Mississippi River Boulevard trail. Facility conditions, pavement surfaces, and the need for snow and ice maintenance is also an important factor. When these conditions are not met, it can be a barrier that keeps people from recreating.

Access to reliable and affordable transportation is critical for meeting daily needs, educational and employment opportunities. According to the National Equity Atlas, in 2019 households headed by people of color in Saint Paul were more likely to not have access to a car, black households were most likely not to have access at 32%. A regional trail along Summit Avenue would provide an off-street trail for community members and serve as a reliable alternative transportation option to cars.



### **Perceived Comfort and Safety:**

Not all bicycle and trail users are the same, the level of traffic stress individual users will tolerate informs the type of facility people will use. Approximately 84% of people in the user survey prefer to ride at sidewalk level, separated from vehicles. Reasoning for this preference varied, but included perceptions of safety and proximity to cars. Approximately 56% of people that currently use the Summit Ave. bikeway cited their experience could be improved with either separation between bike and drive lanes or improved safety at intersections.

Community organizations that facilitate BIPOC-led outdoor recreation activities often include programs and events that introduce people to bicycling. Introductory programming can serve as an opportunity for more people to learn about bicycle safety and mechanics. Creating a separated bicycle trail along Summit Avenue designed to improve perceived safety and comfort would expand opportunities for BIPOC-led and adaptive recreation programming in a recreational parkway space, welcome to all ages and abilities.

# Equity Analysis

*Public Participation: What did you learn from the engagement conducted? (continued)*

## **Diverse and Multi-cultural Representation:**

The City's Comprehensive Plan estimates Ramsey County is projected to be 45% people of color by 2030. Ward 1, which includes the Summit-University neighborhood, represents the City's most racially and economically diverse ward and is currently the only ward in the City of Saint Paul without a Regional Park facility.

The City of Saint Paul and Summit Avenue sit on the ancestral, traditional, and contemporary Dakota homelands. Acknowledgment of this land and the legacies of violence, displacement, migration, and settlement that have brought us to current day are important to recognize in the context of Summit Avenue.

There is a history of colonialism that is represented and here, historical figures that are connected to some of the architecture along the avenue also played a role in historic violence and displacement of other historic communities. Consider indigenous history and natural history of this place both locally and regionally and how that is represented.

As the City and Metropolitan region become

more racially and ethnically diverse, it is important that future designs of built elements in the landscape reflect this diversity to show how many people, cultures, experiences, and complex histories can be found throughout the region and are connected to Summit Avenue.

*The experience of Summit Avenue does not feel the same for everyone.*

*During engagement community members expressed that it is important to recognize that there are layers of history that are more visible here, and some that are not.*

# Equity Analysis

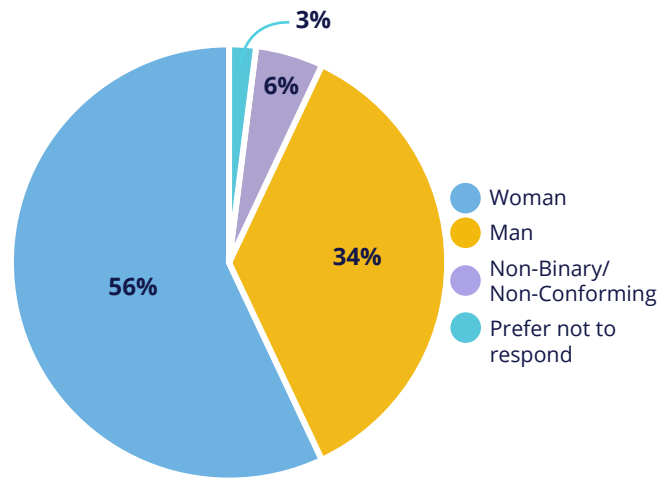
## Results From Focused Engagement Survey Summer 2022

The Community Events focusing on future stakeholders and underserved populations gave planners the opportunity to hear from different demographic groups that were underrepresented in other engagement formats. Demographic information about the participants in these focused engagement events is listed to the right.

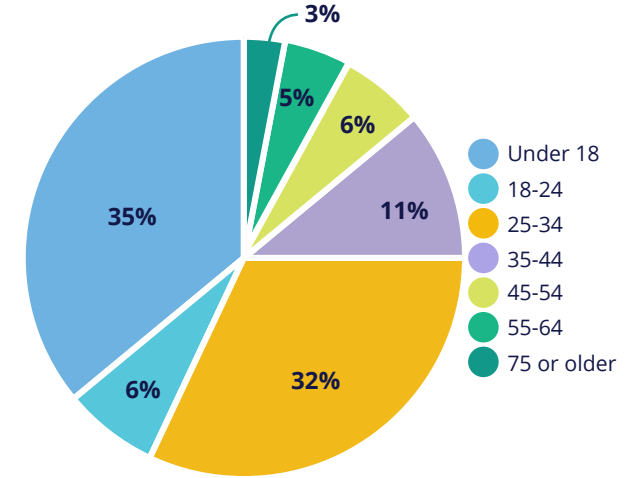
In general, the respondents who participated in the Focused Engagement surveys were more diverse than the survey participants for the online survey at EngageStPaul.org/summit, and provided important feedback and ideas from typically underserved communities:

- Half of these respondents identified as a race or ethnicity other than White or Caucasian
- 35% percent of respondents were youth under 18, and 73% of these respondents were under 34

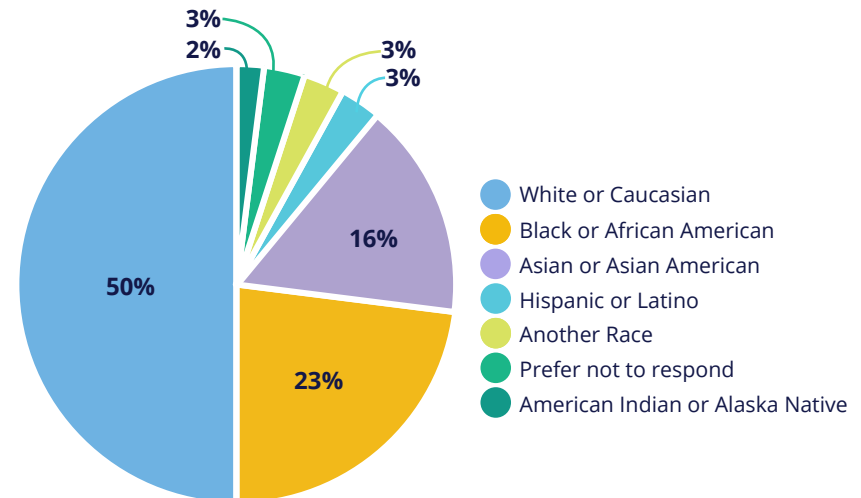
Gender: How do you identify?



Please select your age



With which race or ethnicity do you most identify?

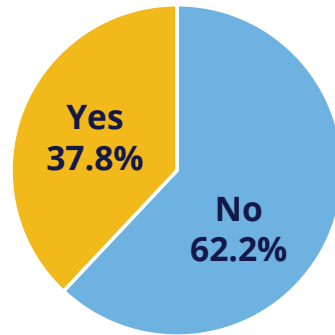


# Equity Analysis

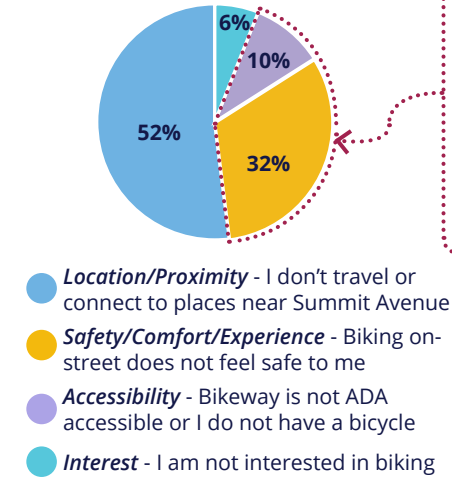
## Results From Focused Engagement Survey Summer 2022

Focused engagement surveys captured approximately 78 respondents through various community events and online survey participation. Questions from the Focused Engagement survey focused on how respondents feel about safety on bikeways in general, and how the existing Summit Avenue bikeways feel in terms of comfort and safety. Respondents were also asked to provide feedback about why they do or do not use the Summit Avenue bike facilities today.

Do you currently use the on-street bikeways on Summit Avenue?

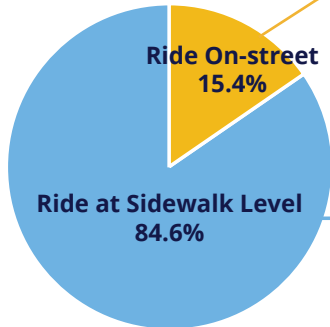


If you answered no, why not?



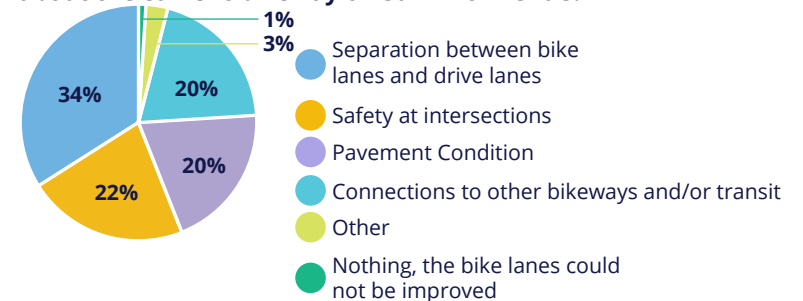
42% of those who do not currently use the bikeways on Summit, indicated either accessibility or the on-street bikeway experience as a barrier to their use.

If you ride a bicycle, do you prefer to ride on the street or on a paved trail at sidewalk level?



- More separation from pedestrians
- The street feels safe from pedestrians and maneuvering curbs
- More freedom and no obstructions
- Safer for kids
- I feel safer
- Less likely to get hit by a car
- Cars can't block bike lane
- More comfortable, more enjoyable

If you answered yes, what could be improved about the current bikeway on Summit Avenue?



# Equity Analysis

## Evaluation Summary

### *Transparency: How did this public participation impact the decisions and policies made?*

Public participation from the focused engagement efforts helped to shape development of the trail plan and reinforced the need to create a trail facility that provides a lower traffic stress tolerance and is more accessible and accommodating to all ages and abilities than the current existing on-street bikeway. Recommendations from the community through focused engagement by theme include:

**Accessibility:** Increase access by creating physical separation between vehicles and bicyclists. Prioritize facility maintenance and ADA accessible parking opportunities adjacent to the trail.

**Safety and Comfort:** Increase safety and comfort by providing separation from vehicle traffic and separation between bicyclists and pedestrians. Improve connections across intersections and to local and regional destinations that prioritize pedestrians and bicyclists. Increase demand by providing amenities such as bicycle parking, benches, lighting, public art & wayfinding, multi-lingual signage and drinking fountains.

**Diversity and Inclusion:** Develop future design and engineering processes to integrate community organizations early and often that can lead, inform, and shape a diverse representation of public art and cultural interpretation throughout the corridor.

### *Accountability: How will the planning effort create better outcomes?*

The planning process identified present-day barriers for underserved communities that include the lack of accessible facility conditions and concerns for safety and comfort due to the lack of physical separation between vehicles and bicyclists. The process also identified community priorities for future design and construction efforts in the corridor to create a diverse representation of many people and cultures of Saint Paul and the region that are connected Summit Avenue's past, present, and future.

The existing on-street bike lanes on Summit Avenue, directly adjacent to a high traffic roadway, create an environment that feels unsafe, therefore limiting use of the facility. The planning process developed strategies based upon feedback from local community events and from organizations including District Councils, Adaptive Recreation, and BIPOC-led outdoor recreation groups to create a trail that is inclusive and equitable for

people of all races, ages and abilities. Initial engagement data in the project suggested participation was limited to middle-aged people who self-identify as white or Caucasian. This process required the project team to increase awareness by engaging a broader demographic and helped to shape considerations and priorities in design that can reduce barriers to future trail use.

# Demographic Analysis

This analysis focuses on the six factors outlined in the Metropolitan Council 2040 Regional Parks Policy Plan: race, ethnicity, national origin, income, ability, and age. As a regional facility, the demographics of the community adjacent to Summit Avenue as well as the regional demographics of the metropolitan area determine who may be benefiting or who might be underserved by regional trail facilities. The data is illustrated graphically on the next page.

## Local Analysis

Using data from the census tracts directly adjacent to the Summit Avenue corridor, this analysis is divided into two segments that help capture the variations in demographic trends that exist between the more residential and more urban segments of the corridor.

### Summit Avenue (Mississippi River Boulevard to Saint Albans Street)<sup>1</sup>

- Ethnicity and Race: The population of this segment of Summit Avenue is predominantly white with approximately 82% of residents reporting as white. 10% of the region's residents are Black, 4.5% Hispanic, and 3.5% Asian.
- National Origin: Approximately 94% of residents are U.S. born.
- Mean Household Income: The mean annual household income in these tracts is \$86,294.

- Ability: The percentage of residents with any disability is 8.1%
- Age: 17% of residents are 17 years old or younger, 72% of residents are between 18 and 64, and 11% of residents are 65 or older.

### Summit Avenue (Saint Albans Street to Kellogg Boulevard, Kellogg Boulevard and Eagle Parkway)<sup>1</sup>

- Ethnicity and Race: The population of this segment of Summit Avenue is predominantly white with approximately 71% of residents reporting as white. 10% of the region's residents are Black, 5% Hispanic, 8.5% Asian, and 5.5% reporting as another race.
- National Origin: Approximately 93% of residents are U.S. born.
- Mean Household Income: The mean annual household income in these tracts is \$58,215.
- Ability: The percentage of residents with any disability is 14.3%
- Age: 14% of residents are 17 years old or younger, 69% of residents are between 18 and 64, and 17% of residents are 65 or older.

## City-wide Analysis

City-wide demographic data identifies potential park users outside of the direct trail corridor. In this data, more diversity in almost all categories exists compared to the census tracts directly adjacent to Summit Avenue.

### City of Saint Paul<sup>2</sup>

- Ethnicity and Race: Residents of Saint Paul report their race and ethnicity as follows: 55.2% of residents identify as white, 15.5% Black, 19.1% Asian, 9% Hispanic or Latino, and the remaining population identifying as American Indian, Native Hawaiian and other Pacific Islander, two or more races, or other.
- National Origin: Approximately 80% of residents are U.S. born.
- Mean Household Income: The mean annual household income in these tracts is \$57,876.
- Ability: The percentage of residents under 65 years of age living with any disability is 9.1%
- Age: 25% of residents are 17 years old or younger, 69% of residents are between 18 and 64, and 17% of residents are 65 or older.

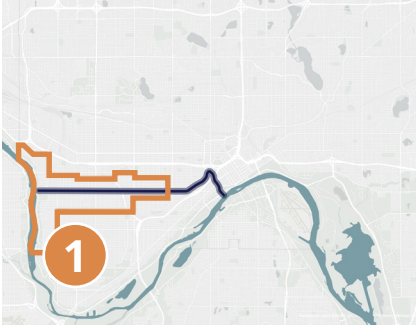
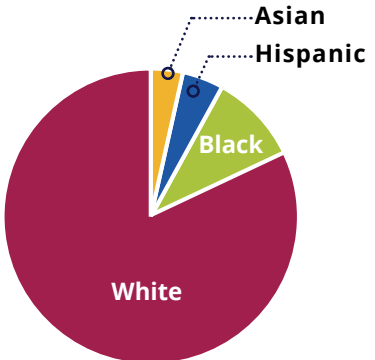
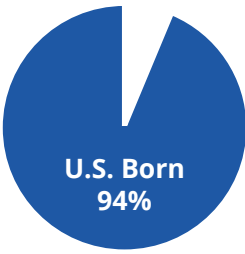
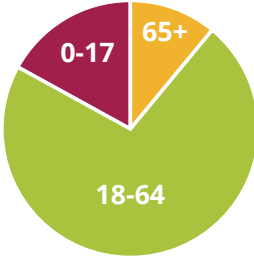

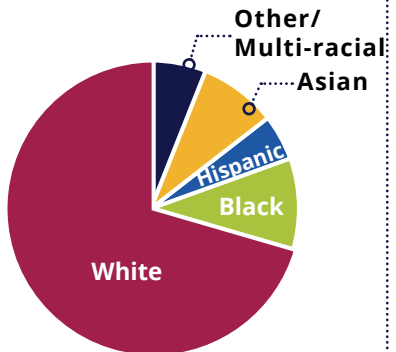
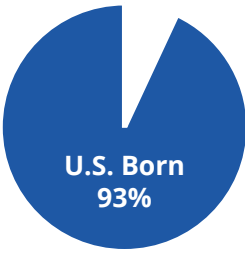
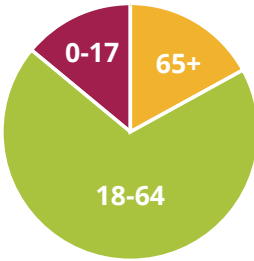
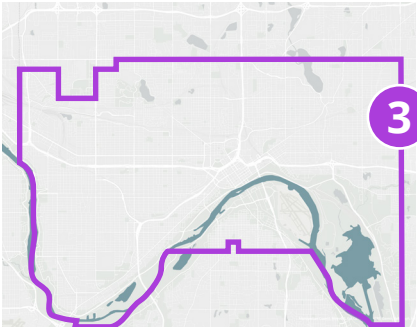
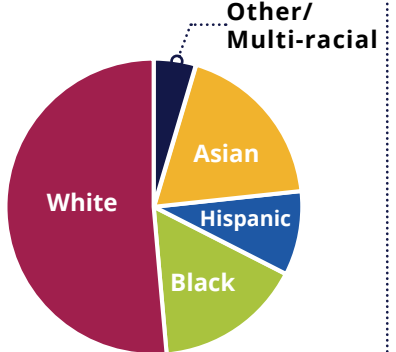
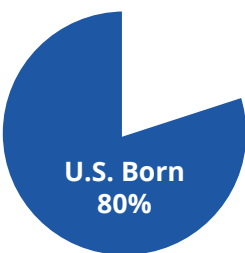
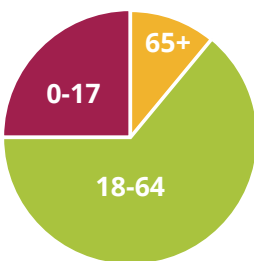
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Demographic data provided by the Metropolitan Council and the United States Census Bureau:

<sup>1</sup> : <https://metrotransitm.n.shinyapps.io/regional-parks-equity-tool/>

<sup>2</sup> : <https://www.census.gov/>

# Demographic Analysis

DATA AREA	RACE AND ETHNICITY	MEAN HOUSEHOLD INCOME	NATIONAL ORIGIN	AGE	ABILITY
		<b>\$86,294</b>			<b>8.1%</b> living with a disability
		<b>\$58,215</b>			<b>14.3%</b> living with a disability
		<b>\$57,876</b>			<b>9.1%</b> of residents under 65 are living with a disability

# Connections for Youth and Families

## Schools and Community Locations

The City of Saint Paul, Saint Paul Public Schools, Ramsey County, and MnDOT work collaboratively to implement Safe Routes to School, with the guidance of The Saint Paul Safe Routes to Schools Policy Plan. This document outlines strategies to improve safety for students walking and biking to school in Saint Paul. The Policy Plan recommends a half-mile radius around elementary schools, and a one-mile radius around middle and high schools as an appropriate distance for students in those grades to feel comfortable walking or biking to school.

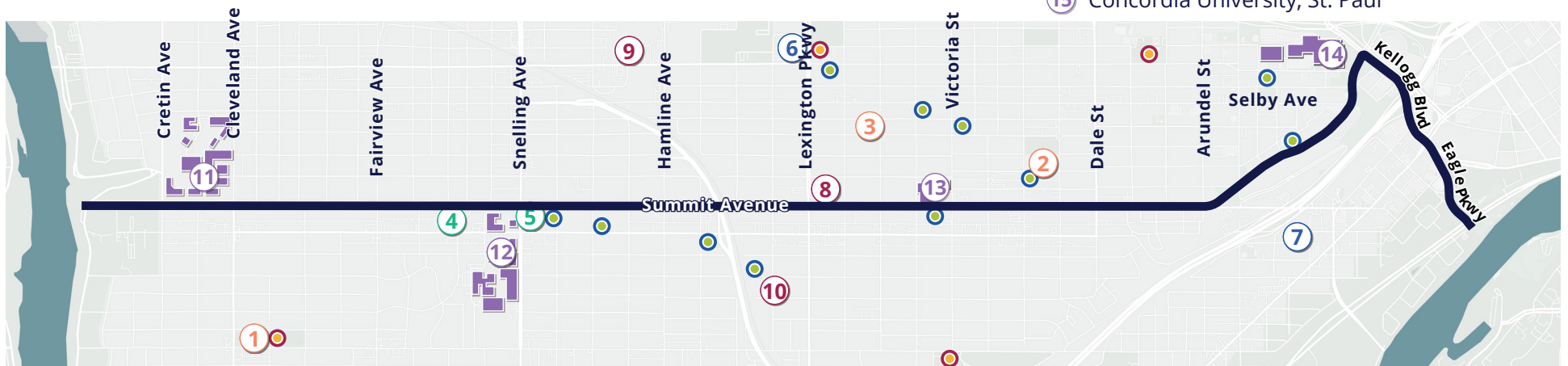
Due to its proximity to a number of schools, Summit Avenue has the potential to be a great connector between schools, homes, community centers, and parks. In its current condition, Summit Avenue caters more to experienced and

confident riders. Through the community engagement process, parents and families have expressed their concern about riding with their children or letting their children ride alone on the existing on-street bikeways. By providing a curb separated bicycle facility on Summit Avenue, more vulnerable riders, including school age children, would be able to connect to school and other community amenities safely without a car.

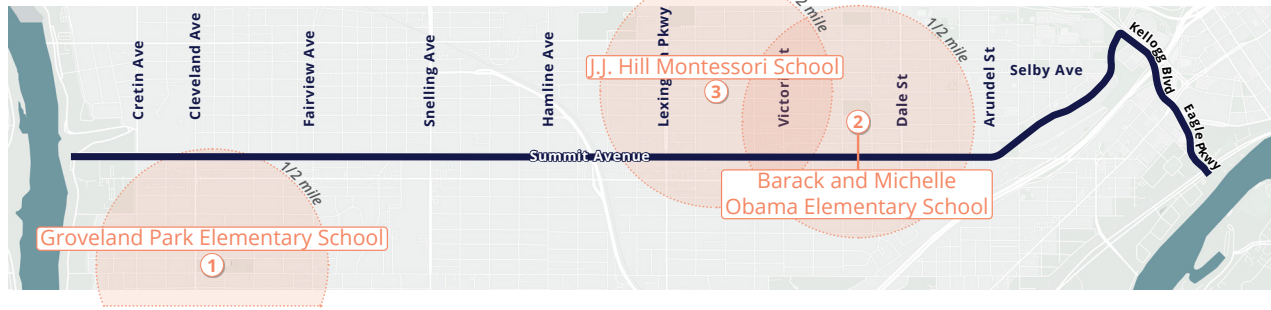


*Bike train along Summit Avenue*  
Credit: Safe Routes to School

- # Elementary School
  - # Middle School
  - # High School
  - # Schools with Multiple Grades
  - # Colleges and Universities
  - Preschool / Daycare
  - Community Center
- 
- 1 Groveland Park Elementary School
  - 2 Barack and Michelle Obama Elementary School
  - 3 J.J. Hill Montessori School
  - 4 Hidden River Middle School
  - 5 Laura Jeffrey Academy
  - 6 Central High School
  - 7 Journeys Secondary School
  - 8 St. Thomas More Catholic School
  - 9 Higher Ground Academy
  - 10 Saint Paul Academy
  - 11 University of St. Thomas
  - 12 Macalaster College
  - 13 Mitchell Hamline School of Law
  - 14 Saint Paul College
  - 15 Concordia University, St. Paul



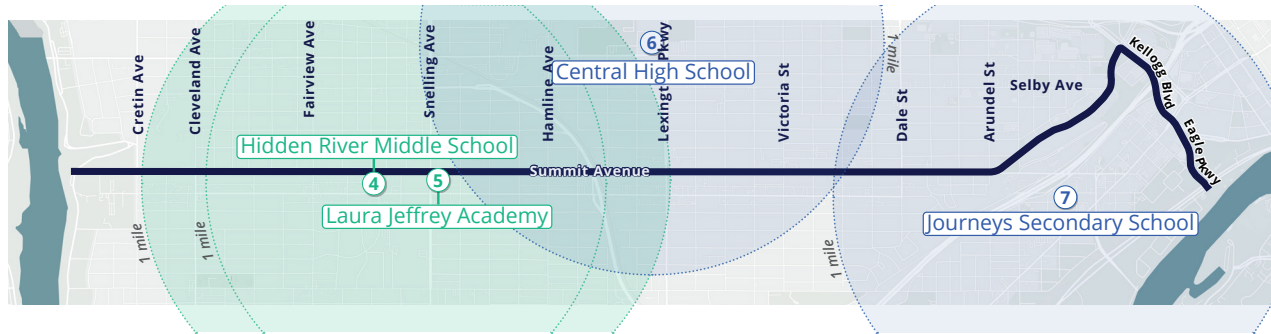
# Connections for Youth and Families



## ELEMENTARY SCHOOLS

*1/2-mile radius shown from school*

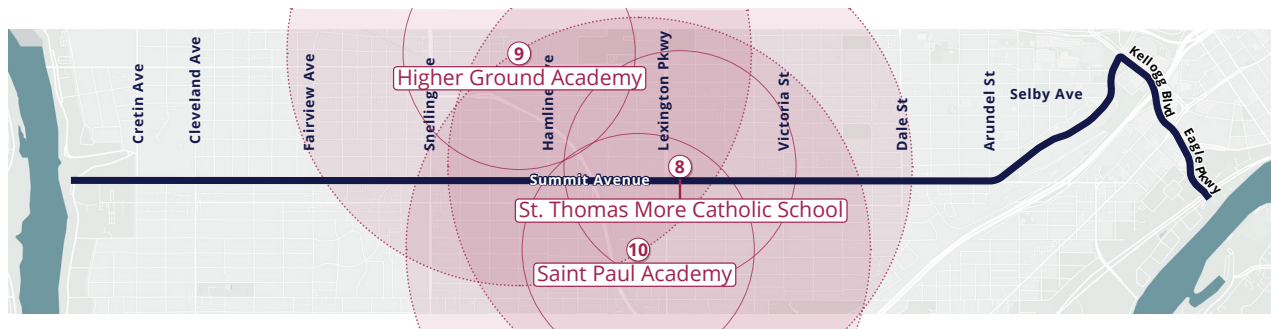
- Segments of the Summit Avenue corridor are within a half-mile radius of an elementary school including a small area near Cleveland Avenue, and an area between approximately Ayd Mill Road and Arundel Street.



## MIDDLE AND HIGH SCHOOLS

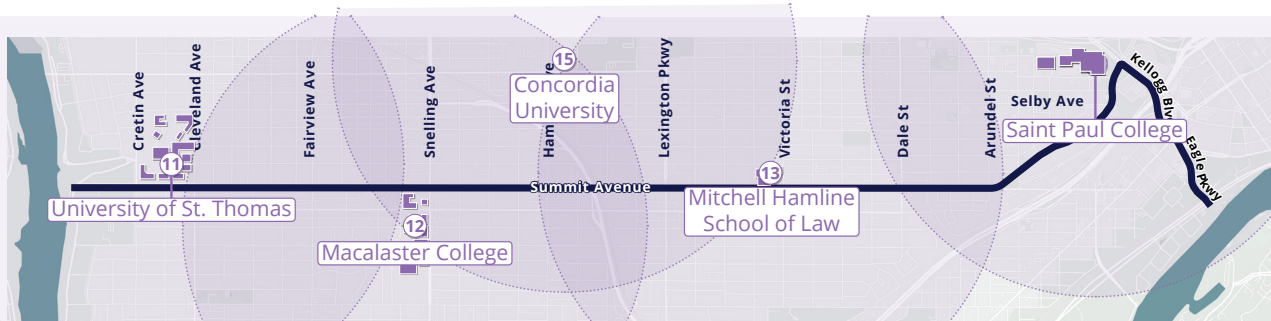
*1-mile radius shown from school*

- All of the Summit Avenue corridor east of approximately Cretin Avenue is within a one-mile distance of a middle and/or high school



## SCHOOLS WITH MULTIPLE GRADES 1/2- and 1-mile radius shown from school

- Segments of the Summit Avenue corridor are within a half-mile radius of an elementary school including an area between approximately Fairview Avenue and Dale Street.



## COLLEGES AND UNIVERSITIES

*1-mile radius shown from school*

- The entirety of the proposed Regional Trail corridor is within a one-mile radius of a college and/or university

# Connections for Youth and Families

## Focused Engagement

### Bicycle Network in Communities

Riding a bicycle can be a safe, fun, and accessible experience for all ages and abilities. Having access to a network of bicycle facilities provides opportunities for community members to meet local and regional transportation and recreational needs each day as an alternative to motor vehicles. It can mean getting to work, school, businesses, and accessing community events directly and intuitively. Engagement efforts for the Summit Avenue Regional Trail plan included receiving feedback from organizations such as, Saint Paul Public Schools - Safe Routes to School Program, Hidden River Middle School Family Staff Organization (FSO), and Slow Roll Twin Cities. Several important themes for feedback from these groups are identified below.

- Fundamental skills & bicycle safety
- Community health, recreation, and empowerment
- Street infrastructure and crossings

### Fundamental skills & bicycle safety

Programming that focuses on introductory skills for bicycling and equipment in a safe, supportive environment offers youth and families paths to build skills and access to this recreational and transportation option. In addition to supporting the activity of bicycling to and from school for transportation, schools incorporate bicycling activity into physical education classes and

look for ways that students can access field trips and group rides during the day as well as part of their curriculum. These programs build essential skills for bicycle safety, mobility, and even maintenance for equipment.

### Health, recreation, and empowerment

Organizations such as Slow Roll provide ways to meet your neighbor, see your community and be outside<sup>1</sup>. Slow Roll events create space for beginners and often times these events take place along Summit Avenue as a gradual ride with a direct connection to the river. Community members from Hidden River Family Student Organization referenced how Summit Avenue can be a barrier itself for crossing and recognized how students will form their own group rides by gathering in the medians to ride together. Other programming within Hidden River FSO includes ways to empower youth such as pairing students with more experience riding with those who are beginners to create mentorship opportunities and build skills.

Since the pandemic, Hidden River Middle School has seen more bicycling activity and doubled its bicycle parking capacity in response to higher demand. These trends reflected more students and staff using bicycles for transportation to school.

### Street infrastructure and crossings

The route from Hidden River Middle School along Summit Avenue to Griggs and that connection to Central High School is an important path for youth and families. Students and families expressed how Summit Avenue itself can be a barrier to cross limiting access from neighborhoods to the north and south. This focused engagement effort relayed and recognized the importance of prioritizing safe crossings for all ages and abilities as well as the opportunity along Summit Avenue to design infrastructure that prioritizes people within these spaces.

<sup>1</sup> Saint Paul Public Schools: Safe Routes to School Plan - Capitol Hill Gifted and Talented Magnet Benjamin E. Mays IB World School, 2018



*Slow Roll Event  
Credit: Safe Routes to School*



*Bicycle skills courses for students  
Credit: Safe Routes to School*

# Engagement Events

## Design Advisory Committee (DAC) Meetings

The Design Advisory Committee (DAC) included community leaders from businesses, organizations, and community groups near Summit Avenue. The guiding principles and roles of the Design Advisory Committee were as follows:

- Advisory role to Parks and Recreation
- Input balanced with larger citywide needs, Parks and Recreation Systems and Vision Plan, Saint Paul Bicycle Plan, Great River Passage, and permitting
- Committee members are representing a larger interest group
- Decisions by consensus, not voting
- Work respectfully in group setting
- Understand and balance needs of all trail users
- Join Committee with open-mind and willingness to listen and hear views or ideas

The DAC met with project staff twice during development of the Plan to give feedback and help provide a connection between members of their organizations and the project.

## Technical Advisory Committee (TAC) Meetings

The Technical Advisory Committee (TAC) was comprised of City of Saint Paul staff as well as staff from other regulatory agencies. The groups represented in the TAC include:

- City of Saint Paul
- Minnesota Department of Transportation (MnDOT)
- State Historic Preservation Office (SHPO)
- Department of Natural Resources (DNR)
- National Park Service (NPS)
- Capitol Region Watershed District (CRWD)
- Capitol Area Architectural and Planning Board (CAAPB)
- Ramsey County
- Metropolitan Council
- Heritage Preservation Commission (HPC)

The individuals from these groups were invited to two TAC meetings at different phases of the development of the Plan. Members of the TAC were asked to advise the development of conceptual trail alignments and provide feedback about ideas presented during these meetings.

## Virtual “Drop-in” Engagement Sessions

Three drop-in engagement sessions were held in the spring of 2022. Community members were invited to participate in an informal call with project team members to learn about the project and share concerns.

## 2021-2022 On-Site Events

Project staff attended a number of on-site events near Summit Avenue between Fall 2021 and Summer 2022 to talk to community members about the project and collect feedback. A list of these events is included in the ‘Focused Engagement’ section earlier in this chapter (page 39).

## Public Information Session

Members of the public were invited to learn about the project and give feedback. Over 250 community members attended the virtual event where project staff presented an overview of the project and discussed potential trail concepts. Participants were divided into breakout sessions to discuss the concepts further and voice feedback about the proposed trail facility.

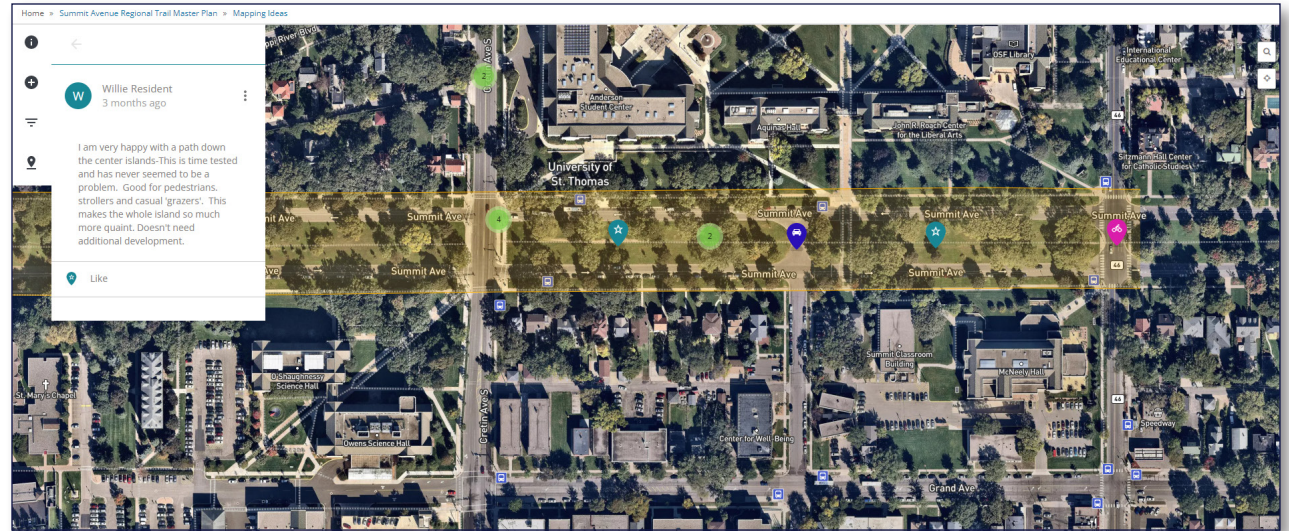
## Community Open House

A Community Open House was held at Hidden River Middle School on October 27, 2022 to provide an opportunity for community members to view design concepts, share feedback, and engage with the project team to learn more about the Plan. Staff were available to answer questions, provide information, and gather feedback.

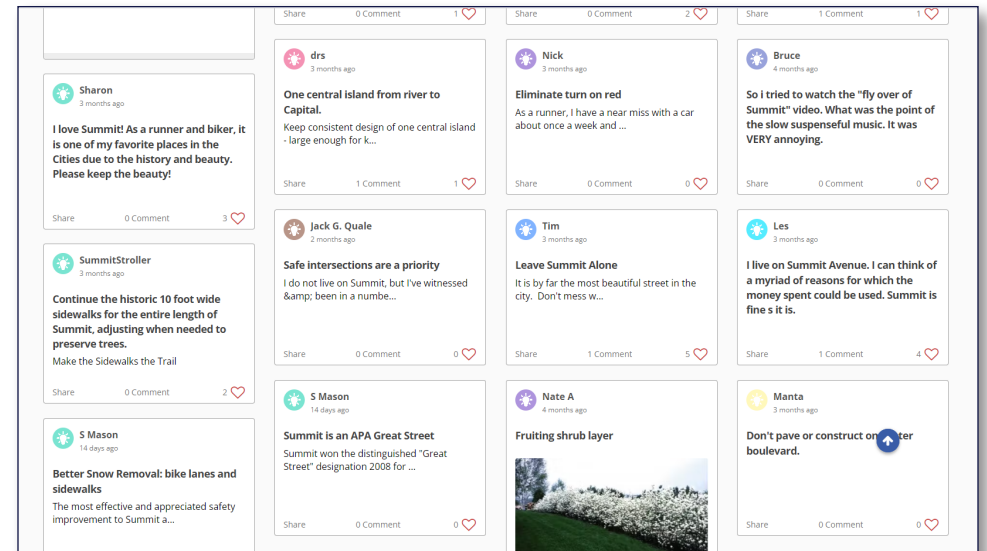
# Public Engagement

## Virtual Engagement

Engagement also occurred virtually for the Plan. The Engage Saint Paul website (<https://engagestpaul.org/summit>) served as the main portal for engagement. Project information was provided by Parks and Recreation staff for review and comment by community members. Engagement tools included an interactive map where users could drop pins, share photos, and leave comments, a survey to help gather feedback about specific elements of the corridor, and an idea board, where users could post comment and photos and interact with other members.



The City of Saint Paul Parks and Recreation project website (<https://www.stpaul.gov/departments/parks-and-recreation/design-construction/current-projects/summit-avenue-regional-trail>) also provided links to the engagement platforms and project information. These websites have allowed for continuous public engagement through the development of this Plan.











# Public Engagement

## Virtual Engagement

### Mapping Ideas

The project engagement website provided an interactive map for community members to visualize the proposed project corridor, and make comments related to the map. At this point (August 2, 2022), 174 people have contributed and 632 pins have been added to the map.

Pins organized by general categories were available to be used. Those categories are listed below, with the percentage of comments related to each also listed:

-  Like (12%)
-  Dislike (12%)
-  Safety (22%)
-  Biking (18%)
-  Traffic or Roadway (13%)
-  Recreation (8%)
-  Parking (6%)
-  Other (5%)

Common themes noted in this exercise include:

- Notes at major intersections regarding concerns for safety
- Desire to maintain and preserve existing natural features including mature tree canopy and central median running path; notes about existing greenspaces that have opportunity for amenities
- Notes about specific properties, schools needing drop-off zones, churches needing parking at certain times of day, etc.
- Historic elements are important (granite curbs, hexagon pavers, wide sidewalks)
- Comments about conflicts between drivers and bicyclists at driveways, intersections, parking areas
- Desire for no change to Summit Avenue other than roadway repairs
- Importance of winter maintenance

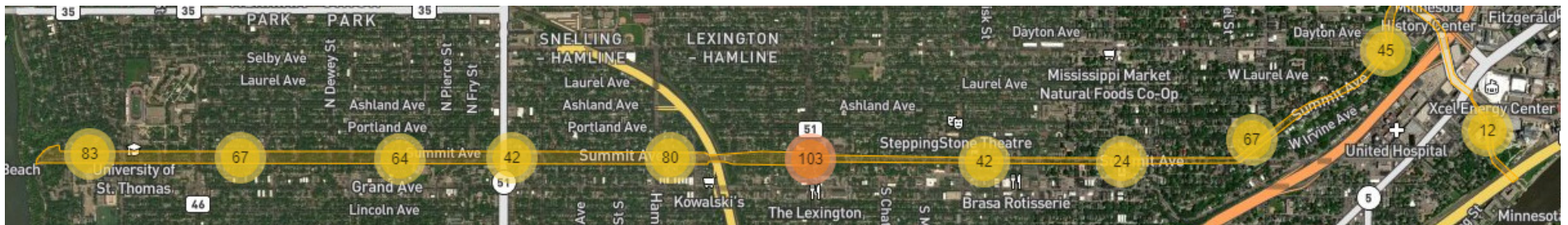
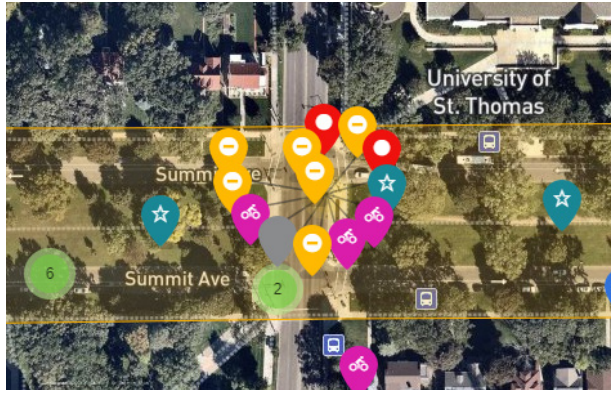


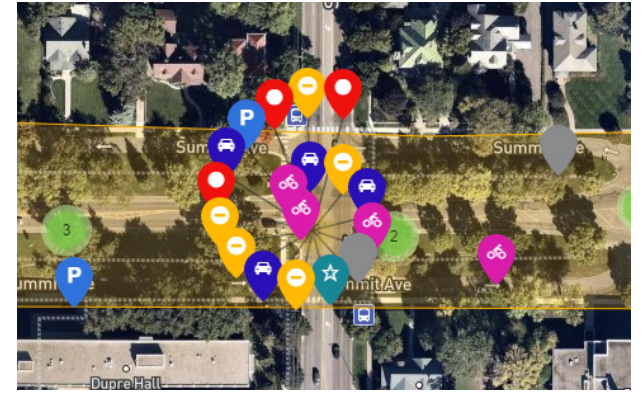
Fig. 2-15 | Snapshot from 'Mapping Ideas' Engagement Tool



Intersection at Mississippi River Boulevard



Intersection at Cretin Avenue



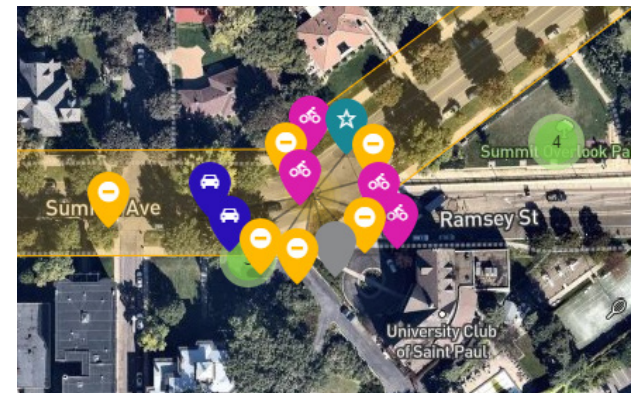
Intersection at Snelling Avenue



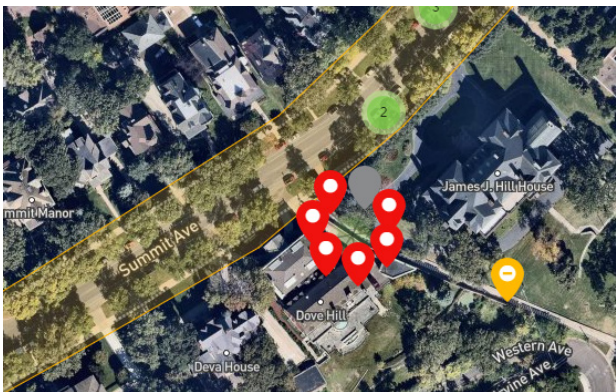
Ayd Mill Road Bridge



Intersection at Lexington Parkway



Intersection at Ramsey Street



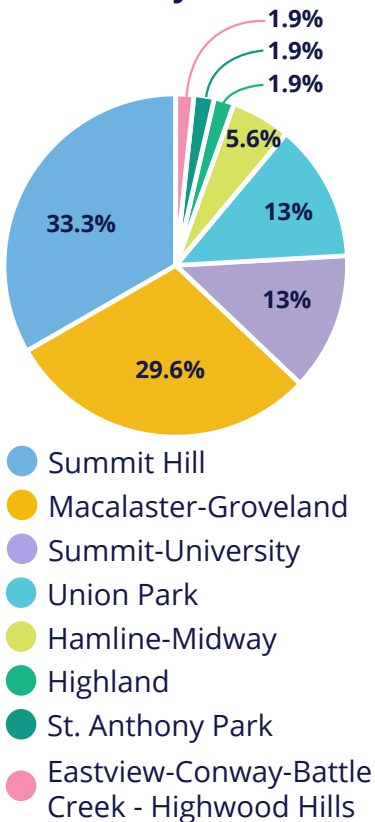
Walnut Street stairs

# Public Engagement

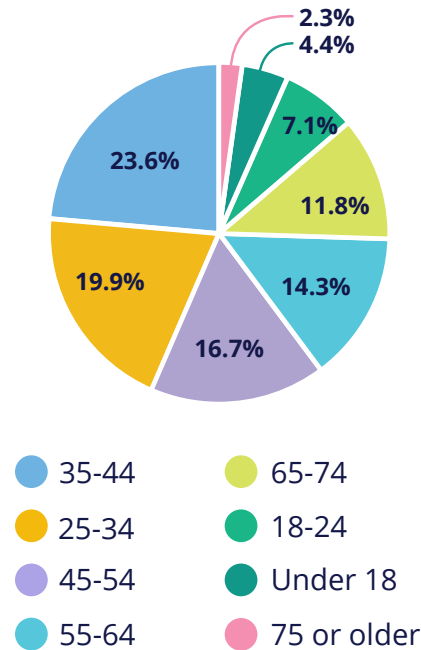
## Results From Engagestpaul.org Online Survey August 2021-October 2022

Community members were invited to participate in an online survey to share ideas and concerns about the proposed regional trail. A summary of the feedback received is illustrated here.

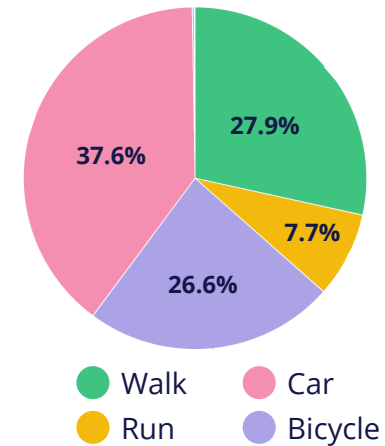
### Where do you live?



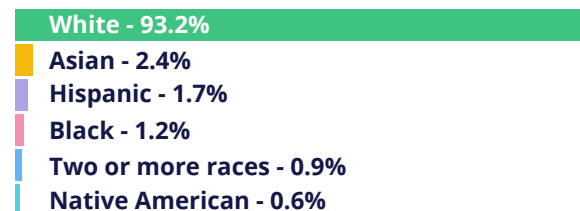
### Please select your age



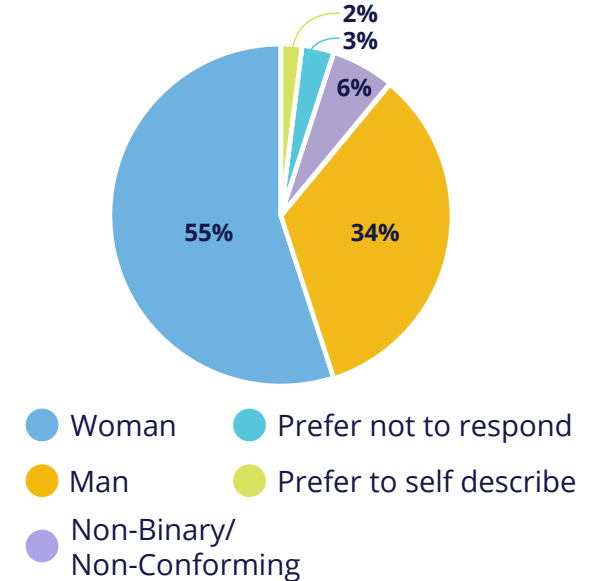
### What method of transportation do you primarily use along Summit Avenue?



### With which race or ethnicity do you most identify?



### Gender: How do you identify?

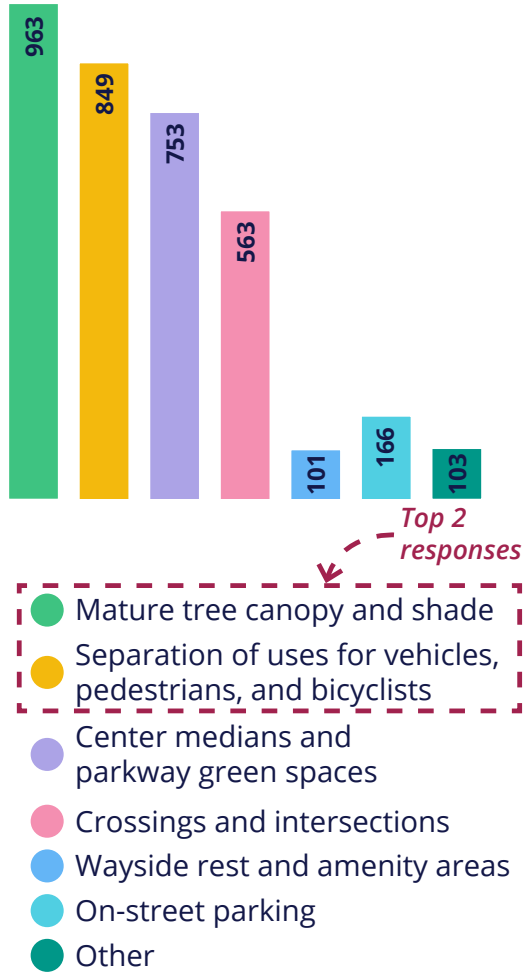


*\* See appendix for additional survey results.*

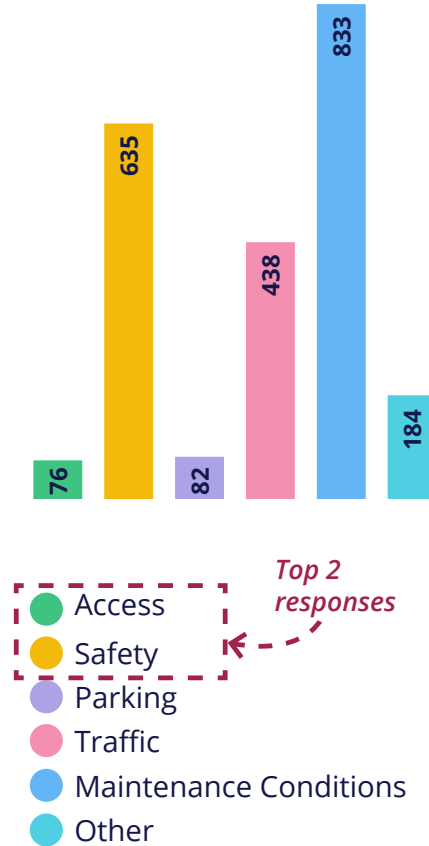
# Public Engagement

## Online Survey Results

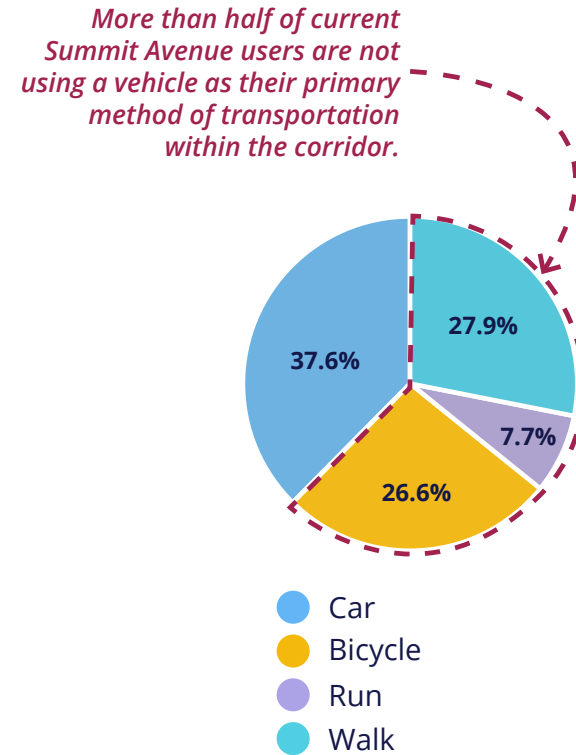
Within the Summit Avenue corridor, which elements are most important to you?



What limits your use of Summit Avenue for transportation or recreation?



What method of transportation do you primarily use along Summit Avenue?



*\* See appendix for additional survey results.*

# Public Engagement

## Online Survey Results

One of the questions in the online survey asked respondents,

**“If you could improve ONE thing along Summit Avenue, what would it be and why?”**

This questions received **1,345** responses, below is a sample of the responses received:

- Better, safer bike infrastructure. It's such a beautiful road to bike on, but it feels increasingly unsafe. There is no barrier between speeding cars and bikes.
- More green spaces
- Replace the road! It is horrible!
- ...remove parking on one side and create a permanently protected and separated bike lane. It would return Summit to its historical purpose as a bike path and would make the street safer for everyone as a main thoroughfare in St. Paul.
- Don't destroy mature trees
- Accessibility; make Summit Avenue safer for walking pedestrians, especially for disabled people
- Slower traffic speeds
- Bike lanes. Summit is one of the most used bike corridors through the city and to downtown. It should have

better bike lanes. Ideal would be lanes that are protected and separated from cars, like the new lanes on Como or Johnson Parkway.

- Eliminate the risk of being “doored”
- Nothing in particular - it's a very nice street
- More art/history public spaces
- Protected bike lanes!
- Fix the holes!
- De-prioritize motor vehicles. Most of the problems with Summit Avenue stem from the presence of motor vehicles and the backwards planning priorities that favor them
- Eliminate parking to increase biking and pedestrian use...we don't need 2 lanes of parking on the city's most beautiful parkway
- Places to rest - benches, public parks, public greenspace
- I think Summit Avenue is just right. Just keep the streets clear of pot holes and the sidewalks level
- Make it a safe place for families to bike

*\* See appendix for additional survey results.*

## Other Feedback Themes

### *Greenspace*

- Limit impacts to tree, focus on preservation
- Importance of canopy for shade and parkway experience
- Maintain open space in medians - open space for passive recreation

### *Safety*

- Minimize conflicts at intersections
- Conflicts between vehicles and bicycles
- Confusing median to roadway transition areas
- More separation between cars, bicycle, and pedestrians

### *Facility Conditions*

- Existing roadway surface is very poor
- Walkway paver surfaces lift and heave, tripping concerns
- Wider, 10' sidewalks east of Dale are highly desirable
- Snow maintenance conditions inhibit bicycling in lanes
- Desire for more accessible surfaces, year-round
- Maintain dirt path in central median - unique running experience in the City
- Charming, quaint experiences, unlike other facilities

### *No Change*

- Maintain existing functions and on-street conditions
- Limit impacts to corridor
- Surface repairs are a priority

# Public Engagement

## Technical Advisory Committee

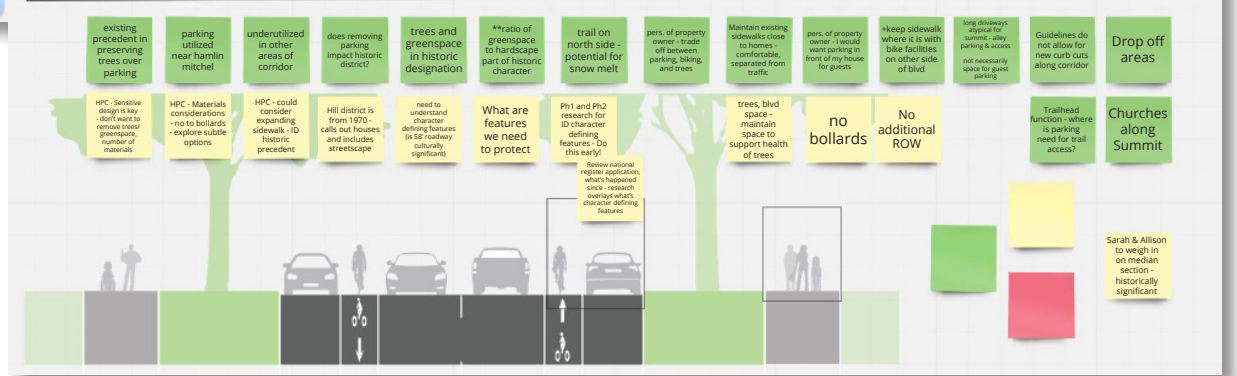
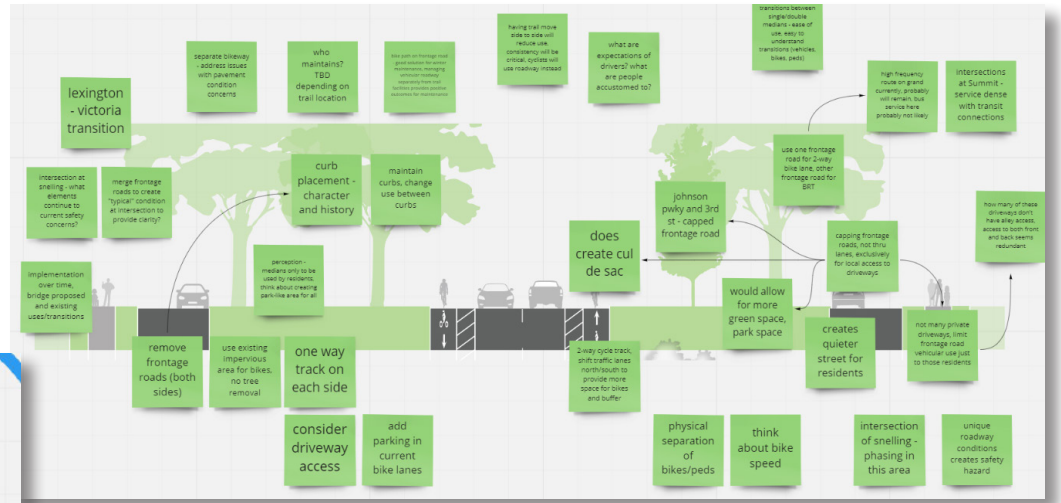
### TAC Meeting #1 - February 4, 2022

... **3** DESIGN

"As a \_\_\_\_\_, critical items for a successful trail here would include \_\_\_\_\_."

**THINK + SHARE**  
(There will also be a way to complete this as meeting follow-up)

As a Landscape Architect...	Operations & Maintenance Supervisor - Resilient paving wide enough to accommodate equipment	NPS: A way to get connected to River or other places - signage is important	NPS: AS inclusive as possible - shared roadway experience is a barrier	O&M: Proper spacing for maintenance to happen - volume of spaces for SNOW and room so it's workable	O&M: Not permeable pavement - limited resources
O&M: Soft-surface/aggregate trail surface may be OK	Nat. Resources: On-site rainwater mgmt - keeping it on the land is important	Nat. Resources: Diversity of plant materials, wildlife/pollinat or habitat			



# Public Engagement

## Technical Advisory Committee

### TAC Meeting #1 - February 4, 2022

#### Discussion Topics

- Multi-use trail facility vs. separate bike and pedestrian facilities
- If separated: (2) one-way bike facilities vs. (1) two-way bike facility
- Trail in median
- Parking restrictions and removals

#### Group Discussion Themes

##### Trail Facility

- Preference for separate bicycle and pedestrian facilities
- In double median condition - consider frontage roads for trail facility
- Consistency in facility type through the corridor will be critical
- Consider project phasing
- Could consider expanding sidewalk
- Consider trail on north side of roadway for snowmelt potential
- Maintain existing sidewalks where they are

##### Trees and Greenspace

- Use existing impervious area for trail, no impact to trees and greenspace
- Prioritize trees and greenspace over parking
- From a historical perspective, don't want to remove trees or reduce greenspace
- Trees and greenspace are part of the historic district designation of the corridor

##### Parking

- Reduce parking near intersections for clear sight lines
- Parking removal could promote other modes of transportation
- Parking in residential areas is desirable

##### Other

- Emphasis on need for improved safety at intersections: leading pedestrian intervals, specific signals for cyclists
- Need to understand what component of the roadway and surrounding context are part of the historic designation, what can be changed, what needs to remain.

# Public Engagement

## Technical Advisory Committee

TAC Meeting #2 - May 23, 2022

**1 minute**

**1 VISION**  
Quick Post: **First word** that comes to mind when you picture the parkway on Summit Ave.

Busy	historic	green	forested	connections	continuous
People	trees	destination	dogs	interesting	bikes
homes					

**2 DESIGN**  
"In 50 years, this parkway..."

**THINK + SHARE**  
(There will also be a sign to encourage you to "think + share")

safe	more bike and ped focused	should feel similar - less cars	open and welcoming	no losses from now	more tree diversity, preservation of tree canopy

**1 minute**

**1 VISION**  
Quick Post: **First word** that comes to mind when you picture the parkway on Summit Ave.

Greenspace	Tree	Mobility	Relaxing	Formality	needed
Recreation					

**2 DESIGN**  
"In 50 years, this parkway..."

**THINK + SHARE**  
(There will also be a sign to encourage you to "think + share")

Update	Will use the same as it does today, but taller trees	Allow to bike completely around St. Paul			

**FEEDBACK**

**Two-Way Separated Trail, Parking One Side**  
200' Right-of-Way | Segments A and C

**Two-Way Bicycle Facility, Remove Parking**  
Ayd Mill Bridge, one-way facilities

**wayfinding and amenities**

- narrowing travel lanes (vehicular), intersection bumpouts, shorter and crossings
- well loved, historic area
- reducing space for cars and parking
- vertical signs, etc. to maximize use of parking envelope
- reducing clutter on sidewalks
- vertical signs, etc. to maximize use of parking envelope
- reducing clutter on sidewalks


**FEEDBACK**

**Two-Way Separated Trail, Parking One Side**  
200' Right-of-Way | Segments A and C

**Two-Way Bicycle Facility, Remove Parking**  
Ayd Mill Bridge, one-way facilities

Love it! Canal Region - supporting historic character and better use of green space	Allison - historic signage, signage about changing transportation journey in greenspace
Brent C - Two way may provide better linear access to facilities	
Rachel C - conflict with delivery vehicles	Allison - consider historic curb
Brent C - emergency vehicles, potholes, potholes, potholes, potholes	Brent C - 6' buffer more able to accommodate signage

# Public Engagement

## Technical Advisory Committee

TAC Meeting #2 - May 23, 2022

### Discussion Topics

- Trail facility style (one-way vs. two-way) and experience
- Role of greenspace
- Balance of corridor component (greenspace, historic context, parking)
- Parking restrictions and removals

### Group Discussion Themes

#### Trail Facility

- Continuity in trail facility is preferred
- Positive reception to separated facility - seems easier for snow clearing
- Hesitant about cyclists going against traffic in a two-way bike facility, buffer seems helpful, suggestion of a vertical element as well
- Two-way facility pros and cons: support for no net loss of greenspace, concern that this will change historic proportions and symmetry (segments A and C)
- Support for one-way facility - more familiar to bikers, drivers, and pedestrians
- Concern about phasing with two-way facility and what happens in the interim

#### Trees and Greenspace

- Interest in and concern about tree removals
- If impact on greenspace is necessary, study where the impact will occur, be sensitive to context
- Forestry staff emphasizes the desire to maintain the existing root zone of the trees in the corridor - 3-4' of impact feels significant
- Enhance existing park-like quality of the parkway - provide uninterrupted medians without vehicle cut-throughs
- Impacts to greenspace and tree canopy also impacts the historic value of the corridor

#### Parking

- General support for selective parking removal
- Parking is most critical near multi-family housing areas, for example, Dale St. area

#### Other

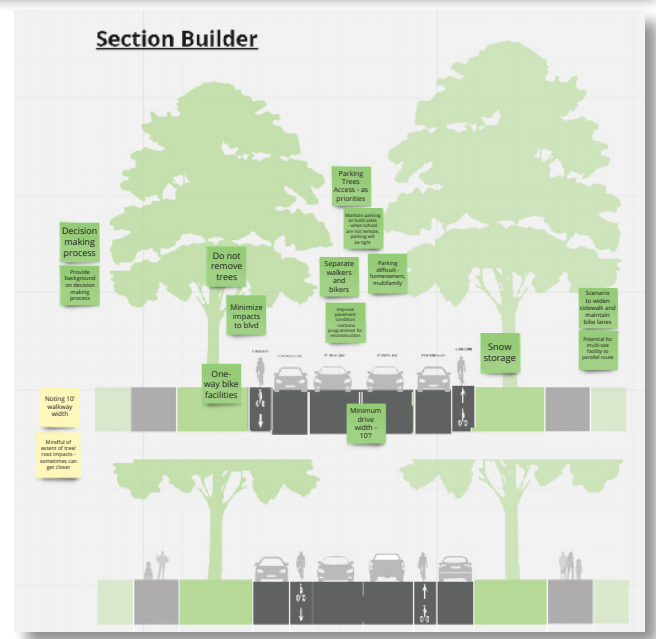
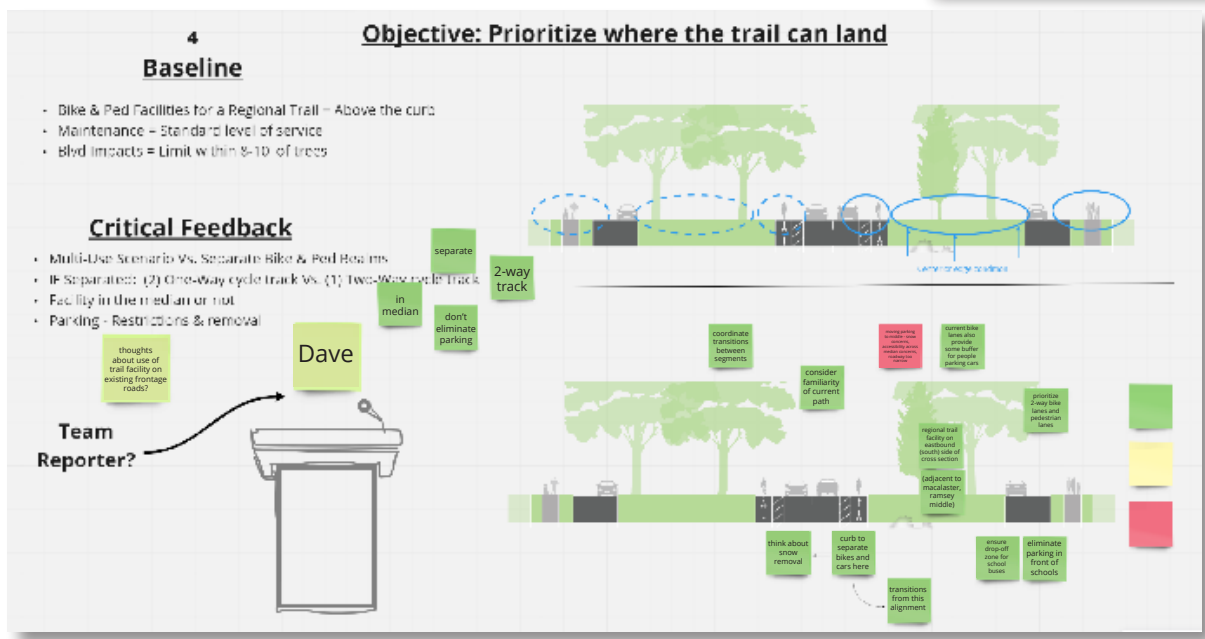
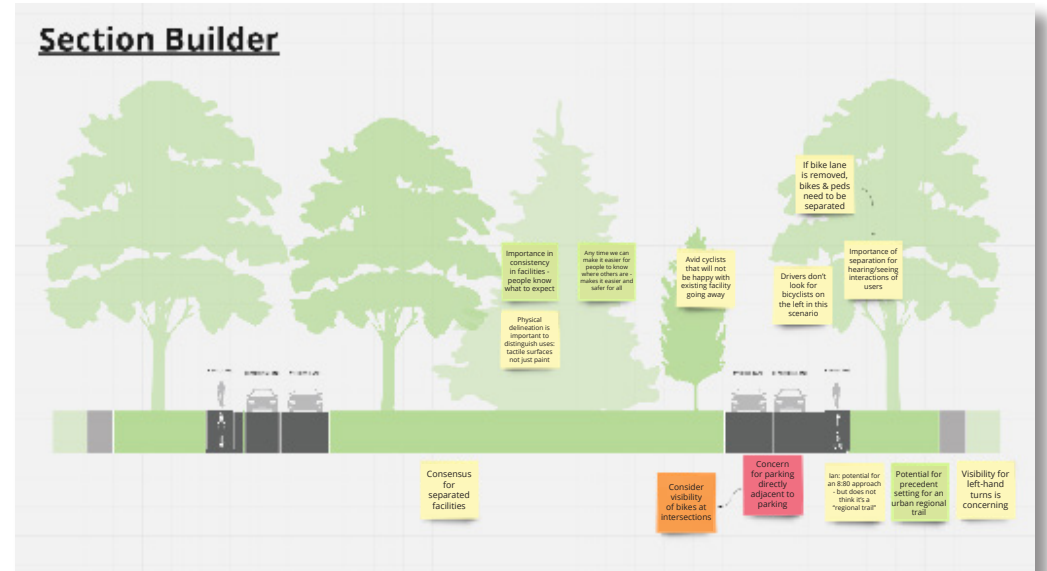
- Importance of winter maintenance
- Consider residential driveways, think about safety for all users
- Traffic calming, narrowing travel lanes, intersection bumpouts, shorter pedestrian crossings
- Wayfinding and amenities

- Opinion that two-way facility adds to the park-like feel, desire to make Summit Avenue feel more like a park and less like a through way for vehicular traffic
- Symmetry is important for historic preservation
- Interest in relationship to existing transit stops and intersections
- Consider project phasing - how will the trail function when only part of it is completed?
- Importance of safety improvements at Snelling Ave intersection

# Public Engagement

## Design Advisory Committee

DAC Meeting #1 - February 15, 2022



# Public Engagement

## Design Advisory Committee

### DAC Meeting #1 - February 15, 2022

#### Discussion Topics

- Multi-use trail facility vs. separate bike and pedestrian facilities
- If separated: (2) one-way bike facilities vs. (1) two-way bike facility
- Trail in median
- Parking restrictions and removals

#### Group Discussion Themes

##### Trail Facility

- Inappropriate to put trail in the middle of the wide median
- Consensus for separate bicycle and pedestrian trail facilities
- Consistency is important so users know what to expect
- Avid cyclists will not be happy with the existing facility going away
- Discussion about both one-way and two-way facility types - concern about safety for bikers going against the traffic direction in a two-way scenario
- The 10-foot sidewalks near Dale St feel safe and comfortable

##### Trees and Greenspace

- Don't take away greenspace from median - keep informal running trail
- Do not remove trees
- Minimize impacts to boulevards

##### Parking

- Desire by some not to eliminate parking
- Other suggestions for selective parking removal
- Parking removal will be difficult for residents, especially people living in multi-family buildings

##### Other

- Improve pavement throughout corridor
- Intersection and transition safety is critical for all modes

# Public Engagement

## Design Advisory Committee

DAC Meeting #2 - May 25, 2022

### Critical Feedback

- Trail Facility Styles and Experiences
- Role of greenspace
- Recognize the push/pull of greenspace and hist. context
- Parking Removal & Restrictions

Table 1 follows

### OVERALL CORRIDOR FEEDBACK

### Critical Feedback

- Trail Facility Styles and Experiences: 1-way or 2-way
- Role of greenspace
- Recognize the push/pull of greenspace and hist. context
- Parking Removal & Restrictions

### Two-Way Separated Trail, Parking Both Sides

100' Right-of-Way | Segments D, E, and F

--- Existing Curb Line  
— Potential Impact Zone

8' | 11' | 11' | 8' | 4' | 12'

#### FEEDBACK

- Want a holistic approach to summit (1) or two way for entire length)
- The symmetry of the street is important - that is a factor of the character of the street
- Would narrowing travel lanes help reduce speed?
- Has there been thoughts to retain parking?
- Idea of combining existing 5' facilities (10') total instead
- Since funding won't come thru for longer time, how about a one-way vehicular situation?
- Potentially east of lexington can be different than west

# Public Engagement

## Design Advisory Committee

### DAC Meeting #2 - May 25, 2022

## Discussion Topics

- Trail facility style (one-way vs. two-way) and experience
- Role of greenspace
- Balance of corridor component (greenspace, historic context, parking)
- Parking restrictions and removals

## Group Discussion Themes

### Trail Facility

- One-way style facilities are predictable to drivers
- Concern about 4' buffer, minimizing the buffer could create more space for bikers and pedestrians, reduce impact to greenspace - buffer provides snow storage and protection to bikers from car doors of parked cars
- Questions about the need for buffers/requirements for buffer widths
- One-way style seems oriented to commuters, two-way accommodates more users, more recreational
- Desire for a consistent facility type

- Two-way facility provides nice link to Capitol City Bikeway on east end
- Preference for both facility types one-way and two-way)

### Trees and Greenspace

- Prioritize greenspace and existing trees

### Parking

- Support for public transit over parking in situations where parking may be removed
- Desire to retain as much parking as possible

### Other

- Symmetry is important
- Think about how the facility will function for residents as well as trail users
- Support for removing the vehicle cut throughs in the medians
- Narrow travel lanes to reduce speed
- Consider climate impacts - heat island effect, stormwater runoff, etc.
- Desire for parkway to remain as is - just include improvements to roadway condition and striping
- "Solution looking for a problem"

# Public Engagement

## Public Information Session

June 6, 2022

1 minute

**2**  
DESIGN  
"In 50 years, this parkway...."

THINK - SHARE

car free	preserved	historic	benches	shady	historic
accessible	disrepair lack of funding	connected	land donated by residents	well traveled	increased density
local gem	beautiful ride	kid friendly	community friendly	walker friendly	parking friendly
residential	untrippable sidewalks	breath of fresh air	residential	mutil modal	cared for and work of art

1 minute

**1**  
VISION  
Quick Post: **First word** that comes to mind when you picture the parkway on Summit Ave.

linear park

biking and cycling	pot holes	trees	mansions	8-80 ped/walkers	linear park
dirt running	lovely parkway	historic context	street repair	high taxes	safety
wonderful way to walk	institutions	families	dirt biking	traffic	already improved
poor maintenance	what's broken?	imperial date driving project?	family friendly	parking that serves housing on summit	speeding
colleges parking					

### OVERALL CORRIDOR FEEDBACK

Concern about trees and tree loss - how many?	Process of the project - why summit Ave? Where are more opportunities for input?	How do driveways work with raised bikeway?	Making Summit a one-way with Grand as a pair	bikeways on alleyways idea	safety as it exists now and in the concepts	safety of driveway crossings	traffic and traffic management - how can that be a safer aspect of the corridor
How is engagement planned going forward?	Historic value is important	Existing bike lanes feel constrained	Want to make it safe for all users	Why does it need to change?	Concern for loss of parking	How can we make biking and all modes safer on summit - One idea is a trail	

### OVERALL CORRIDOR FEEDBACK

Project process and desire for more information	determined alignment and wanting more safety information	posting crash-data to website	number of intersections and driveways - bikes are crossing now but how would it change?	Maintenance information needed - who is responsible for it? Level of Service	Pedestrian facilities along the sidewalk - keep that in mind with bike facilities	Keep the historic feel and trees as much as possible	
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# Public Engagement

## Public Information Session

June 6, 2022

### Discussion Topics

- Trail facility style (one-way vs. two-way) and experience
- Role of greenspace
- Balance of corridor component (greenspace, historic context, parking)
- Parking restrictions and removals

### Group Discussion Themes

#### Trail Facility

- Desire to stay in existing transportation envelope to limit impacts
- Trail facility could improve winter conditions if plowed
- Idea to have bikeways in alley

#### Trees and Greenspace

- Tree protection and preservation of greenspace
- Trees in corridor provide unique character - concern if trail can be built and still maintain the character
- Concerns about tree loss

#### Parking

- Safety should be the highest priority - parking should be the lowest
- Consider people with mobility challenges when thinking about parking removal
- Many concerns about loss of parking

#### Other

- Emphasis on safety for families and biking with children - current condition does not feel safe for young or new bikers
- Concern that the corridor is not maintained now, how will a regional trail be maintained in the future?
- Questions in general - why regional trail?
- Questions about considering other east/west routes
- Safety should be the priority
- Preservation of historic character
- Suggestion for other safety measures - bumpouts, reduction in number of crossings, elevated crossings
- Desire to slow vehicular traffic
- Idea to make Summit Avenue a one-way, pair with Grand Ave as another one-way (vehicular)
- Create a corridor where everyone feels welcome

# April 13, 2023 - Parks and Recreation Commission Meeting Recap

The information below summarizes feedback heard at the April 13th, 2023 Parks and Recreation Commission Meeting. City staff gave a presentation to Commissioners on the Summit Avenue Regional Trail Plan. A representative from both SOS (Save Our Streets) and the Saint Paul Bicycle Coalition gave 4 minute remarks to the Commission, followed by a comment period where over 60 individuals provided comments.

## 1 Safety

- **Priority for Safety** - Points about safety brought up by people who both support and oppose the Regional Trail Plan
- **Engineering & Safety** - Questions about whether or not a separated facility is safer than the current conditions on Summit Avenue
- **Vehicle Conflicts** - Safety of crossing driveways and intersections; safety for drivers
- **More Vulnerable Users** - Safety of trail for people who are young, elderly, or living with disabilities. Interest for those who are not currently using the bikeways on Summit Avenue

## 3 History

- **Historic Preservation** - Concern for the effects relative to historical elements along Summit Avenue with the implementation of a trail
- **Historic Destination** - Importance of Summit Avenue as a historic destination

## 5 Process and Community Engagement

- **Frustration** - Concern that voices in opposition to the trail are not being taken into consideration or heard.
- **More Time** - Desire among some for more time to engage with more of the local community; concern that the length of time and amount of engagement has not been sufficient
- **Inclusion** - People at the meeting advocating for people who are very young, elderly, and disabled or those for that could not attend the meeting
- **Process Clarity** - Feeling that Plan has been predetermined - input and responsiveness is not being seen in the Plan
- **Priorities** - Why is this being proposed here and not somewhere else in the City? General concerns about funding priorities and equity

## 2 Tree Canopy

- **Data Discrepancies** - Concerns about discrepancies between City estimate and independent arborist estimate regarding potential tree loss due to construction
- **Value of Trees** - Importance of trees in for history, shade and cooling, climate resilience, and the aesthetic beauty of the roadway
- **Balance of Needs** - Balance of tree loss and once in a generation opportunity for infrastructure upgrades to meet future needs
- **Priority for Preservation** - General consensus that tree preservation is important.

## 4 Parking

- **Economic Impacts** - Concern about how a parking reduction will negatively impact businesses and institutions along Summit Avenue.
- **Safety and Accessibility** - Discussion about safety of residents having to walk farther distances from their car to their home if parking is reduced
- **Land-use Priorities** - Ideas about alternative parking strategies - private partnerships, prioritizing parking for residents, better snow plowing

## 6 Climate Change and Future Planning

- **Investment in Climate Resilience** - Importance of investment in climate resilient infrastructure that allows residents and visitors to be less car dependent and feel safe in all modes
- **Future Infrastructure Planning** - Think about infrastructure in the future when cars may not be the most viable transportation option
- **Youth and Future Generations** - Discussion about infrastructure investments that benefit the youngest generations, and future generations that will bear the greatest burden of climate change



# Existing Conditions

## Organization and Themes

Throughout this document, different themes and scales have guided the investigation, and ultimately the recommendations for the proposed trail facility. Looking at the city of Saint Paul and the communities beyond brings an understanding of the region-wide impacts that this corridor has, while a one-block look at the corridor helps understand the impact that this facility has on individuals, property owners,

neighborhoods, and communities. The diagram below illustrates the entire Summit Avenue Regional Trail corridor, and delineates the different segments explored through this Plan document. The segments have not only unique physical roadway alignments, but also have a unique character and different uses.

The Plan document focuses on a number of themes that guide the recommendations set forth in this document. Those themes

include:

- Regional greenspace amenities
- Mature canopy and greenspace
- Circulation, connectivity, and access
- Parking
- Historic and cultural context

Through this section of the document, these themes guide the exploration of existing conditions along the Summit Avenue corridor.



Fig. 3-16 | Summit Avenue Corridor Segments

# Project Context

## Political Context

The 5.5-mile Summit Avenue Regional Trail corridor intersects with several different wards, district councils, and neighborhoods within the city of Saint Paul. The corridor lies within Wards 1, 2, 3 and 4, and district councils 8, 9, 13, 14, 16, and 17.

Note that Ward 1 is the only ward in the City of Saint Paul that does not currently contain a regional park or trail amenity. The Summit Avenue Regional Trail would provide a regional connection to other parks and trails within the system.

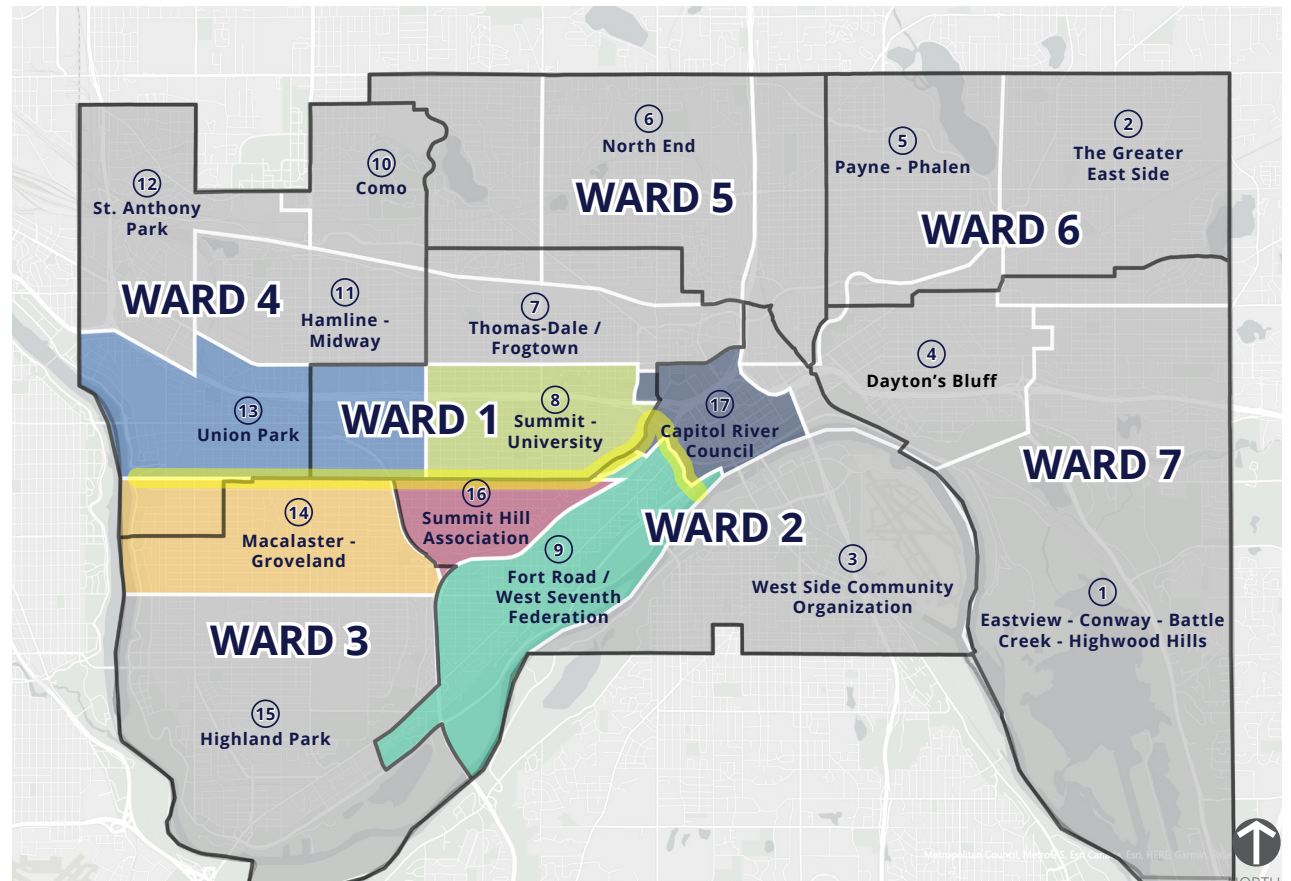


Fig. 3-17 | Saint Paul Ward and District Council Boundaries

# Project Context

## Regional Greenspace Amenities

Designated as a *regional linking trail*, the Summit Avenue Regional Trail serves to connect other regional park and trail amenities throughout the city of St. Paul and beyond. The proposed Summit Avenue corridor improves a missing east/west connection from river to river via downtown, serving a large number of city residents. The map below also shows the connection created between regional park amenities at different points along the Mississippi River.

### Other Considered Routes

Other potential routes connecting Mississippi Gorge Regional Park to the Sam Morgan Regional Trail were evaluated at a high-level. These routes include the following locations:

- Grand Avenue
- Portland Avenue
- Marshall Avenue and Selby Avenue
- Ayd Mill Road/Little Bohemia Trail
- Jefferson Avenue/Ayd Mill Road

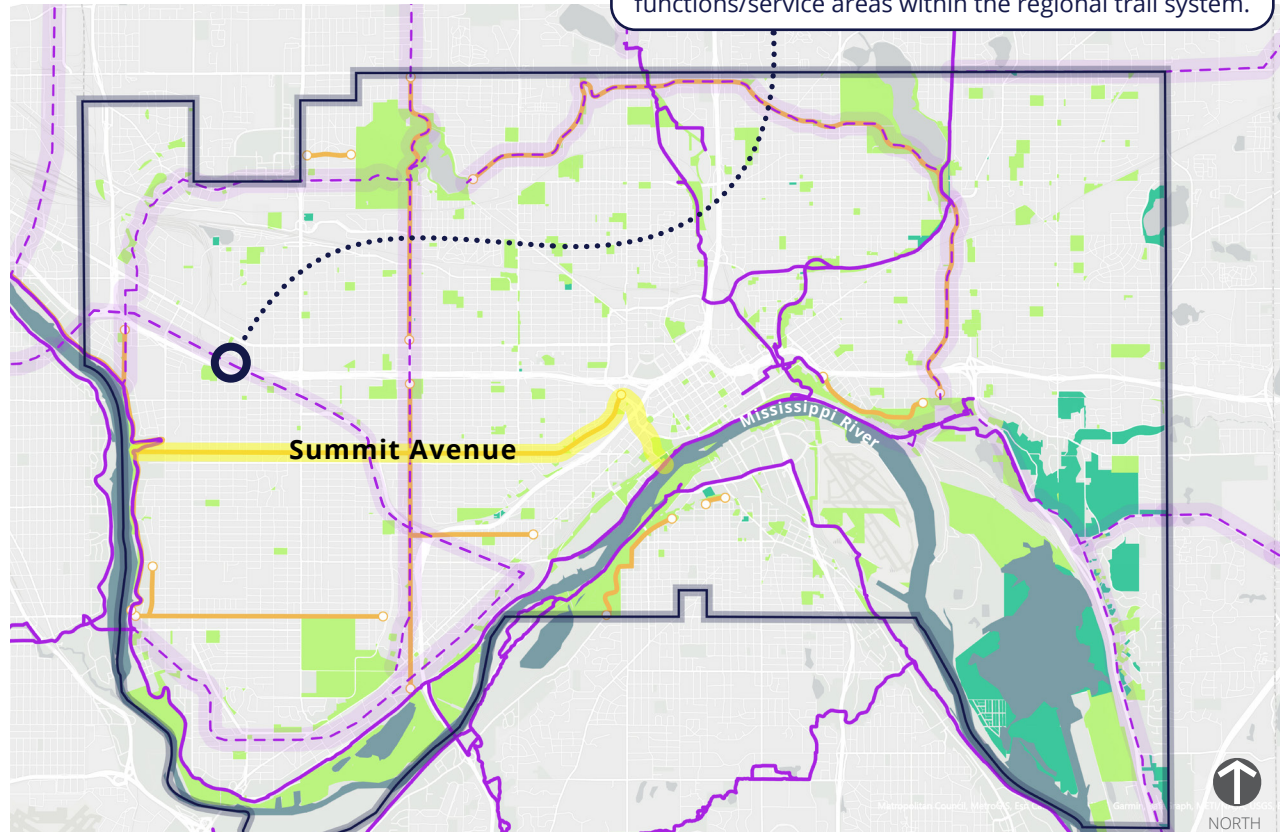
These routes were not preferred to Summit Avenue due to various conditions including the following factors:

- Indirect or interrupted connections
- Profile changes along the roadway affecting user comfort and experience
- Lack of parkway characteristics for recreation
- Narrow right-of-way conditions and constraints
- Contextual land use and compatibility for a regional trail
- Does not connect two regional facilities via downtown Saint Paul



Plan addresses community questions about alternate routes considered

**Mississippi Gorge - Samuel Morgan Regional Trail**  
The Regional Parks Policy Plan views both this search corridor and the Summit Avenue search corridor as complementary to one another and serving two separate functions/service areas within the regional trail system.



Regional Trail and Greenspace

### Legend

- Regional Trail Search Corridor
- Regional Trail
- Parkway
- Greenspace - City of Saint Paul
- Greenspace - Ramsey County

# Designated Historic Districts and Individual Historic Properties

The Summit Avenue Regional Trail corridor runs through several historic districts, and is situated adjacent to many individual historic properties. Additionally, the trail corridor provides access to other historical areas, particularly those within Downtown Saint Paul and near the Mississippi River.

The historic districts and individual historic properties within the corridor have different requirements and recommendations. In general, some of the significant historical elements along Summit Avenue include features such as, historic buildings, streets, sidewalks, open space, vegetation, topography, and spatial organization (public/private).

It is likely that a historical review process will be necessary as part of the future trail project in this corridor by either local, state, or federal agencies. Agencies such as the Heritage Preservation Commission (HPC) at the City and the Minnesota State Historic Preservation office (SHPO) may be involved in that review process. If there is a Section 106 review, there will be opportunity for interested parties and the public to participate in consultation during all steps of the review process.

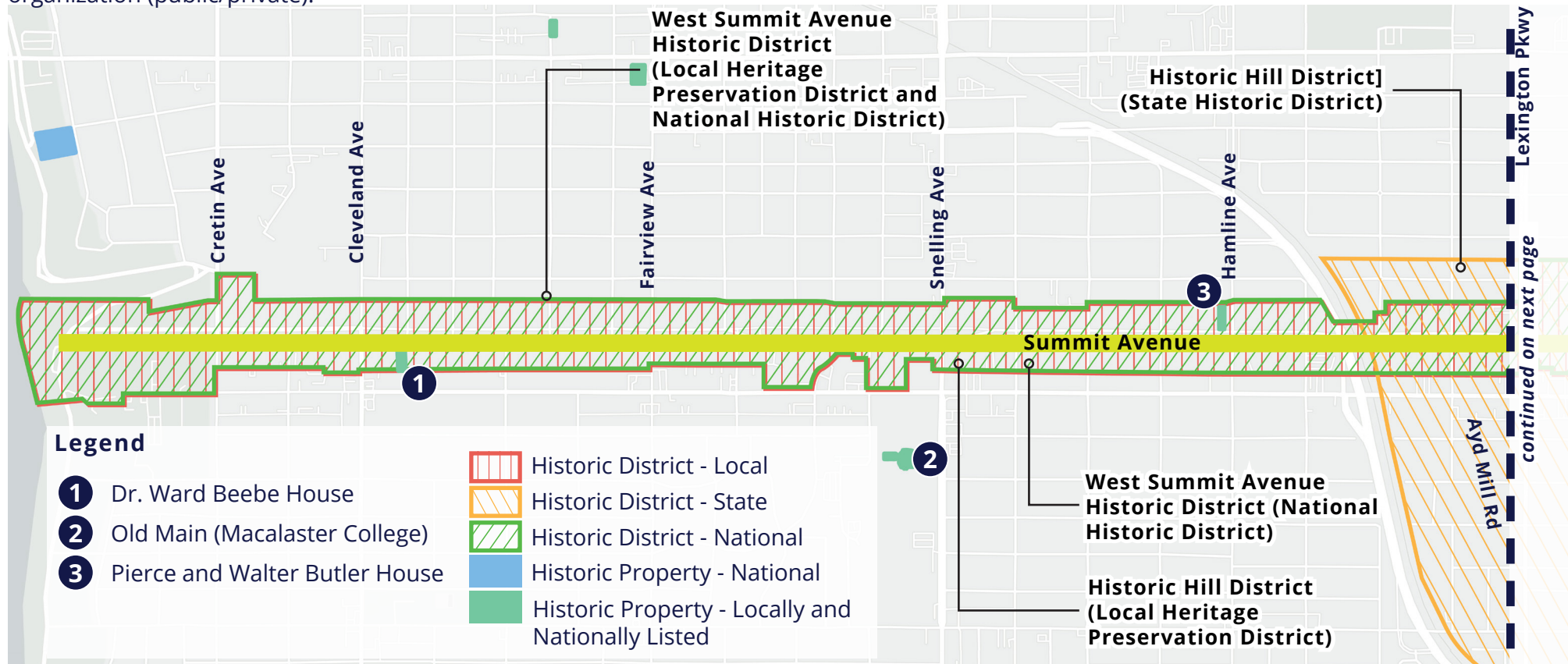


Fig. 3-18 | Historical Sites and Districts

# Designated Historic Districts and Individual Historic Properties

## Legend

- 4** Minnesota Governor's Residence
- 5** Vienna and Earl Apartment Buildings
- 6** F. Scott Fitzgerald House
- 7** Burbank-Livingston-Griggs House
- 8** James J. Hill House
- 9** Cathedral of Saint Paul
- 10** Smith Building
- 11** John M. Armstrong House
- 12** Saint Paul Municipal Grain Terminal

-  Historic District - Local
-  Historic District - State
-  Historic District - National
-  Historic Property - Locally Listed
-  Historic Property - State Listed
-  Historic Property - Nationally Listed
-  Historic Property - Locally and Nationally Listed
-  Historic Property - Locally, State, and Nationally Listed

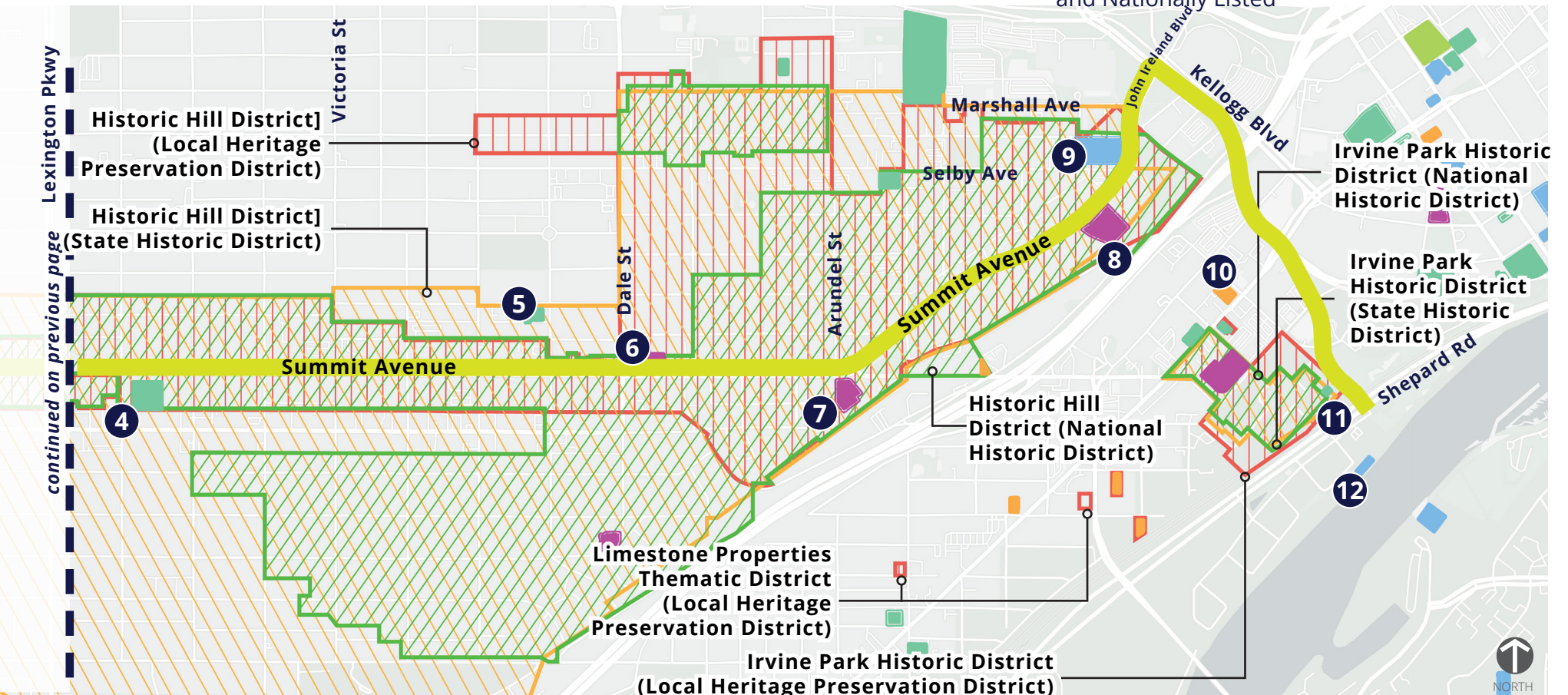


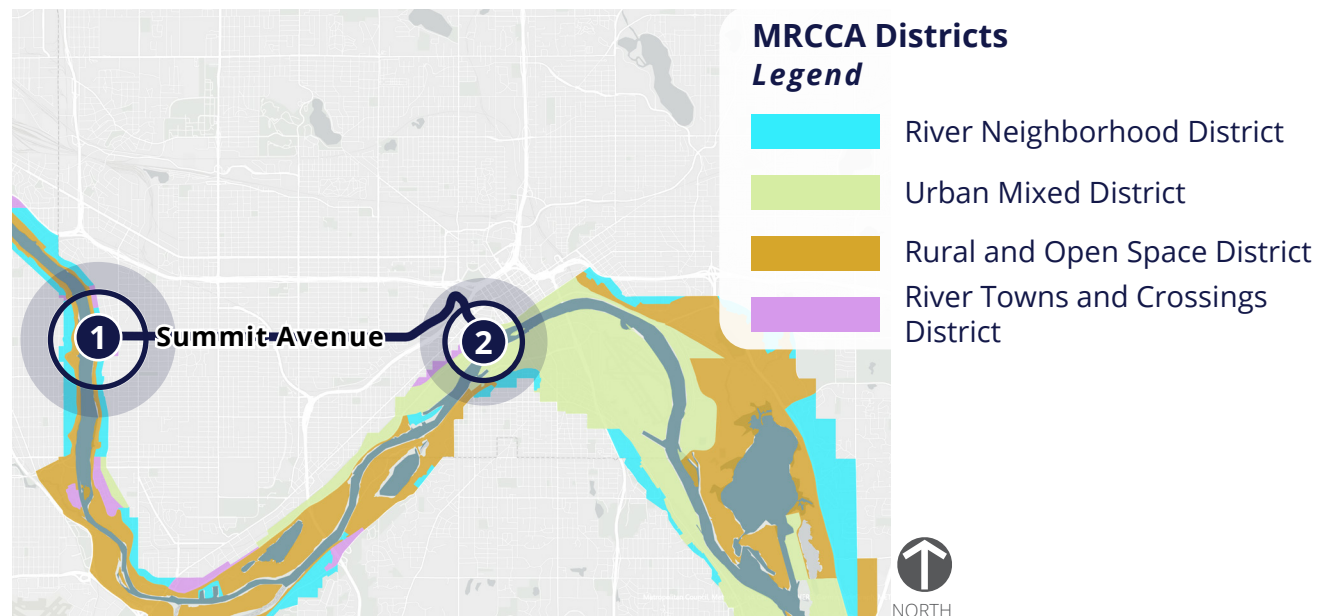
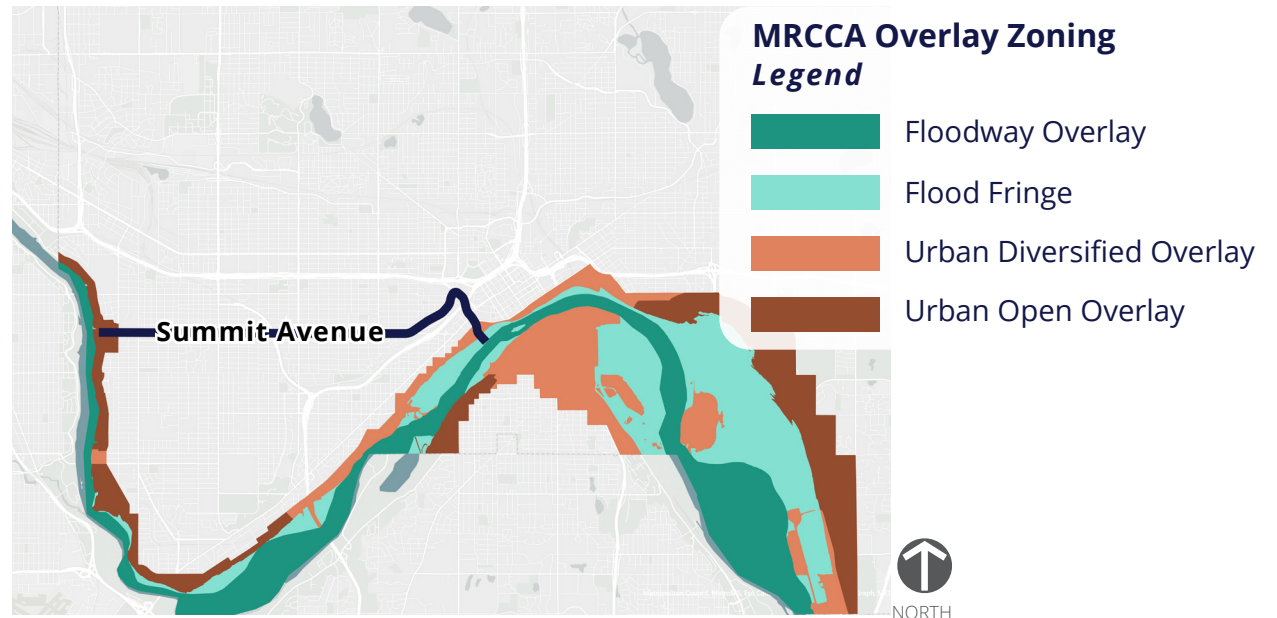
Fig. 3-19 | Historical Sites and Districts

# Mississippi River Corridor Critical Area (MRCCA)

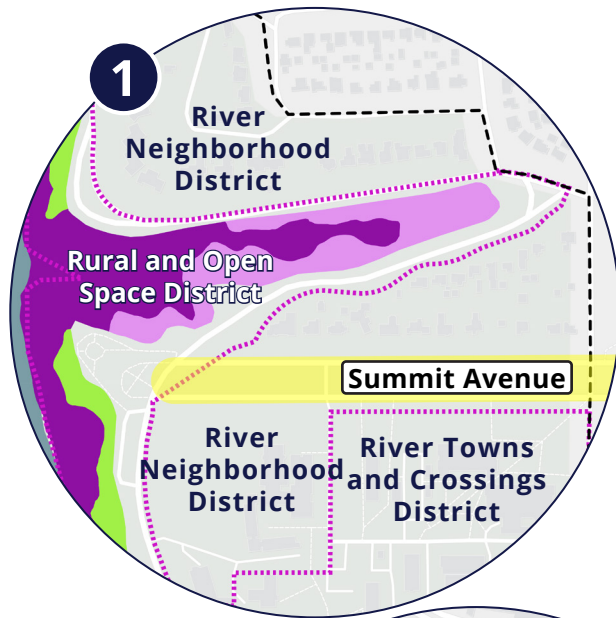
## MRCCA Districts and Significant Vegetation Stands

The Mississippi River Corridor Critical Area is a State-designated corridor along 72 miles of the Mississippi River in the Twin Cities Metropolitan Area, including 17 miles of river and 26 miles of shoreline in Saint Paul. The Minnesota Rules, Chapter 6106, regulates the planning and development by requiring local governments to complete an MRCCA plan defined by six districts. The language within the MRCCA, along with the 2040 City of Saint Paul Comprehensive Plan, and this Plan document will serve as guidance for planning, design, and maintenance of the trail corridor.

The proposed Summit Avenue Regional Trail is within the River Neighborhood District, the River Towns and Crossings District, the Urban Mixed District, and the Urban Core District. The MRCCA also contains denotation of significant vegetation stands within the boundary. None of these significant vegetation stands exist within the proposed trail facility.



# Mississippi River Corridor Critical Area (MRCCA)



## Significant Existing Vegetative Stands in the MRCCA

### Legend

----- MRCCA Boundary

..... MRCCA District Boundaries

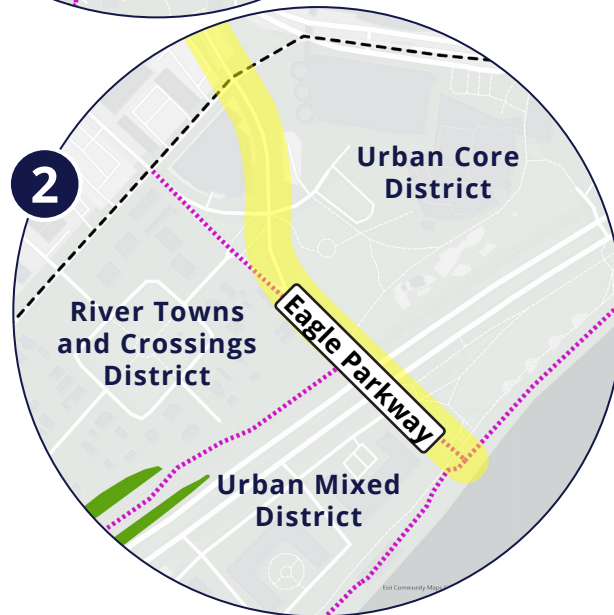
Significant Vegetation Stands

Light Purple Box: Midwestern White Oak - Red Oak Forest

Dark Purple Box: Maple - Basswood - Hardwood Forest

Light Green Box: North - Central Dry - Mesic Oak Woodland

Dark Green Box: Midwest Box-elder - Ash Ruderal Forest



**River Neighborhood District (CA-RN):** Characterized by primarily residential neighborhoods that are riparian or readily visible from the river or that abut riparian parkland. Minimizing erosion and the flow of untreated storm water into the river and enhancing habitat and shoreline vegetation are priorities in the district.

**River Towns and Crossings District (CA-RTC):** Characterized by historic downtown areas and limited nodes of intense development at specific river crossings, as well as institutional campuses. Minimizing erosion and the flow of untreated storm water into the river, providing public access to and public views of the river, and restoring natural vegetation in riparian areas and tree canopy are priorities in the district.

**Urban Core District (CA-UC):** Includes the urban cores of Minneapolis and Saint Paul. Providing public access to and public views of the river are priorities in the district.

**Urban Mixed District (CA-UM):** Includes large areas of highly urbanized mixed use that are a part of the urban fabric of the river corridor, including institutional, commercial, industrial, and residential areas and parks and open space. Restoring and enhancing bluff and shoreline habitat, minimizing erosion and flow of untreated storm water into the river, and providing public access to and public views of the river are priorities in the district.

# Natural Resources

## Mississippi River Corridor Critical Area

### Purposes of MRCCA designation (as detailed in Minnesota Statutes, section 116G.15, subd, 1)

As stated in this section of the 2021 Minnesota Statues, “the federal Mississippi National River and Recreation Area established pursuant to United States Code, title 16, section 460zz-2(k) is designated an area of critical concern in accordance with this chapter. The purpose of this designation is to:

1. protect and preserve the Mississippi River and adjacent lands that the legislature finds to be unique and valuable state and regional resources for the benefit of the health, safety, and welfare of the citizens of the state, region, and nation;
2. prevent and mitigate irreversible damages to these state, regional and natural resources;
3. preserve and enhance the natural, aesthetic, cultural, and historical values of the Mississippi River and adjacent lands for public use and benefits;
4. protect and preserve the Mississippi River as an essential element in the national, state, and regional transportation, sewer and water, and

recreational systems; and

5. protect and preserve the biological functions of the Mississippi River corridor.”

### Compliance with Minnesota Administrative Rules (6106.0130)

This section of administrative code established standards for public facilities that are consistent with best management practices and that protect primary conservation areas. General design standards are explained and include:

- Minimize visibility of the facility to the extent consistent with the purpose of the facility
- Comply with the dimensional standards in part 6106.0120, except as provided in part 6106.0180
- Be consistent with the vegetation management standards in part 6106.0150, subpart 5. and the land alteration and storm water management standards in part 6106.0160, including use of practices identified in Best Practices for and storm water management standards in part 6106.0160, including use of practices identified in Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-001, incorporated by reference under part 6106.0090, where applicable. State or regional agencies, special

purpose units of government, local park agencies, and local units of government with parks within their jurisdiction are not required to obtain a vegetation management or land alteration permit under part 6106.0150 or 6106.0160, but must apply the standards and criteria that would be applied by local government, were a permit required

- Avoid primary conservation areas, unless no alternative exists. If no alternative exists, then disturbance to primary conservation areas must be avoided to the greatest extent practicable, and design and construction must minimize impacts
- Minimize disturbance of spawning and nesting times by scheduling construction at times when local fish and wildlife are not spawning or nesting

Other more specific standards for design of facilities within the MRCCA area outlines in this section. The eventual design and construction of the regional trail facility will adhere to these standards and recommendations.

# Natural Resources

## Natural Resources Inventory

### Land Cover Inventory

The land cover inventory originates from the Minnesota Land Cover Classification system developed by the Minnesota Department of Natural Resources and Metro GIS. The inventory describes the land cover rather than land use in the described area.

The proposed regional trail intersects with the mapped land cover areas at the eastern and western most sections. The map and legend describes the land cover types including significant vegetation types and species, and impervious coverage.

### Legend


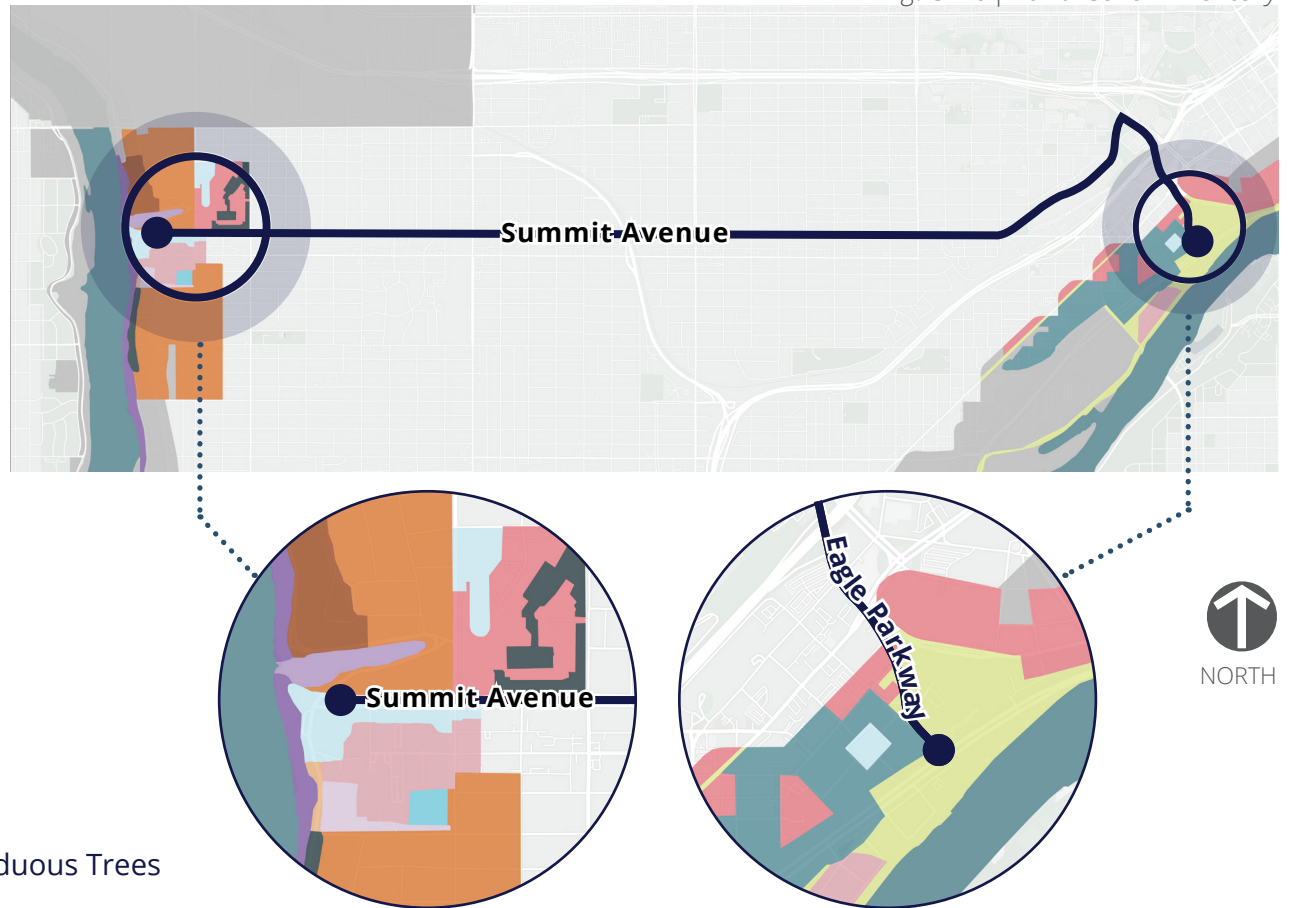
-  11-25% Impervious Cover with Deciduous Trees
-  26-50% Impervious Cover with Deciduous Trees
-  51-75% Impervious Cover with Deciduous Trees
-  Pavement with 91-100% Impervious Cover
-  Buildings and Pavement with 76-90% Impervious Cover
-  Buildings and Pavement with 91-100% Impervious Cover
-  Short grass on Upland Soil
-  Short grass and Mixed Trees with 4-10% Impervious Cover
-  Short grass and Mixed Trees with 11-25% Impervious Cover
-  Short grass and Mixed Trees with 51-75% Impervious Cover
-  Oak Forest Mesic Subtype
-  Maple and Basswood Forest
-  Deciduous Tree on Upland Soil

Fig. 3-20 | Land Cover Inventory



# Mature Tree Canopy and Greenspace

An inventory of trees and greenspace along Summit Avenue was completed as part of the planning process for this Plan. Different aspects of the parkway canopy were mapped including all tree locations, structural and critical root zones, landmark trees, and ash trees within the corridor. The structural and critical root zones are a starting point when considering a trail location and the potential impact on mature trees. A more in depth review of species, health, and location of trees should be completed during the design process of future trail implementation projects.

Landmark trees are trees that have been nominated by community members and identified as significant for environmental, social, and/or economic benefits <sup>1</sup>. There are two landmark trees identified within the Summit Avenue corridor

<sup>1</sup> : <https://www.stpaul.gov/departments/parks-and-recreation/natural-resources/forestry/landmark-tree-program>

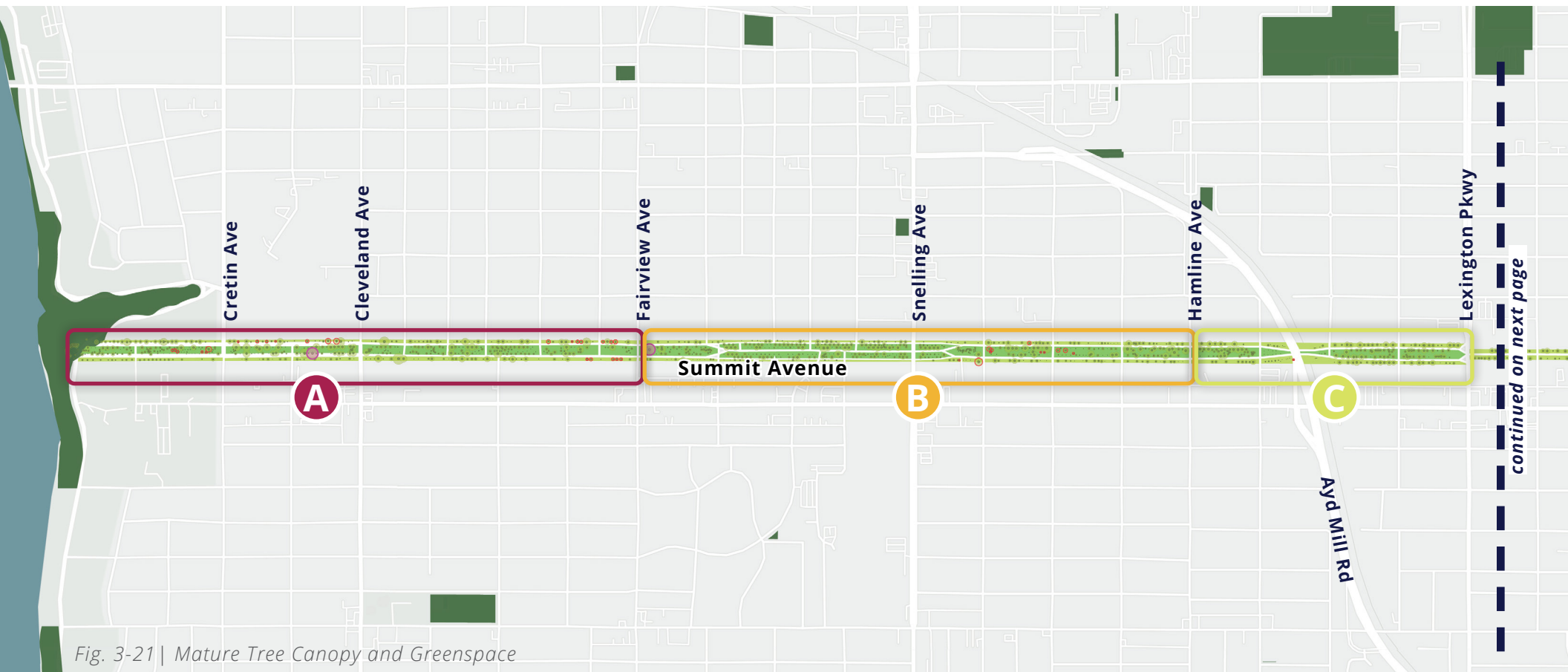


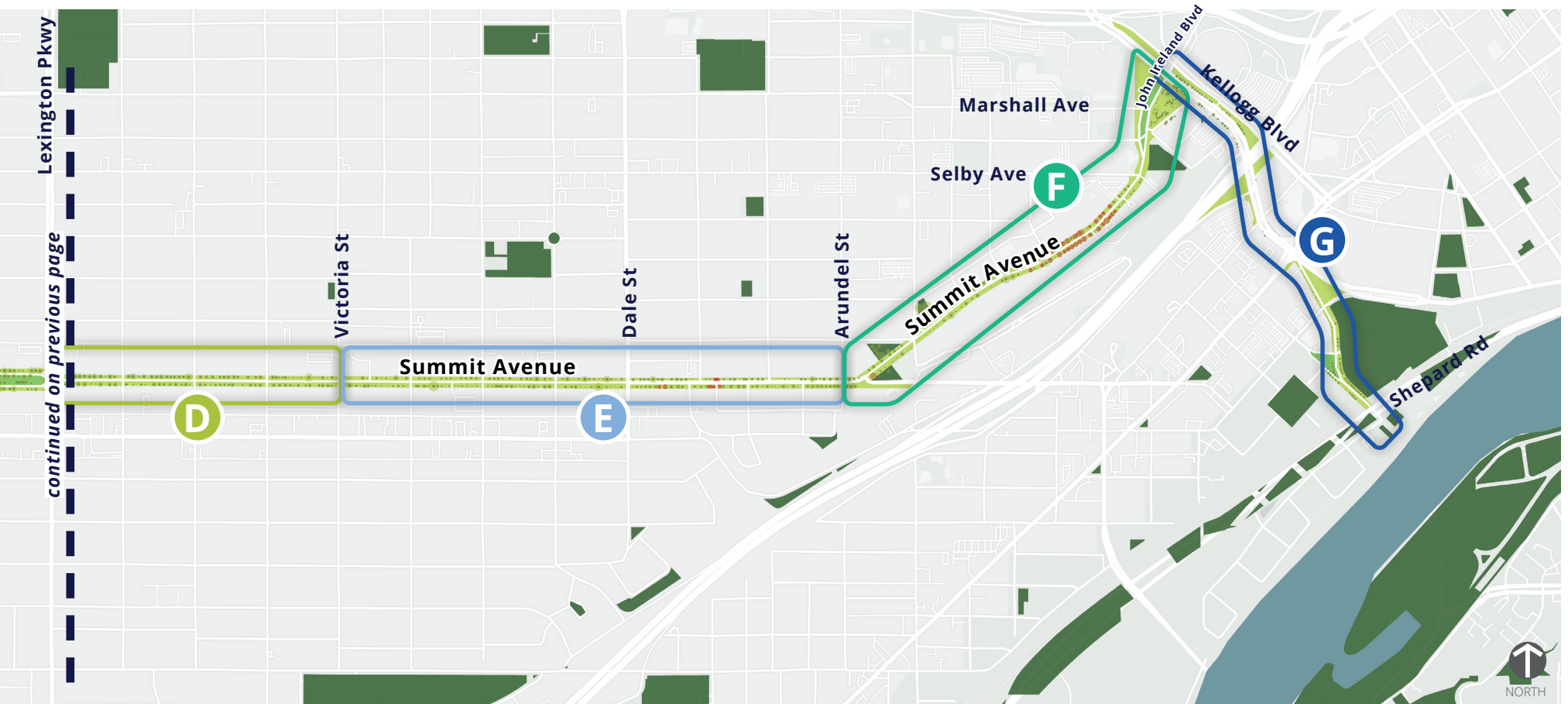
Fig. 3-21 | Mature Tree Canopy and Greenspace

**Legend**

-  Building Footprint
-  Summit Avenue Roadway Median
-  Summit Avenue Corridor Boulevard
-  Public Park
-  Tree Structural Root Zone\*
-  Tree Critical Root Zone\*\*
-  Landmark Tree
-  Ash Tree

\* The tree structural root zone is calculated by multiplying the diameter of a tree (in inches) by .9. This determines the structural rooting area diameter (in feet). Disturbance to the structural root zone increases a tree's risk of failure.

\*\* One inch of trunk diameter equals one foot of critical root zone radius. Disturbance within this area should be done carefully, if at all.



# Mature Tree Canopy and Greenspace

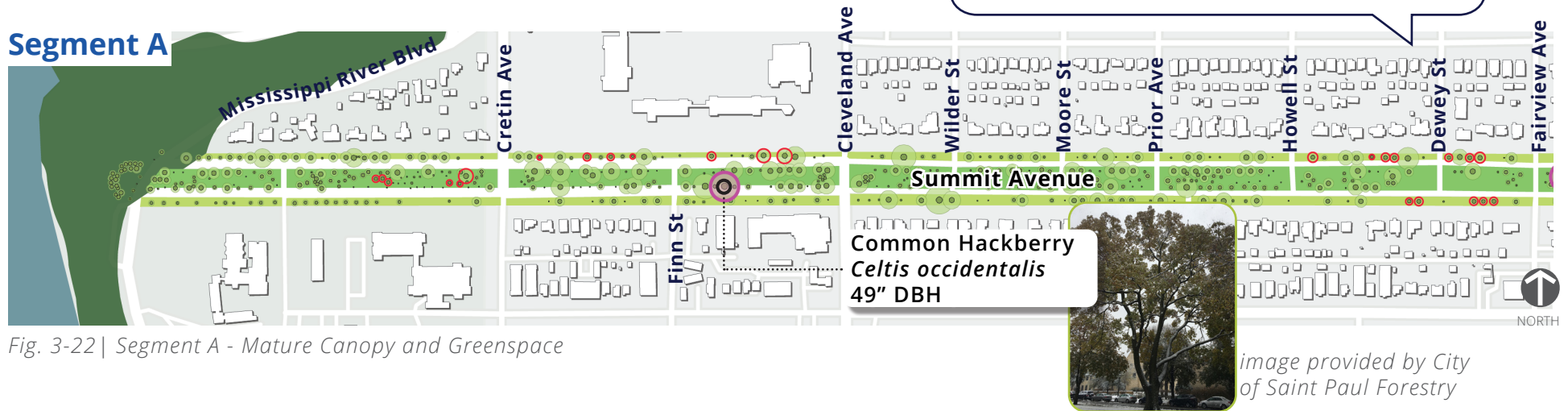


Fig. 3-22 | Segment A - Mature Canopy and Greenspace

**Segment B Greenspace Characteristics:**

- Double green medians
- One of the corridor's 'landmark trees'
- No existing ash trees

**Segment C Greenspace Characteristics:**

- 90' green medians
- ~12 ash trees to be removed by City
- Significant understory vegetation between Griggs St. and Lexington Pkwy

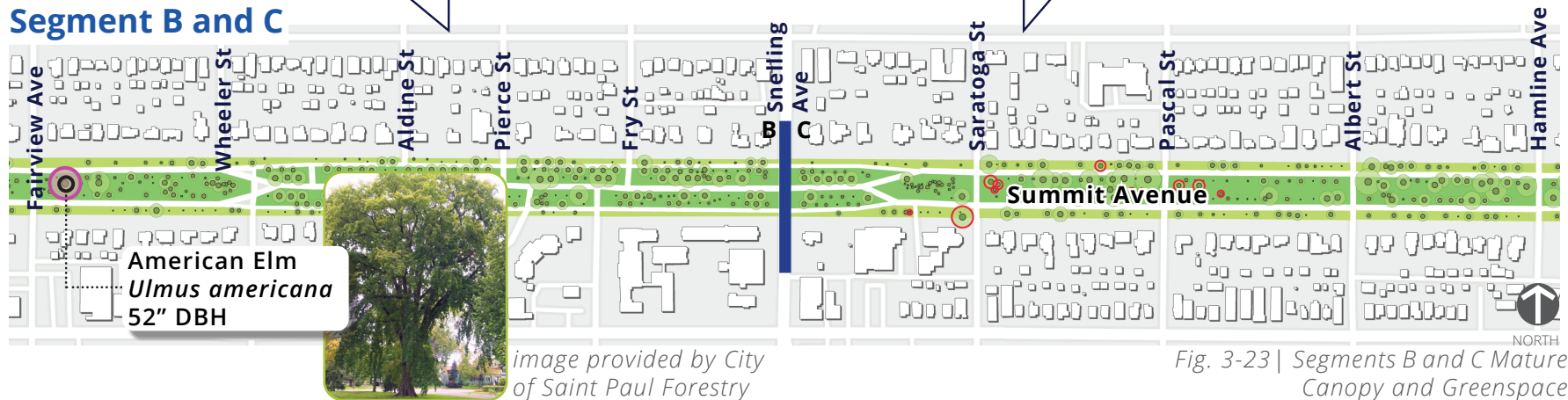


Fig. 3-23 | Segments B and C Mature Canopy and Greenspace

# Mature Tree Canopy and Greenspace

## Segments C and D

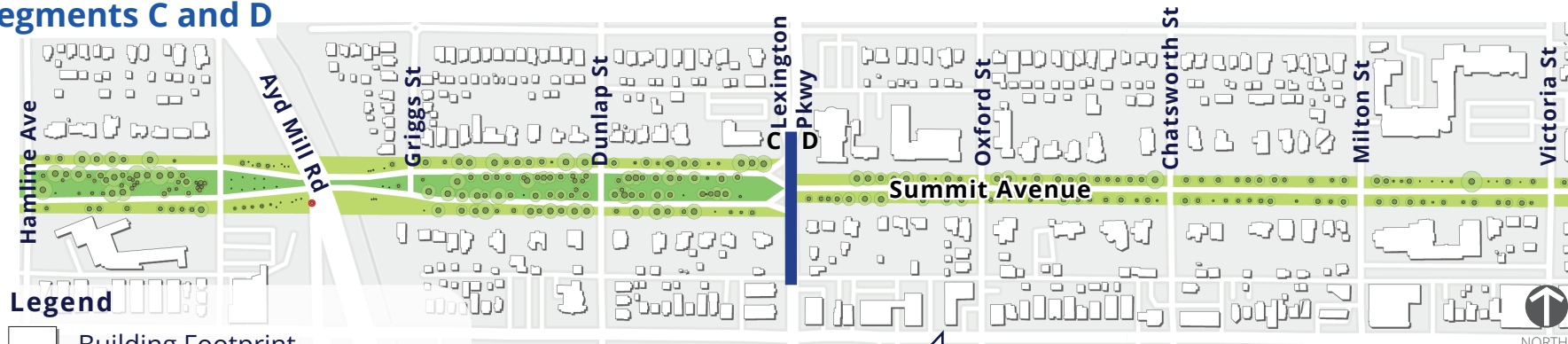


Fig. 3-25 | Segments C and D Mature Canopy and Greenspace

**Segment D Greenspace Characteristics:**

- No roadway median
- Characterized by mostly younger, smaller, trees
- No existing ash trees

**Segment E Greenspace Characteristics:**

- No roadway medians
- ~9 ash trees to be removed by City
- Characterized by some mature, larger trees, mostly smaller, younger trees

## Segment E



Fig. 3-24 | Segment E - Mature Canopy and Greenspace

# Mature Tree Canopy and Greenspace

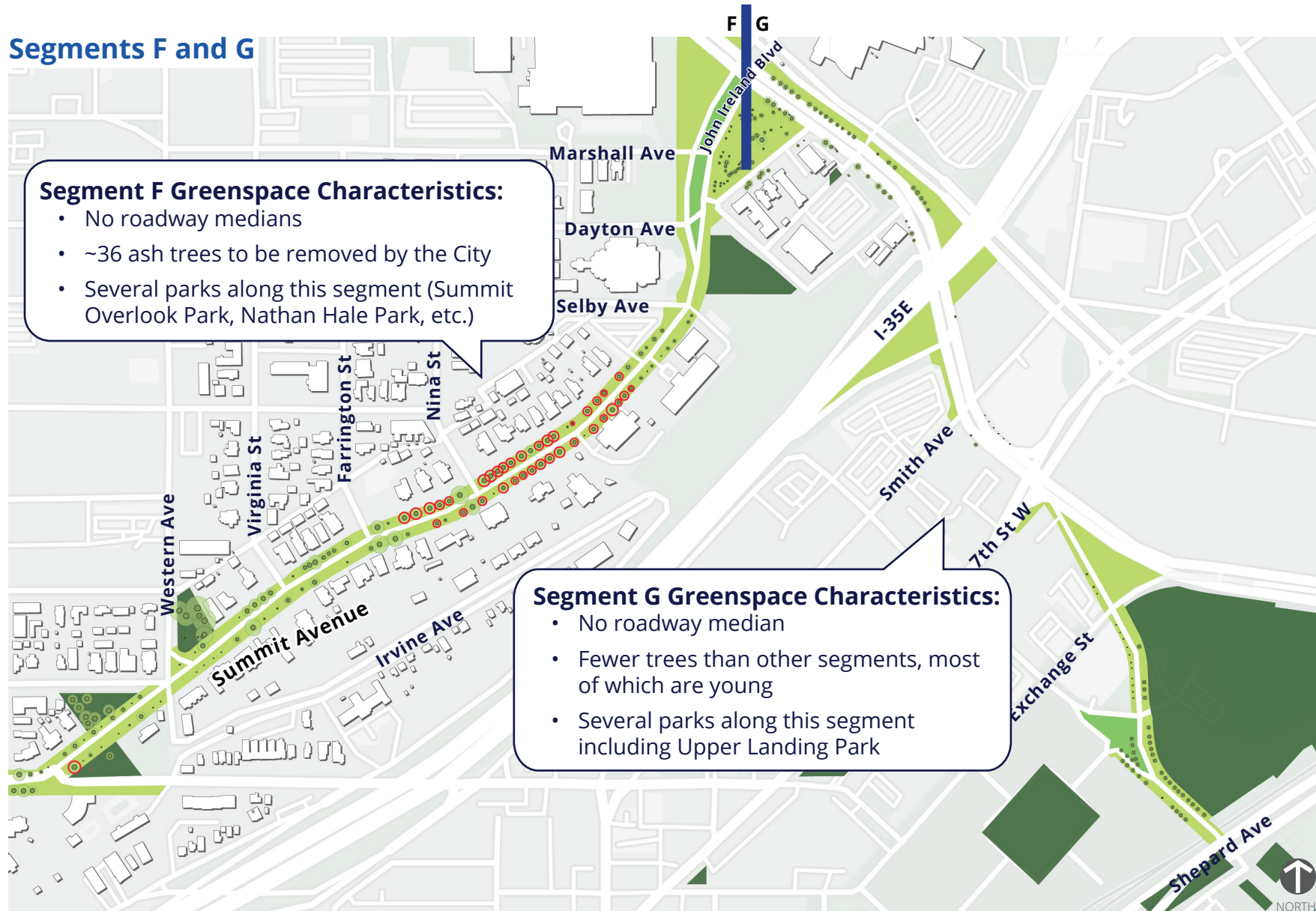


Fig. 3-26 | Segments F and G - Mature Canopy and Greenspace







# Circulation, Connectivity, and Access

As a regional linking trail, the proposed Summit Avenue Regional Trail facility seeks to connect regional facilities to one another, and to connect people to those regional parks and trails. Understanding the existing land-use, transportation types, and future planned routes illustrates the potential for the proposed regional trail along Summit Avenue. The corridor connects to several exiting bike routes, transit routes, and other regional trails. It also connects residential and commercial areas from the river to downtown Saint Paul. Information on the map below is provided by The Saint Paul Department of Planning and Economic Development « <https://stpaul.maps.arcgis.com/apps/webappviewer/index.html?id=21c68099a3124881b4411859ff66c3e3> »














Additional parcel level data can be found through Ramsey County's resource page « <https://maps.co.ramsey.mn.us/MapRamsey/> »

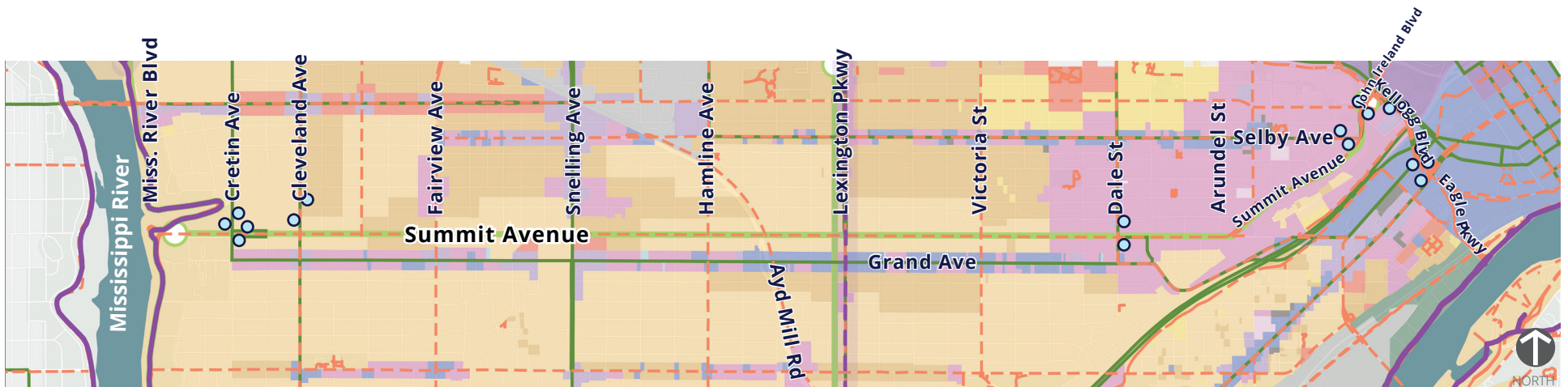
## Legend

### Transportation

-  Transit Route
-  Parkway
-  Regional Trail
-  Regional Trail Search Corridor
-  Bikeway
-  Transit Stop

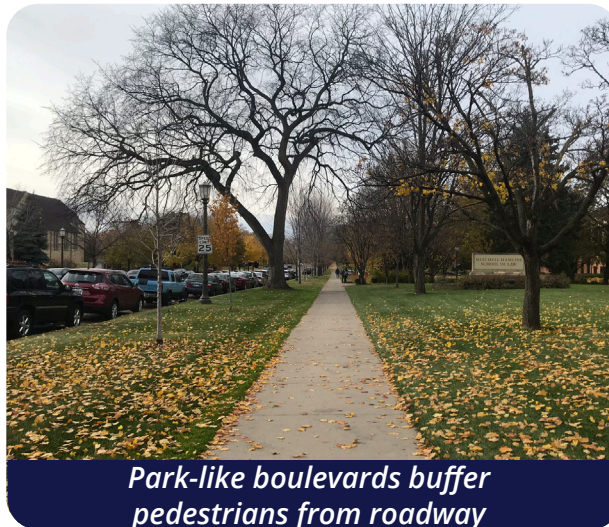
### Zoning

-  Two Family Residential
-  One Family Residential
-  Townhouse Residential
-  High Rise Multi Family
-  Medium Density Multi Family
-  Low Density Multi Family
-  Traditional Neighborhood
-  Business
-  Office Service
-  Parking
-  Industrial
-  Capitol Area Jurisdiction
-  T3 with Plan



# Circulation, Connectivity, and Access

## Opportunities and Constraints



# Circulation, Connectivity, and Access

## Opportunities and Constraints



*Year-round use of running trail through central median*



*Poor sidewalk conditions*



*No access to Walnut Street steps, a potential connection point*



*Accessibility issues at transit stops*



*Mid-block pedestrian crossings*



*Park amenities and connection to greenspace*

# Roadway Characteristics

## Typical Sections

The following three typical sections are present in the Summit Avenue corridor:

Section Type	Segment						
	A	B	C	D	E	F	G
200' ROW with single median	○		○				
200' ROW with double median		○					
100' ROW with no median				○	○	○	
Variable							○

Segments D, E, and F vary in their sidewalk width. All three segments include approximately 26-feet behind the back of curb. Segment D includes a 6-foot sidewalk; the sidewalks in Segment E vary from 6- to 8-feet; and Segment F includes a 10' sidewalk. The conditions of segment G vary greatly. Portions are characterized by minor arterial and local roadway classifications, with varying ROW widths and sidewalk conditions.



Fig. 3-27 | Typical 200-foot ROW with single median



Fig. 3-28 | Typical 200-foot ROW with double median

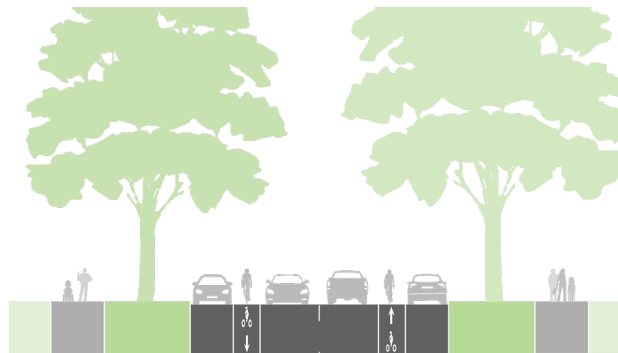


Fig. 3-29 | Typical 100-foot ROW with no median

# Roadway Characteristics

## Intersection Types

There are 48 roads intersecting the identified trail corridor between Mississippi River Boulevard and Kellogg Boulevard (segments A through F, 4.7 miles). Of these 48 intersections, 45 are full access and 3 are reduced access (S Wheeler St, Aldine St, Cambridge St). The dominant traffic controls at intersections are side street stops and signalized intersections. Intersections are spaced anywhere from approximately 350- to 900-feet apart. Intersection spacing is more regular, at around 650-feet, east of Snelling Avenue.

All segments – and sections - include both of these intersection types creating six “typical” intersections.

1. Traffic signal at single median
2. Side-street stop at single median
3. Traffic signal at double median
4. Side-street stop at double median
5. Traffic signal without median
6. Side-street stop without median

Two intersections fall outside of these intersection types. The intersection with Mississippi River Boulevard has side street stops on Summit and there is an all-way stop at the intersection with Ramsey Street. The implications of intersection types will be explored in future design phases.

## Transition Types

The transitions between typical sections will require additional attention and exploration of how to best design the regional trail to ensure a consistent alignment, user-friendly wayfinding, and safe & comfortable crossings at roadways. Moving west to east, the three transitions and their locations are listed below. All transitions occur at signalized intersections:

- Fairview Avenue - single to double median
- Hamline Avenue - double to single median
- Lexington Parkway - single median to no median

## Atypical Areas

There are several sections and points in the corridor which are atypical and do not align with the previous descriptions. The Ayd Mill Road bridge is the primary atypical component in segments A through F. Segment G may also be considered atypical as it’s character and roadway characteristics differ considerably from Summit Avenue. Alignment alternatives for these areas will be explored in future design phases.

# Traffic Analysis

## Multi-modal Travel Volumes

The City of Saint Paul's Department of Public Works has conducted annual bicyclist and pedestrian counts since 2013. These counts take place mid-week in September during peak hours (4-6 p.m.). Benchmark locations are used each year to measure annual changes in non-motorized traffic. Typically, 30 benchmark sites for bicyclist traffic and 25 benchmark sites for pedestrian traffic have been counted since 2013. The number of locations counted is dependent on the number of participating volunteers who manually tabulate the counts. In 2019, 21 benchmark sites were counted for bicyclist traffic and 13 benchmark sites were counted for pedestrian traffic.

In the 2019 bicyclist and pedestrian counts, Summit Avenue (east of Fairview Ave) had the second highest bicycle counts, and three of the top five top walking counts (east of Cleveland Ave, east of Fairview Ave, and east of Western Ave).

### Bicycle:

- Summit Avenue (east of Fairview Ave) had 252 bicyclist counts in 2019, an average of 239 (2013-2019), a 6% drop from 2013-2019, and a 20% increase from 2018-2019.
- Summit Avenue (east of Dale St) had 126 bicyclist counts in 2018, an average of 135 (2013-2018), and a 25% drop from 2013-2018.

- Summit Avenue (east of Cleveland Ave) had 121 bicyclist counts in 2019, an average of 180 (2017-2019), and a 46% drop from 2017-2019.
- Summit Avenue (east of Western Ave) had 78 bicyclist counts in 2019, an average of 112 (2013-2019), and a 37% drop from 2013-2019.

### Pedestrian:

- Summit Avenue (east of Fairview Ave) had 180 pedestrian counts in 2019, an average of 239 (2013-2019), a 6% drop from 2013-2019, and a 20% increase from 2018-2019.
- Summit Avenue (east of Dale St) had 143 pedestrian counts in 2018, an average of 171 (2013-2019), and a 16% drop from 2013-2018.
- Summit Avenue (east of Cleveland Ave) had 228 pedestrian counts in 2019, an average of 256 (2017-2019), and a 22% drop from 2017-2019.
- Summit Avenue (east of Western Ave) had 171 pedestrian counts in 2019, an average of 135 (2013-2019), and an 8% increase from 2013-2019.

### Vehicular:

Annual average daily traffic volumes on Summit Avenue are 7,000-8,400 west of Lexington Avenue, 11,200 from Lexington Avenue to Ramsey Street, and 3,900 from Ramsey Street to John Ireland Boulevard.

2040 Forecasted volumes remain the same. Snelling Avenue, Lexington Avenue, and Kellogg Boulevard have the highest traffic volumes of the cross streets in the trail corridor at 17,000-28,000 AADT. (Source: MnDOT Traffic Counts)

### Traffic Considerations:

Traffic and intersection impacts will be evaluated along with conceptual trail alignments through the design phase of each segment. Intersections which are more complex - for example, at transition points, with higher traffic volumes, or with a high number of conflict points - will be evaluated with potential trail facilities to identify design solutions that support the multi-modal nature of the corridor.

### Parking

Parallel on-street parking is consistent along Summit Avenue with variations in restrictions (permit requirements, hours, etc). There is no on-street parking along Kellogg Avenue or Eagle Parkway (segment G). The parking studies conducted in 2019 and 2022 are noted on the following pages of this document. An additional parking study should be conducted in conjunction with the planning and design of each segment to ensure sensitive, context-based approaches are being used.

# Traffic Analysis

## Parking

### 2019 Parking Study

A parking study was conducted by the City along Summit Avenue in the summer and fall of 2019 to determine the feasibility of overnight parking restrictions in order to perform routine maintenance along the road. The parking counts spanned from Mississippi River Boulevard to Selby Avenue (segments A-F). Counts were taken on three different Thursday and Friday nights between the times of midnight and six a.m. The following excerpt from the memorandum dated January 31, 2020 (Kathy Lantry, Department of Public Works), summarized the results of the study:

- Parking utilization rates well below 50% were observed along most of Summit Avenue on all six count dates.
- Parking utilization rates above 75% were consistently observed for a two block segment near Dale Street as well as on intersecting side streets near Dale Street.
- Parking utilization rates above 50% were observed near the University of St. Thomas in September when school was in session.

### 2022 Supplementary Parking Study

As part of this Planning process, an additional parking study was conducted from Lexington Parkway to Selby Avenue, as well

as on side streets immediately adjacent to Summit Avenue between Grotto Street and Selby Avenue. Parking data was collected on three dates in February 2022 - Thursday February 10th, Saturday February 12th, and Sunday February 13th. A summary of the additional results are below:

- Parking utilization in the corridor is generally modest, average 30% utilization over study area
- Area near Dale Street saw consistently high usage

The data collected from both of these studies showed similar results - generally parking utilization is under 50% on Summit Avenue with the exception of the areas around Dale Street. The parking study also noted a higher number of parked cars on Sunday morning near places of workshop along Summit Avenue.



# Traffic Analysis

To understand the current safety concerns on the Summit Avenue corridor, the reported crash information available from the Department of Transportation to the City of Saint Paul was reviewed and analyzed. This includes a review of all crashes along the corridor and a specific look into the pedestrian and bicyclist involved crashes.

**Studied Corridor Length: 4.5 miles (Mississippi River Boulevard to Kellogg Boulevard)**

## Pedestrian and Bicyclist Crashes

*(includes vehicle to pedestrian and vehicle to bicyclist crashes)*

Total pedestrian and bicyclist involved crashes (2012 to 2021\*): 63

- 31 pedestrian-involved crashes
- 32 bicyclist-involved crashes

\*Since pedestrian and bicyclist involved crashes are more random in nature and occur less frequently, a full ten-year analysis was conducted.

Note: This data may be underestimated as many pedestrian and bicyclist involved crashes go unreported, especially if there are no injuries or fatalities involved.

The highest concentration of pedestrian and bicycle involved crashes occurred between Lexington Pkwy and Ramsey St.

## Crash Severity

- 100% of reported pedestrian crashes resulted in an injury or fatality
- 90% of reported bicyclist involved crashes resulted in an injury or fatality

The crash data available indicates that pedestrian and bicyclist crashes on Summit Avenue tend to result in injuries or fatalities. This is relatively consistent with national trends on reported pedestrian and bicyclist crashes.

## Data Summary

There have been 63 crashes involving pedestrians and bicyclists in the past ten years. Most of these pedestrian and bicyclist involved crashes resulted in injuries or fatalities.

*The full crash review report can be found in the document appendix.*

# Traffic Analysis

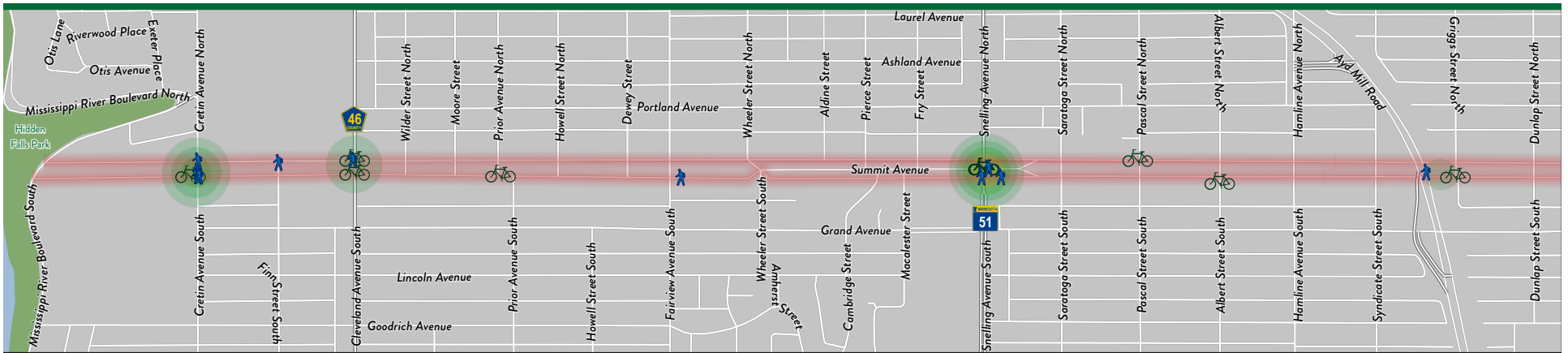


Fig. 3-30 | Summit Avenue Pedestrian and Bike Crashes (2012-2021)

# Existing Conditions by Segment

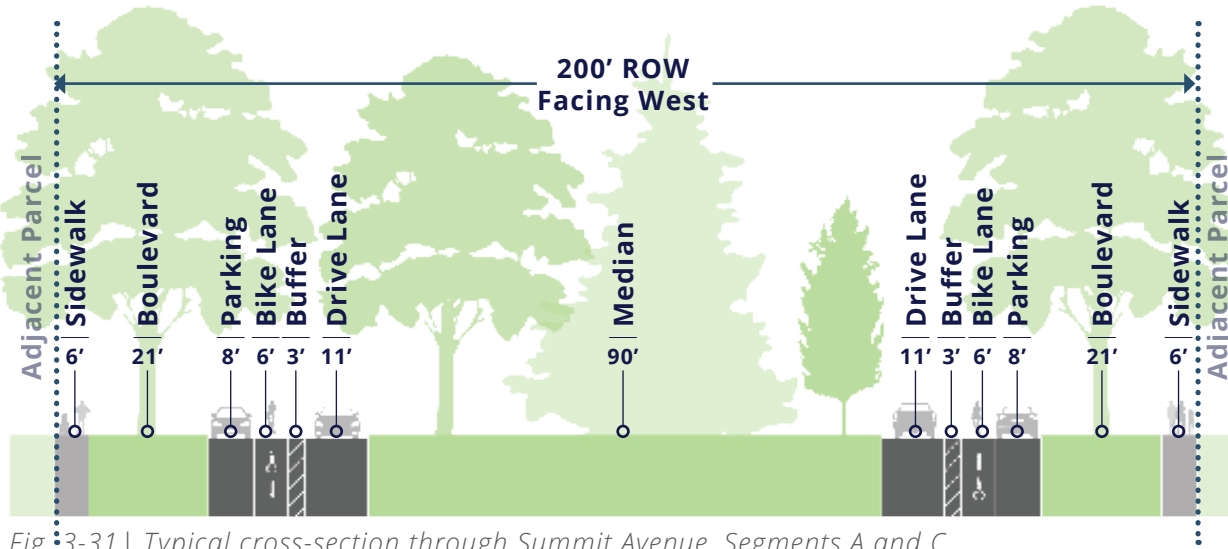


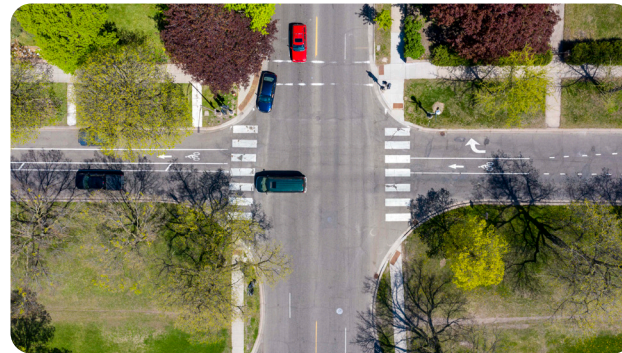
Fig. 3-31 | Typical cross-section through Summit Avenue, Segments A and C



Summit Avenue and Cleveland Avenue



Summit Avenue and Ayd Mill Road



Summit Avenue and Hamline Avenue

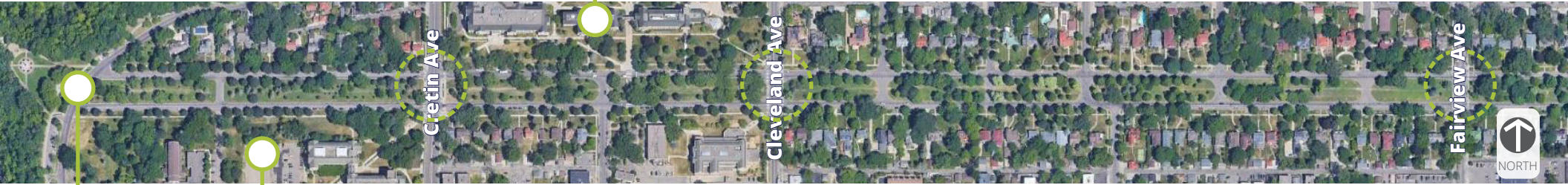


Summit Avenue and Cretin Avenue

# Existing Conditions by Segment



## Segment A



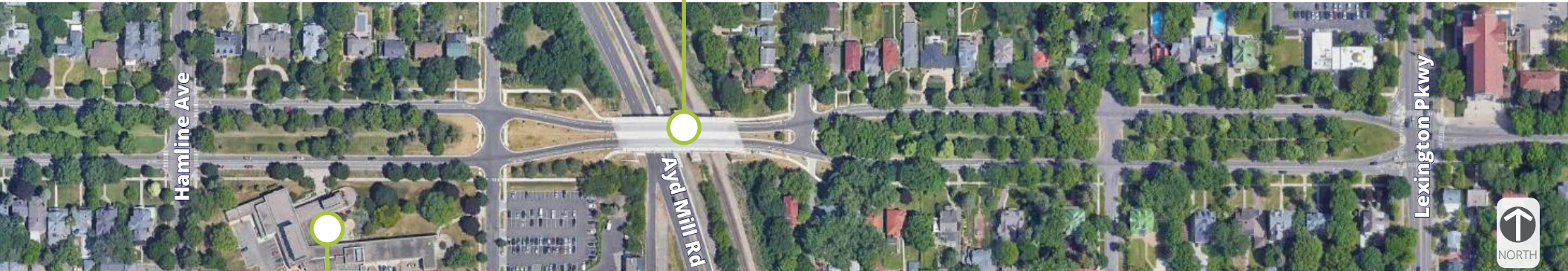
Connection to Mississippi Gorge Regional Park

Seminaries of Saint Paul

University of Saint Thomas

Ayd Mill Rd Bridge

## Segment C



Mt. Zion Temple

# Existing Conditions by Segment



Segments A and C | Public Right-of-Way Corridor | Facing West

# Existing Conditions by Segment

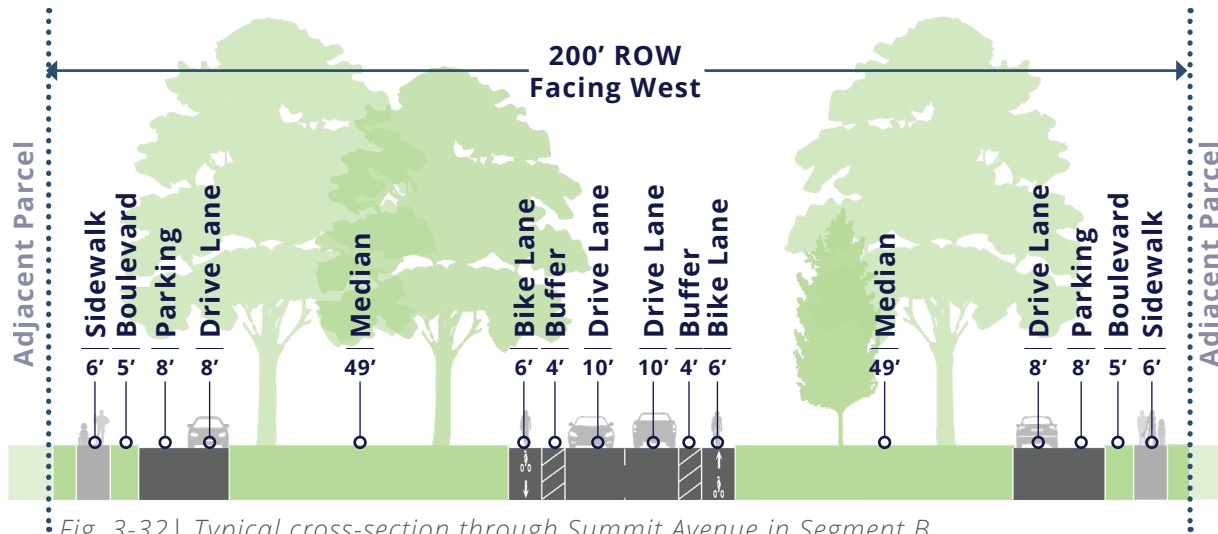
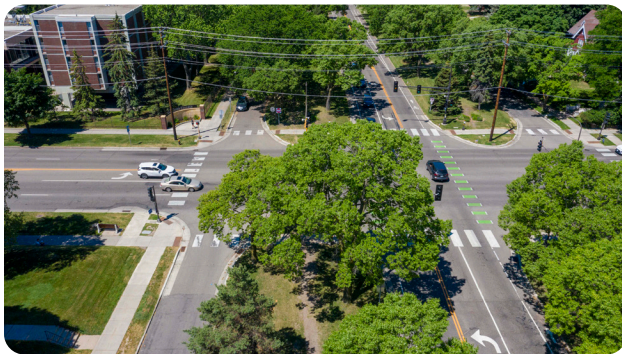


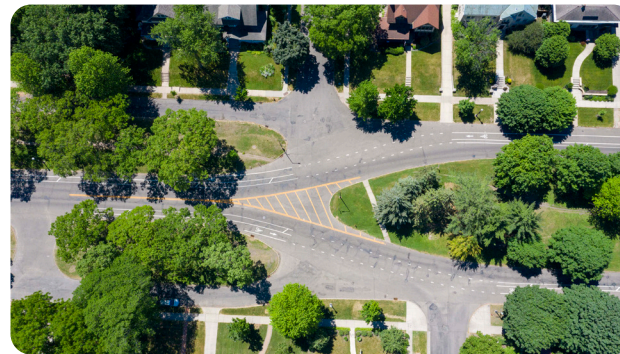
Fig. 3-32 | Typical cross-section through Summit Avenue in Segment B



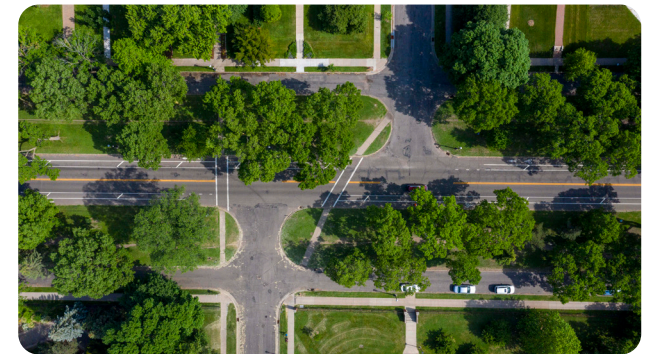
Summit Avenue and Fairview Avenue



Summit Avenue and Snelling Avenue



Summit Avenue and Wheeler Street

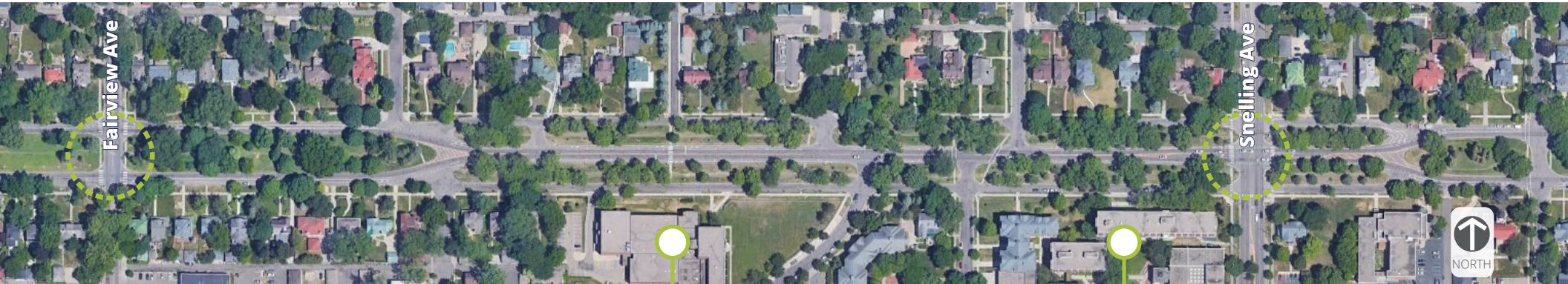


Summit Avenue and Fry Street/Macalaster Street

# Existing Conditions by Segment



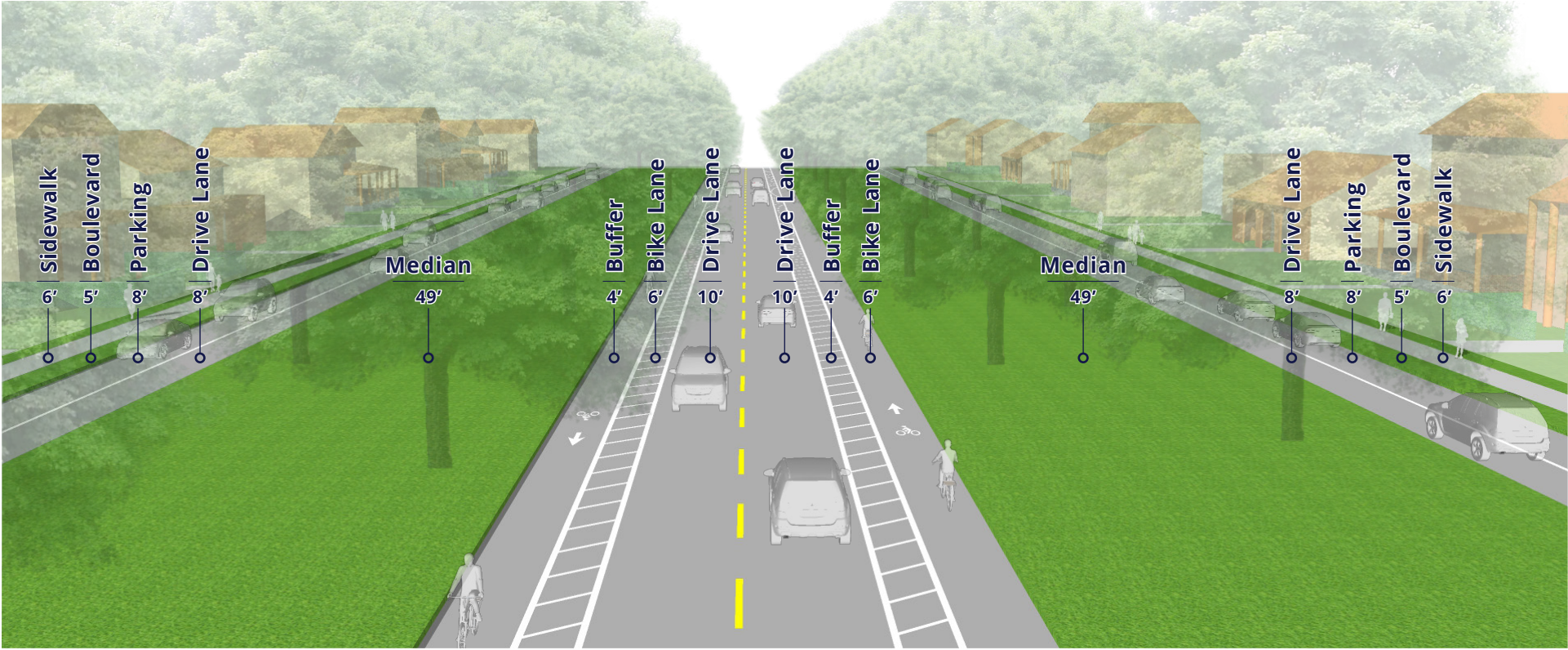
## Segment B



Hidden River  
Middle School

Macalaster  
College

# Existing Conditions by Segment



Segment B | Public Right-of-Way Corridor | Facing West

# Existing Conditions by Segment

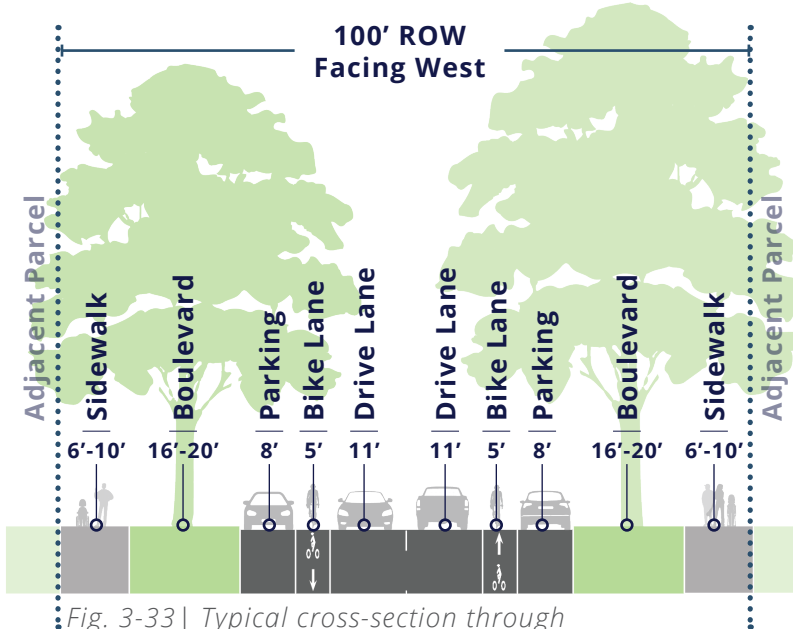


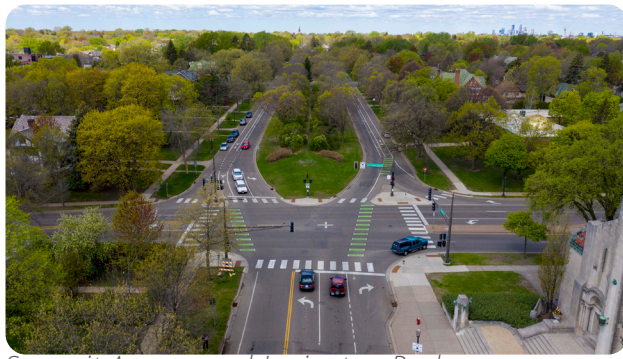
Fig. 3-33 | Typical cross-section through Summit Avenue in Segments D, E, and F



Summit Avenue and Dale Street



Summit Avenue and Marshall Avenue



Summit Avenue and Lexington Parkway

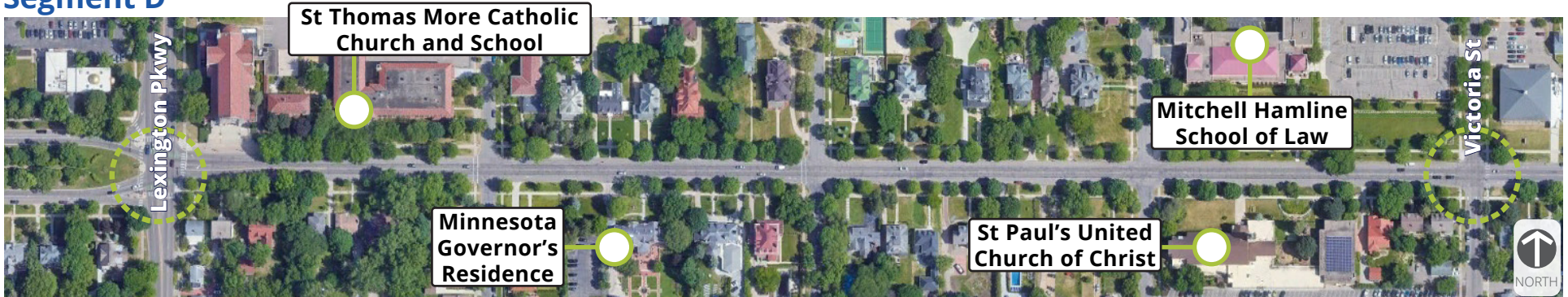


Summit Avenue and Selby Avenue

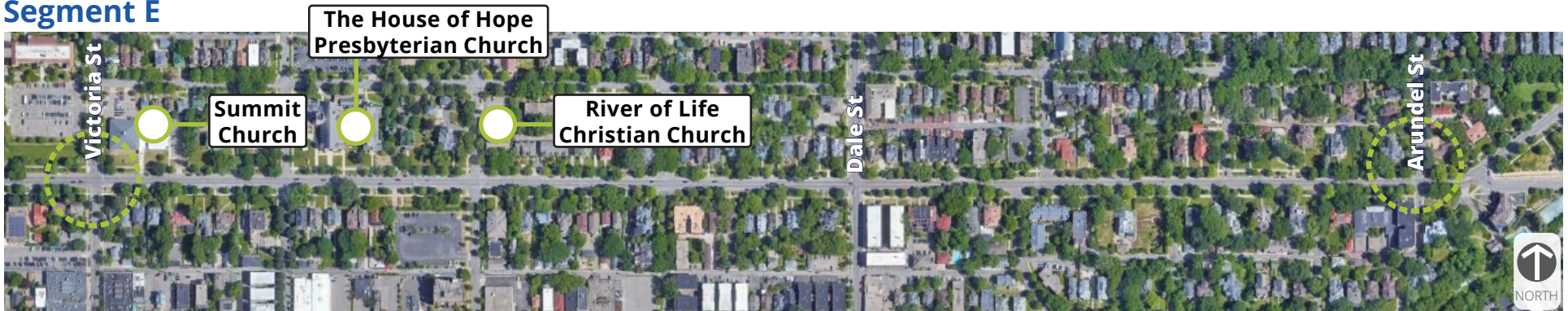
# Existing Conditions by Segment



## Segment D



## Segment E

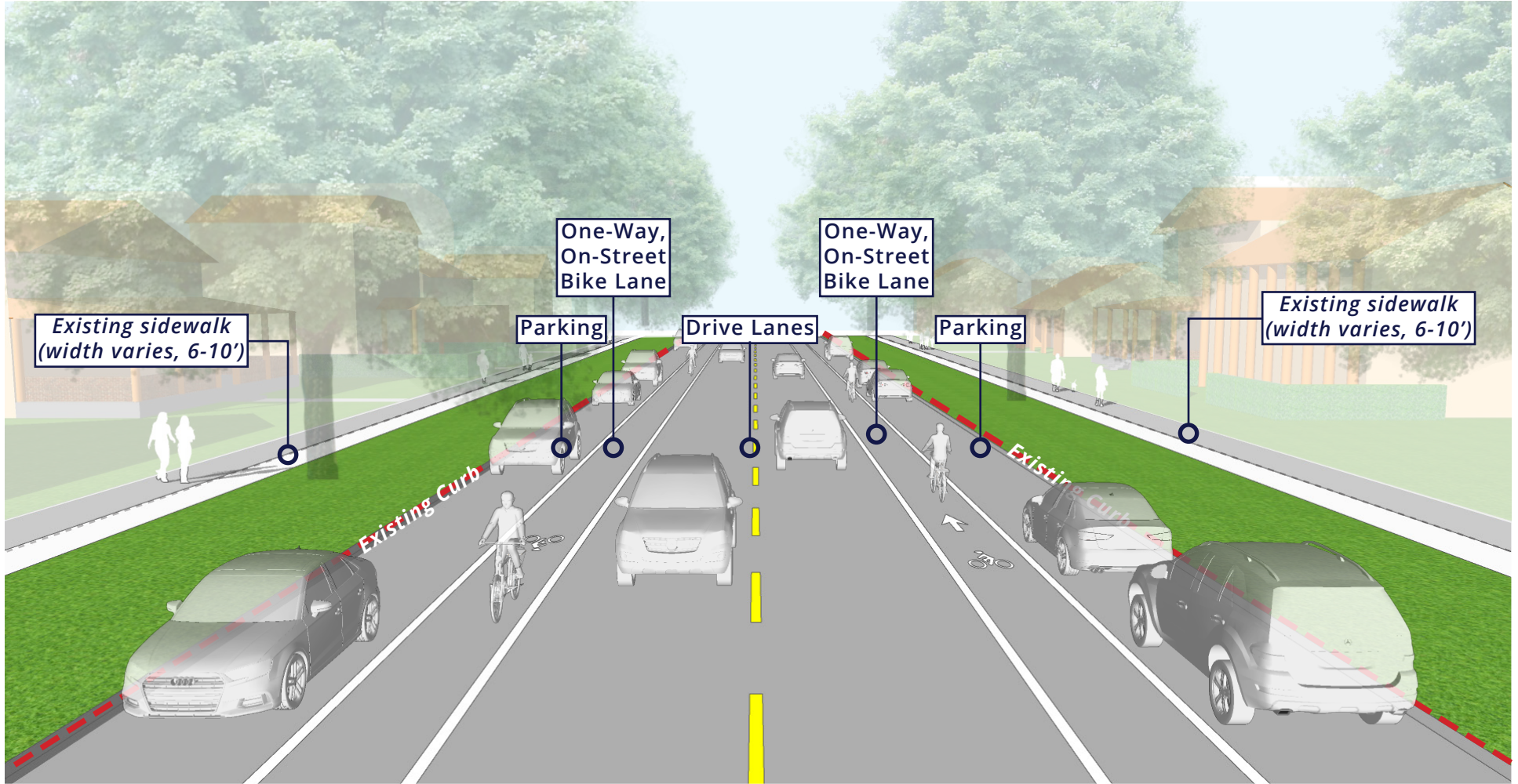


## Segment F



# Existing Conditions by Segment

Public Right-of-Way Corridor | Facing West



# Existing Conditions by Segment

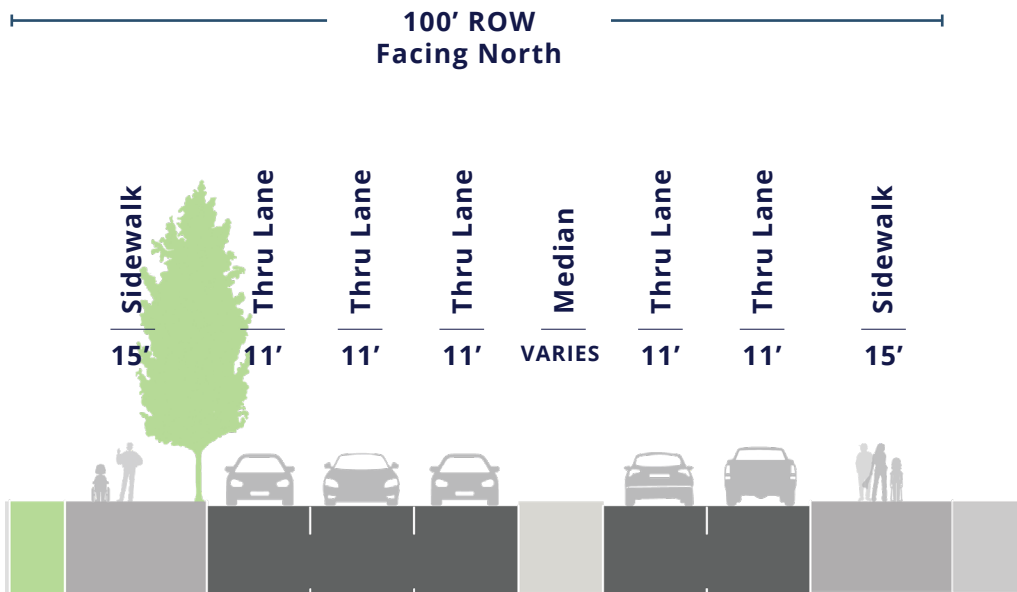
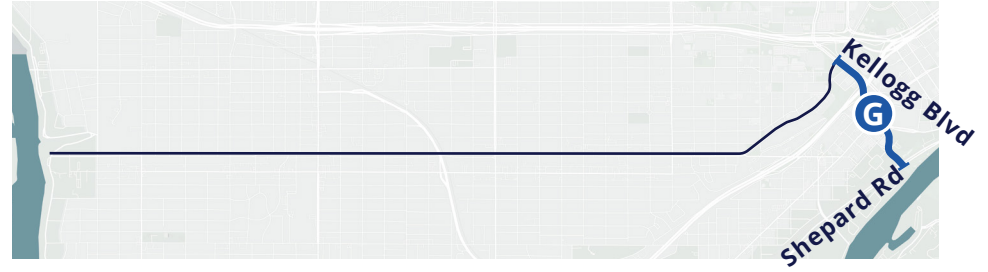


Fig. 3-34 | Typical cross-section through Summit Avenue in Segment G

**John Ireland Boulevard to West 7th Street**

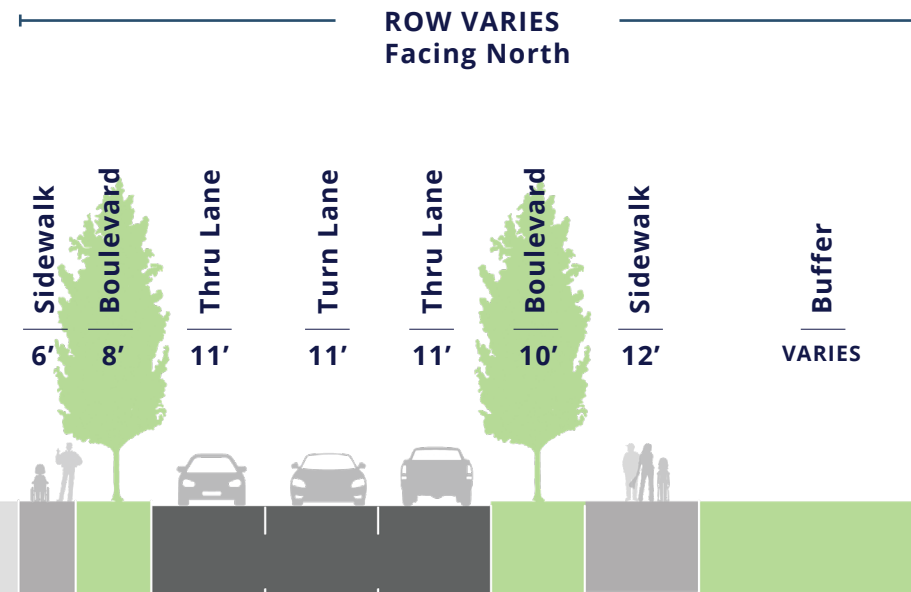
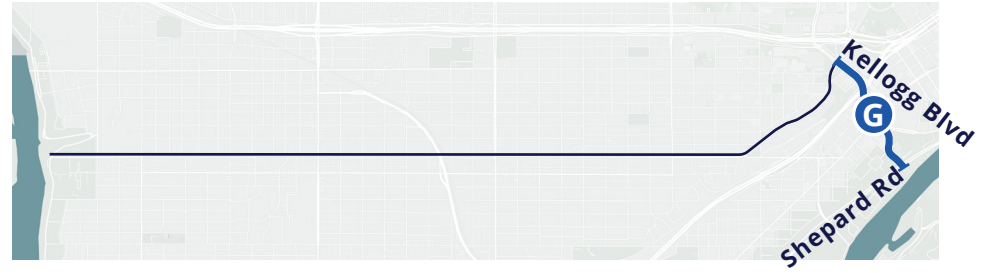


Fig. 3-35 | Typical cross-section through Summit Avenue in Segment G

**West 7th Street to Shepard Road**

# Existing Conditions by Segment



*Kellogg Blvd and 7th St W*



*Eagle Pkwy and Shepard Rd*



*Kellogg Blvd and Chestnut St*



*Kellogg Blvd and Mulberry St*



# Regional Trail Plan

## Plan Approach

The Plan is focused on developing a corridor-wide approach for a Regional Trail facility along Summit Avenue between Mississippi River Boulevard and the Samuel H. Morgan Regional Trail.

This chapter examines the corridor at a variety of scales to inform a trail concept that achieves the goals set out in earlier chapters, and encapsulates the project vision. As in earlier chapters, the corridor is divided into segments (shown below). The development concept looks at each segment

to make a recommendation specifically for the unique conditions along Summit Avenue. As a corridor-wide facility, the consistency between segments is also a critical part of the Plan. This chapter explores the corridor-wide, segment-specific, and one-block scales to provide a holistic view of the corridor.

This chapter also addresses the critical components of a regional trail facility including accessibility, wayfinding, natural resources, and others.



### Community Feedback Icon

Look for this icon in the document highlighting areas of focus generated by insights, feedback, and concerns from community members throughout engagement.

These topics will be important considerations for future phases of implementation, design, and engineering of a trail facility.

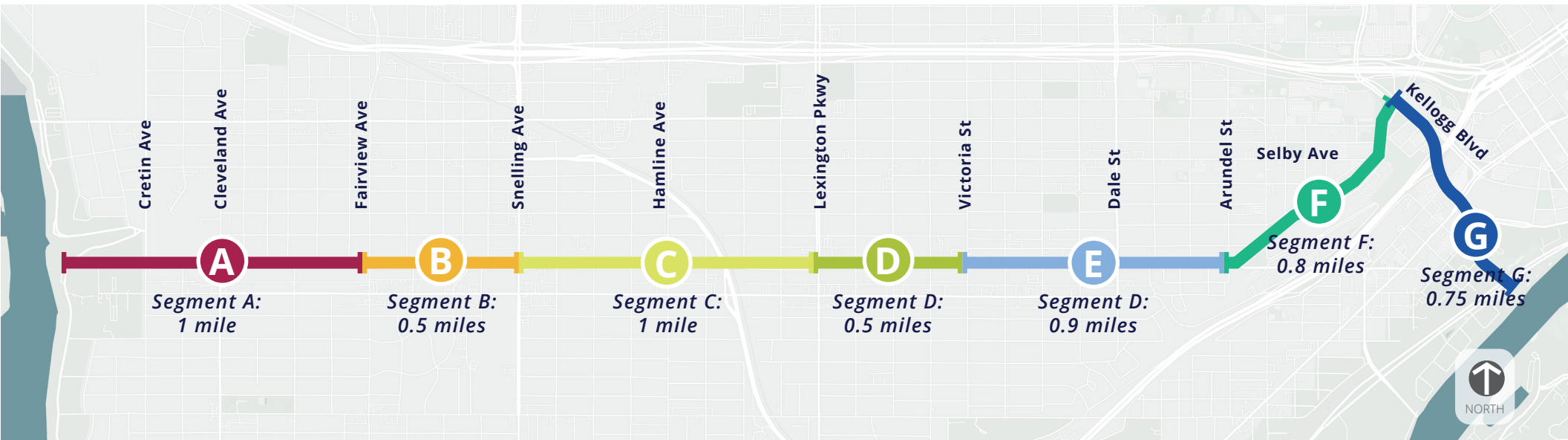


Fig. 4-36 | Corridor Segment Lengths

# Project Vision

## Initial Visioning

The vision for the proposed Summit Avenue Regional Trail is a combination of community feedback, technical advisory input, and the broader goals of the Metropolitan Council goals for regional amenities.

Themes from these groups focused on preservation of the corridor's historical context and greenspace, improved safety for all users, and connectivity to other regional amenities.

The City of Saint Paul Comprehensive Plan also identifies a city-wide Vision and Core City Values that set a framework for welcoming and equitable spaces within the City.

The project vision encapsulates the entire corridor, with more specific goals and recommendations for each segment, block, and connection along the regional trail facility. This vision will serve as a guide to future design and implementation of the regional trail along the Summit Avenue corridor, and will help create a cohesive facility that reflects the values of the community and the region.



### **Project Vision:**

***The Summit Avenue Regional Trail offers a high-quality recreational experience recognizing the past and present along with the natural and built environments. The trail provides regional and local connections serving a broad range of users.***

# Project Vision

## Guiding Principles

-  **Improve connectivity and public access to open space**
-  **Create a safe and equitable recreation experience for all users**
-  **Balance historic quality of corridor while modernizing infrastructure**
-  **Preserve greenspace and tree canopy**
-  **Anticipate evolving needs of users to create a more resilient, people-oriented corridor**

## Objectives and Strategies

- Protect mature canopy trees; limit impacts to greenspace
- Utilize design strategies to improve safety and comfort including intersection improvements, trail maintenance, and safer roadway design
- Serve all ages and abilities with trail design
- Identify a trail facility design and alignment that is compatible with historic context
- Align trail improvements with available funding opportunities and coordinate capital improvement projects
- Prioritize pedestrians, cyclists, and transit riders through design interventions
- Identify existing greenspaces along trail facility corridor that can serve as nodes for users of the regional trail
- Use signage for wayfinding, historic and cultural interpretation, and education
- Identify opportunities to include native plants and continue to provide a diversity of plant species

# Concept Evaluation

## Regional Trails (as defined by the Metropolitan Council 2040 Regional Parks Policy Plan):

- Regional trail corridors provide recreational opportunities along linear pathways in the metropolitan area.
- “Linking Trails” pass through or provide connections among components of the Regional Parks System, local, state, federal recreational facilities, or significant natural resource areas.
- Trails are selected for their ability to intersect with local trail networks. In urban areas many serve as commuting routes for bicyclists in addition to service recreational purposes.
- They connect to multiple public interest destinations such as schools, job centers, tourist destinations, historical cultural, architectural building sites, and commercial districts.

## Why a Separated Trail Facility?

A separated bike trail is separated from vehicular traffic by a physical barrier. This barrier can include a curb, bollards, vegetation, or other physical features. The proposed means of separations along the Summit Avenue corridor is a standard 6” curb. Several factors described below explain the need for a separated trail facility along Summit Avenue.

- **Traffic Volume** | Summit Avenue carries enough vehicle traffic volume to which industry best practices recommend separated facilities (*see table below*).
- **Industry Standards and Recommendations** | National and state guidance recommends spaces to bike that are separated from car traffic (FHWA, MnDOT, NACTO)
- **Comfort and Safety** | Separate trail facilities create more welcoming, comfortable, and safe spaces for a variety of users of all abilities.

## Industry Best-Practices, Recommended Facility

This table outlines current best practices for bicycle facilities based on traffic volumes. Based on the existing annual average daily traffic counts on Summit Avenue, the majority of the corridor falls into the >6,500 vehicles per day category. The segment from Ramsey Street to John Ireland Boulevard is 3,900 vehicles per day.

Roadway Traffic Volume (vehicles per day)	Posted Roadway Speed	Recommended Facility Type		
		FHWA Bikeway Selection Guide	MnDOT Bicycle Facility Design Manual	NACTO Designing for All Ages and Abilities
< 3,000	25-30 mph	Shared Roadway or Bike Boulevard	Shared Roadway or Bike Boulevard	Bike Boulevard (<25 mph)
3,000-6,500	25-30 mph	Bike Lane (buffer preferred)	Bike Lane (buffer preferred)	Bike Lane (<6,000 AADT and <25 mph)
>6,500	25-30 mph	Separated Bike Lane or Sidepath	Separated Bike Lane or Sidepath	Separated Bike Lane or Sidepath

Fig. 4-37 | Recommended Facility Types

# Concept Evaluation

## Industry Best Practices, Continued



*More clarity about safety regulations and recommendations; best practices for bikeways*

### Selection of a Protected Facility

As diagrammed on the previous page, the selection of a bicycle facility types is predominantly based on roadway volume (vehicles per day), and posted roadway speed. Using these criteria, almost all segments of the Summit Avenue corridor would best be suited for a separated bikeway facility.

### All Ages and Abilities

The current bike lanes work well for some bikers, particular those with biking experience who feel confident riding next to traffic. However, these types of bike lanes on streets with high traffic volumes like Summit Avenue tend to deter less confident riders. By implementing a separated regional trail facility, the Summit Avenue bikeway can be a more accessible biking corridor for users of all abilities. According to the National Association of City Transportation Officials (NACTO), among adults in the US, only 6-10% generally feel comfortable riding in mixed traffic or painted bike lanes while as many as 81% of those would ride in protected bike lanes<sup>1</sup>. By reducing stressful bicycling experiences, a more diverse group of riders

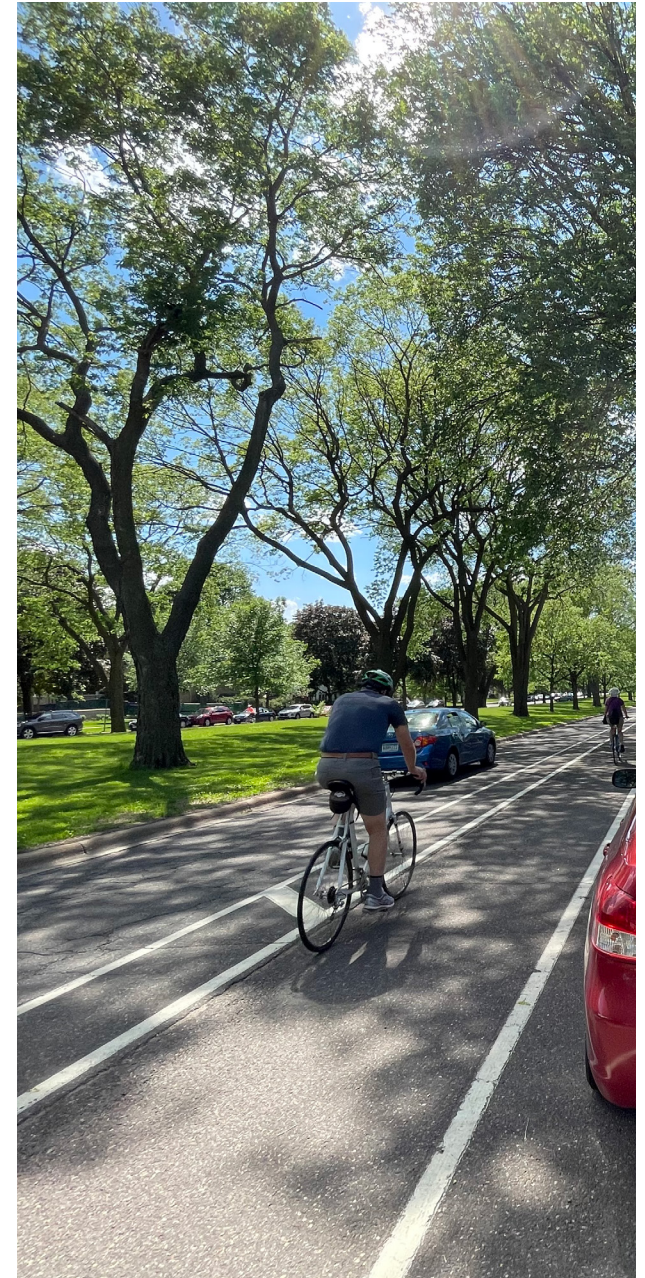
will feel confident to use biking facilities. Due to the various uses on Summit Avenue including schools, religious institutions, single-family and multi-family housing, and other institutions, there are several groups of people who may benefit from a separated bicycle facility:

- **Children and families** riding to and from the many schools along Summit Avenue. Young children are often not confident bikers and may not be seen by drivers<sup>1</sup>
- **Adults over the age of 65** are a fast-growing percentage of the population. Ramsey County is projected to experience a 48% increase in residents 65 and older between 2015 and 2030. Nationally, this age cohort is also the only group with a growing number of car-free households. Separated facilities are much safer for seniors and generally those with slower riding speeds and lower visual acuity<sup>1</sup>.

The National Association of City Transportation Officials (NACTO) found in data in New York City that adding protected bike lanes to streets reduced injury crashes for all roads users by 40% over four years<sup>1</sup>.

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<sup>1</sup> : NACTO "Designing for All Ages & Abilities" | [https://nacto.org/wp-content/uploads/2017/12/NACTO\\_Designing-for-All-Ages-Abilities.pdf](https://nacto.org/wp-content/uploads/2017/12/NACTO_Designing-for-All-Ages-Abilities.pdf)

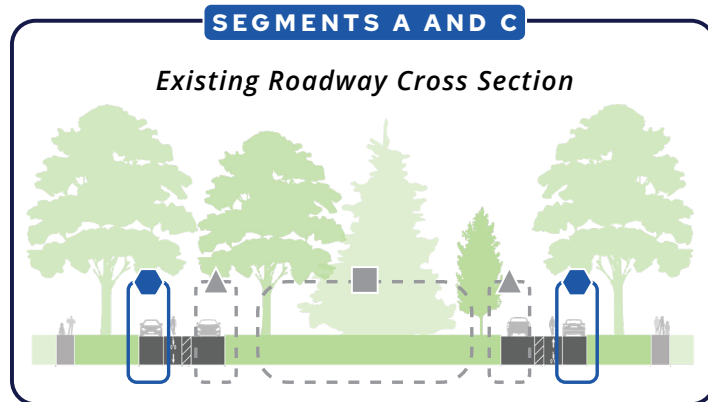


# Concept Evaluation

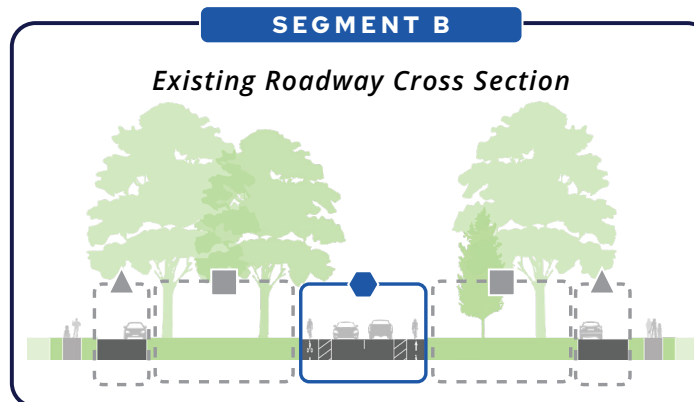
## Initial Alignment Study

To begin the process of developing a trail alignment for each segment of the corridor, the entire 100'/200' public right of way for each segment was reviewed. The existing median (where applicable), boulevard, roadway, and sidewalks were all considered, and the impact of a regional trail facility in was considered. Specific components that were considered in each option include mature tree canopy, historic preservation, safety, and user experience.

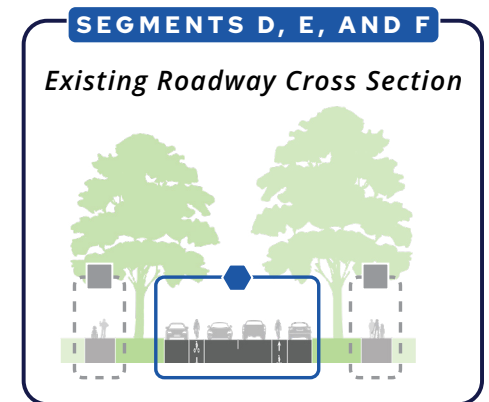
The diagrams below show generally all potential locations for a trail within the existing corridor. The alignment considered most feasible as determined during meetings with the Design Advisory Committee, Technical Advisory Committee, and City staff is indicated by a red box surrounding the description.



- Trail in Median
- ▲ Separated trail between median and roadway
- Separated trail between roadway and boulevard



- Trail in Median(s)
- Separated trail in center roadway
- ▲ Separated trail on north and/or south frontage roads







- Shared-use (pedestrian and bicycle) trail at existing sidewalk
- Separated trail between roadway and existing boulevard

# Concept Evaluation

## Corridor Exploration

Of the options explored on the previous page, a trail facility at the outside edge of the existing roadway is preferred for minimal impact to greenspace, intuitive user experience, and safety of traffic flow at crossings. Several considerations required exploration including one- or two-way trails, and how to address the other modes within the Summit Avenue corridor including pedestrians and vehicular traffic. Mature tree canopy and greenspace are a top priority within these considerations

### Legend

-  Concept meets stated goal
-  Concept partially meets stated goal
-  Concept does not meet stated goal
-  Does not apply

The preferred alignment for segments D, E, and F of the regional trail are one-way bike facilities. However, two-way trails were also reviewed. The benefits and drawbacks of one-way and two-way facilities are noted later in the document.

	SEGMENTS A AND C				SEGMENT B		SEGMENTS D, E, AND F			
	One-Way Trails <i>Most Parking Remains</i>	One-Way Trails <i>Parking Removed One Side</i>	Two-Way Trail <i>Most Parking Remains</i>	Two-Way Trail <i>Parking Removed One Side</i>	One-Way Trails	Two-Way Trails	One-Way Trails <i>Most Parking Remains</i>	One-Way Trails <i>Parking Removed One Side</i>	Two-Way Trail <i>Most Parking Remains</i>	Two-Way Trail <i>Parking Removed One Side</i>
<b>Parking</b> <i>On-street parking meets demand observed in parking studies</i>	✓	○	✓	○	—	—	✓	○	✓	○
<b>Mature Tree Canopy</b> <i>Presents low risk of impacts to trees in the corridor</i>	○	○	✗	✓	✓	✓	✗	✓	✗	✓
<b>User Experience</b> <i>Trail facility is familiar to cyclists and drivers</i>	✓	✓	○	○	✓	○	✓	✓	○	○
<b>Historic Preservation</b> <i>Presents opportunity to maintain balance symmetry</i>	✓	○	○	○	✓	○	✓	✓	○	○

# Concept Evaluation

## Corridor-Wide Approach

### Proposed Alignment

#### One-Way Trail Facility, Corridor-Wide

The proposed concept seeks to provide a consistent and familiar facility type throughout the proposed trail corridor. This approach provides a one-way bike trail on both the north and south side of Summit Avenue from Mississippi River Boulevard to Kellogg Boulevard. The one-way facilities were preferred by both community members and by technical professionals as the safest option for this corridor.



The proposed alignment for the Regional Trail resulted from a combination of feedback from Design Advisory and Technical Advisory Committee members, City staff, community input via surveys and engagement, and industry best practices.



Fig. 4-38 | Proposed Trail Alignment

### Alternate Alignment

#### One-Way Trail: Mississippi River Boulevard to Lexington Parkway, Two-Way Trail Lexington Parkway to Kellogg Boulevard

This alignment was reviewed by project staff and community members and was determined to be the less preferred alignment option. The two-way bicycle facility was viewed as less safe and a less intuitive facility for both cyclists and drivers.

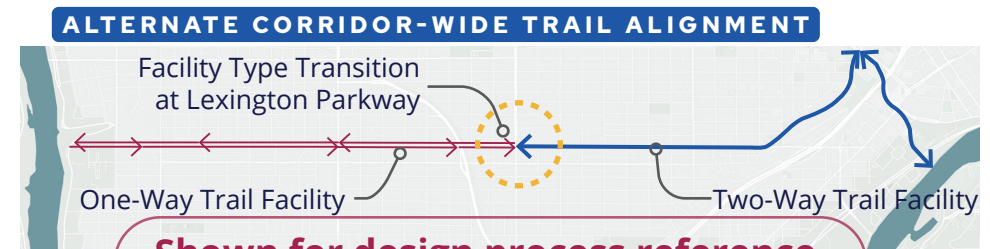


Fig. 4-39 | Alternate Development Concept

**Shown for design process reference. This alignment is not proposed as part of the Plan**

# Concept Evaluation

## Concept Refinement

### Constrained Conditions

Outlined below is a framework for decision making during future design and construction projects in the corridor. It sets up three tiers in reverse-priority that reflect what areas would need to be impacted when the recommended section (8'-11' facility based upon site conditions, which includes the treadway and buffer) is not feasible or there is an opportunity to provide more greenspace

given a site condition. Departure from the typical section would be determined during the design and engineering phase of the regional trail, identified due to context-specific site conditions found in the corridor.

### 1 Parking

Citywide planning and policies in general do not prioritize on-street parking for single-occupancy vehicles. Parking counts conducted as part of the Plan analysis phase reflect on-street parking is under-utilized corridor-wide which supports a strategy of reducing on-street parking options to reallocate space for a regional trail facility. See parking study in Ch. 3 for more information regarding current parking utilization.

### 2 Paved Surface Dimensions

- **Vehicle corridor:** Lane width reduction where possible (11' Minimum: 10' drive lane with 1' curb reaction:
- **Bicycle Corridor:**
  - » Narrower 8' paved facility including treadway and buffer
  - » Street lights, signs, and other obstructions to be outside of trail corridor (11' away from curb)

### 3 Boulevard/Buffer Condition

- Paved in lieu of grass for maintenance
- Tree health: Forestry and planned removals
  - » Dead or declining health, potential hazard
  - » Ash Tree
- Relocate or replace immature/young trees with smaller root zones further away from the curb

### Parking Strategies:

#### West of Lexington Parkway

- Parking to remain typically
- Parking removal if design alternatives are not feasible and is determined to be critical to meet design standards for safety
- Design flexibility for parking removal at each block to accommodate emergency vehicles and sight lines

#### East of Lexington Parkway

- Context-based approach - 50% parking reduction assumed (typical)
- Remove parking one-side of street, create lane shift to vary parking locations north/south
- Remove parking both sides: if needed, look for consistency and re-introduce 50% on-street parking options every 1-2 blocks
- Prioritize maintaining 50% parking near areas of multi-unit housing and limited off-street options

# Design Considerations | Tree Vulnerability

## Evaluation Tools

The trees along Summit Avenue play an integral role in creating a recreational parkway experience east to west across the City. In planning for roadway reconstruction and a regional trail facility, it is important to develop a design approach that prioritizes tree health and preservation.

Roadway and trail construction carry risk to existing vegetation. To evaluate a design approach, this study looks at location of curb lines relative to tree critical root zones (CRZ) and structural root zones (SRZ).

At the planning level, the evaluation of the tree canopy along Summit Avenue focuses on the corridor-wide level rather than on individual trees within the corridor. This Plan seeks to provide evaluation tools to guide future design and implementation phases of the regional trail.

Data used in this Plan comes from City of Saint Paul GIS data, which includes the approximate location of all trees within the public right-of-way along Summit Avenue, along with the assumed critical and structural root zones of those trees.

### CRZ

#### Critical Root Zone (CRZ)

Construction work done in this area should be done carefully. A tree preservation plan should be developed to guide construction in these areas.

1" DBH (trunk diameter measured at breast height) = 1' Critical Root Zone Radius (CRZ) from center of tree

#### Example:

A tree with a 12" diameter trunk has a critical root zone that extends 12' from the center of the tree

### SRZ

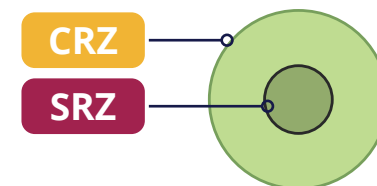
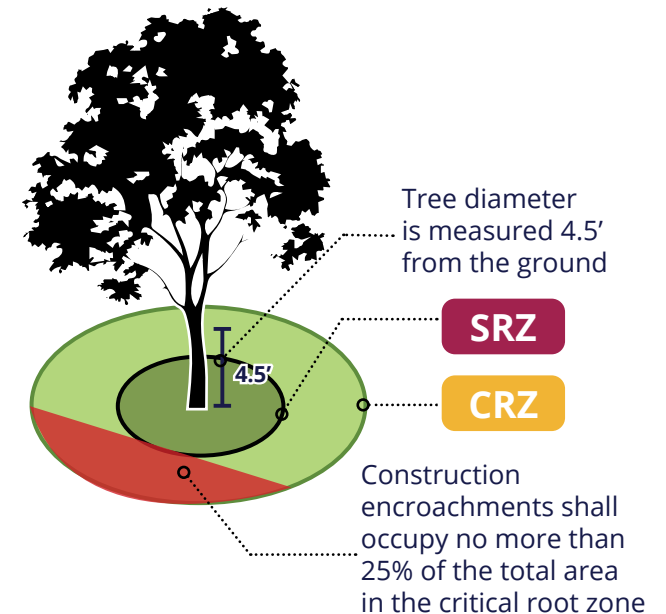
#### Structural Root Zone (SRZ)

Most of a tree's structural roots exist in this zone. Disturbance to the structural root zone of a tree increases a tree's risk of failure. Construction activities should be avoided within the SRZ.

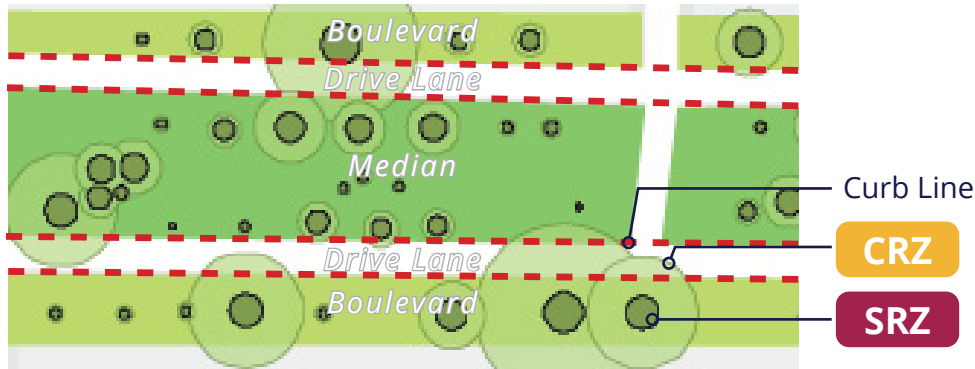
1" DBH (trunk diameter measured at breast height)  $\times .9 =$  1' Structural Root Zone Diameter (CRZ) from center of tree

#### Example:

A tree with a 12" diameter trunk has a structural root zone that forms a 10.8' diameter zone around the center of a tree, of a 5.4' from the center of a tree.



# Design Considerations | Tree Vulnerability



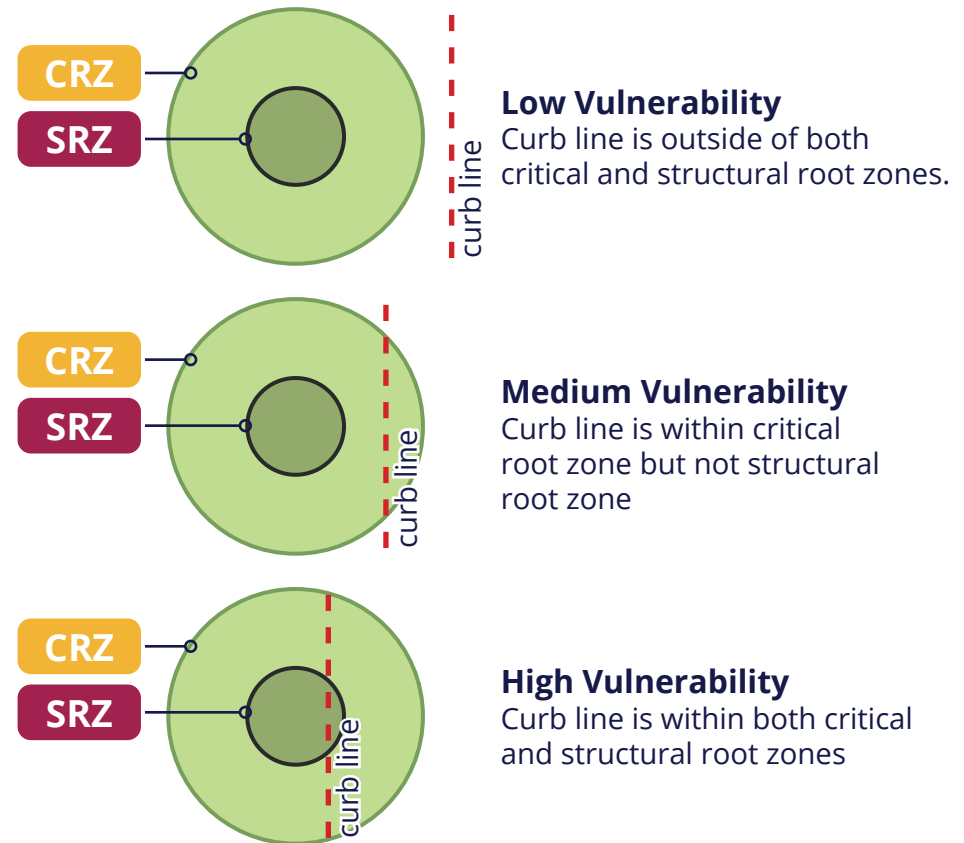
## Evaluation Method

Using the available GIS data, the relationship between the curb line and SRZ and CRZ of the trees along Summit Avenue was compared. All trees were identified as either low, medium, or high vulnerability with vulnerability indicating the amount of risk to trees within each regional trail concept. Low vulnerability trees are those where the curb line is outside both the critical and structural root zones of a tree. Medium vulnerability trees are those in which the curb line is within the critical root zone of a tree, but not within the structural root zone. High vulnerability trees are those where the curb line is within both the critical and structural root zones.

Looking first at the existing conditions along Summit Avenue, it is expected that the critical and structural roots zone of many larger trees already exist under paved roadways and sidewalks. This indicates that these trees are already in non-ideal growing conditions and that any construction work in these areas could be harmful to trees. Considering many sections of the Summit Avenue roadway have not been reconstructed in over 90 years, maintenance and repairs of utilities and infrastructure that will be necessary to maintain a safe roadway could have an adverse affect on the tree canopy, regardless of the implementation of a trail facility.

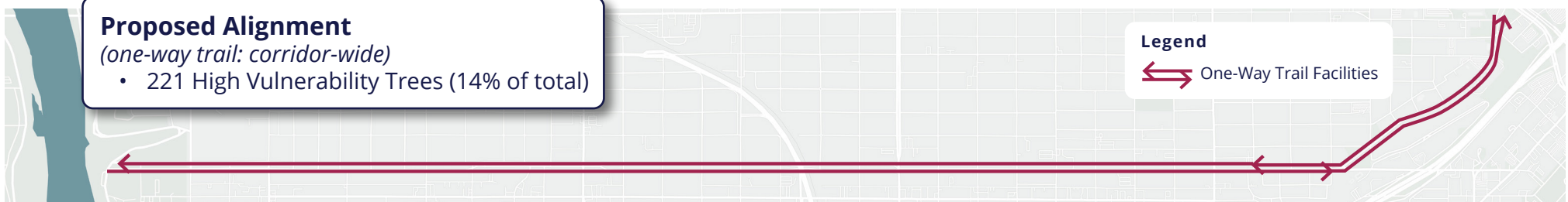
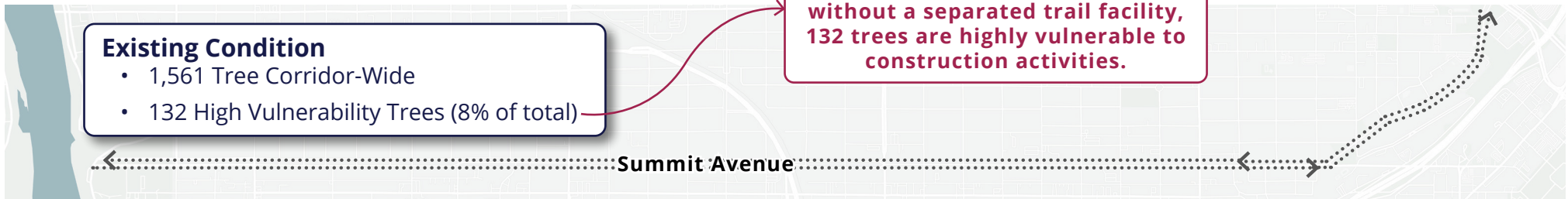
## Example Tree Inventory Diagram

Available GIS data was used to analyze the critical and structural root zones of the existing trees within the Summit Avenue corridor in relation to existing and proposed curb lines. The diagrams showing CRZ and SRZ for each segment of the Summit Avenue corridor can be found in Chapter 03.



# Design Considerations | Tree Vulnerability

## Evaluating Potential Impacts



The existing condition compares the curbs in their existing location, with the CRZ and SRZ of existing trees. In this comparison it was found that 132 are categorized as “high vulnerability trees”, meaning that the existing curb lines intersect with both the critical and structural root zones of existing trees. For the proposed trail concepts, the critical and structural root zones were compared with the proposed curb lines for each concept. In some concepts, there is no change in the curb line, meaning that the number of vulnerable trees stays the same as existing. In concepts where curb lines are moving, trees were re-evaluated to determine the amount of potential risk to each tree.

### Urban Forestry | Context

- 448** Trees removed along Summit Avenue from 2009 - 2022
- 15%** Average percentage of trees impacted after street reconstruction  
\*Derived from three case studies of City of Saint Paul street reconstruction projects from 2011, 2014, 2015
- 1:1** Tree Replacement practice. Importance of diversity, both age and species

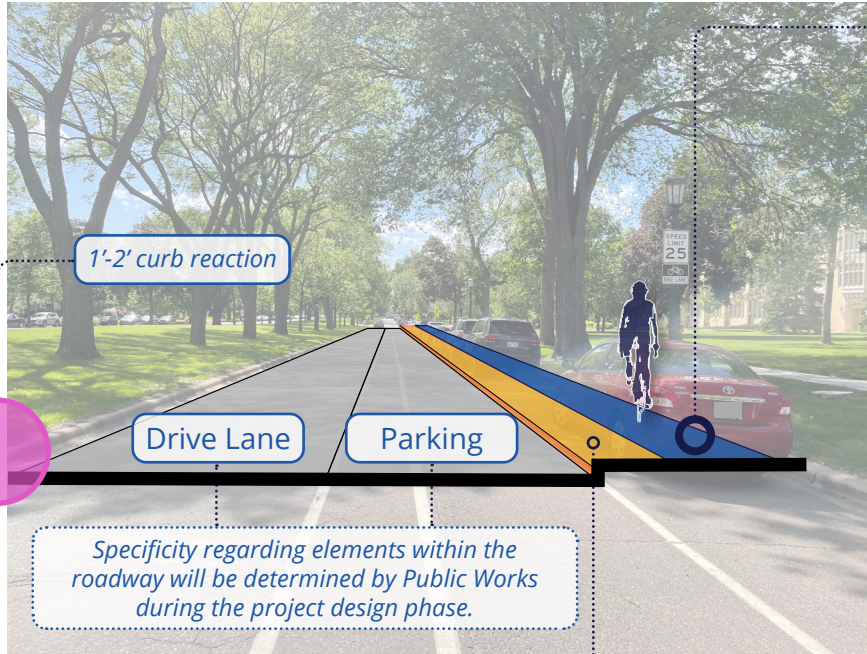
**Risk to trees is highly variable depending on specific site conditions, health of tree, and tree species.**

Potential risk to trees was evaluated for corridor-wide concepts based on proximity of root zones to curb lines. In this study, approximately 8%-15% of the trees in the Summit Avenue corridor could be considered highly vulnerable to construction. Specific impacts and tree preservation strategies are beyond the scope of the Summit Avenue Regional Trail Plan, and will be evaluated during the design and engineering phases of the project.

**NOTE:** Study was reflective of current conditions and data at the time of evaluation and is subject to change. **Survey data corridor-wide is not available at this time.**

# Design Considerations

## Components of the Transportation Envelope



Specificity regarding elements within the roadway will be determined by Public Works during the project design phase.

### Buffer

recommended width: **4'**  
 minimum width: **2' clear**



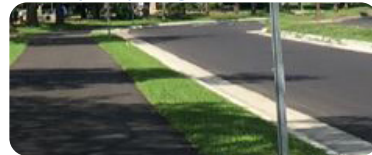
**Drive Lane Widths and Design Minimums**

10' recommended for traffic calming (requires 1'-2' curb reaction, i.e. 11'-12')

### Example | Paved Buffer:



### Example | Vegetated Buffer:



Plan provides clarity about facility dimensions



recommended width: **8'**  
 minimum width: **7'**  
 constrained condition: **6'**

- Familiar to drivers and current users of the Summit Avenue bike lanes
- Easier to maintain consistent facility through project implementation
- Predictable movement between modes at intersections and transition points

*Kellogg Blvd and Eagle Pkwy only*

recommended width: **14'**  
 minimum width: **12'**

- Easier and less costly to maintain
- Smaller overall facility - easier to implement in existing roadway with limited impact
- Align with City and other policy recommendations

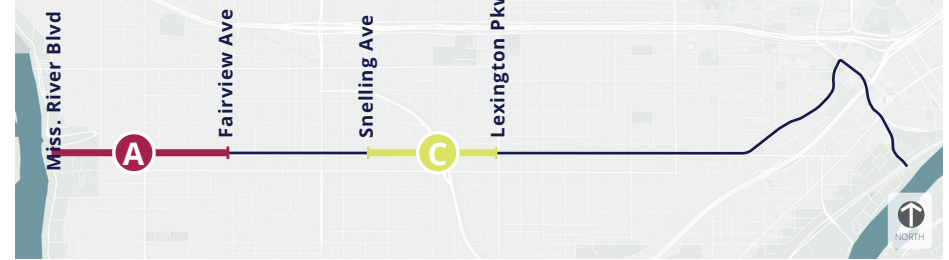


Note: all facility dimensions to be verified at the time of design and implementation

# Development Concept

## Segments A and C | Existing Conditions

### Location Map



### Segment Characteristics

- Segment A intersects with the Mississippi River Corridor Critical Area (MRCCA) designated area
- Characterized by a wide, green median with mature tree canopy shading the parkway
- Existing bike lanes are separated from vehicular traffic by a striped buffer, and located between the drive lane and parking lane
- On-street parking in this section is less than 30% utilized at the times studied for this report, as well as the 2019 study

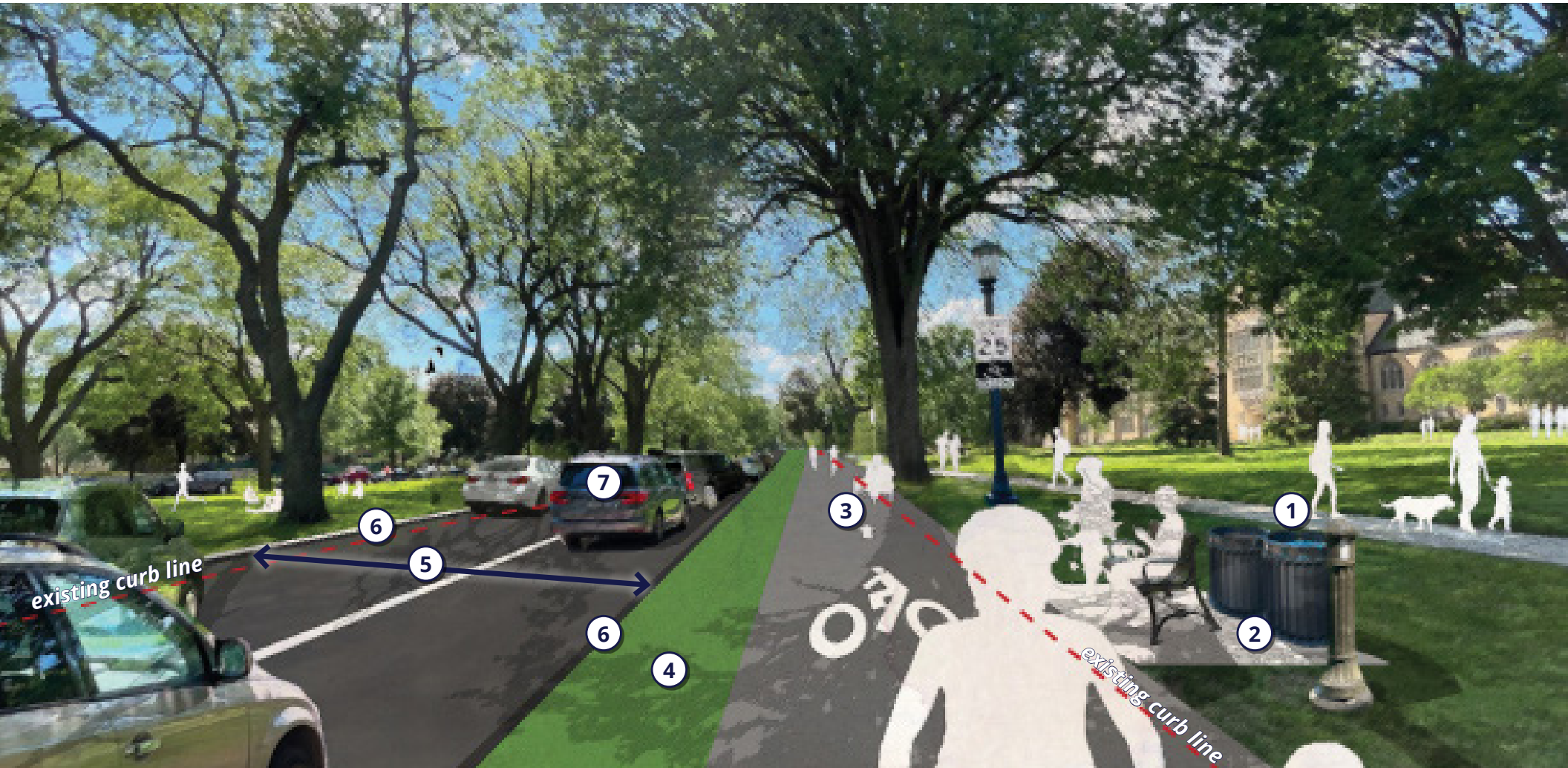
### Existing Condition | Typical Section



# Development Concept

## Segments A and C | Proposed Trail Design

- ① Sidewalk  
Variable Width
- ② Amenity Areas  
Space for rest, furnishings
- ③ One-Way Trail  
Grade Separated
- ④ Buffer  
Vegetated
- ⑤ Vehicle Corridor
- ⑥ Curb  
6" Height
- ⑦ Parking  
On-Street



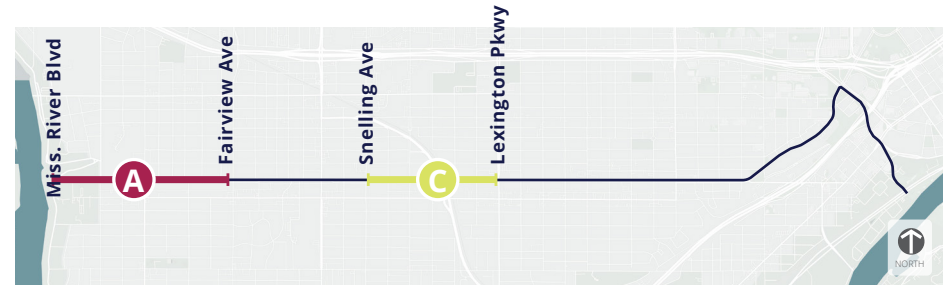
# Development Concept

## Segments A and C | Proposed Concept

### Considerations for Design

It is anticipated that the transportation envelope (road + trail) for these segments can adapt to site specific conditions. The road cannot be less than 20' for emergency vehicle access, therefore important considerations when adjusting trail and buffer designs include:

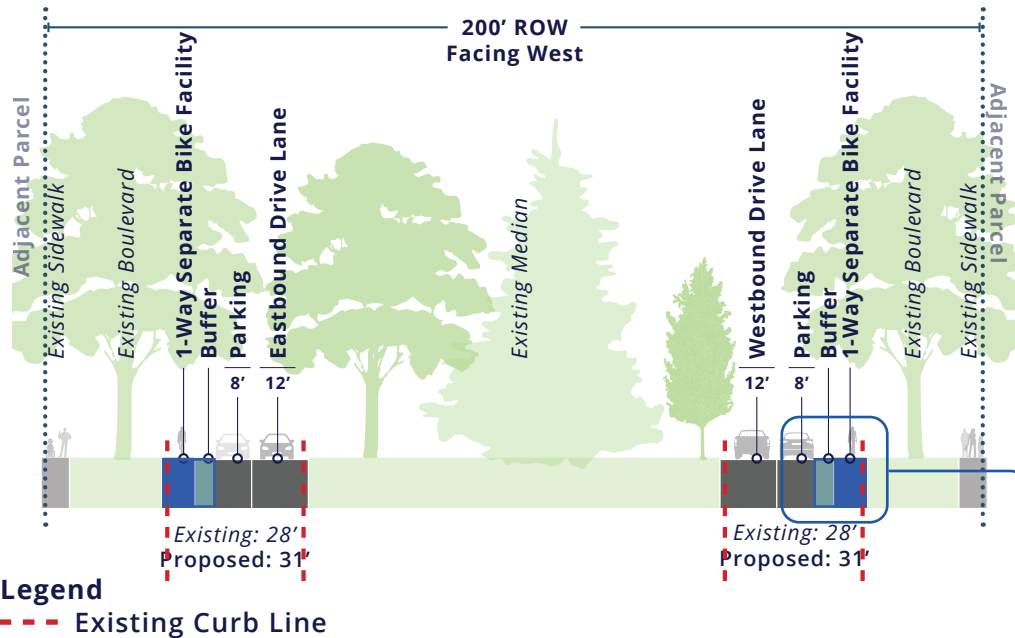
- Tree preservation
- Snow encroachment & storage
- Vegetated buffer and user experience
- Passing & side by side use



### Segment Recommendations

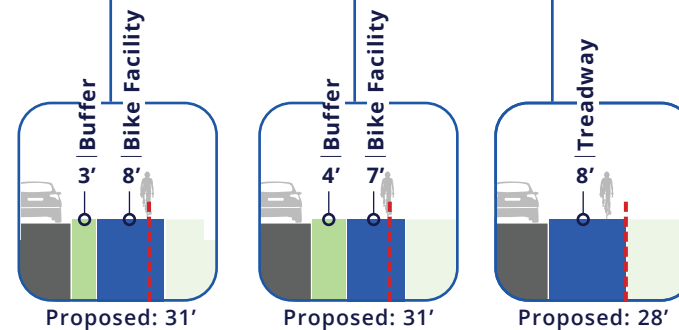
#### Design Approach:

- Implement one-way separated bicycle facilities on both the north and south sides of Summit Avenue
- Provide a 6" curb and vegetated buffer (where applicable) between bicycle facilities and parking lane for maintenance and snow storage
- Recommended 8-11' facility based upon site conditions which includes the treadway and buffer
- Maintain parking on both the north and south sides of Summit Avenue while also accommodating for emergency access
- Maintain eastbound and westbound traffic lanes on either side of central median
- See page 151 of this document for trail recommendations at driveways



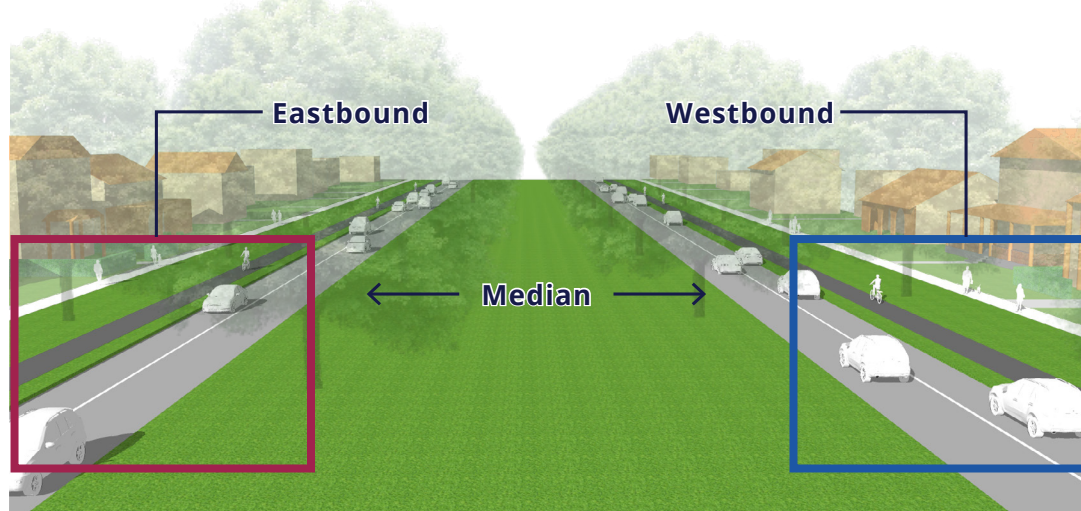
\*The proposed parking and drive lane widths reflect the current recommendations for roadway dimensions to accommodate Emergency Service vehicles on this type of roadway. These dimensions should be evaluated during design and engineering to ensure they meet safety requirements for all users of the corridor.

#### Trail Design Variations

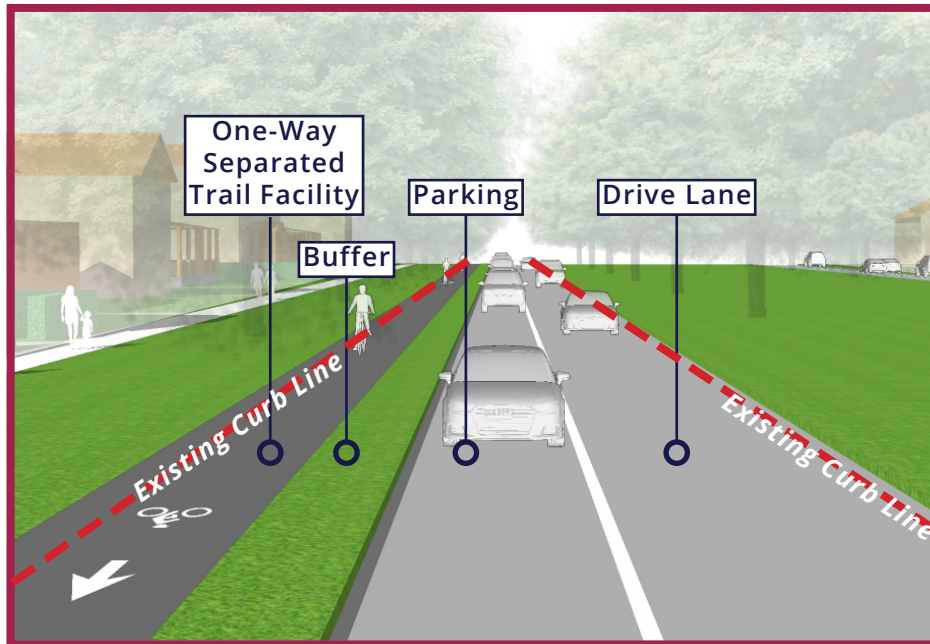


# Development Concept

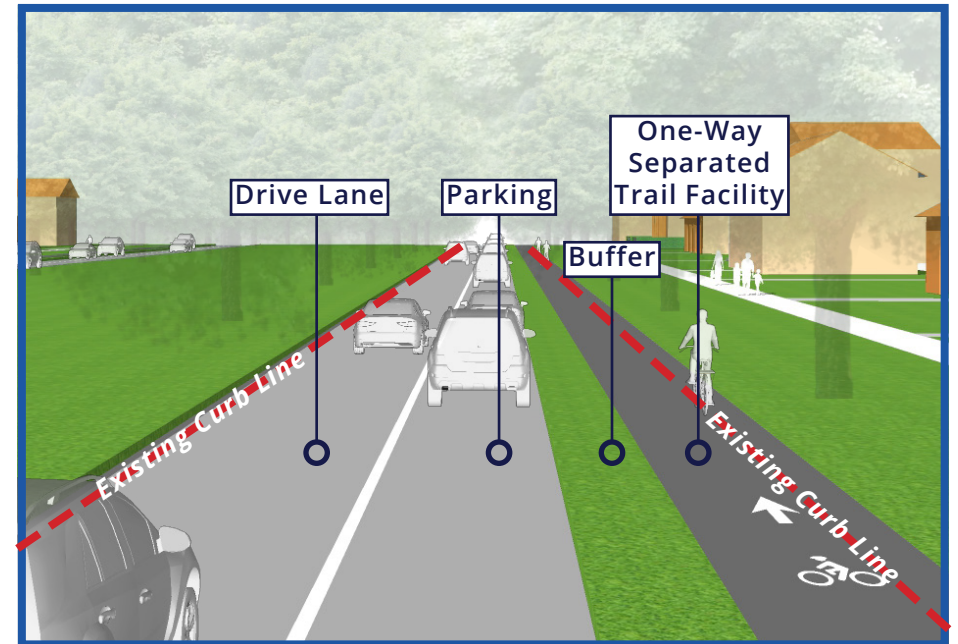
## Public Right-of-Way Corridor - Facing West



## Roadway on south side of Summit Avenue - Eastbound



## Roadway on north side of Summit Avenue - Westbound



# Development Concept

## Segments A and C | Evaluating Potential Tree Impacts

Segments A and C of the Regional Trail propose a transportation envelopes that extends into the existing boulevard. The diagrams and text below contextualize the boulevard impacts in these scenarios compared to other segments of the corridor, as well as the citywide standard planting approach.

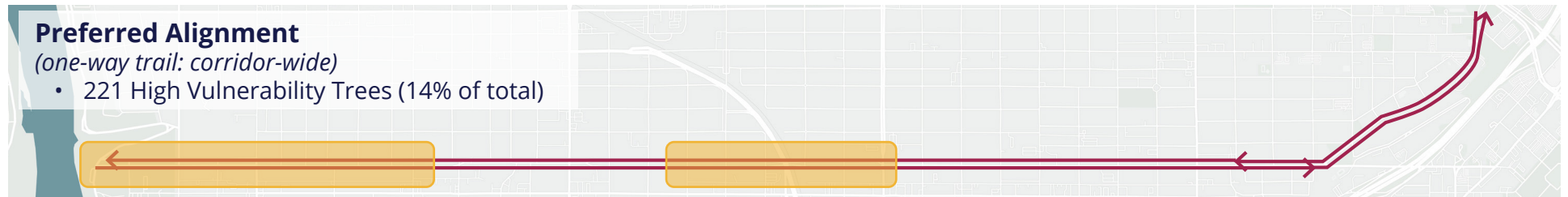
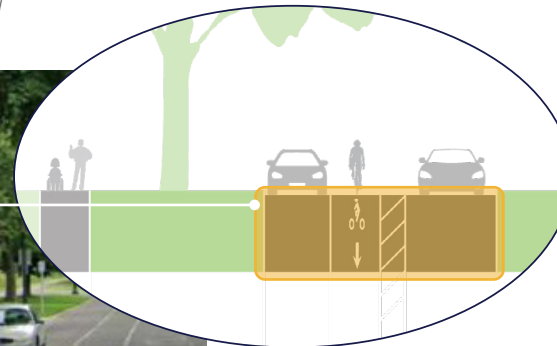


Fig. 4-40 | Proposed Regional Trail Alignment | Segments A and C Highlighted



### Urban Forestry | Boulevard Width Context

- 21'** Existing (Segments A&C)
- 19.5'** Proposed (Segments A&C)
- 16'** East of Lexington (Segments D,E,F)
- 6'** Average in the City



### Segments A and C

- Proposed envelope (road + trail) = 31'
- Design narrows roadway space for vehicles

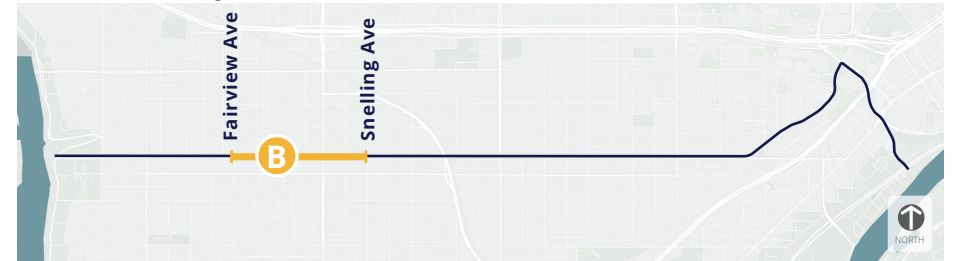
### Why is the transportation envelope larger?

- The envelope needs to **fit both trail and roadway**
- 20' min. roadway for emergency vehicle access
- Trail buffer is important here: snow encroachment
- Trees are generally set further back
- Opportunity for enhanced trail experience
- Ability to constrain trail where needed

# Development Concept

## Segment B | Existing Conditions

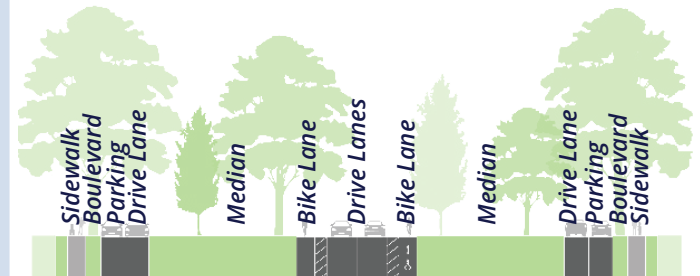
### Location Map



### Segment Characteristics

- The central roadway of Segment B is the main thoroughfare for both vehicles and bicycles
- North and south one-way roads primarily serving the local residences and institutions and provide parking.
- Community members have voiced concerns about the safety at these intersections, particularly at the intersection of Summit Avenue and Snelling Avenue, where a number of bicycle related crashes have occurred.

### Existing Condition | Typical Section



# Development Concept

## Segment B | Proposed Trail Design

1

Sidewalk  
Variable Width

2

One-Way Trail  
Grade Separated

3

Buffer  
Paved

4

Vehicle  
Corridor

5

Curb  
6" Height

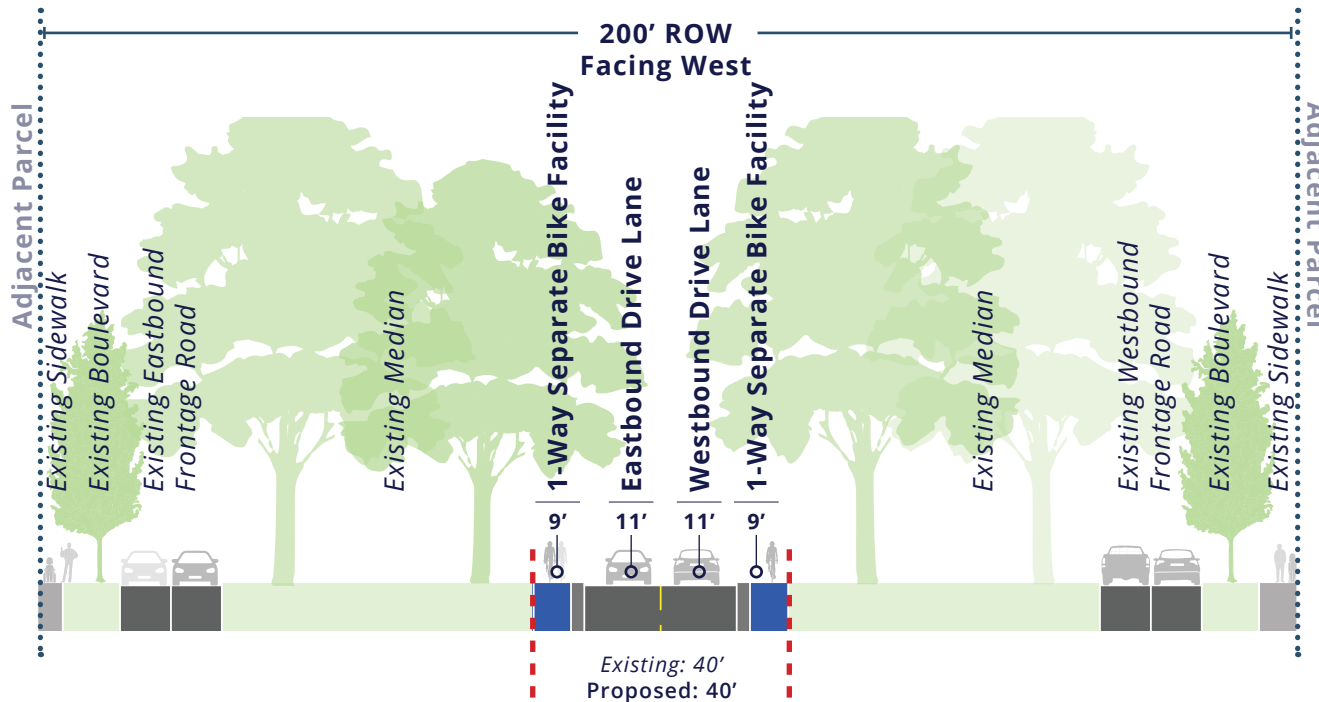
6

Parking  
Frontage Road



# Development Concept

## Segment B | Proposed Concept



### Legend

--- Existing Curb Line

\*The proposed parking and drive lane widths reflect the current recommendations for roadway dimensions to accommodate Emergency Service vehicles on this type of roadway. These dimensions should be evaluated during design and engineering to ensure they meet safety requirements for all users of the corridor.

## Segment Recommendations

### Design Approach:

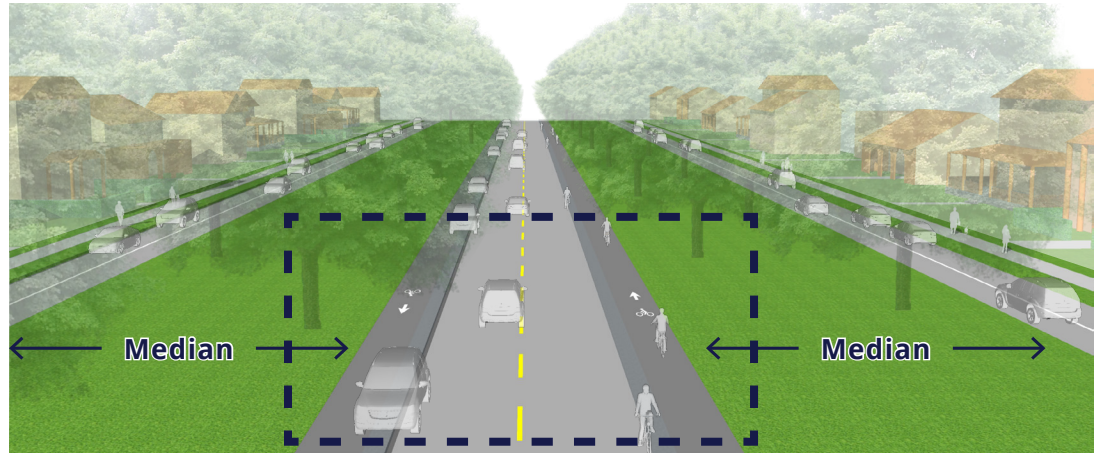
- Implement two, one-way separated bicycle facilities on the north and south sides of the central drive lane on Summit Avenue
- To avoid impacts beyond the curb line, the paved treadway will be a 9' width which includes a 6' trail with a 3' paved maintenance buffer
- Maintain parking and one-way traffic on frontage roads
- Maintain eastbound and westbound traffic lanes in central roadway

\* Proposed trail facility in segment B does not impact existing frontage roads; driveways will remain in their current condition.

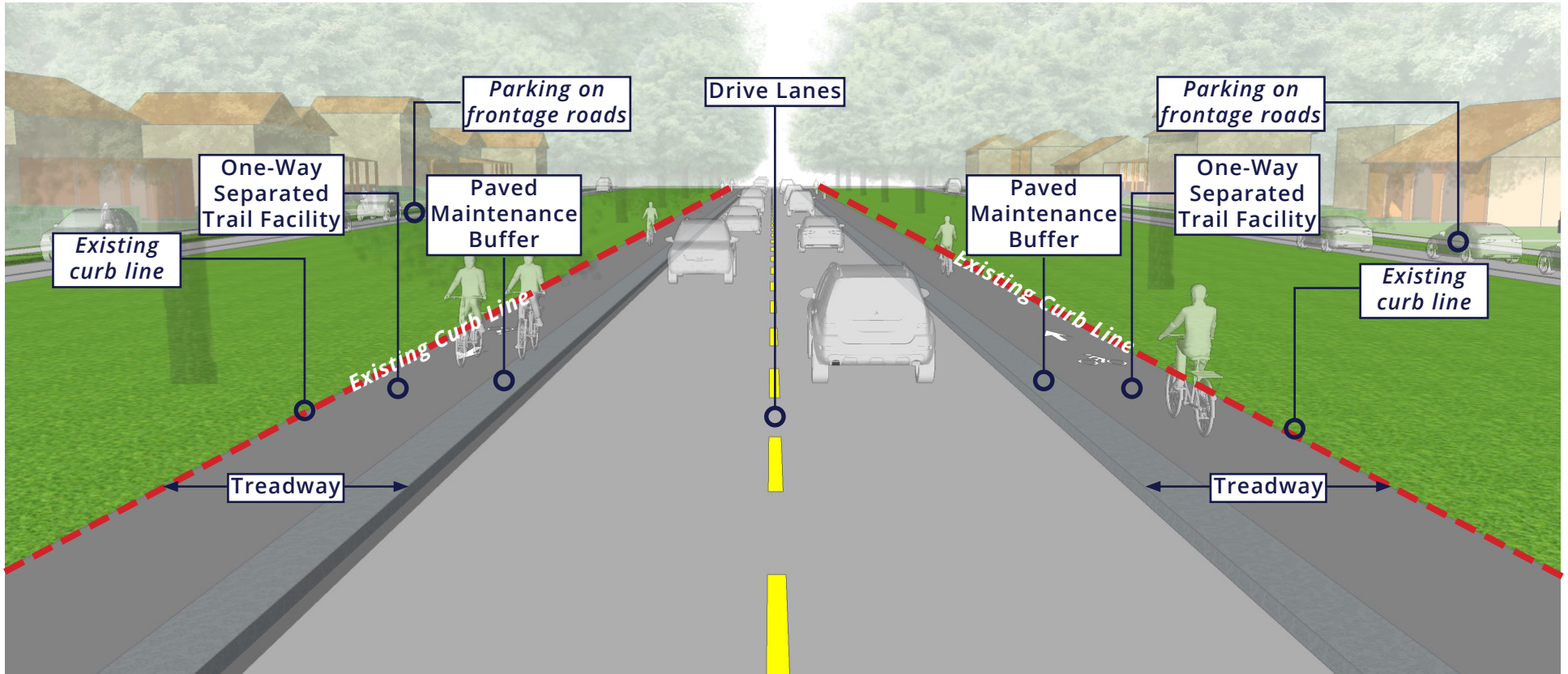
# Development Concept

## Segment B | Proposed Concept

Public Right-of-Way Corridor | Facing West

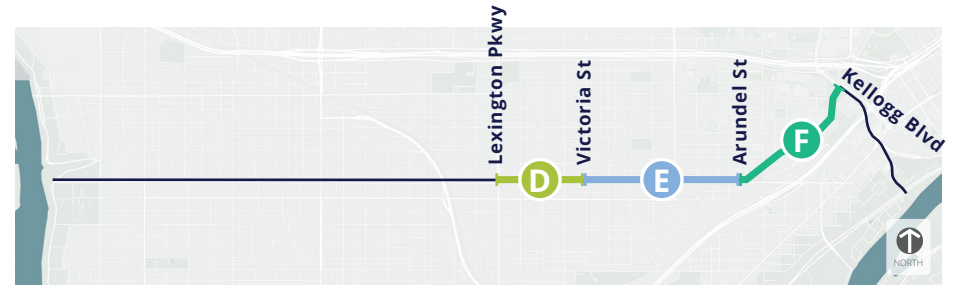


Center Two-Way Roadway



# Development Concept

## Segments D, E, and F | Existing Conditions



### Segment Characteristics

- The right-of-way in these segments is narrower than segments A, B, and C at 100' instead of 200'
- These segments have generous green boulevards and a dense tree canopy, and in some areas, 10' pedestrian sidewalks.
- Several historic properties and a number of public parks are within this segment, providing an opportunity for the regional trail to connect users to historic and cultural landmarks along Summit Avenue.

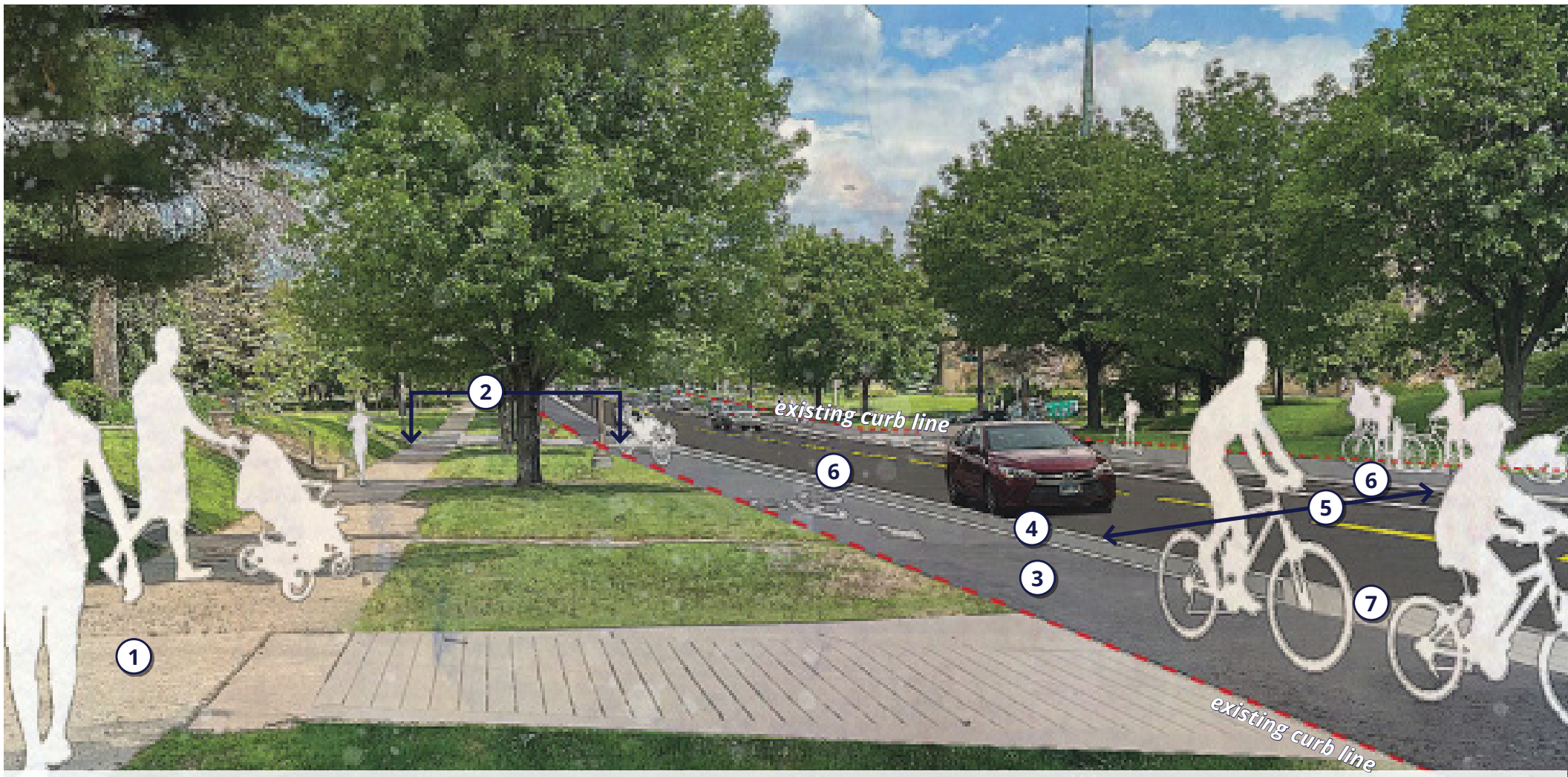
### Existing Condition | Typical Section



# Development Concept

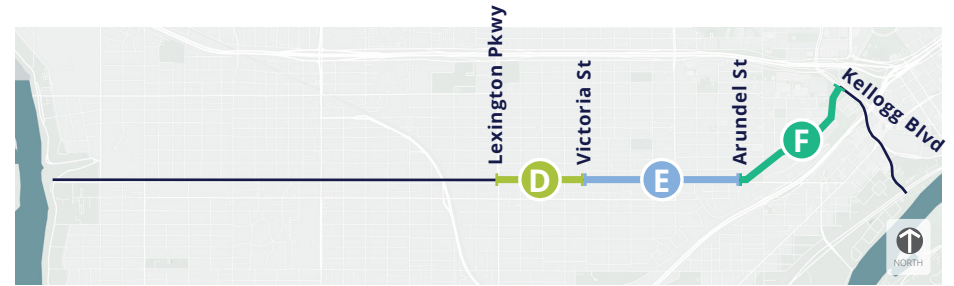
## Segments D, E, and F | Proposed Trail Design

- ① Sidewalk  
Variable Width
- ② Tabled Crossing  
Trail and Sidewalk raised  
6" above street level
- ③ One-Way Trail  
Grade Separated
- ④ Buffer  
Paved
- ⑤ Vehicle Corridor
- ⑥ Curb  
6" Height
- ⑦ Driveway  
Apron



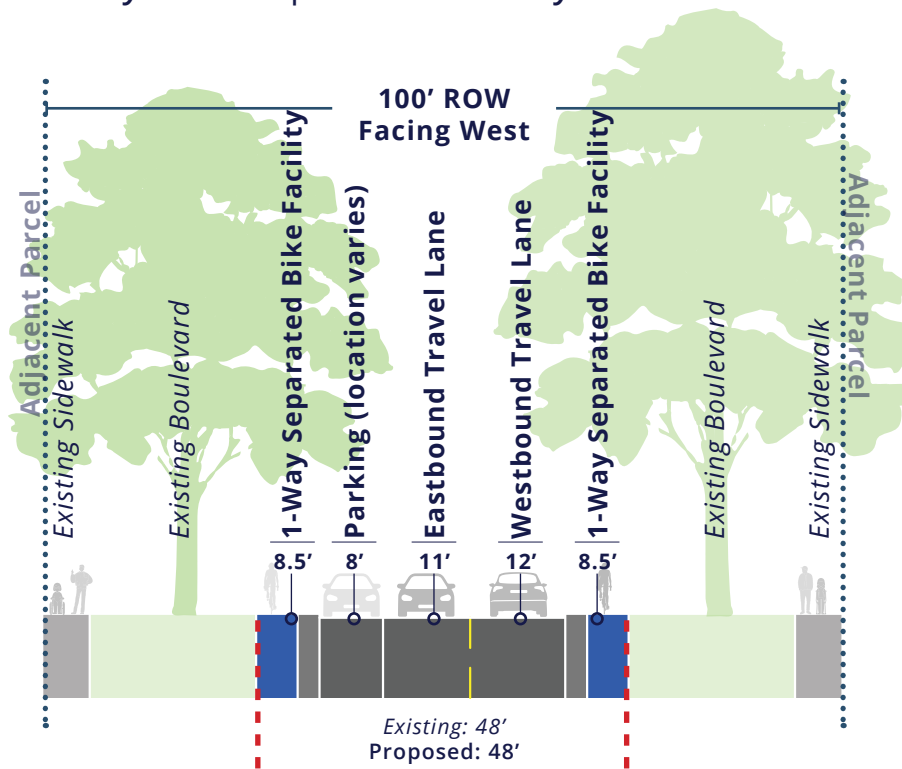
# Development Concept

## Segments D, E, and F | Proposed Concept



### Proposed Trail Facility

#### One-Way Facilities | Narrow Treadway



#### Legend

--- Existing Curb Line

### Segment Recommendations

#### Design Approach:

- Implement two, one-way separated bicycle facilities on the north and south side of Summit Avenue
- Retain parking on one side of Summit Avenue, alternating between north and south based on land use and parking needs of adjacent properties
- Provide 8.5' treadway, encompassing a bike lane and a paved maintenance buffer within appropriate design and engineering standards
- See page 147 of this document for trail recommendations at driveways
- The proposed dimensions of the transportation envelope do not exceed existing dimensions. Existing boulevards and sidewalks are proposed to remain in their existing condition.

**\*The proposed parking and drive lane widths reflect the current recommendations for roadway dimensions to accommodate Emergency Service vehicles on this type of roadway. These dimensions should be evaluated during design and engineering to ensure they meet safety requirements for all users of the corridor.**

# Development Concept

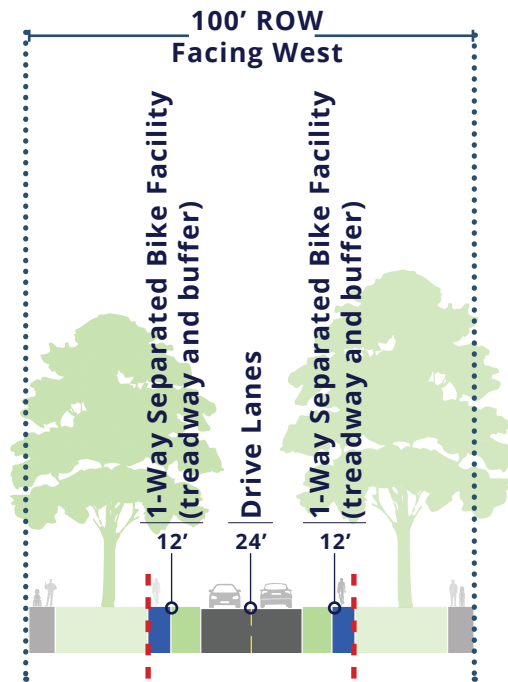
## Segments D, E, and F | Other Alignment Considerations



Proposed alignment reflects community feedback

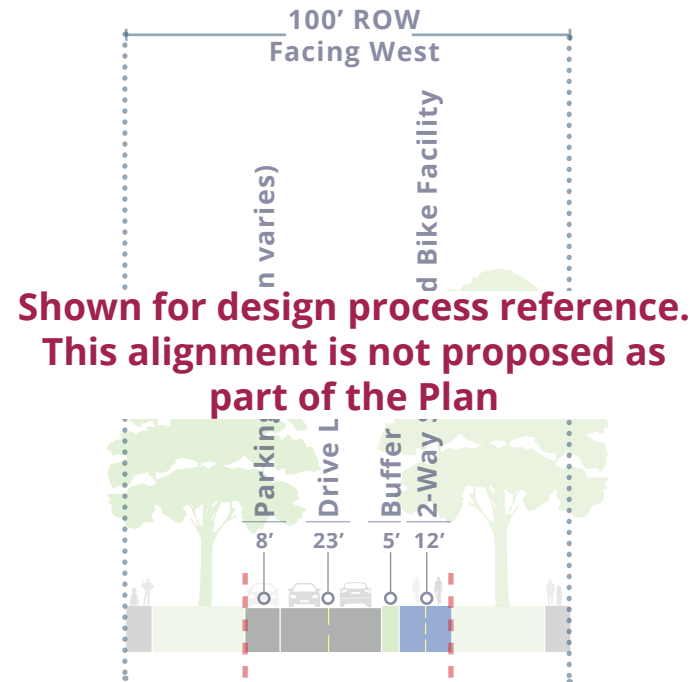
### Alternate Typical Section | One-Way Facilities Parking Removed:

- This alignment removes parking on both sides of Summit Avenue to allow for a wider bike facility and vegetated buffer.
- Feedback from community members highlighted the importance of maintaining parking in these segments. For this reason, **total removal of parking is not the preferred alignment** and would only be considered to accommodate emergency service vehicles, or for tree preservation purposes.



### Alternate Alignment | Two-Way Bike Facility:

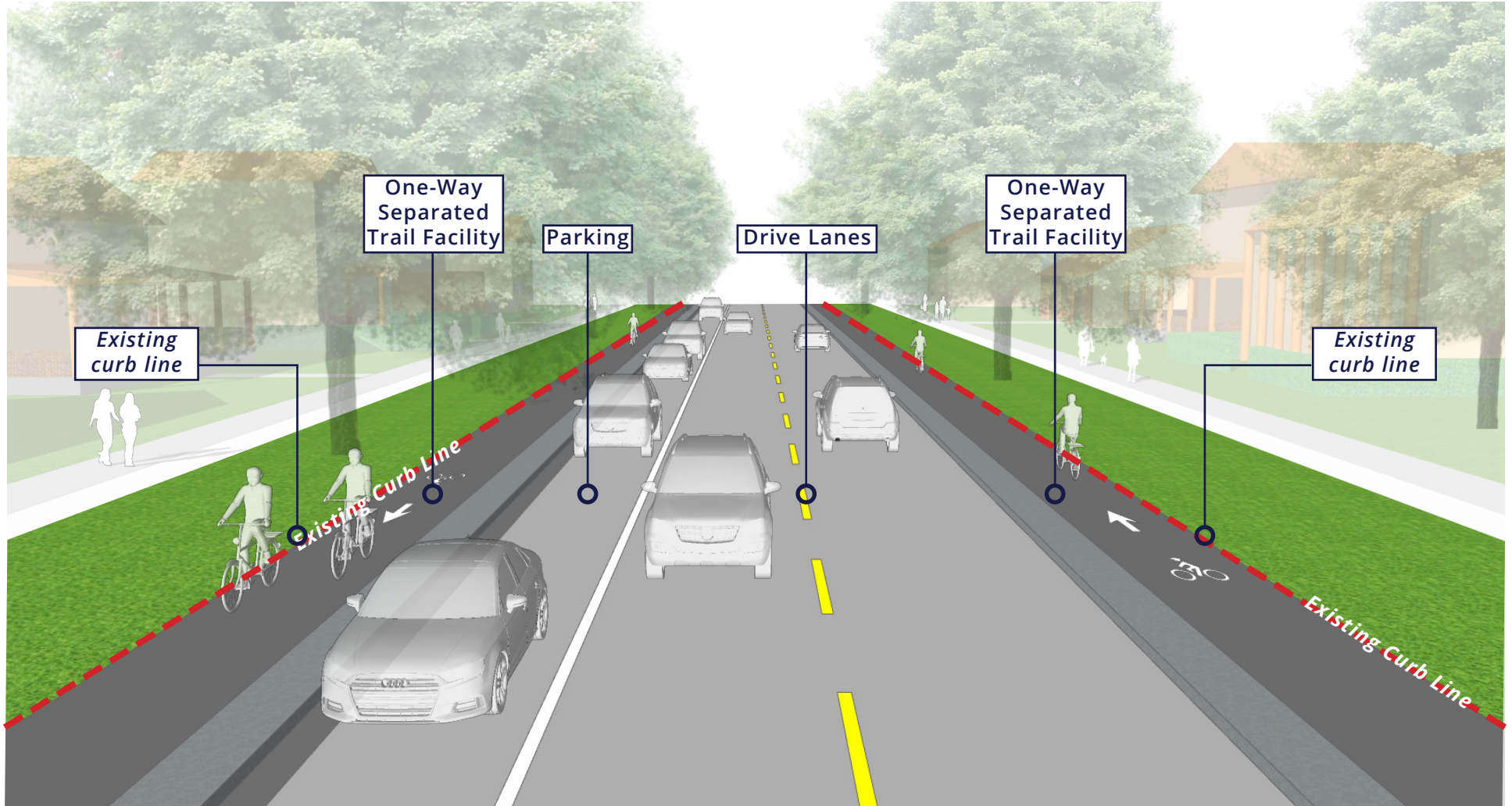
- A two-way bicycle facility was evaluated for these segments that would provide a 12' bikeway with a 5' vegetated buffer.
- Feedback from community members and technical staff indicated that a two-way bicycle facility along the Summit Avenue corridor feels unsafe due to the contra-flow bicycle traffic, and inconsistent with the proposed one-way trails in other segments.



# Development Concept

## Segments D, E, and F | Proposed Concept

### Proposed Trail Facility | Public Right-of-Way Corridor | Facing West



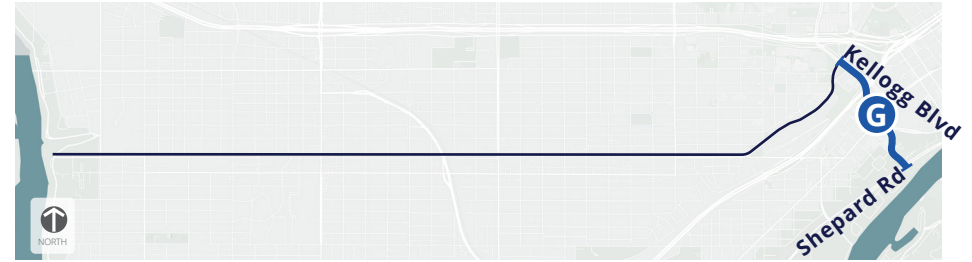
# Development Concept

## Segment G

Segment G of the proposed regional trail has a very different, and more urban character than the other segments of Summit Avenue. This portion of the trail provides an important connection to other bicycle, pedestrian, and transit routes in and adjacent to the downtown area, as well as the Sam Morgan Regional Trail at the eastern most end of the Summit Avenue Regional Trail.

The section of the trail corridor along Kellogg Blvd is planned to share a facility with the future Capital City Bikeway. The design process for that project will inform trail location and facility dimensions.

The section of the trail corridor along Eagle Pkwy currently has a 12', multi-use bicycle and pedestrian facility. The proposed trail along this segment of the corridor will remain as-is, and the regional trail will be incorporated into the existing multi-use path. Additional pedestrian and bicycle facilities will be added as needed to support both current and future users of this segment. Additional wayfinding and signage will also be added for trail consistency and accessibility.



# Development Concept

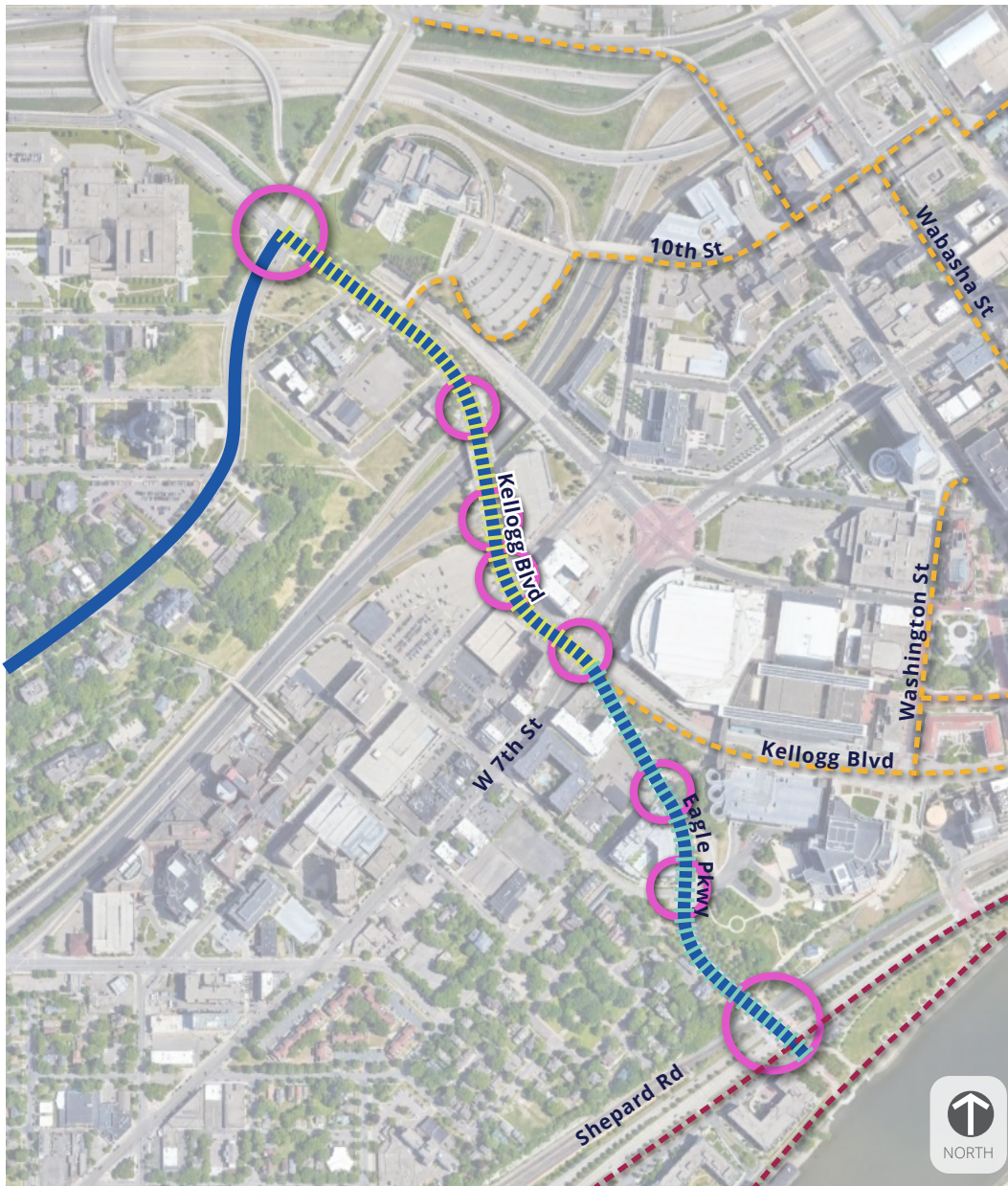

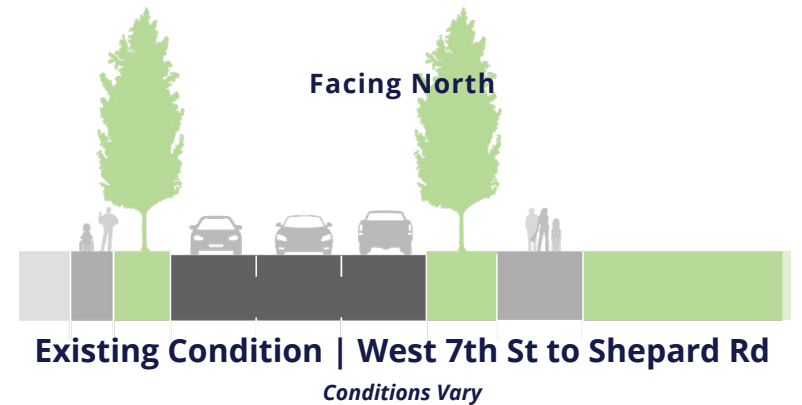
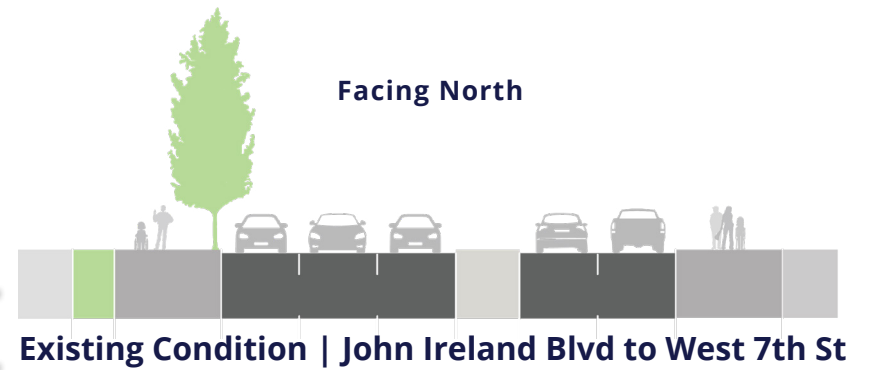


Fig. 4-43 | Segment G - Existing Condition

## Legend

-  Proposed Summit Avenue Regional Trail
-  Trail Facility to align with Capital City Bikeway
-  Trail Facility to align with existing multi-use path on Eagle Parkway
-  Planned Capital City Bikeway
-  Existing Trails
-  Signalized Intersection



# Development Concept

## Segment G | Capital City Bikeway

The Capitol City Bikeway: Network Study and Design Guide details the preferred cross sections for all segments of the bikeway, including the segment shared with the proposed Summit Avenue Regional Trail. Relevant cross sections are shown here.



Fig. 4-45 | Capitol City Bikeway Proposed Conditions

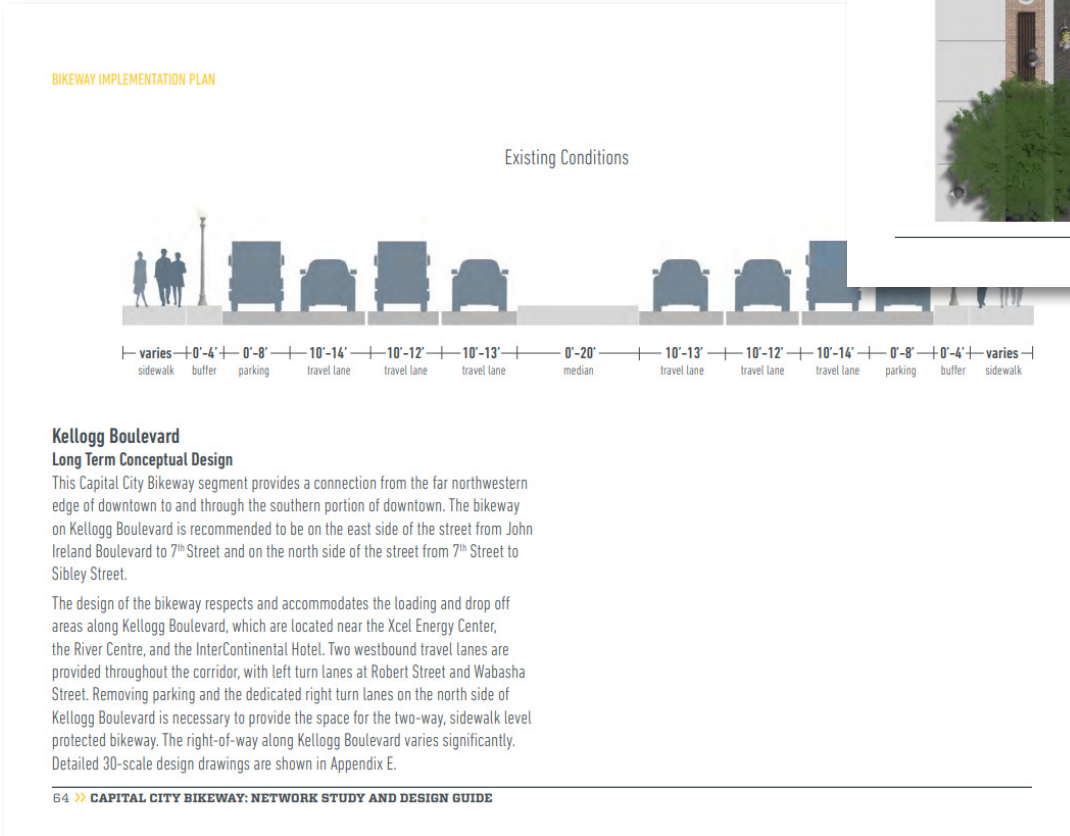


Fig. 4-44 | Capitol City Bikeway Existing Conditions on Kellogg Blvd

# Development Concept

## Segment G | Eagle Parkway



**Eagle Parkway  
Typical Block**  
Shared-use trail on  
existing path

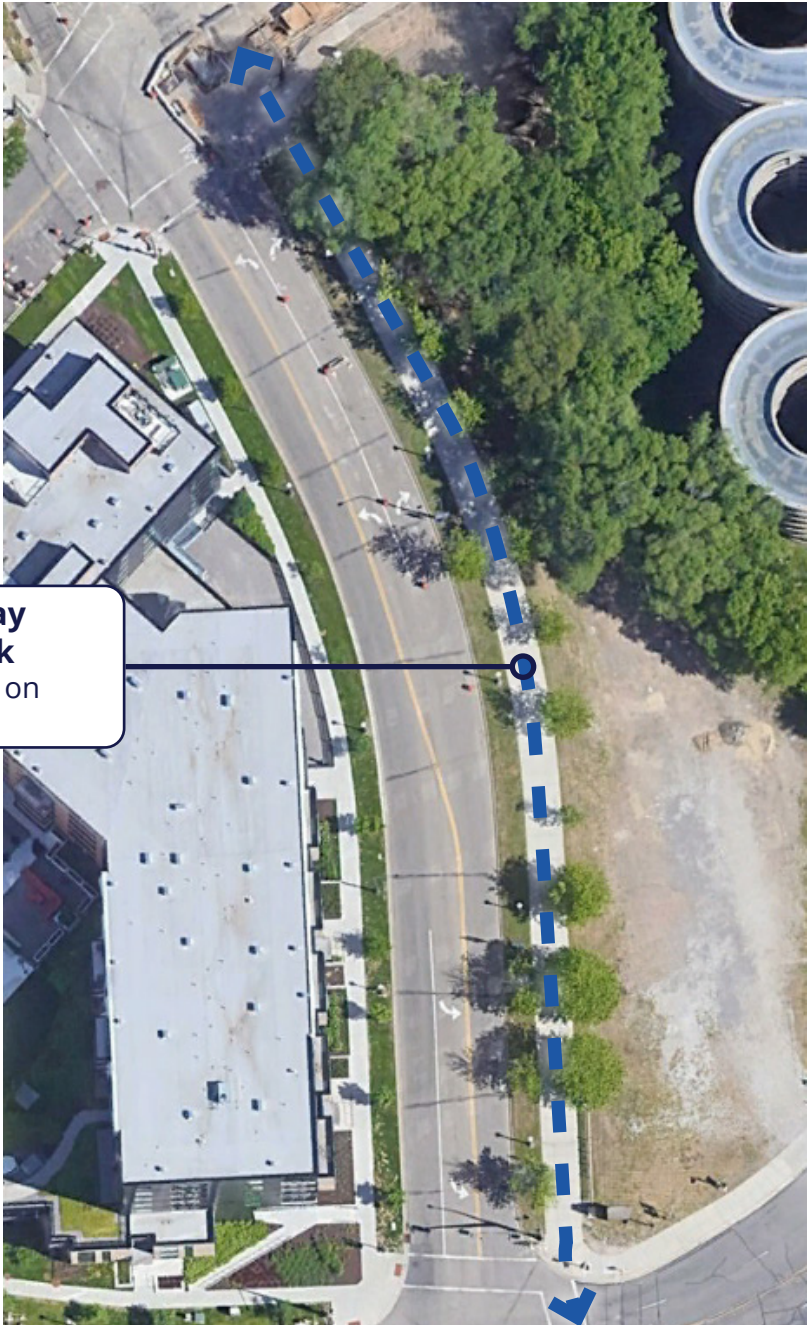


Fig. 4-46 | Segment G - Eagle Pkwy Typical Existing Condition

# Intersections

## Intersection Design Guidelines

There are many unique intersections that exist within the Summit Avenue corridor. The Plan seeks to provide guidance for the treatment of these intersections, while more specific details about intersections will be explored through the design, engineering, and implementation phases of the Regional Trail in the future.

The location of trail and sidewalk crossings at intersections will need to be developed during design and engineering to evaluate each sites' specific conditions, opportunities and constraints. Considerations include:

- Crossing safety and traffic operations
- User experience for pedestrians and bicyclists
- Tree preservation and open space

The intersection guidelines are listed below:

- Prioritize pedestrians and cyclists at intersections; ensure safety for all modes of travel
- Use consistent design strategies for all intersections along the Summit Avenue corridor that will be legible and familiar to all users
- Use infrastructure strategies for pedestrian, bicycle, and vehicle facilities that work in harmony and prioritize safety in a multi-modal trail corridor.
- Final intersection treatments will be determined during future design phases and coordinated with Saint Paul and Ramsey County Public Works.

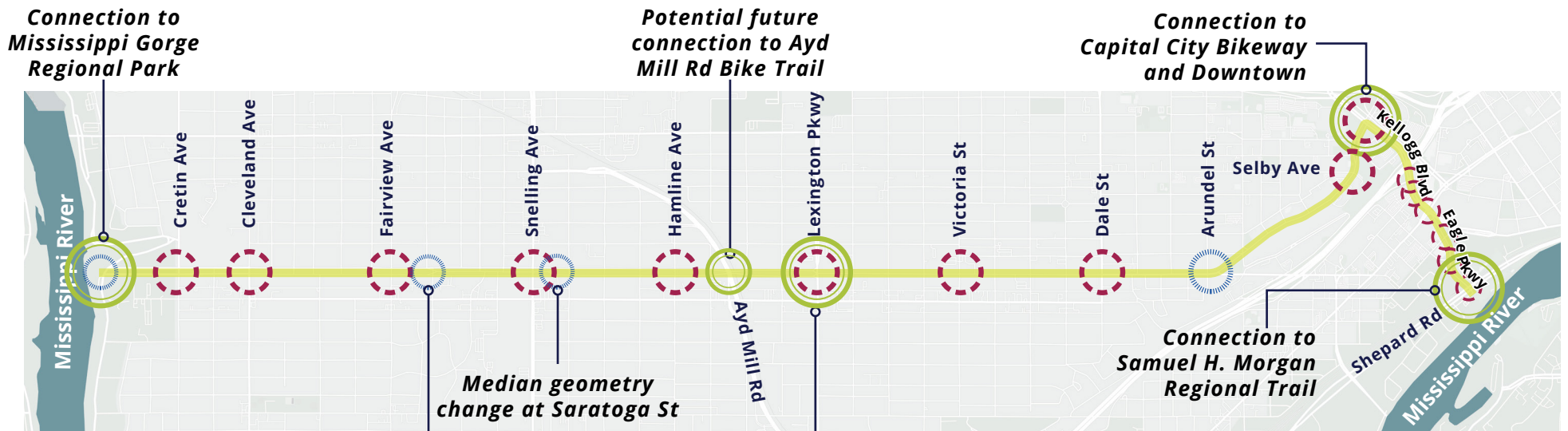


Fig. 4-47 | Existing Intersections

**Median geometry change at Saratoga St**

**Median geometry change at Wheeler St**

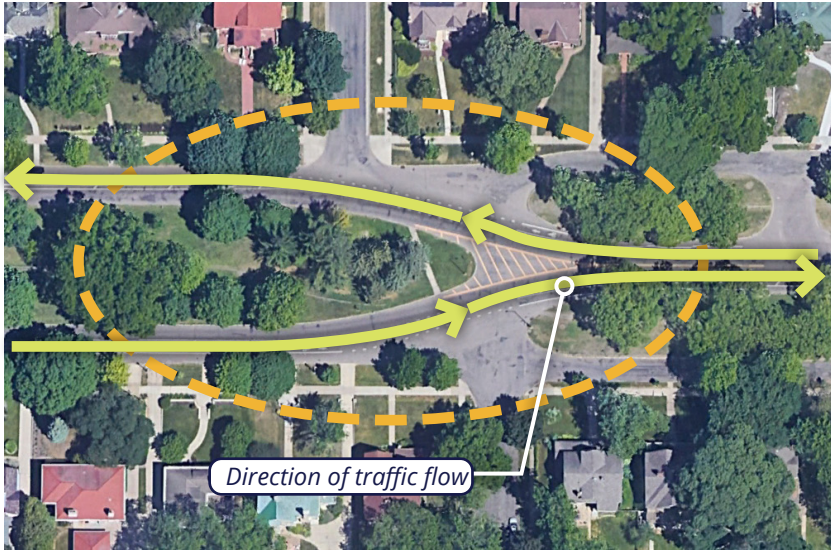
**Potential future connection to Lexington Pkwy Trail (current regional trail search corridor)**

### Legend

- Connection to existing trail/bikeway
- Signaled Intersection
- Non-signalized, significant intersections

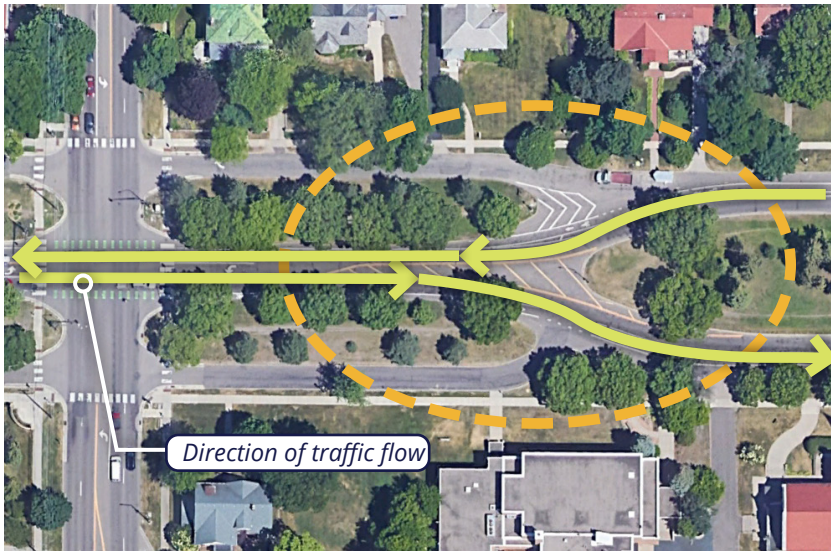
# Intersections

## Existing Intersections | Unique Conditions



### Intersection at Summit Avenue and Wheeler Street

The intersection at Wheeler Street transitions from the large, single median to the west, to the double median condition, with one central roadway and two frontage roads to the east. Since this intersection is a unique alignment, navigating the roadway can be challenging and unclear to drivers, cyclists, and pedestrians. The Plan recommends an additional, more detailed study of this area to provide a more clear and consistent alignment that prioritizes the safety of all modes. Explore geometric improvements, enhanced crossings for bicycles and pedestrians, and other safety measures.

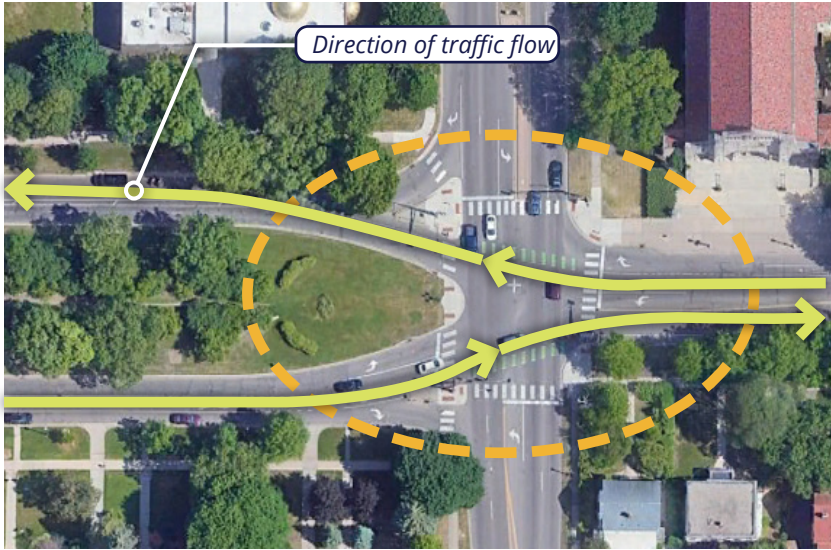


### Transition on Summit Avenue between Snelling Avenue and Saratoga Street

Similar to the intersection at Wheeler Street, this area transitions from the double median, to single median condition on Summit Avenue. This segment contains similarly unclear and uncomfortable vehicular and bicycle movements. The Plan recommends an additional, more detailed study of this area to provide a more clear and consistent alignment that prioritizes the safety of all modes. Explore geometric improvements, enhanced crossings for bicycles and pedestrians, and other safety measures.

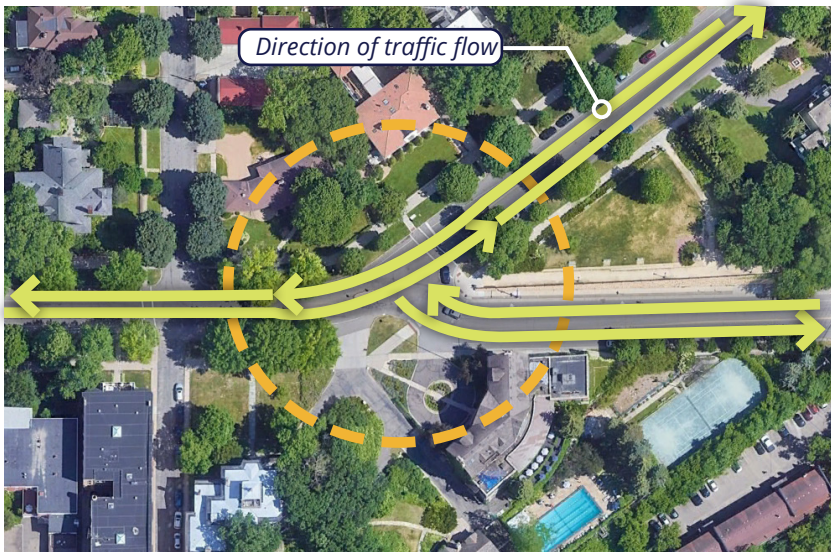
# Intersections

## Existing Intersections | Unique Conditions



### Intersection at Summit Avenue and Lexington Parkway

The intersection at Lexington Parkway marks the roadway transition from a large, single median, to the more constrained, 100' right-of-way segments with no median. Lexington Parkway is a designated Regional Trail Search Corridor, so safe intersections that prioritize cyclists and pedestrians will be critical. The Plan recommends an additional, more detailed study of this area to provide a more clear and consistent alignment that prioritizes the safety of all modes. Explore geometric improvements, enhanced crossings for bicycles and pedestrians, and other safety measures.



### Intersection at Summit Avenue and Ramsey Street

The intersection at Ramsey Street has a unique geometry, and an additional challenge of steep grades as Ramsey Street approaches Summit Avenue. Providing more clarity for all modes, and implementing strategies to increase safety will be critical at this intersection. The Plan recommends an additional, more detailed study of this area to provide a more clear and consistent alignment that prioritizes the safety of all modes. Explore geometric improvements, enhanced crossings for bicycles and pedestrians, and other safety measures.

# Intersections

## Intersection Design Toolkit | Roadway Infrastructure

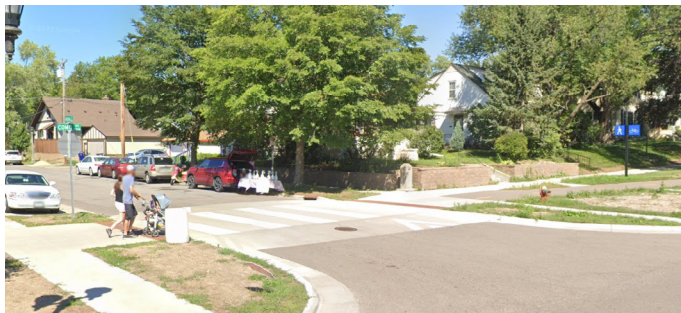
A number of roadway treatments can be considered at intersections to increase safety for all modes traveling within the Summit Avenue corridor. Those shown in this document do not represent an exhaustive list. Intersection treatments should be studied at the time of implementation, and each unique intersection should have context-based strategies for increasing safety and trail user experience.

### Tabled Crossings



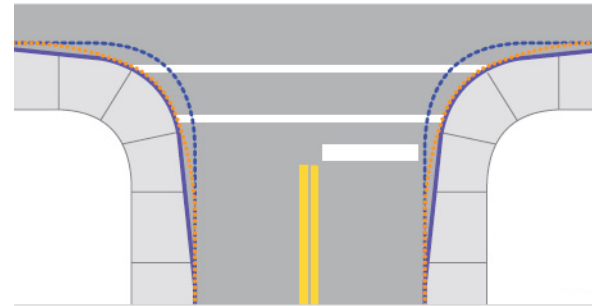
Image Courtesy of NACTO

At unsignalized, minor intersections, consider tabled crosswalks to make pedestrians and bicyclists more visible, and to provide a physical and visual cue to drivers to watch for pedestrians. Tabled crossings are not proposed across Summit Avenue.



Example of tabled crossing at Como Ave and Arona St

### Reduced Curb Radii and Reduced Drive Lane Widths



When reconstructing curbs, consider reducing curb radii and shrinking drive lane widths. These strategies encourage slower driving speeds.

Image Courtesy of FHWA

### Curb Extensions/Bumpouts

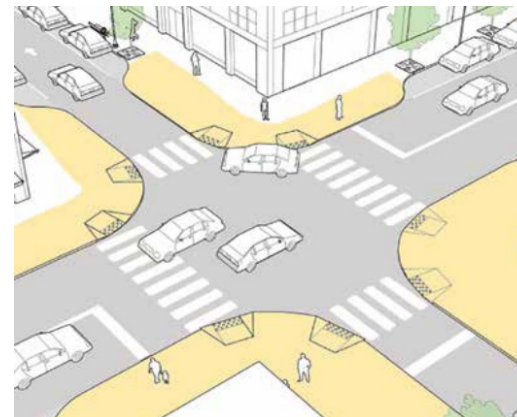


Image Courtesy of NACTO

Construct bumpouts at intersections to reduce the width of the road, and indicate to drivers that pedestrians and bikes are crossing.

# Intersections

## Intersection Design Toolkit | Striping and Pavement Markings

In addition to roadway infrastructure improvements, striping and pavement markings can also be used at intersections to provide more clarity within the multi-modal facility. As with the tools on the previous page, the treatments listed here may not be the only useful striping and pavement marking tools at the time of trail implementation. A more in-depth investigation should guide design and implementation of these treatments.

### Bike Boxes



Bike Boxes allow bicycles to be ahead of vehicular traffic at intersections, improving visibility and reducing bicycle/vehicle conflicts

Image Courtesy of NACTO

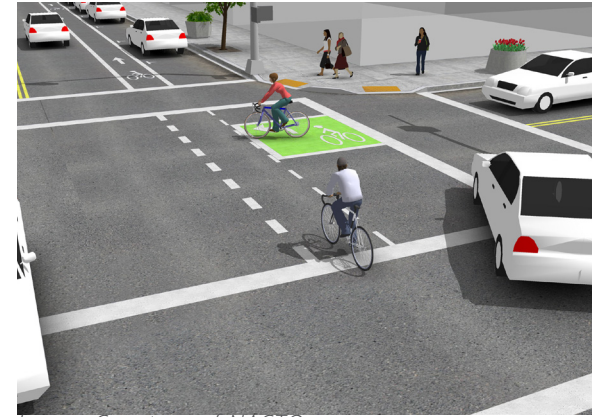
### Intersection Crossing Markings



Intersection crossing markings indicate the bicycle path through an intersection. They are visible to both cyclists and drivers to anticipate movements and reduce conflicts and confusion

Image Courtesy of NACTO

### Two-Stage Turn Queue Boxes



Two-Stage Turn Queue Boxes can be used to transition between bicycle facilities by creating a designated queuing zone for cyclists at transition intersections.

Image Courtesy of NACTO

# Special Considerations

## Sight Lines and Parking Rules



Proposed alignment accounts for community concerns about sight lines

### Existing

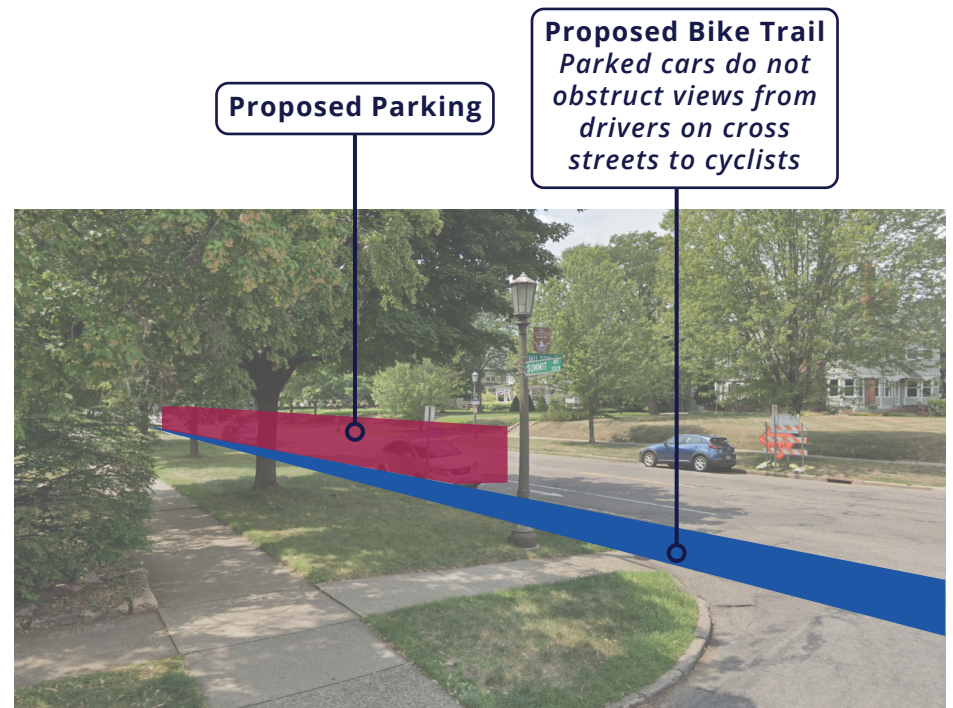
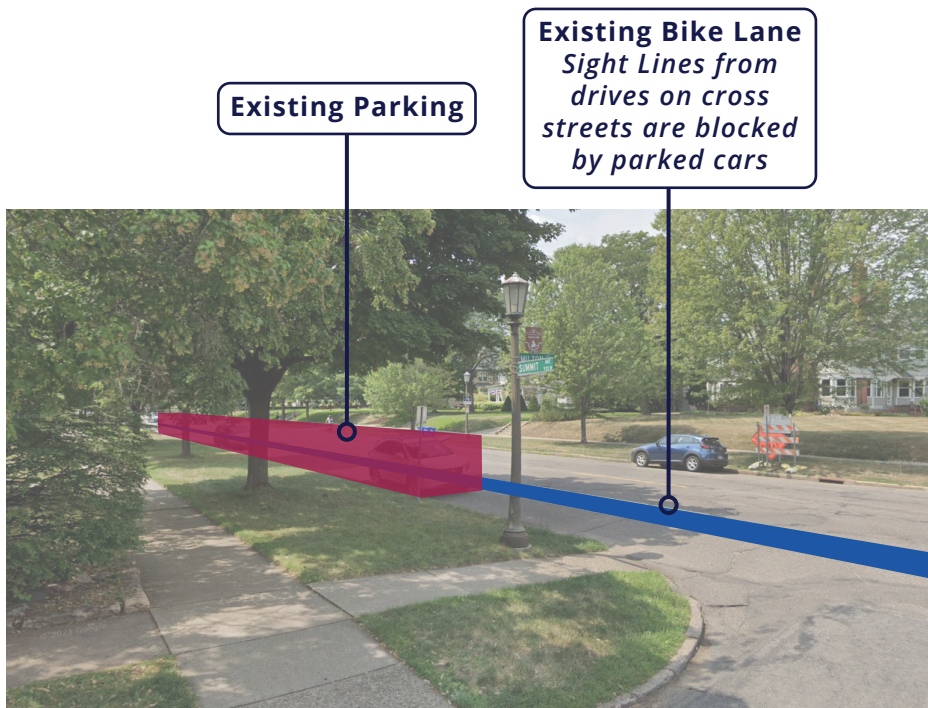
The current recommended Saint Paul Public Works parking rules include the following:

- No parking within 30' of a stop sign or traffic signal
- No parking within 20' of marked or unmarked crosswalks
- No parking within 5' of driveways

These dimensions are shown at a typical unsignalized intersection in segments D, E, and/or F of the Summit Avenue corridor.

### Proposed

With the proposed trail alignment, sight lines from cross streets to the trail facility will be unobstructed by parked cars, creating a safer condition for both cyclists and drivers. Consider increasing parking setback requirements at intersections and driveways to provide increase sight lines in all directions and fewer opportunities for bicycle/vehicle/pedestrian conflicts.



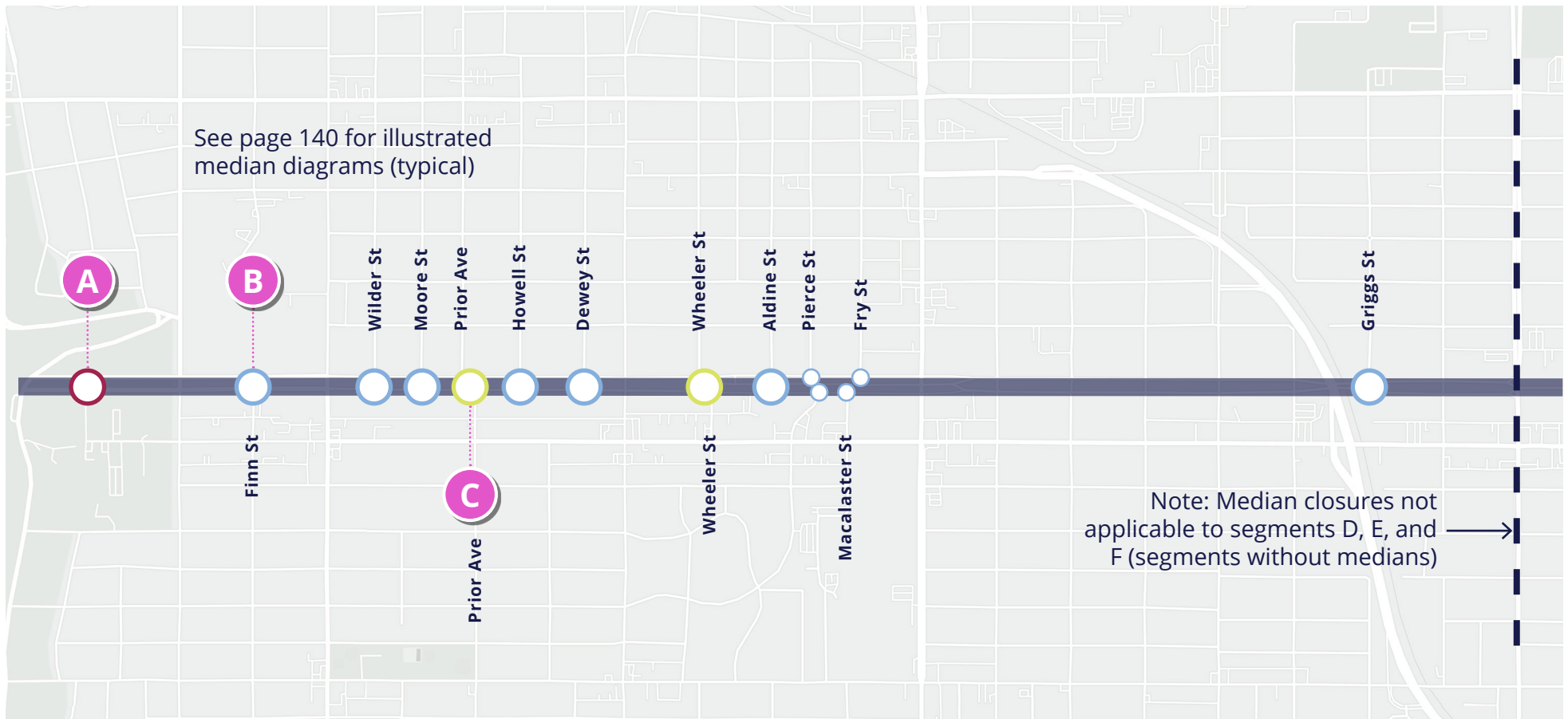
# Special Considerations

## Median Closures

In certain conditions, medians along Summit Avenue may be considered for closure, converting them from a vehicle-oriented space, to a more pedestrian-friendly space with a continuous park-like character. Locations to consider median closures can be found on the diagram on this page. Concepts for these median closure are illustrated on the next page. It will be important to conduct additional traffic studies during design and engineering to assess feasibility and impacts of median closures.

### Legend

- Median breaks not intersected by north/south street
- Median breaks intersected by either north OR south street
- Median breaks intersected by both north AND south street



# Special Considerations



Plan document addresses community request for more information about pedestrian infrastructure

## Median Closures

By reallocating the paved space currently used by vehicles to cut through the central medians to be used as pedestrian spaces, several potential benefits can be achieved:

- Reduce conflicts between vehicles, bicycles, and pedestrians
- Provide areas of recreation and respite within the corridor and maintain the existing informal central path used for recreation and leisure.
- Provide space between the one-way trails that can include amenities supporting Regional Trail use.



Provide opportunities for either above or below ground stormwater management treatment systems. The following median intersections offer high potential for stormwater infiltration systems:

- » Wilder Street
- » North Moore Street
- » Prior Avenue North
- » North Howell Street
- » North Dewey Street
- » North Wheeler Street
- » Aldine Street



### 1 Vehicle Barriers

Bollards, planters, etc. Consider emergency vehicle access in these areas and tailor approach to access needs



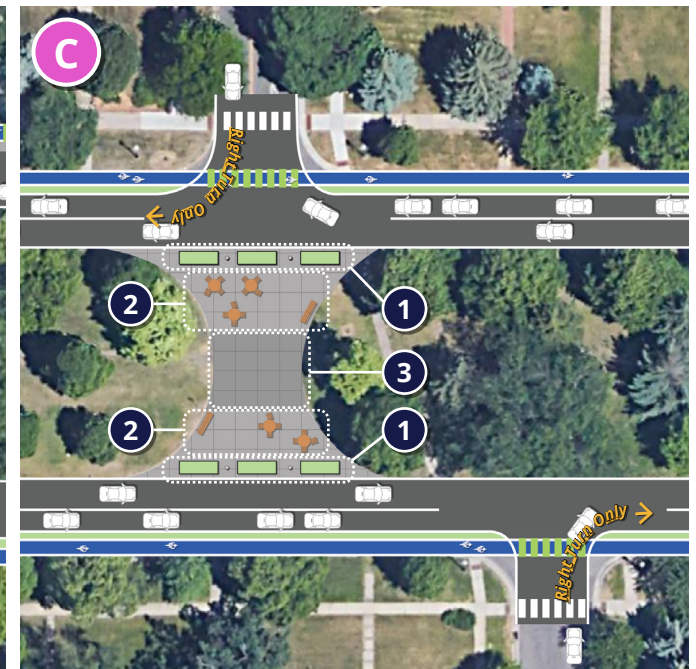
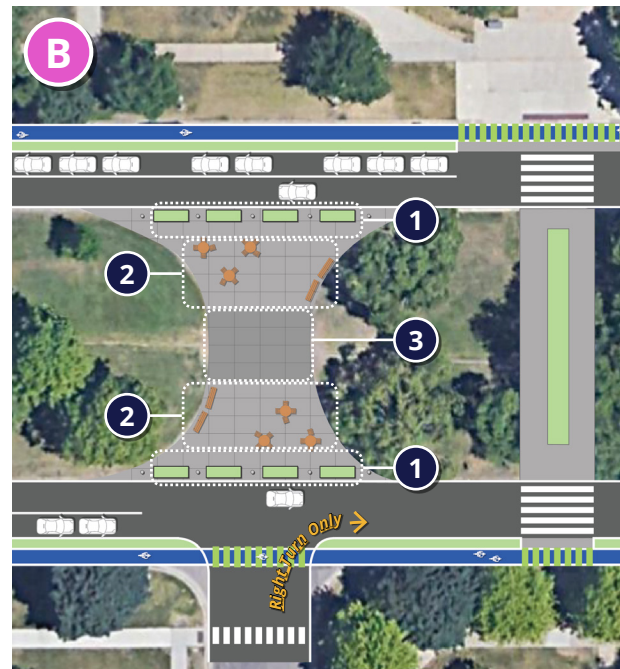
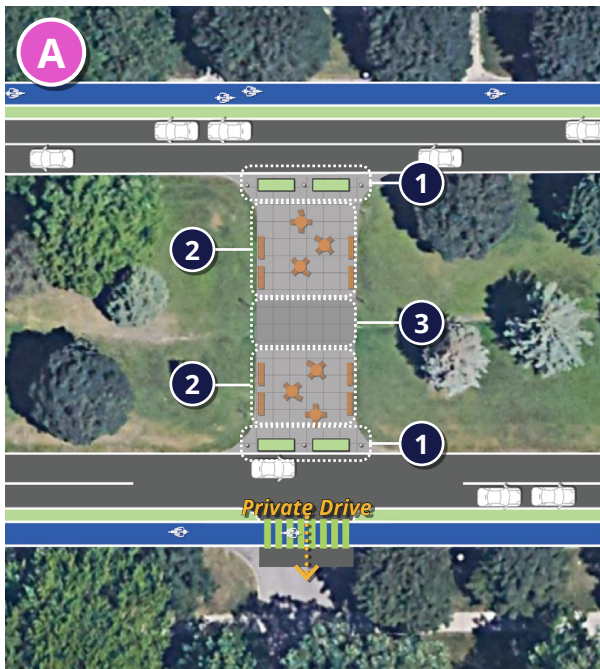
### 2 Seating

Benches, tables, etc



### 3 Decorative Paving

Reflect historic character of neighborhood through paving design; differentiate path through center to connect informal running path in median



# Special Considerations

## Connection to Greenspace

### 1 Mississippi River Gorge Regional Park and Mississippi River Boulevard

The proposed Regional Trail facility begins/ends at the Mississippi River Gorge Regional Park at the intersection of Summit Avenue and Mississippi River Boulevard. Connecting the proposed Regional Trail facility to an existing Regional Park facility creates an important link in the regional system.

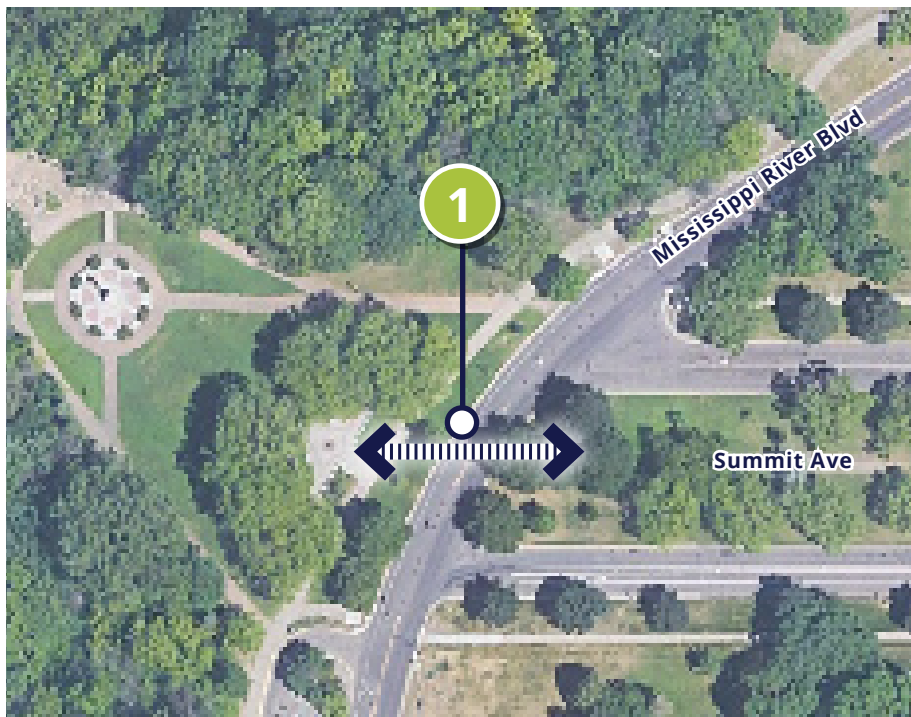


Fig. 4-48 | Special Considerations

### 2 Short Line Park

This area is within the public right-of-way and is commonly used as a community park open space. Consider trail amenities here including bike parking, wayfinding and signage, and seating. In addition to trail amenities, consider ADA accessible parking in this area.

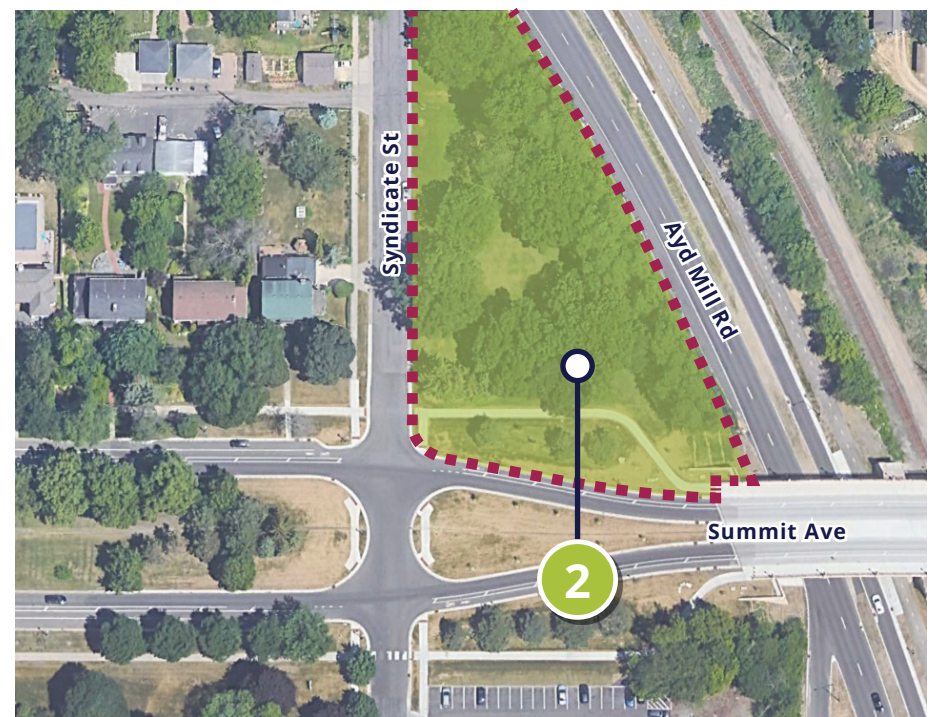


Fig. 4-49 | Special Considerations

# Special Considerations

## Connection to Greenspace

### 3 Summit Overlook Park and Nathan Hale Park

Provide a connection from the proposed Regional Trail to these park spaces and consider trail amenities here including bike parking, wayfinding and signage, and seating.

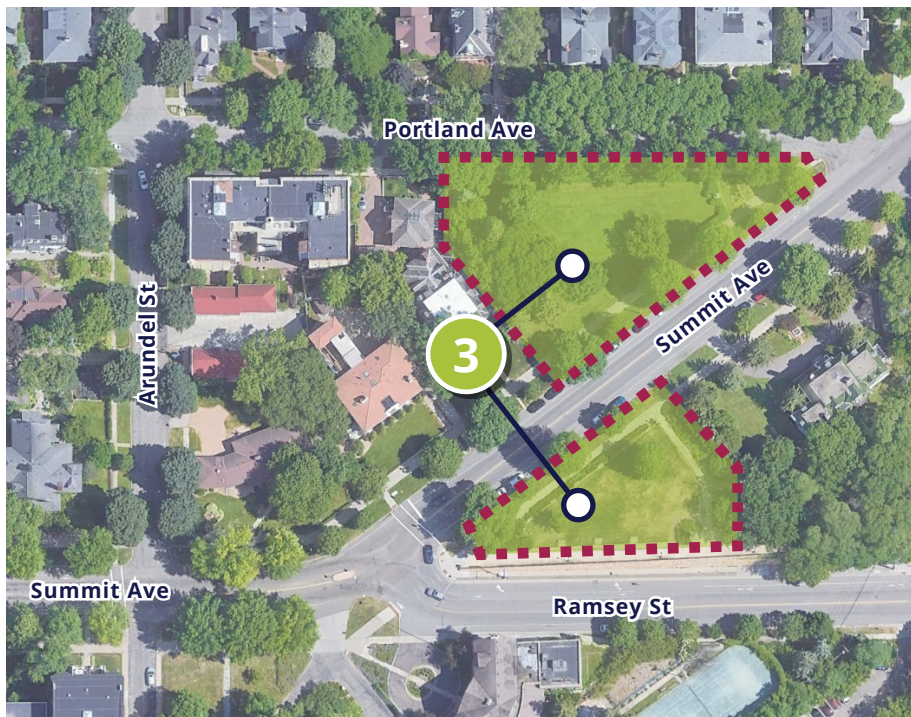


Fig. 4-50 | Special Considerations

### 4 Cathedral Hill Park, Summit Park and Informal Greenspace

In the proposed Regional Trail alignment this area will serve as the transition between the Summit Avenue Regional Trail, and proposed Capital City Bikeway on Kellogg Boulevard. The parkspace in this area can serve as a valuable area for rest and respite, recreation, and leisure for cyclists and pedestrians.

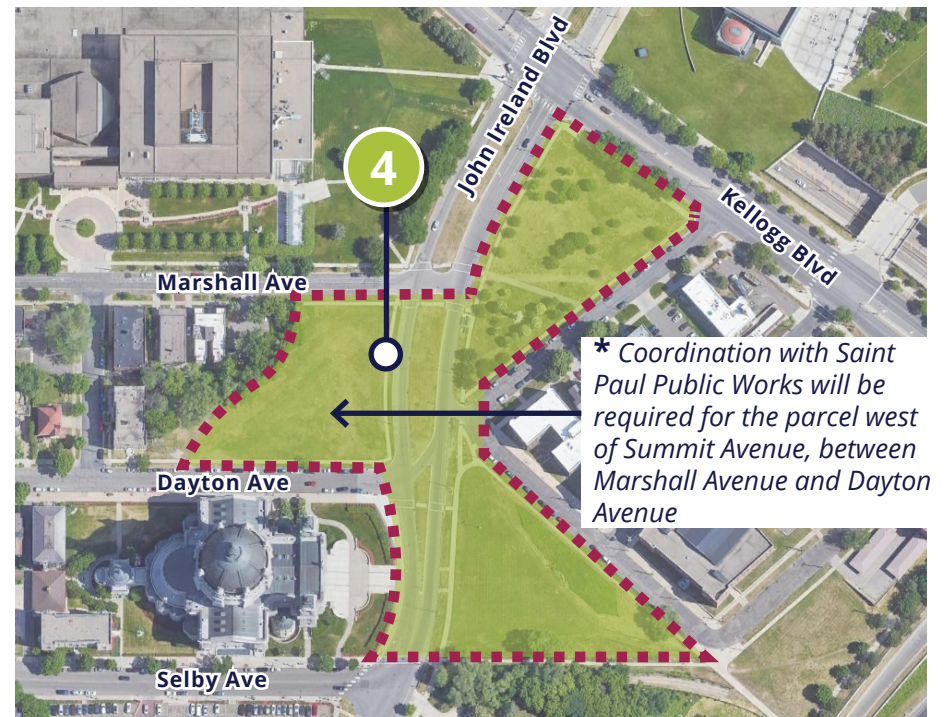


Fig. 4-51 | Special Considerations

# Special Considerations

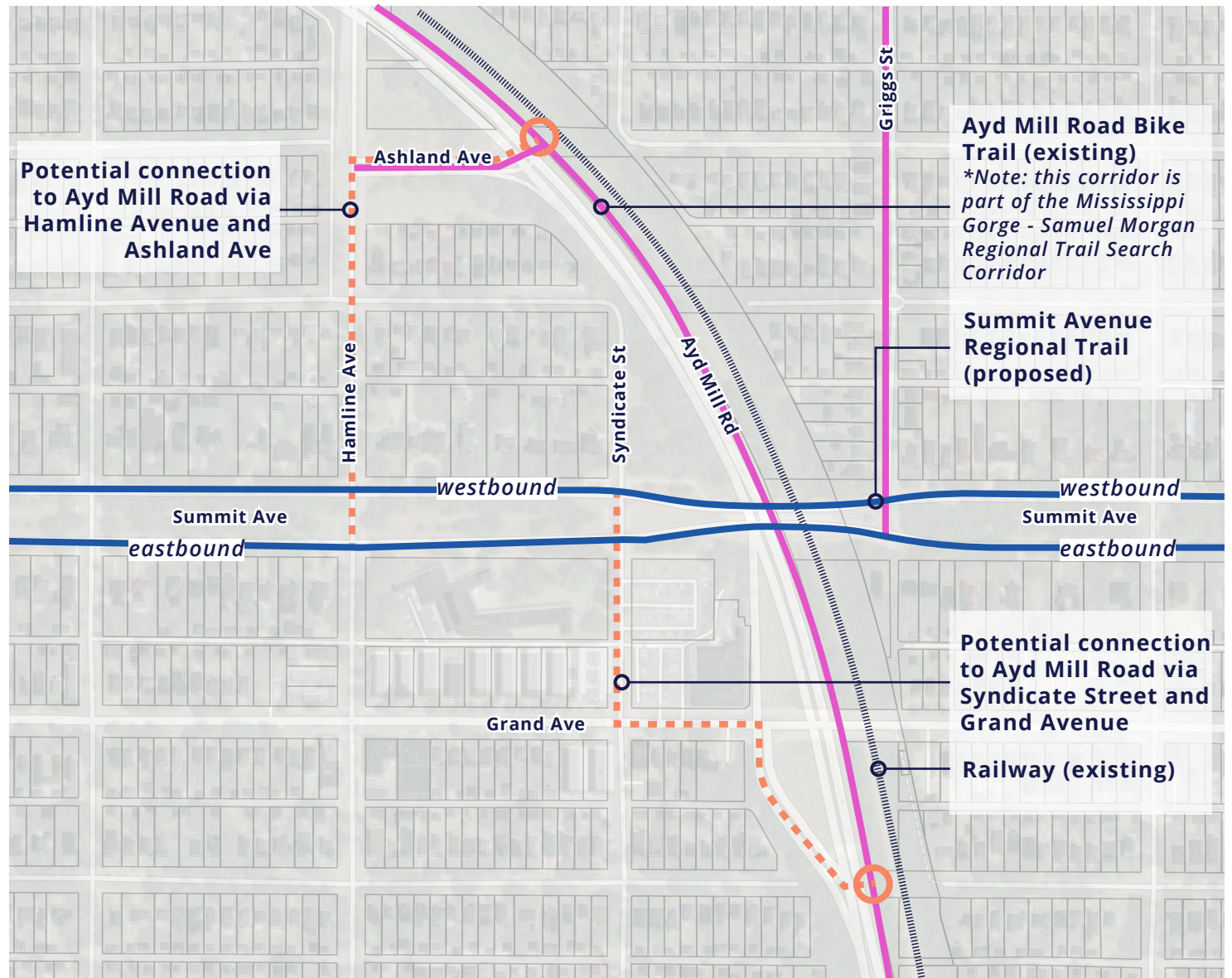
## Connections to Other Networks

### Ayd Mill Road Bike Trail

The proposed Summit Avenue Regional Trail provides an opportunity to connect to the existing bike trail along Ayd Mill Road. There are challenges associated with creating an accessible bike and/or pedestrian connection here, given the grade change, the vehicular patterns, and the adjacent railway. The diagram on this page highlights opportunities for connections using existing roadway connection points from Summit Avenue to Ayd Mill Road. As future bike facilities are implemented through this area, routes to connect these two bicycle facilities should be considered.

### Legend

- Proposed Summit Avenue Regional Trail
- Other existing bikeways
- - - Potential future connection routes



# Special Considerations

## Connections to Other Networks

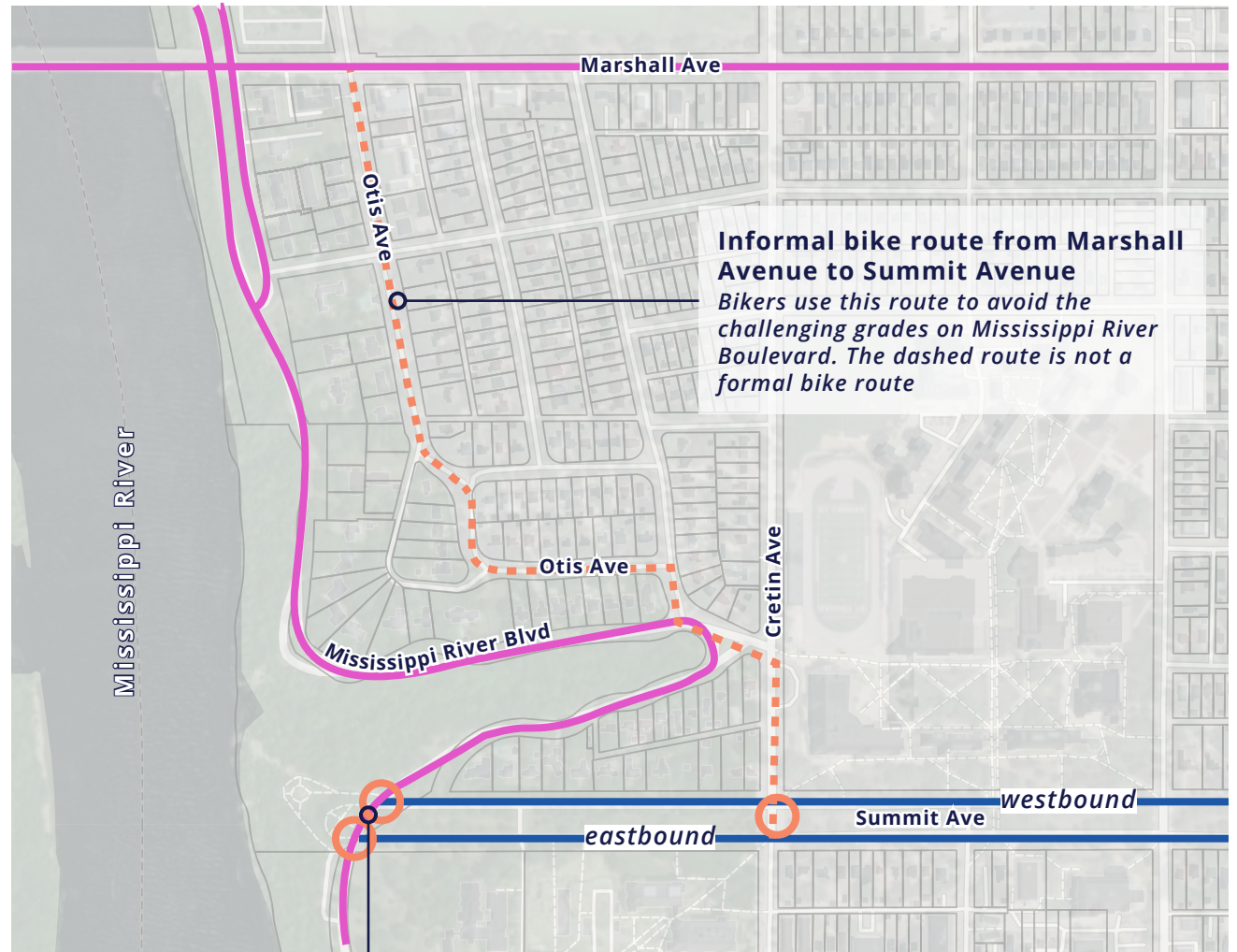
### Mississippi River Boulevard

The western most end of the Summit Avenue corridor provides a link to other regional facilities, as well as connections to other bike facilities. Because of the grade conditions along the Mississippi River, some riders currently cut through the neighborhood adjacent to Summit Avenue to connect to Marshall Avenue. Rather than discouraging this path, safe bicycle and pedestrian facilities should be considered along Otis Avenue and Cretin Avenue as future improvements are made.

Additionally, the intersection of Summit Avenue and Mississippi River Boulevard provides an important regional link. Because of this, safety improvements should be considered at this intersection to focus on multi-modal safety.

### Legend

- Proposed Summit Avenue Regional Trail
- Other existing bikeways
- - - Potential future connection routes



**Informal bike route from Marshall Avenue to Summit Avenue**  
*Bikers use this route to avoid the challenging grades on Mississippi River Boulevard. The dashed route is not a formal bike route*

**Connection at Mississippi Gorge Regional Park and Mississippi River Boulevard**  
*Multi-modal safety should be a priority at this connection point. Sight lines and vehicle speeds make the current alignment feel uncomfortable to some users*

# Special Considerations

## Special Considerations



As segments of the regional trail are implemented, considerations should be made to repair adjacent amenities that can support the broader goals of connectivity and access for the proposed trail. For example, repairing and re-opening the Walnut Street Staircase can provide a connection from Summit Avenue to pedestrian path and 35W bridge crossing. Additional signage and wayfinding can be incorporated into these repairs to make use accessible and safer. Other amenities should be considered such as bike parking, and/or a bike rail to transport bikes between elevations.



Maintain informal running path in central median.



*Plan responds to community interest in maintaining central median as a unique and informal recreational amenity for running*

# Special Considerations

## Typical Driveway Conditions



Proposed driveway condition accounts for community concerns about driveway conflicts

The Summit Avenue corridor has many driveways leading from the roadway to adjacent properties. In both the existing and proposed conditions, vehicles will cross zones with pedestrians and bicyclists. The proposed trail location would improve sight lines between driveway vehicles and bicyclists.

### Existing Condition

Driveway vehicles cross the following before entering the roadway travel lane:

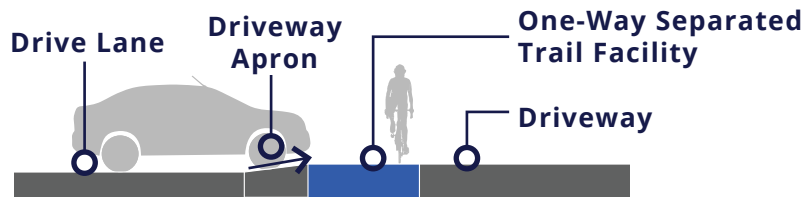
- Sidewalk and boulevard
- Parking lane
- On-street bicycle lane

### Proposed Condition

Driveway vehicles cross the following before entering the roadway travel lane:

- Sidewalk and boulevard
- One-way Regional Trail, separated
- Parking lane

Locating cyclists above the curb adjacent to the boulevard and restricting parking at driveway intersections increases visibility between driveway vehicles and trail cyclists



Driveways in the public right-of-way will be rebuilt as a part of future street reconstruction. Consider solutions during engineering that maintain usability for residents and keep sight lines open for all modes in crossing zones.

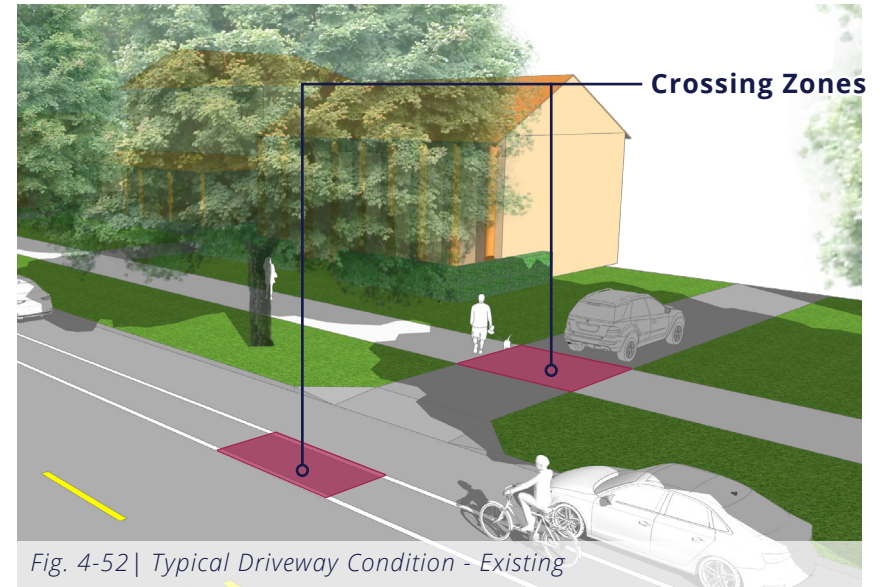


Fig. 4-52 | Typical Driveway Condition - Existing

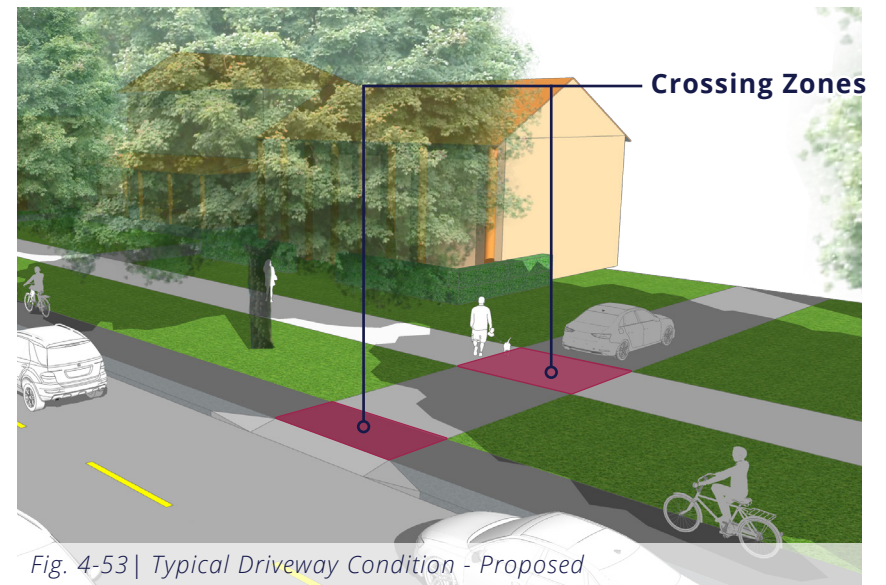


Fig. 4-53 | Typical Driveway Condition - Proposed

# Special Considerations

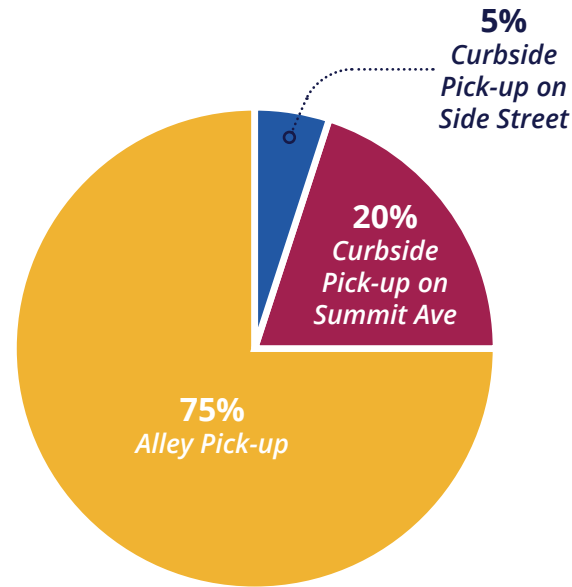


Plan document addresses community request for more information about curbside activities

## Curbside Activity | Solid Waste Pick-up

### Existing Condition

Currently, about 75% of properties along Summit Avenue use alleys for trash pick-up. About 5% of properties utilize trash pick-up on the curb of an intersecting side street. The other 20% of owners have curbside pick-up, either on Summit Avenue or on a side street that intersects with Summit Avenue. Of this 20%, a number of properties do have alley access and trash services could be relocated to the alley rather than the curb. Additionally, some residents along Summit Avenue with physical disabilities use walk-up trash service.



**Note: The majority of waste collection along Summit Avenue is currently collected in alleys and will continue to be with the implementation of a Regional Trail.**

### Proposed Condition

A number of conditions should be studied as the regional trail is implemented. Items for consideration include:

- Of the 20% of properties who currently have curbside waste pick-up, relocate pick-up to the alley where feasible.
- Coordinate with Saint Paul Solid Waste to understand pick-up needs for vehicles and drivers at the time of implementation. Consider truck types, staffing needs, and ways to reduce conflict within roadway
- The location of carts for pick-up will be an individualized process with property owners and the City during future design and engineering phases.



Existing trash pick-up in alley



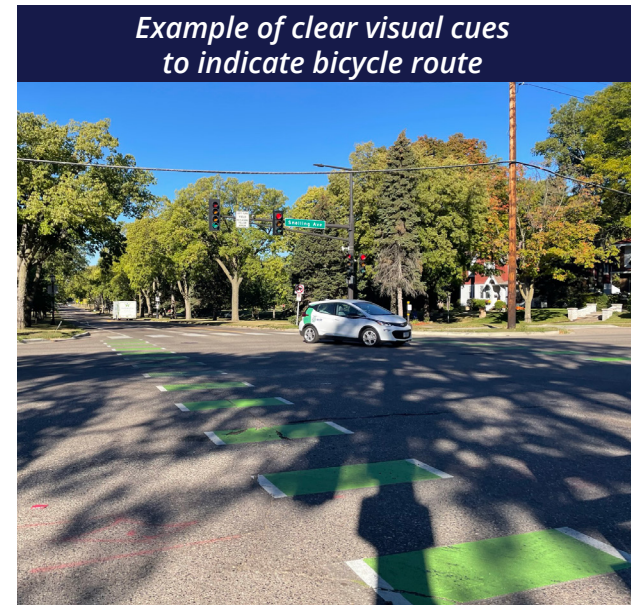
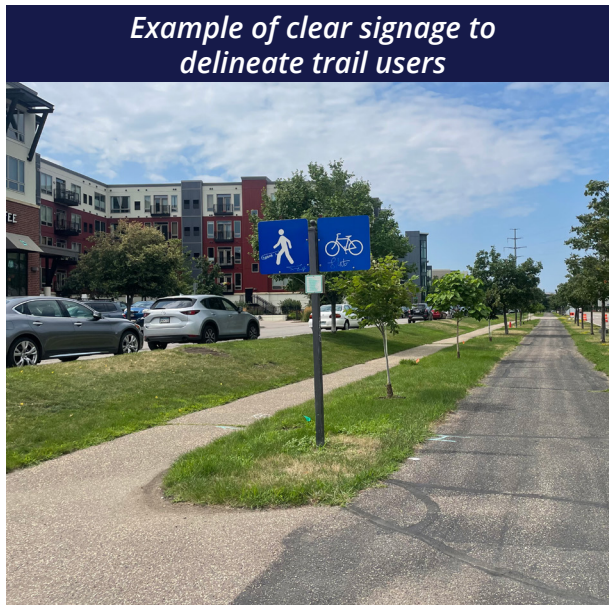
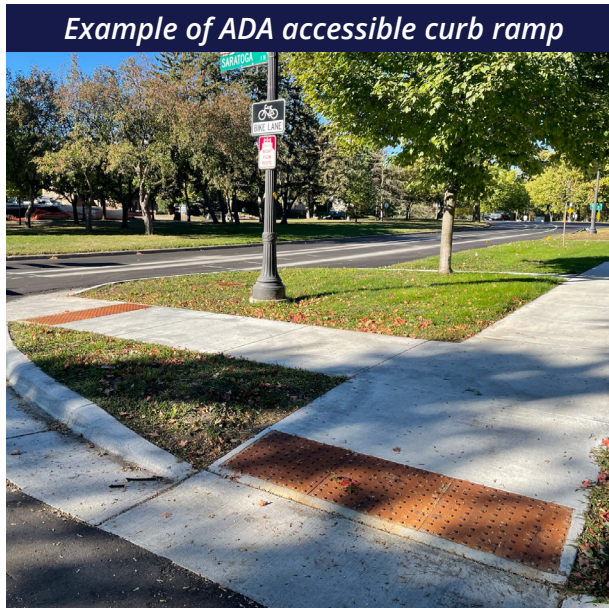
The scenario shown is a common practice, but placing containers in the roadway is not permitted

# Accessibility

## Accessibility Toolkit



- Repair pedestrian walkways that do not meet ADA accessibility guidelines
- Provide pedestrian and bicycle ramps at all grade changes
- Provide accessibility upgrades at all intersections through implementation including curb ramps, landing areas, and tactile warning strips
- Include visual cues to clearly mark transition areas
- Consider benches and seating along the corridor to provide opportunities for rest
- Ensure wayfinding signage follows accessibility guidelines
- Create a comfortable trail facility for all users regardless of ability
- Provide connections to existing regional trail and other bike trail facilities with familiar design queues and signage to encourage users from around the region to feel safe and comfortable using the trail
- Provide signage to nearby transit facilities including direction and distance between trail facility and nearest transit stop
- Note that granite curbs are not ADA accessible. Corners and pedestrians ramps that currently have granite curbs will need to be replaced with concrete or another ADA accessible material.



# Accessibility

## Parking



In order to provide an accessible trail facility, public, ADA accessible parking areas should be considered adjacent to the proposed Regional Trail. Recommendations for these parking areas are listed below:

- Accommodate existing on-street disability parking where permitted
- Consider additional disability parking and loading zones at amenity areas within the corridor
- Consider public/private partnerships on privately owned surface lots
- Key locations for public, accessible parking include areas with existing amenities, specifically existing parks and greenspaces along the corridor
- The diagram below highlights potential areas where accessible parking should be prioritized



Future designs will need to follow Public Rights-of-way Accessibility Guidelines to ensure accessible facilities. Businesses that serve the public are also responsible for ADA compliance.

The City works with individuals and property owners on a variety of parking-related concerns. This practice would continue beyond the regional trail planning process to identify where permitted spaces are needed within the public right of way. Resources include residential disability parking zones and special needs parking permits for long-term parking.

Specific locations for on-street parking and reduction have not been determined yet, this will occur during design and engineering phase using a context-based approach to understand individual properties' parking access needs and balance parking utilization.

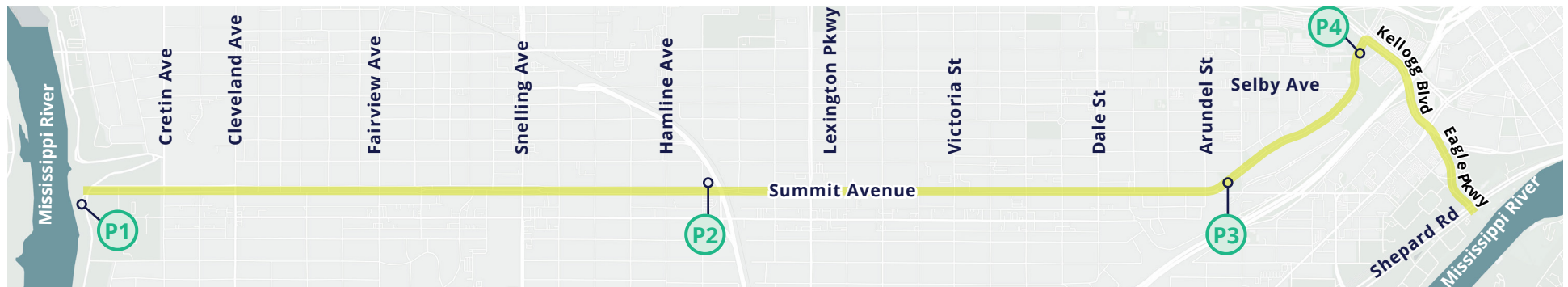


Fig. 4-54 | Potential Public Parking Locations

# Wayfinding

Wayfinding and other signage types along the trail corridor will help provide a consistent, safe, and unique experience for trail users. As the corridor evolves, additional signs may be added to indicate new connections to transit, regional parks and trails, and other amenities along the corridor.

Locations and types of wayfinding signage indicated on the plan reflect feedback from community engagement. Significant places, connections, and character features were identified by community member

## Wayfinding Toolkit

- Follow accessibility guidelines for all signage along trail corridor
- Develop a corridor-wide signage plan to ensure a cohesive strategy for wayfinding
- Adhere to other signage standards for the City of Saint Paul Parks and Recreation signage plan for consistency and legibility.

### **H** Historical Marker

Signage to indicate historically significant districts and properties along the corridor including those listed on the National Register of Historic Places.

### **T** Connection to Transit

Indicate direction and distance to transit routes that intersect or closely connect with the trail.

### **G** Connection to Greenspace

Signage at parks, public green spaces, or significant vegetation features along the trail corridor.

### **D** Directional Signage

Include signage at the beginning and end of trail, and at intervals along the trail and major intersections that connect to other trails and pedestrian connection points.

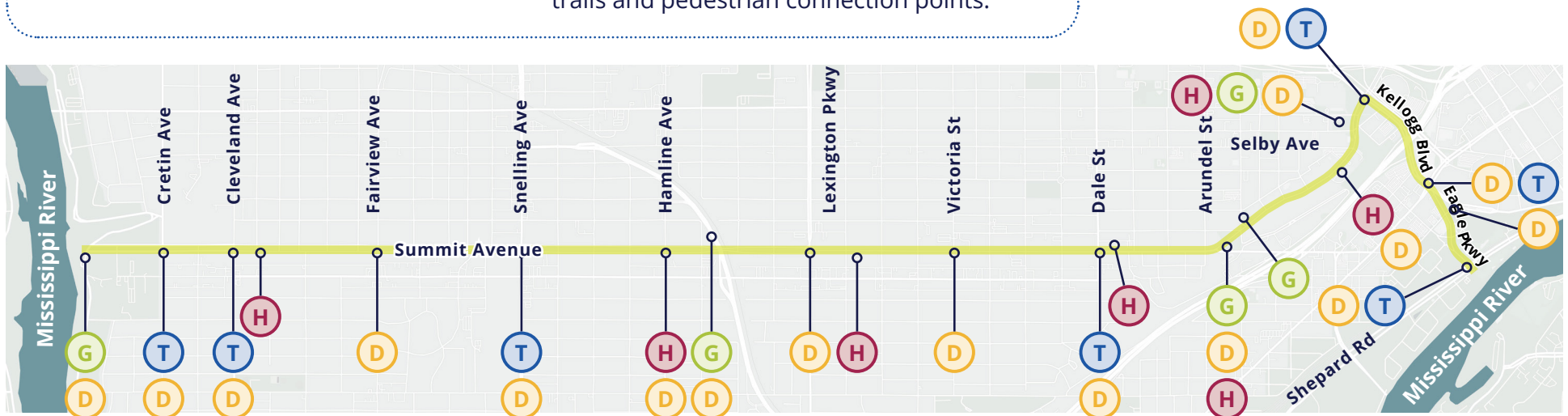


Fig. 4-55 | Wayfinding

# Sidewalks and Pedestrian Infrastructure

The pedestrian route along Summit Avenue is one of the defining character features of the corridor. Additionally, the sidewalk is a preferred way of residents and visitors to experience and enjoy the historical and natural features of the corridor.

Of the top five walking locations collected in 2019 by the City of Saint Paul, three of the segments were along Summit Avenue (Summit Avenue east of Cleveland Avenue, Summit Avenue east of Fairview Avenue, and Summit Avenue east of Western Avenue). The existing sidewalks vary, from 6' concrete sidewalks along most of the corridor, to the wider 10' sidewalks east of Dale St that reflect the historic character of the community.

The regional trail facility proposed in this Plan seeks to maintain the existing sidewalks as they are, and augment the pedestrian experience by providing a bike facility that is separate from both the roadway and the pedestrian sidewalks to provide a regional facility that is safe for all users.

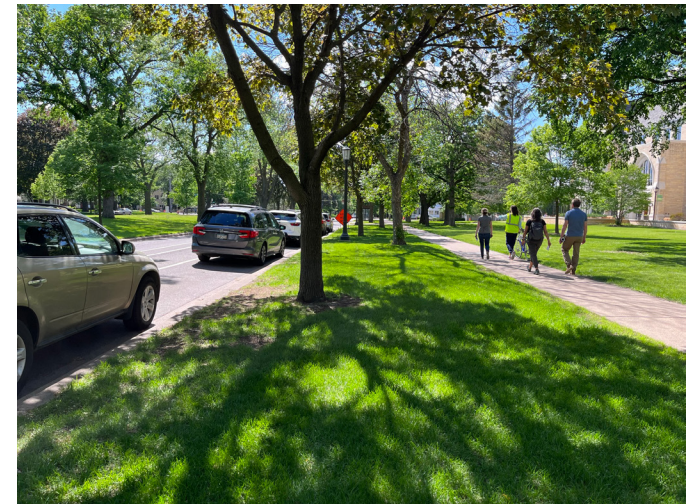
As the regional trail facility is implemented, sidewalks may be considered for reconstruction depending on condition and safety. As intersection updates are implemented, sidewalks that do not meet ADA accessibility guidelines will be reconstructed.

The regional trail will benefit pedestrians by providing further separation of modes. Bicyclists that currently ride on the sidewalk will now have a protected facility to ride on.

If the trail is implemented during roadway reconstruction, strategies such as reducing vehicle lane widths to slow cars down, shorter crossing distances, narrowing curb radii, and elevated crosswalks all prioritize the experience of a pedestrian along Summit Avenue.



*Plan document addresses community request for more information about pedestrian infrastructure*





# Furnishings and Amenities

Recommendations for furnishings and amenities along the proposed trail corridor include:

- All proposed facilities along the trail should be accessible, comfortable, and equitable spaces for all
- Site furnishings and amenities should support necessary facilities for regional trail activities, potentially including bicycle racks and fix-it stations, and seating areas for respite.
- Interpretive, educational, and historical signage may be incorporated to provide trail users with a layered trail experience. See Plan section on Wayfinding for more information about this.
- Features that promote safety including lighting and wayfinding should be clear and adhere to all appropriate guidelines.
- See Plan section on Public Art for more information about the recommended process for Public Art.

The specific furnishings and amenities along with their location and design, will be determined through future design and engineering phases to specifically respond to the regional trail facility.

It is possible that granite curbs may be a part of the final plans, in limited locations. There are challenges to using granite curbing for the entire project. Granite curbs are not as effective at removing water from the

roadway. Granite curbs are more expensive to procure, install, and repair. It is estimated that granite curbs would cost five times more than conventional concrete curbing, adding several millions of additional costs for the Summit Avenue corridor. Lastly, granite curbs require more lateral space to install and may have an additional incremental impact on existing boulevard trees.



*Bike racks and amenities*



*Interpretive Signage at Shadow Falls Park*



*Benches at Rice Park*



*Existing Lighting on Summit Avenue*



*Example: Wayfinding on Capital City Bikeway*

# Public Art Process

## City of Saint Paul Public Art Ordinance

In 2009, the City of Saint Paul passed an Ordinance supporting public art. Within the Ordinance, the city council finds that:

1. Involvement of public artists in public projects should begin at the earliest stages of conceptual planning and continue through project design and implementation;
2. Sufficient resources should be committed to sustain an innovative public art and design program that is distinguished by its high quality;
3. That policies and procedures should be administratively developed which will facilitate and support creation and implementation of a public art plan.

Local artists and community members identified key goals for the public art component of Summit Avenue Regional Trail:

### Develop a Robust, Creative Engagement Process

- Engage community members through the entire design process to identify vital content for the artwork that allows the artist to translate this content into visual form.
- Ensure this process includes a diverse group of people who are representative of the broader project region and who will use the trail.

- Focused on open discussion, storytelling, and sharing amongst community members.

### Acknowledge Multi-Level History

- Artwork should address Summit Avenue's long and complex history including its Natural, Indigenous, and European colonial histories, and how this layered past influences the regional trail into the future.
- Community representatives from these histories need to be consulted through the artist selection, design, and implementation phases of any public art project.
- Artwork could encourage community members to share their stories from these different and diverse histories of Summit Avenue.

### Integrate Artist(s) or Artist Team Through Planning and Design Process

- The artist(s) or artist team should be in the planning and design process as soon as possible positioning the artist as leader in the location and form of the public art.
- Opportunities for the integration of artwork into other elements of the regional trail should be identified
- The artist(s) or artist team should be selected through a thoughtful process that starts with the community engagement process.

- A diverse selection of representatives from the broader project region must weigh in on artist selection criteria, and be on the artist selection committee.



Image of Dale Street Bridge Public Art



Image of Dale Street Bridge Public Art



Image of stop sign post: by Lisa Elias

# Conflicts

As part of the planning process, “identification of conflicts with other existing or proposed projects or land uses affecting the park/trail unit, including steps necessary for their resolution”<sup>1</sup> is a required component of the document. The content in this section focuses less on physical conflicts of the proposed trail, and more on coordination items and processes that will occur during design and engineering, and construction.

## Trail Consistency and Functionality Through Phased Implementation

As segments of the Regional Trail are implemented, facility consistency and the functionality of bicycle, pedestrian, and vehicular modes will need to be carefully considered.

Transitions between the existing conditions and the new Regional Trail will need to be planned and implemented to provide safe facilities with clear transitions. Strategies for managing these transitions include:

- Coordination with Public Works for interim conditions that support multi-modal corridor use
- Consider temporary or pilot programming opportunities that demonstrate planned future trail changes and can engage community members on-site

## Space Allocation

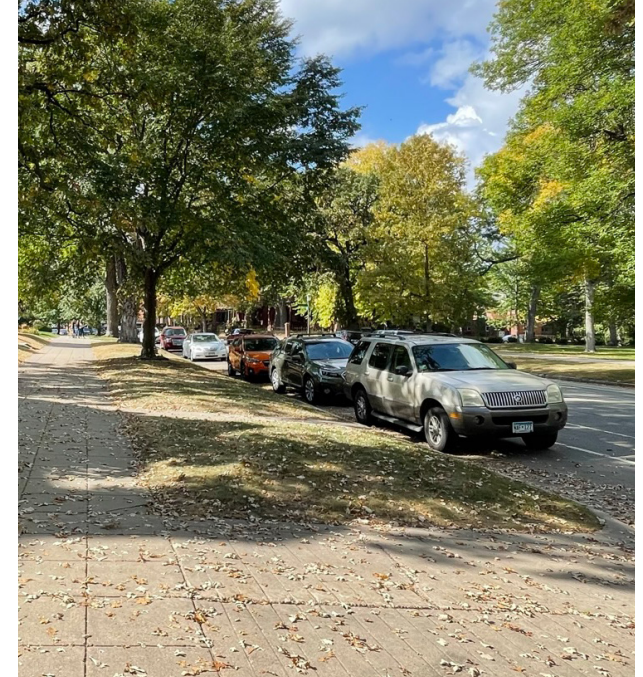
Within the public right-of-way, space will need to be dedicated for various land uses. When seeking a balance of priorities, specific existing conditions need to be evaluated on-site during the design and engineering phase.

In order to accommodate safe and comfortable facilities for all users within the trail corridor, there are a number of factors to consider. Space allocation areas include:

- Trail facility: treadway and buffer space
- On-street parking
- Roadway travel lanes
- Boulevards
- Pedestrian Sidewalks

While initial parking studies reflect underutilization of on-street parking corridor-wide, some areas along the corridor do show high parking demand. When making decisions during design and engineering to reduce parking and allocate space for a regional trail facilities, it is important to continue to work with institutional and residential property owners to balance all needs along the corridor. See Accessibility section of this document for parking recommendations to consider public/private partnerships on privately owned surface lots.

Future design and engineering phases should consider additional parking studies to capture current utilization that can continue to inform trail design. Chapter 1 of this document highlights policy goals within the City’s 2040 Comprehensive Plan related to parking. Examples of these include strategies such as shared parking agreements, mix-used parking facilities, and managing parking demand.



1 : 2040 Regional Parks Policy Plan | [https://metro council.org/Parks/Publications-And-Resources/POLICY-PLANS/2040-REGIONAL-PARKS-POLICY-PLAN-\(2020-version\)/2040-Regional-Parks-Policy-Plan.aspx](https://metro council.org/Parks/Publications-And-Resources/POLICY-PLANS/2040-REGIONAL-PARKS-POLICY-PLAN-(2020-version)/2040-Regional-Parks-Policy-Plan.aspx)



# Implementation

## Partner Engagement

### Direct Planning Partners

The agencies listed below contributed significant input, insight, and review to the Planning process for this Plan:

#### *Saint Paul Parks and Recreation*

- Regional Trail Implementation Agency
- Responsible for development of Regional Trail Plan

#### *Metropolitan Council*

- Managing agency for regional parks and trails
- Oversees Regional Parks Policy Plan
- Administers Legacy Funding for Regional Park Facilities

#### *Saint Paul Public Works*

- Responsible for other reconstruction and mill and overlay projects within the Summit Avenue roadway
- Advisors to the project regarding relevant impacts to roadway and other infrastructure

### Additional Project Partners

In addition to those above, other partners that participated on the Technical Advisory Committee for the project, and/or provided a review of the Plan are listed below:

- Ramsey County Public Works
- Minnesota Department of Transportation
- State Historic Preservation Office
- Historic Preservation Commission

### Future Partner Coordination

As noted earlier in the document, detailed design elements have not been developed at this point in the project process. During future design and engineering phases for trail implementation, partner coordination with all relevant partners will be necessary to ensure elements of the Regional Trail meet required guidelines.

#### *Environmental and Historical Review Process*

During future design and engineering phases, a number of environmental and historical review processes will guide development of the final trail alignment. Considering the complexity of this corridor, a thorough, nuanced, and thoughtful review process will be necessary to move ahead with implementation. Agencies that will provide review and recommendations include:

- *State Historic Preservation Office (SHPO)*  
The SHPO reflects the interests of the State and its citizens in the preservation of their cultural heritage. The SHPO advises and assists Federal agencies in carrying out their Section 106 responsibilities and cooperates with such agencies, local governments and organizations and individuals to ensure that historic properties are taking into

consideration at all levels of planning and development.

- *The Heritage Preservation Commission* - Serves as an advisory body to the Mayor and Saint Paul City Council on municipal heritage preservation matters.

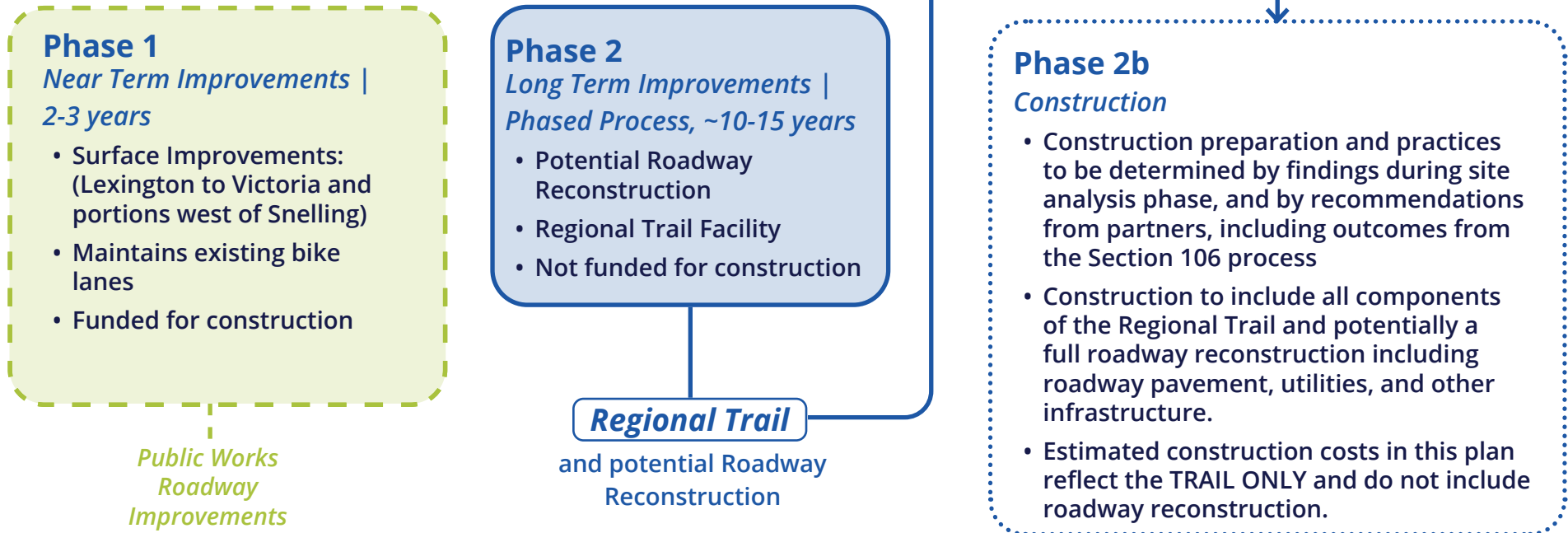
As a part of these agency reviews, a public process will also occur. Consulting parties, including individuals and organizations with a demonstrated interest in the project, will play a key role in the review process.

# Implementation

## Project Phasing

Implementation of this Regional Trail Plan will occur after this Plan is adopted, and once funding is secured. A number of factors will influence the phasing of the design and construction of the Regional Trail facility including funding, construction priorities, and coordination with other projects, including the potential to pair trail implementation with roadway reconstruction projects.

Laid out below is a potential sequence for project implementation. Phase 1 as described here does not include the Regional Trail facility, and only includes upgrades to the roadway and accessibility along the corridor as absolutely necessary. Phase 2 includes the Regional Trail and outlines that design phase as well as the construction phase of the Trail implementation.



# Project Costs

## Project Information

An estimated cost of full street reconstruction for the corridor is \$100 million. Estimated costs below show if the trail were constructed on its own, apart from street reconstruction. The preferred strategy is to build the trail with street reconstruction, where the incremental cost of the trail is less.

Project Length - Miles (approx.) <i>includes segments from Mississippi River Blvd to Kellogg Blvd</i>	<b>4.7</b>
Project Length - Linear Feet (approx.)	<b>24,816</b>
Units (per 100')	<b>249</b>
Number of Intersections (max)	<b>46</b>
Number of Major Intersections	<b>12</b>

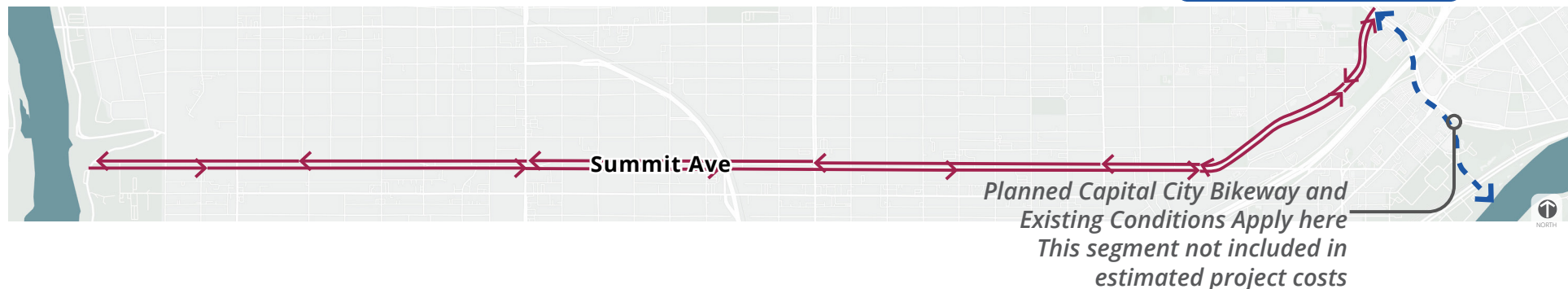
## Corridor Costs

**One-Way Separated Bikeway = \$45,000-\$50,000 per 100' Length**

Assumptions:

- No change to existing sidewalks
- Remove roadway pavement and install bikeways
- Remove curb and gutter (each direction)
- Remove 23' wide roadway pavement
- New curb and gutter, 4' grassed buffer and 7.5' bikeways (average dimensions)
- Includes drainage structure relocation, not utility relocation
- Includes driveway paving
- Includes signage
- Cost does not include lighting or trail amenity areas, but these would be considered as part of the regional trail facility

## Potential Project Costs: Preferred Development Concept:



# Boundaries and Acquisitions

## Boundaries

The project would be developed within the public Right-of-Way along Summit Avenue from Mississippi River Boulevard to West Kellogg Boulevard, along Kellogg Boulevard from Summit Avenue / John Ireland Boulevard to Eagle Parkway and Eagle Parkway from West Kellogg Boulevard to the Samuel H. Morgan Regional Trail at Shepard Road.

The boundary for the trail is a paired one-way set of trails located between the existing boulevard and the existing roadway. The proposed treadway includes space for one-way bicycle travel and necessary buffers for maintenance and clearance. The boundary for the trail along Kellogg Boulevard and Eagle Parkway would follow plans for the proposed Capitol City Bikeway and the existing multi-use trail on Eagle Parkway.

## Acquisition Costs

There are no property acquisitions anticipated for the implementation of the Summit Avenue Regional Trail facility. A more detailed study of properties adjacent to the proposed trail corridor will be completed as segments of the trail corridor are implemented.

## Property Impacts

Impacts to private property are not anticipated to be necessary to implement a trail alignment and design along Summit Avenue. The 100- and 200- foot right-of-way and existing parkway are expected to provide sufficient space for a trail to be sited within the existing corridor section.

Should property impacts be identified, they are anticipated to be temporary in the form of easements for construction. Specific property elements which may be impacted depending on the preferred design include:

- Existing stairs and retaining walls
- Trees on private property (with critical root zones near the public ROW)
- Planting beds
- Driveway aprons

As project segments are implemented, property owners will be notified about potential impacts prior to implementation.

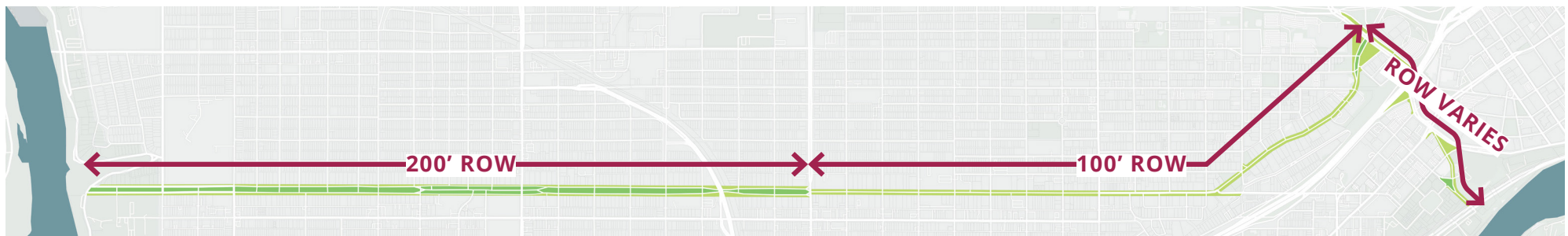


Fig. 5-56 | Summit Avenue Regional Trail Corridor, approximate project boundaries

# Boundaries and Acquisitions

## Segment A

The diagram below illustrates the Regional Trail located within the public right-of-way. Sidewalks within the public right-of-way are considered local facilities - not part of the Regional Trail.

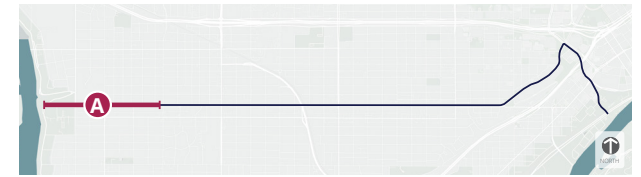


Fig. 5-58 | Key Map - Segment A

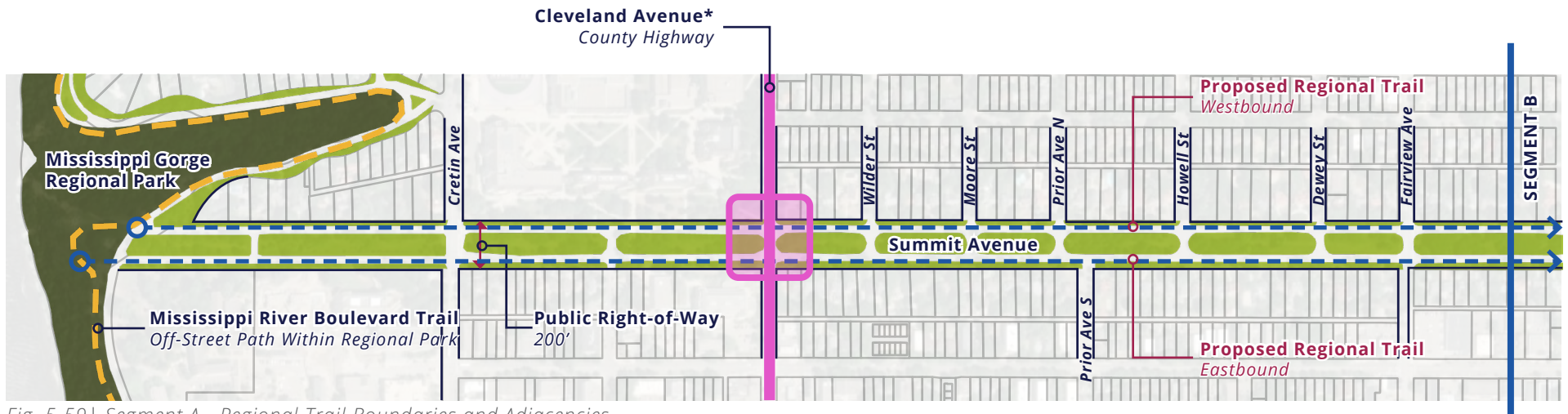


Fig. 5-59 | Segment A - Regional Trail Boundaries and Adjacencies

### Legend

- Proposed Summit Avenue Regional Trail
- Local Greenspace
- Regional Parkland
- Regional Trail
- Intersecting Road with Multiple Jurisdictions

\*Coordination between agencies will be necessary at these intersections during design and engineering for the regional trail facility. Agencies include but may not be limited to:

- City of Saint Paul
- Ramsey County
- Minnesota Department of Transportation (MnDOT)
- Federal Highway Administration (FHWA)

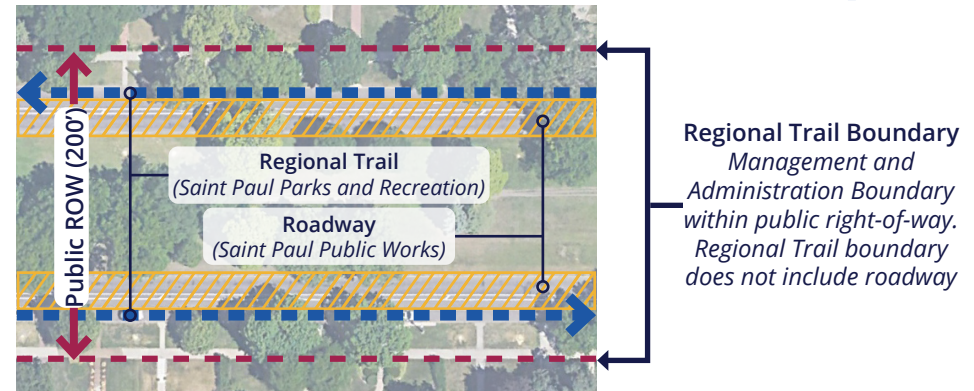


Fig. 5-60 | Segment A - Typical Trail Alignment

# Boundaries and Acquisitions

## Segment B

The diagram below illustrates the Regional Trail located within the public right-of-way. Sidewalks within the public right-of-way are considered local facilities - not part of the Regional Trail.



Fig. 5-61 | Segment B - Regional Trail Boundaries and Adjacencies

### Legend

- Proposed Summit Avenue Regional Trail
- Local Greenspace
- Regional Parkland
- Regional Trail
- Intersecting Road with Multiple Jurisdictions

\*Coordination between agencies will be necessary at these intersections during design and engineering for the regional trail facility. Agencies include but may not be limited to:

- City of Saint Paul
- Ramsey County
- Minnesota Department of Transportation (MnDOT)
- Federal Highway Administration (FHWA)

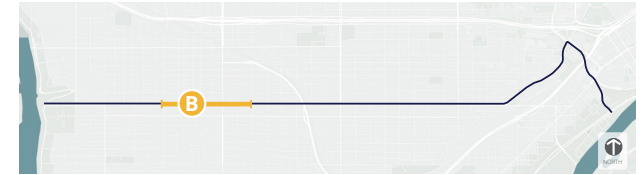


Fig. 5-62 | Key Map - Segment B

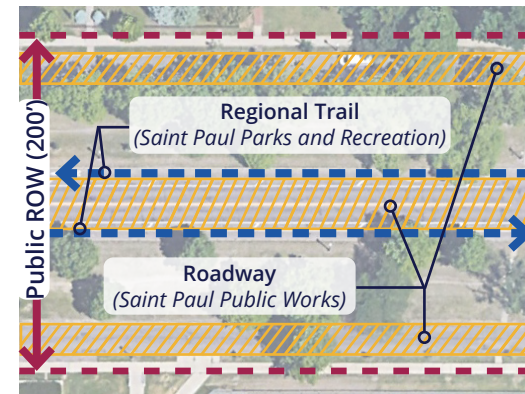


Fig. 5-63 | Segment B - Typical Trail Alignment

Regional Trail Boundary Management and Administration Boundary within public right-of-way. Regional Trail boundary does not include roadway

# Boundaries and Acquisitions

## Segment C

The diagram below illustrates the Regional Trail located within the public right-of-way. Sidewalks within the public right-of-way are considered local facilities - not part of the Regional Trail.

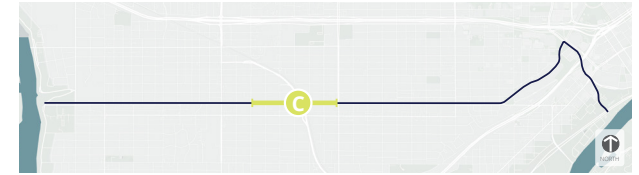


Fig. 5-65 | Key Map - Segment C

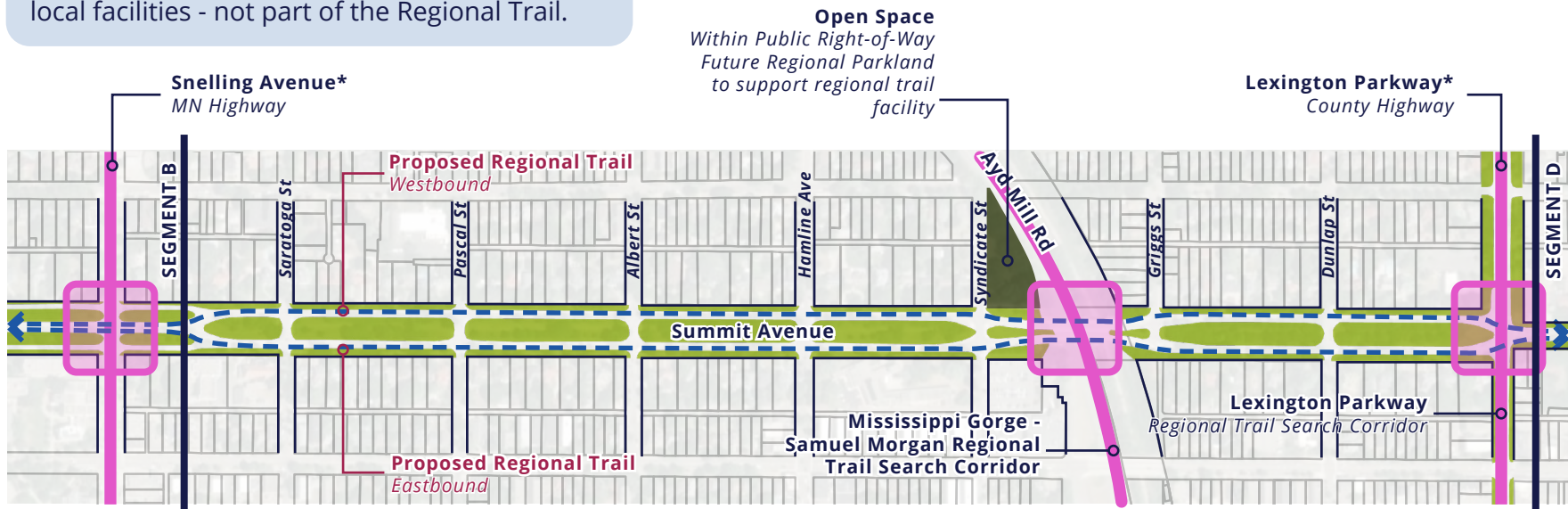


Fig. 5-64 | Segment C - Regional Trail Boundaries and Adjacencies

### Legend

-  Proposed Summit Avenue Regional Trail
-  Local Greenspace
-  Regional Parkland
-  Regional Trail
-  Intersecting Road with Multiple Jurisdictions\*

\*Coordination between agencies will be necessary at these intersections during design and engineering for the regional trail facility. Agencies include but may not be limited to:

- City of Saint Paul
- Ramsey County
- Minnesota Department of Transportation (MnDOT)
- Federal Highway Administration (FHWA)

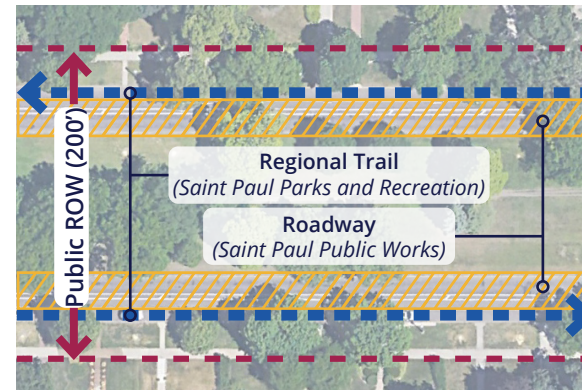


Fig. 5-66 | Segment A - Typical Trail Alignment

**Regional Trail Management and Administration Boundary** limits assumes trail treadway and buffer spaces - see development concept (Ch. 4).

Regional Trail boundary does not include roadway, boulevards, or sidewalks. Select median crossing areas that support connections to the regional trail facility would be included within the management and administration boundary - See development concept (Ch. 4).

# Boundaries and Acquisitions

## Segment D

The diagram below illustrates the Regional Trail located within the public right-of-way. Sidewalks within the public right-of-way are considered local facilities - not part of the Regional Trail.

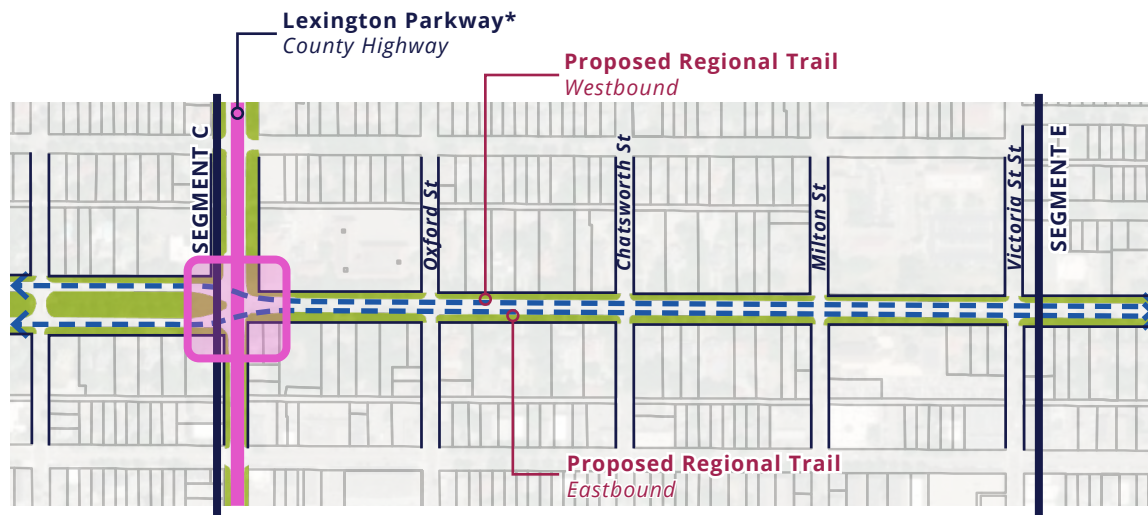


Fig. 5-67 | Segment D - Regional Trail Boundaries and Adjacencies

### Legend

-  Proposed Summit Avenue Regional Trail
-  Local Greenspace
-  Regional Parkland
-  Regional Trail
-  Intersecting Road with Multiple Jurisdictions

\*Coordination between agencies will be necessary at these intersections during design and engineering for the regional trail facility. Agencies include but may not be limited to:

- City of Saint Paul
- Ramsey County
- Minnesota Department of Transportation (MnDOT)
- Federal Highway Administration (FHWA)

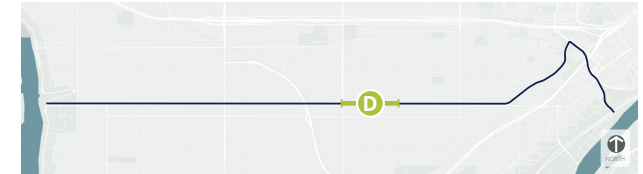


Fig. 5-68 | Key Map - Segment D

Regional Trail Boundary Management and Administration Boundary within public right-of-way. Regional Trail boundary does not include roadway

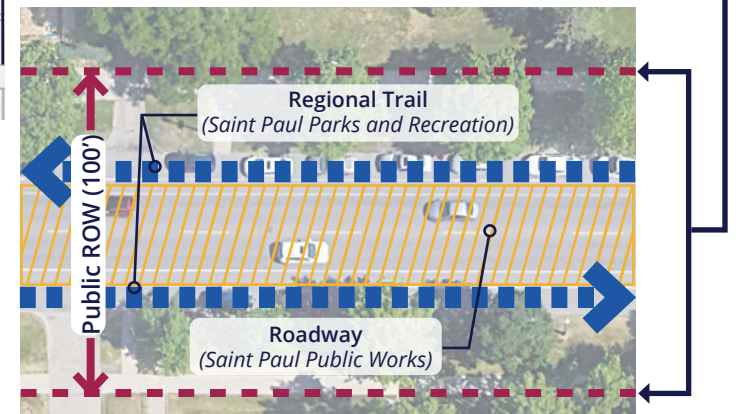


Fig. 5-69 | Segment D - Typical Trail Alignment

# Boundaries and Acquisitions

## Segment E

The diagram below illustrates the Regional Trail located within the public right-of-way. Sidewalks within the public right-of-way are considered local facilities - not part of the Regional Trail.

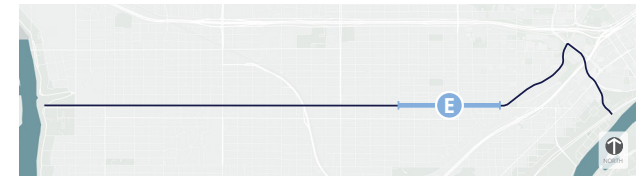


Fig. 5-70 | Key Map - Segment E

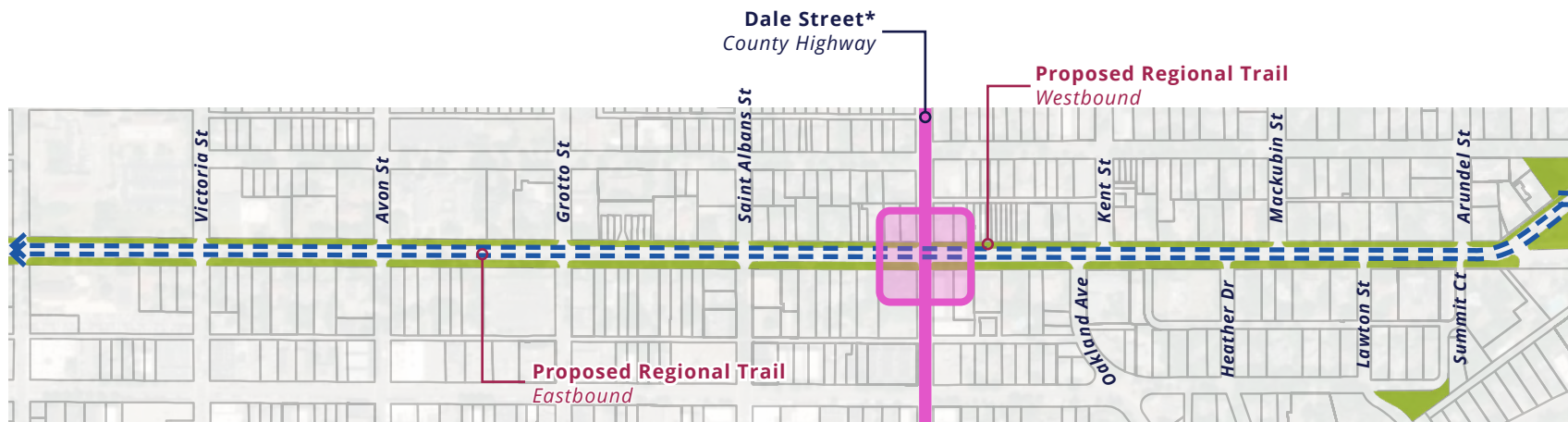


Fig. 5-71 | Segment E - Regional Trail Boundaries and Adjacencies

### Legend

- Proposed Summit Avenue Regional Trail
- Local Greenspace
- Regional Parkland
- Regional Trail
- Intersecting Road with Multiple Jurisdictions

*\*Coordination between agencies will be necessary at these intersections during design and engineering for the regional trail facility. Agencies include but may not be limited to:*

- City of Saint Paul
- Ramsey County
- Minnesota Department of Transportation (MnDOT)
- Federal Highway Administration (FHWA)

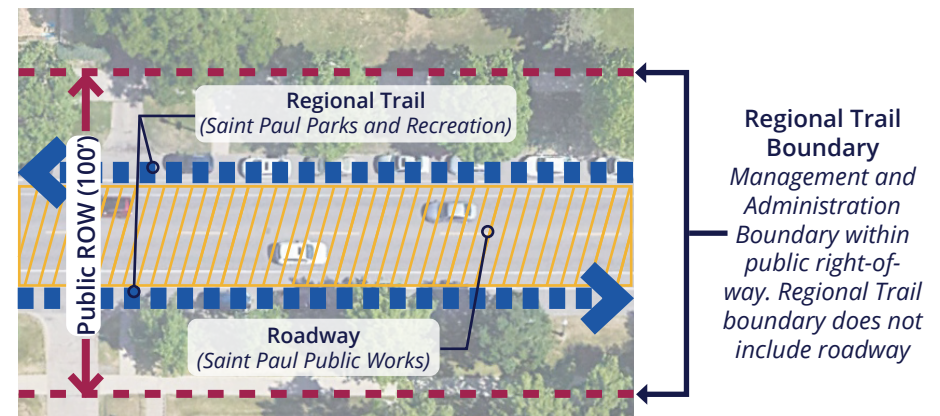


Fig. 5-72 | Segment D - Typical Trail Alignment

# Boundaries and Acquisitions

## Segment F

The diagram below illustrates the Regional Trail located within the public right-of-way. Sidewalks within the public right-of-way are considered local facilities - not part of the Regional Trail.

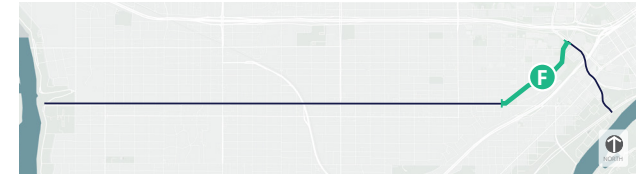


Fig. 5-74 | Key Map - Segment F

### Legend

-  Proposed Summit Avenue Regional Trail
-  Local Greenspace
-  Regional Parkland
-  Regional Trail
-  Intersecting Road with Multiple Jurisdictions

\*Coordination between agencies will be necessary at these intersections during design and engineering for the regional trail facility. Agencies include but may not be limited to:

- City of Saint Paul
- Ramsey County
- Minnesota Department of Transportation (MnDOT)
- Federal Highway Administration (FHWA)

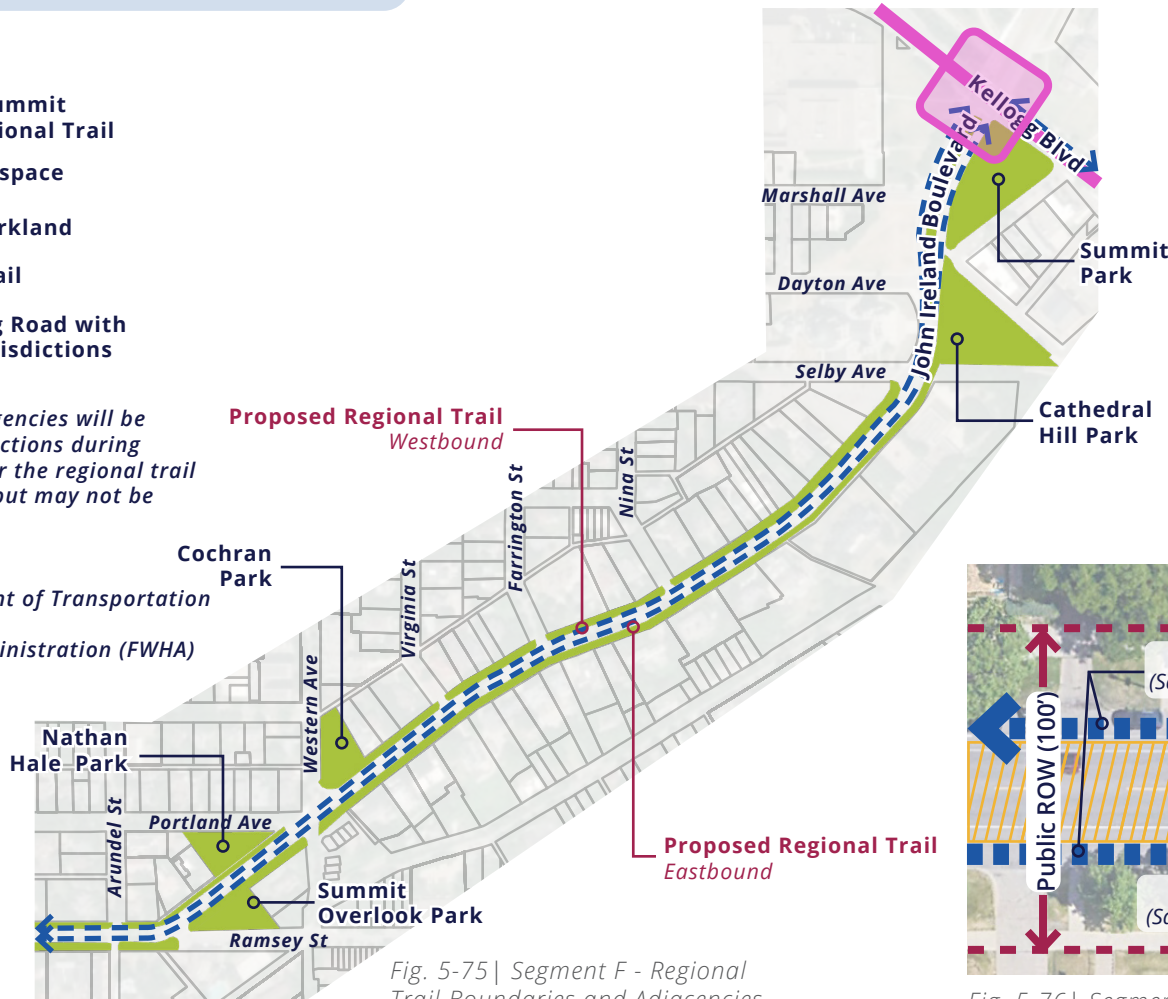


Fig. 5-75 | Segment F - Regional Trail Boundaries and Adjacencies

Regional Trail Boundary Management and Administration Boundary within public right-of-way. Regional Trail boundary does not include roadway

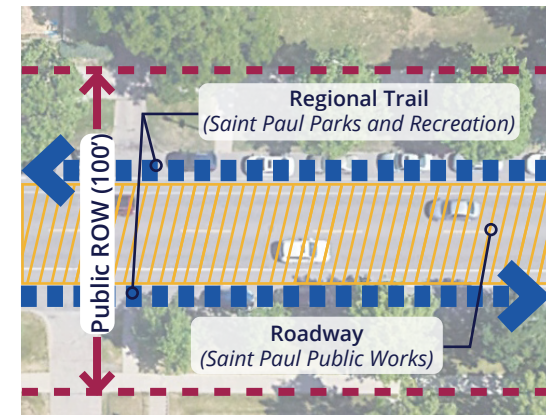


Fig. 5-76 | Segment D - Typical Trail Alignment

# Boundaries and Acquisitions

## Segment G

The diagram below illustrates the Regional Trail located within the public right-of-way. Sidewalks within the public right-of-way are considered local facilities - not part of the Regional Trail.

Segment G of the regional trail will be maintained and operated by the City of Saint Paul Public Works

### Legend

-  Proposed Summit Avenue Regional Trail
-  Local Greenspace
-  Regional Parkland
-  Regional Trail
-  Intersecting Road with Multiple Jurisdictions

\*Coordination between agencies will be necessary at these intersections during design and engineering for the regional trail facility. Agencies include but may not be limited to:

- City of Saint Paul
- Ramsey County
- Minnesota Department of Transportation (MnDOT)
- Federal Highway Administration (FHWA)

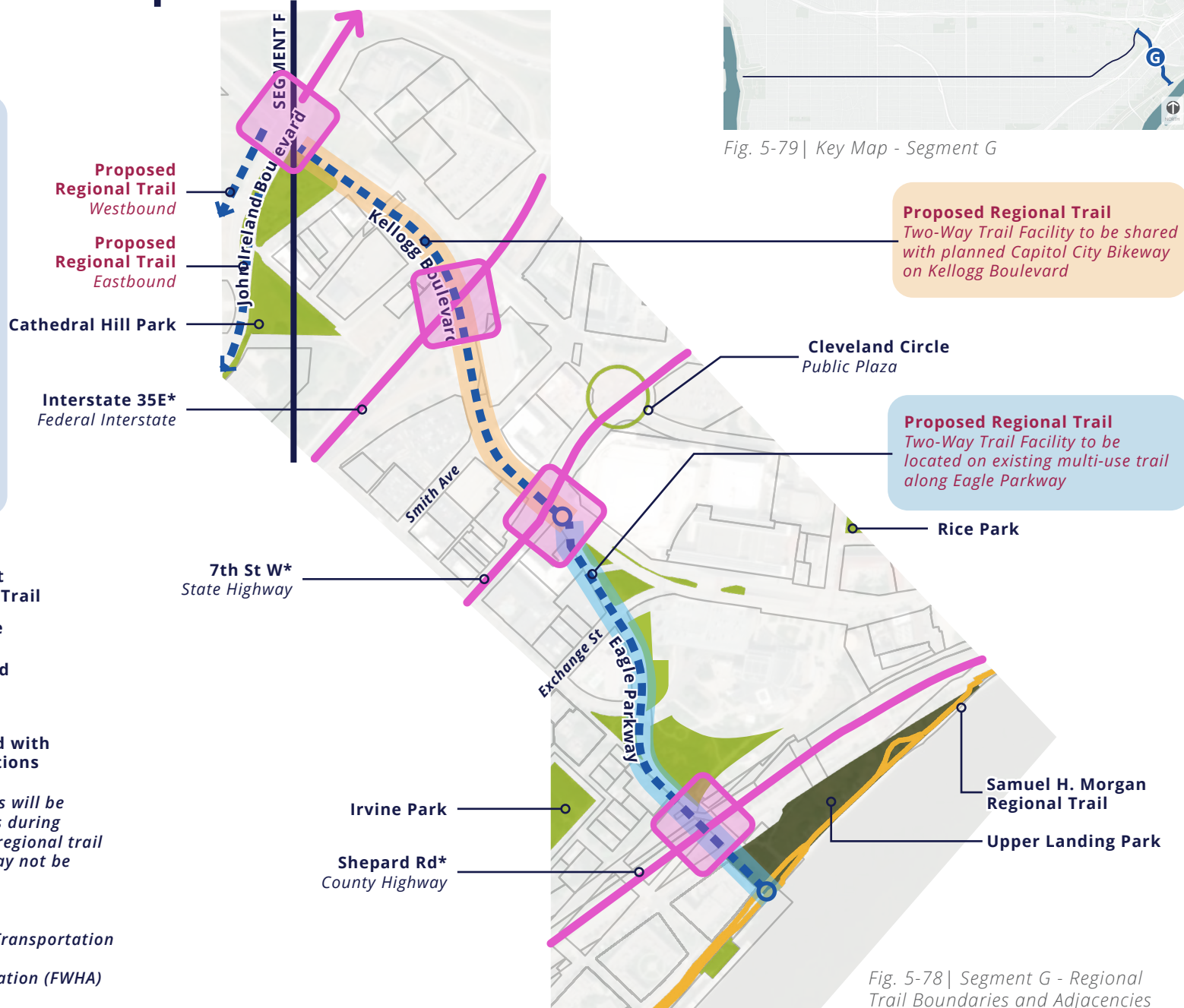


Fig. 5-79 | Key Map - Segment G

Fig. 5-78 | Segment G - Regional Trail Boundaries and Adjacencies

# Operations and Maintenance

All regional trails within Saint Paul are included in the park operations and maintenance budget. This includes annual assessment of the trail conditions, repair, and renovations or the trail components as needed.

The completed trail facility will be included in the normal operations and maintenance cycle funded in part with Regional Park maintenance funds. When securing funding for design and implementation, it will be important to work with Public Works and Parks and Recreation Operations & Maintenance to upgrade or acquire maintenance equipment.

## Mowing and Tree Care

Mowing adjacent turf areas will continue to be completed routinely by residents. Tree pruning in the right-of-way will continue to be completed by Parks and Recreation Forestry Division. A tree inventory and preservation plan should be included during the design phase. Future projects should limit removals of healthy trees within the corridor and plan for special accommodations for trees during and after construction.

### Estimated Maintenance Costs *(per mile of trail)*

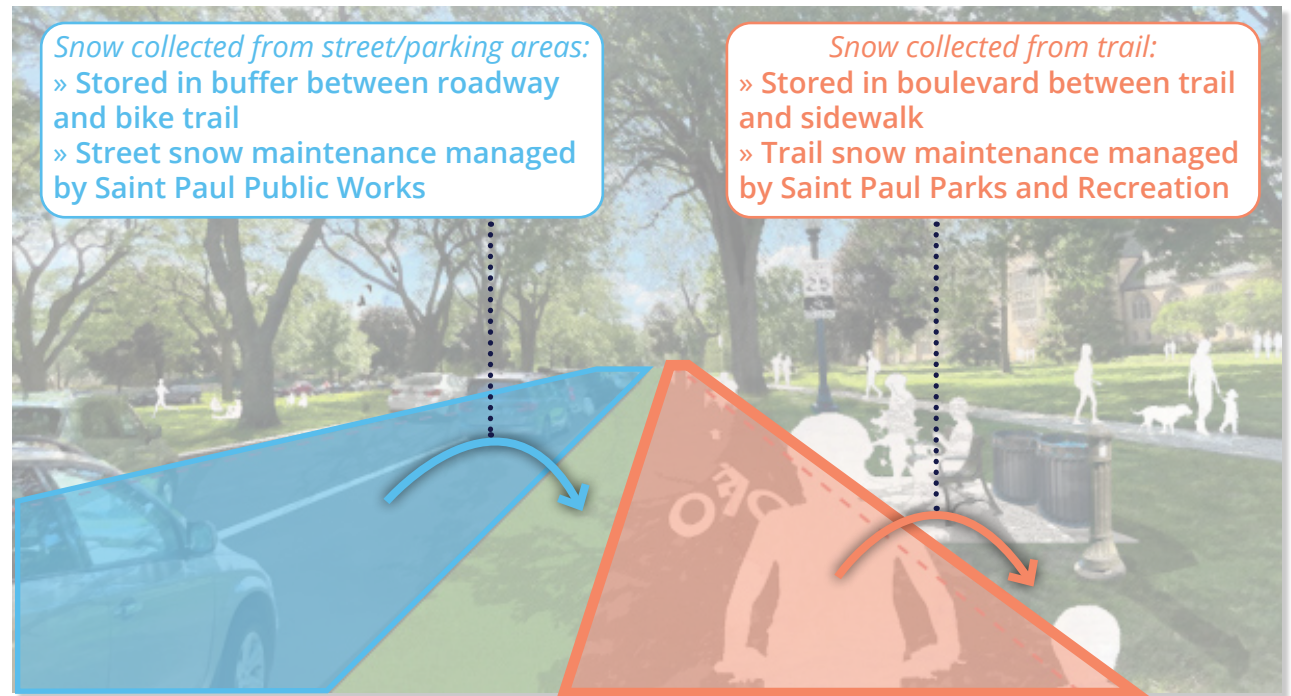
Task	Annual Cost
Plow Snow (<5", 2 passes)	\$1,900
Broom Winter (2 passes)	\$3,100
Sand/salt path	\$850
Mow grass (2 passes)	\$1,400
Broom Summer	\$110
Pick Litter	\$2,100
Empty Trash	\$4,300
Site Furnishings	\$500
<b>Annual Total</b>	<b>\$14,260</b>

# Operations and Maintenance

## Winter Maintenance

The community engagement process has highlighted the importance of snow removal and winter maintenance of bike facilities along Summit Avenue. Separated bike facilities will be managed by City Parks and Recreation staff as part of the City's overall maintenance schedule of trail facilities. As a component in the City and County's non-motorized transportation planning, snow plowing would be performed as needed following measurable snow falls.

Materials for the trail facility should be durable and should be selected with year round maintenance in mind. Additionally, a buffer zone or other designated areas for snow storage from both street and trail snow removal should be incorporated into the design and implementation of the trail facility. Regarding clearing of sidewalks, the same policy that currently exists will remain - property owners or managers are responsible for clearing sidewalks of snow and ice on front of their home or business within 24 hours of the most recently snowfall or ice accumulation (*Saint Paul City Ordinance - Chapters 113 and 114*).



## Local Examples of Winter Trail Conditions



**Wheelock Parkway - Saint Paul**  
Separated trail, snow storage between bike facility and roadway



**Como Avenue - Saint Paul**  
Separated trail, snow storage between bike facility and roadway



**Robert Piram RT - Saint Paul**  
Separated trail, paved buffer - seasonal comparison

# Natural Resources and Stewardship Plan

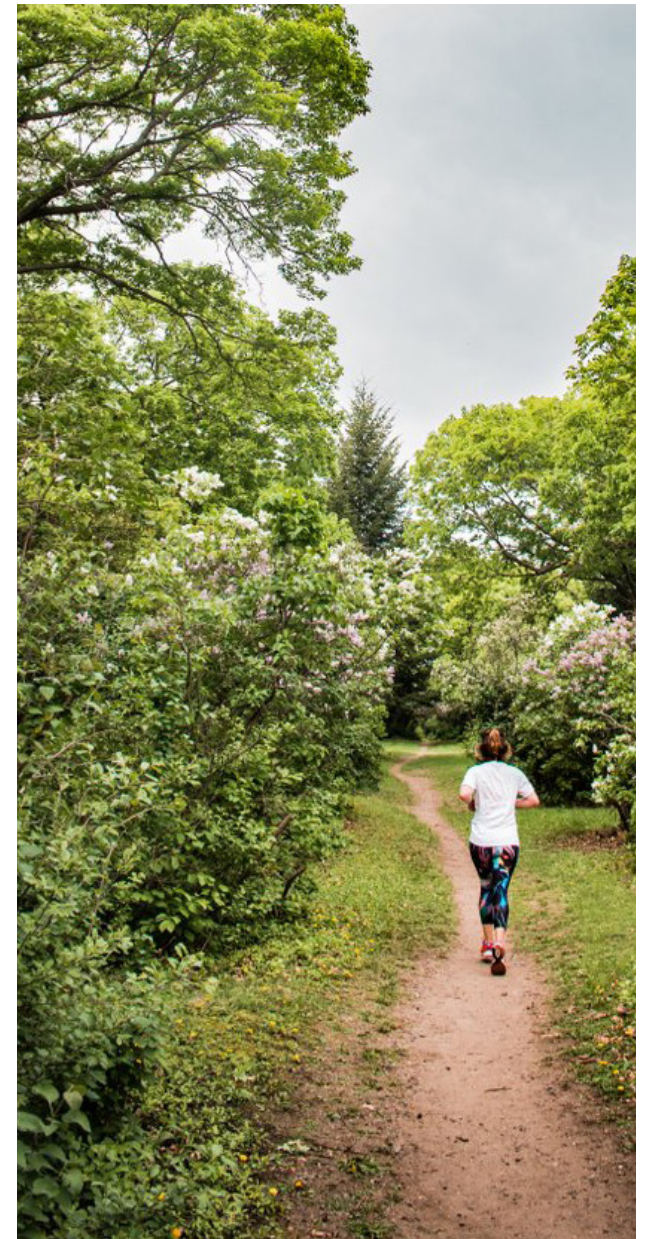
The Summit Avenue corridor is situated in a unique environment - adjacent to Saint Paul's downtown core, but defined by the greenspace and mature tree canopy that provide a natural, park-like feel. The stewardship plan for this regional trail prioritizes preservation of these special natural features, and an approach for the future that maintains and enhances the park-like character of the parkway while also accommodating recreational features.

A Tree Preservation Framework is included on the next page to provide guidance for tree protection during construction, ways to reduce negative impacts to trees, and strategies to mitigate construction impacts and tree loss. In planning for the future of the regional trail, the natural life-cycle of urban trees should be considered, as well as the potential for tree loss due to disease or damage. As trees are replaced, species diversity and age diversity should be a top priority to ensure a healthy and long-lived tree canopy.

The Summit Avenue tree canopy has experienced a number of changes in its history. Between 2009 and 2022, 448 trees were removed along Summit Avenue between Mississippi River Boulevard and Kellogg Boulevard. Reasons for these removals varied, with Emerald Ash Borer being a major factor. The general strategy for removals and replacements is one to

one ratio for removal to replacement. Site conditions are evaluated when replacement trees are planted to ensure the best growing conditions for the tree, safety considerations for people using the site, and future considerations to anticipate changes that may occur within the corridor over time.

The Citywide growing condition for street trees typically include planting in a 6' boulevard. The boulevards and medians along Summit Avenue vary, but generally boulevards are 16-20' wide, and medians are over 40' wide in Segments A, B, and C, giving these street trees more ideal growing conditions than what are typically found in urban conditions.



# Natural Resources and Stewardship Plan

## Natural Resources Toolkit *Tree Canopy*

### Ash Tree Removal

Since 2010, the City of Saint Paul has utilized the “Structured Removal” of ash trees to strategically reduce the total percentage of ash trees on boulevards and in parks throughout the City. By addressing the issue of Emerald Ash Borer before trees become infested, the City is reducing the number of dead or potentially hazardous ash trees in the City.

As of spring 2021, the removals process had begun on Summit Avenue, with the ash trees between Howell Street and Wheeler Street. In 2022, select ash trees between Mississippi River Boulevard and Ramsey Street were removed. The section of Summit Avenue between Arundel Street and Kellogg Boulevard is planned for removals in 2023. Additional updated information about ash tree removals and planting is available on the City Forestry website ([stpaul.gov/Forestry](http://stpaul.gov/Forestry)).

### Tree Preservation Strategies and Forestry Best Practices

To support the regional trail facility, preserving this tree canopy is a top priority and a major consideration in the planning and implementation of the facility. The Plan does not provide preservation strategies for each individual tree along the corridor, but

rather provides guidance for future project implementation and a corridor-wide vision. Guiding principles and strategies are listed below:

- To the extent possible, retaining the existing curb line on Summit Avenue will have the best outcome for long term tree health
- The existing tree canopy of Summit Avenue has a variety of tree species. Selection of new plantings should continue to prioritize species diversity.
- Construction impacts vary depending on tree species. As the Plan is implemented through construction, the City Forestry department should be consulted and should inform design in a way that limits negative impacts to existing trees as much as possible.
- Factors that may influence trail placement based on existing trees include health of existing trees, existing grades at boulevards and medians, and overall root space and distance between curb and trunk.
- As part of the implementation, consider including new trees in the right-of-way and work with the City Forestry department to include in future plans.



# Natural Resources and Stewardship Plan

## Natural Resources Toolkit

### Tree Canopy

#### Tree Preservation and Protection

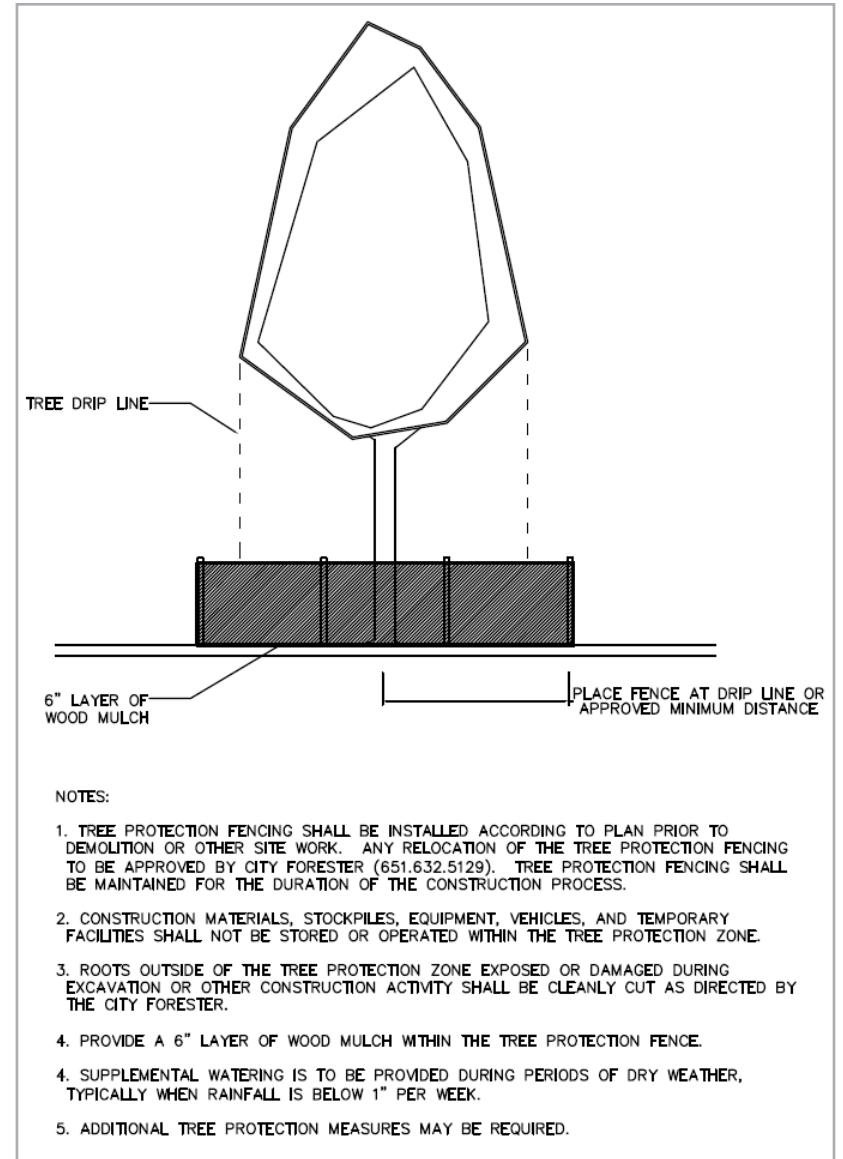
In addition to Chapter 176 of the Saint Paul Code of Ordinances, Chapter 74: the Heritage Preservation Districts and Programs also applies to this project area. Articles for both the Summit Avenue West Heritage Preservation District and Heritage Hill Historic Preservation District are contained within this chapter and provide some guidance concerning tree preservation and general landscaping.

The 2010 Park and Street Tree Master Plan is a guide to street tree planting, maintenance, and preservation. This document will assist with the future maintenance of trees and greenspace within the regional trail corridor. A City of Saint Paul standard tree protection detail is shown on this page to illustrate how tree protection can be ensured during construction.

#### Design and Mitigation of Impacts

When evaluating construction activity impacts to trees, there are several factors to consider, some including the critical and structural root zones, species, and condition of the tree. A more detailed approach to preservation is outlined in Chapter 5 of this document.

The 2010 Park and Street Tree Master Plan highlights the importance of species diversity within the public realm. A 30-20-10 model suggests that total tree inventory should contain no more than 30% of a single family, 20% of a single genus, and 10% of a single species. As trees are planted within the Summit Avenue corridor, this approach should be used to ensure a diverse and healthy tree canopy.



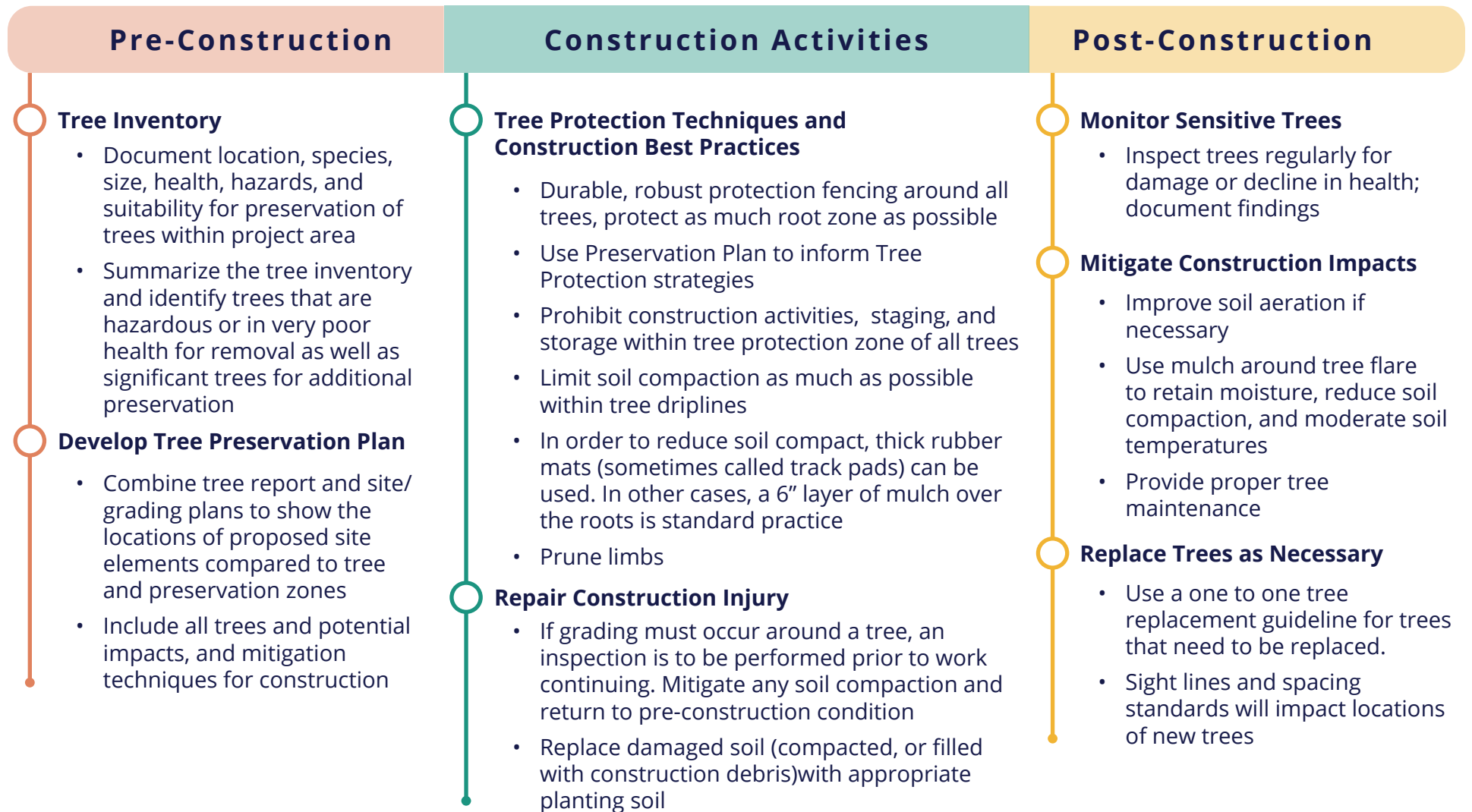
City of Saint Paul Standard Tree Protection Detail

# Natural Resources and Stewardship Plan

## Tree Preservation Framework



Plan document addresses community request for information about tree preservation measures.



# Natural Resources and Stewardship Plan

## Watersheds and Wetlands

Several different sub-watershed intersect with the Summit Avenue Regional Trail corridor, all part of the larger Capitol Region Watershed District. The proposed trail route does not impact any delineated wetlands in the region. See regional map below showing regional watersheds and delineated wetlands.

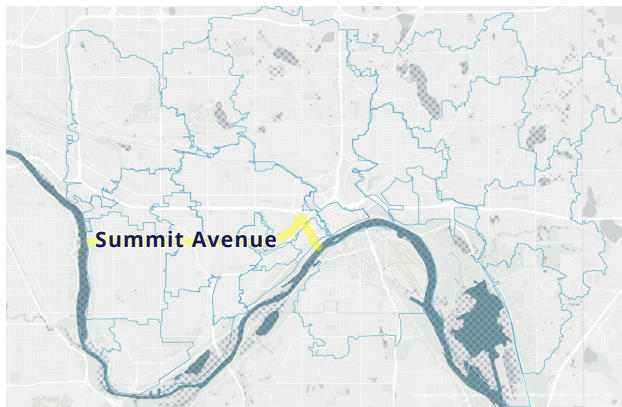


Fig. 5-80 | Regional Wetlands and Watersheds

## Legend

- Watershed Boundary
- ▣ Delineated wetland \*

\* The delineated wetlands shown on this diagram are only considered likely wetlands as part of the National Wetland Inventory. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology, and geography<sup>1</sup>. The accuracy of the mapping depends on several factors, and a more detailed evaluation may need to be conducted.

## Stormwater Management

The Minnesota Pollution Control Agency identified several best management practices for stormwater management including flow controls, vegetation stabilization, bioengineering, structural stabilization, rip-rap stabilization, and filtration practices. Where necessary, as each segment of the regional trail is designed, stormwater management will be an integral part of the planning and implementation for the new facility. Future projects will adhere to requirements of the MN Pollution Control Agency, the City of Saint Paul, the Mississippi River Corridor Critical Area Program (MRCCA), the Capitol Region Watershed District (CRWD), and other specific governing bodies related to the project.

## Additional Best Practices and Recommendations for Stormwater Management and Natural Resources

- The large greenspace area at the intersections of Summit Avenue, Marshall Avenue, Dayton Avenue, and Selby Avenue is within the “High Infiltration Potential” area identified in the 2014 Volume Reduction Plan and present an opportunity for construction of a stormwater treatment system that could be aesthetically pleasing and a public amenity.
- If segment wide reductions in street or buffer width in Segments A and C are considered infeasible, the design team should consider targeted reductions

in the bikeway buffer width and small bikeway alignment shifts around identified “landmark trees” to prioritize their protection.

- Any construction work associated with the Summit Avenue Regional Trail is subject to CRWD Rules. Project designers are encouraged to consider stormwater treatment and other environmental concerns early in the process of any design. Stormwater treatment that is above and beyond the volume required by rule is eligible for deposit in the City’s Stormwater Volume Bank or CRWD grant support.

<sup>1</sup> : U.S. Fish & Wildlife Service | <https://www.fws.gov/node/264582>

# Public Services

## Wayfinding and Signage

Wayfinding and signage is an integral part of implementing a cohesive and usable trail facility. Signage to indicate directions and wayfinding, culture and history, connections to transit, and connections to greenspace should be considered for the trail facility. Chapter 4 of this Plan details a wayfinding strategy for the trail corridor.

## Bicycle Amenities

Through engagement, community members have expressed a desire for more bicycle-oriented facilities. Bike racks and public bike repair stations should be implemented at appropriate intervals along the trail, particularly at the intersections of other trails or bikeways, and at public green spaces along Summit Avenue. Other amenities including restrooms, drinking fountains, and site furnishings should also be considered at these high use areas.

## Pedestrian Lighting

To augment the existing roadway and pedestrian lighting on Summit Avenue, additional lighting for the trail facility should be implemented where necessary. Existing lighting should be inventoried during the design phase to inform additional trail light locations.

## Utilities

Utilities currently exist within the Summit Avenue corridor to serve the adjacent community. Additional utility needs will be determined during the design process.

Metropolitan Council Environmental Services (MCES) has noted that a Regional Interceptor exists along the proposed Regional Trail alignment, but that the depth of the pipe is about 30-feet below grade, and that no adverse impacts are anticipated. Interceptor systems convey wastewater flows to regional wastewater treatment plants. Further coordination with MCES and other utility providers will occur during design and engineering phases.

## Roadway Repairs

Several segments of the existing Summit Avenue corridors are in need of pavement repairs and/or a full roadway reconstruction. Timing the construction of these projects with the implementation of the regional trail facility would be beneficial to both the road and trail projects, as well as neighbors and users of the corridor. These repairs will be a coordinated effort between Saint Paul Public Works and Parks and Recreation.



# Public Awareness

## City of Saint Paul

As part of the community engagement plan, the Summit Avenue Regional Trail gained public awareness via social media and the project engagement website. Once complete, the trail will be promoted through City web pages, social media and other trail related publications available at park facilities. A grand opening will be considered to celebrate and publicize the new regional trail.

## Adjacent Trail Facilities

Summit Avenue intersects with many existing bike and pedestrian trails, as well as parks including Mississippi Gorge Regional Park, Mississippi River Boulevard trail, the Ayd Mill Road trail and Short Line Park, Summit Overlook Park, Cochran Park, Nathan Hale Park, Cathedral Hill Park, the proposed Capitol City Bikeway segment on Kellogg Boulevard, Upper Landing Park, and Samuel H. Morgan Regional Trail. All of these public amenities and greenspaces provide an opportunity for signage to alert the public of the regional trail facility along Summit Avenue.

Notices are posted to the facilities website if park or trail closures occur. Occasionally, the trail facility may be closed for planned events. Trail users can also subscribe to receive updates through the City of Saint Paul Parks and Recreation website.





# Appendix

## Contents

### A1 Project References

### A2 Technical Memoranda

- Technical Memorandum #1
- Technical Memorandum #2
- Technical Memorandum #2 | Parking Inventory
- Technical Memorandum #2 | Corridor Context
- Technical Memorandum #3
- Technical Memorandum #3 | Parking Study
- Technical Memorandum #3 | Trail Transitions
- Technical Memorandum #3 | Trail Configurations Alternatives
- Technical Memorandum #3 | Parking Considerations
- Technical Memorandum #3 | Evaluation Matrix
- Historic Resources Technical Memorandum
- Technical Memorandum #4

### A3 Meeting Materials and Public Comments

A full list of meeting materials including meeting agendas, presentation slides, and discussion notes can be found on the project engagement website:

» <https://engagestpaul.org/summit>

Comments received during the 90% document public comment period during February 2023 can be found here:

» <https://drive.google.com/drive/u/2/folders/1vfhHoraYokQ0mqQC9XFZu59cpcRdzfwO>

Comments received during the 60% document public comment period during November 2022 can be found here:

» [https://drive.google.com/drive/u/2/folders/1n-u3iXzwr7\\_WtYMVTxdHs-V0dwnkTLt\\_](https://drive.google.com/drive/u/2/folders/1n-u3iXzwr7_WtYMVTxdHs-V0dwnkTLt_)

Written public comments received at the Parks and Recreation Commission Public Hearing on April 13, 2023 can be found here:

» <https://drive.google.com/drive/folders/1ajT4Of5TBzOLF5E2TOaTgqNz0AyTmDuf>

# A1. Project References

- Metropolitan Council  
<https://metro council.org/>
- Regional Parks and Trails Equity Tool  
<https://metrotransitm n.shinyapps.io/regional-parks-equity-tool/>
- Regional Park System Visitation Report  
<https://metro council.org/Parks/Publications-And-Resources/PARK-USE-REPORTS/Annual-Use-Estimates/PlayFeatures-Visits-to-the-Regional-Park-System-in.aspx>
- Summit Hill Association  
<https://www.summithillassociation.org/history>
- Visit St. Paul  
<https://www.visitsaintpaul.com/blog/summit-avenue-history-the-story-of-saint-pauls-famous-street/>
- Minnesota Historical Society  
<https://www.mnhs.org/>
- James J. Hill House  
<https://www.mnhs.org/hillhouse/learn/house>
- National Association of City Transportation Officials  
<https://nacto.org/>
- Saint Paul 2040 Comprehensive Plan  
[https://www.stpaul.gov/sites/default/files/2022-01/CSP\\_2040\\_CompPlan\\_FinalAdopted\\_101521.pdf](https://www.stpaul.gov/sites/default/files/2022-01/CSP_2040_CompPlan_FinalAdopted_101521.pdf)
- Saint Paul Bicycle Plan (2015)  
<https://www.stpaul.gov/sites/default/files/Media%20Root/Public%20Works/Saint%20Paul%20Bicycle%20Plan.pdf>
- 2021 Minnesota Statutes (MRCCA)  
<https://www.revisor.mn.gov/statutes/2021/cite/116G.15/subd/116G.15.8#stat.116G.15.8>
- Minnesota Administrative Rules  
<https://www.revisor.mn.gov/rules/6106.0130/>
- University of Minnesota | Mapping Prejudice  
<https://mappingprejudice.umn.edu/>
- NPR | Racial covenants, a relic of the past, are still on the books across the country  
<https://www.npr.org/2021/11/17/1049052531/racial-covenants-housing-discrimination>
- Mapping Inequality | Redlining in New Deal America  
<https://dsl.richmond.edu/panorama/redlining/#loc=5/39.1/-94.58&text=intro>
- National Register of Historic Place Nomination Form - Historic Hill District  
<https://www.stpaul.gov/sites/default/files/2022-08/1976%20Historic%20Hill.pdf>
- National Register of Historic Place Nomination Form - West Summit Avenue Historic District  
<https://www.stpaul.gov/sites/default/files/2022-08/1993%20West%20Summit.pdf>
- Secretary of the Interior | Standards for Archaeology and Historic District  
<https://www.nps.gov/subjects/historicpreservation/upload/standards-guidelines-archeology-historic-preservation.pdf>
- Historic Hill District Guidelines  
<https://www.stpaul.gov/sites/default/files/Media%20Root/Planning%20%26%20Economic%20Development/15221.pdf>
- Summit Avenue West District Guidelines  
<https://www.stpaul.gov/sites/default/files/Media%20Root/Planning%20%26%20Economic%20Development/15222.pdf>
- Summary of Participation on the Community Engagement Website (October 2021-October 2022)  
<https://drive.google.com/file/d/1ht8V5RFHNx6P33YujMo3oPRMJrm7OgpE/view>
- 60% Draft Plan Comments (November 1-30, 2022)  
[https://drive.google.com/drive/u/2/folders/1n-u3iXzwR7\\_WtYmVTxdHs-V0dwnkTLt\\_](https://drive.google.com/drive/u/2/folders/1n-u3iXzwR7_WtYmVTxdHs-V0dwnkTLt_)

# A2. Technical Memorandums

The project consultant, Bolton and Menk, assisted City staff in developing the contents of this Plan document by providing technical information about different Regional Trail alignments. The consultant team provided site analysis, traffic analysis, typical roadway and bikeway sections, and a high-level cost estimate for implementation of a regional trail facility. In addition to this, the consultant team provided a historical analysis of the Summit Avenue corridor to inform the concept development for the Regional Trail. Technical Memoranda from the consultant team are included in this section of the appendix.

## Technical Memorandum #1



Real People. Real Solutions.

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Fax: (612) 416-0222  
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### TECHNICAL MEMORANDUM #1

**Date:** January 7, 2022  
**To:** Mary Norton, PLA  
**From:** Cody Christianson, P.E. and Madeline Dahlheimer, PLA  
**Subject:** Summit Avenue Regional Trail Master Plan  
City of St. Paul  
BMI Project No.: 0L1.126160

This technical memo summarizes our initial findings related to existing conditions, applicable best-practices and precedents, and potential trail alternatives for **Segments A-F** of the Summit Avenue Regional Trail.

**Segment G:** Segment G will be analyzed and concepts explored once we have refined alternatives for the remainder of the trail. Currently, our assumption is that the Summit Avenue Regional Trail alignment will follow the Capital City Bikeway alignment and proposed facilities along Kellogg Boulevard and our task with this master plan will primarily be to address the intersections of Summit Ave/Kellogg Blvd and Kellogg Blvd/7<sup>th</sup> St.

#### CORRIDOR SEGMENTS

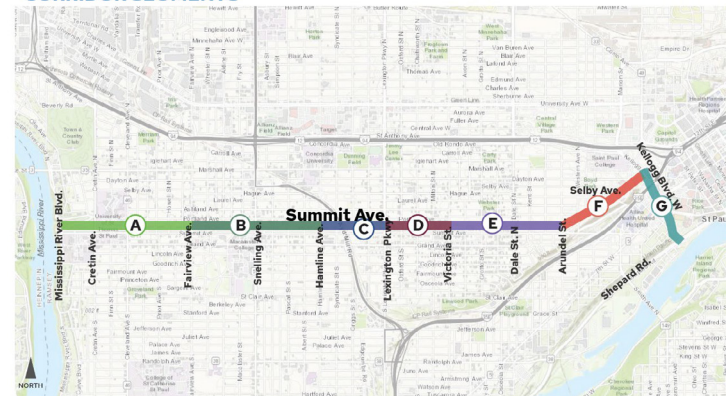


Figure 1: Corridor Segments

H:\STPL\0L1126160\2\_Preliminary\C\_Reports\Tech Memos\126160 Summit Ave Regional Trail\_Tech Memo 1 DRAFT.docx

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## Technical Memorandum #1

Summit Avenue Regional Trail Master Plan

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### Existing Conditions

#### Roadway Characteristics

In order to better understand the trail corridor and efficiently explore alignment alternatives, we have identified typical sections, intersection types, and transitions by segment. Necessary deviations from these typical treatments will be identified as we refine potential trail alignments.

#### Typical Sections

The following three typical sections are present in segments A through F:

Typical Sections:	Segment:					
	A	B	C	D	E	F
200-foot ROW with single median						
200-foot ROW with double median						
100-foot ROW without median						

Table 1: Typical Sections by Segment

Segments D, E, and F vary in their sidewalk width. All three segments include approximately 26-feet behind the back of curb. Segment D includes a 6-foot sidewalk; the sidewalks in Segment E vary from six- to eight-feet; and Segment F includes a 10' sidewalk.

Figure 2: Typical Section, Segments A and C

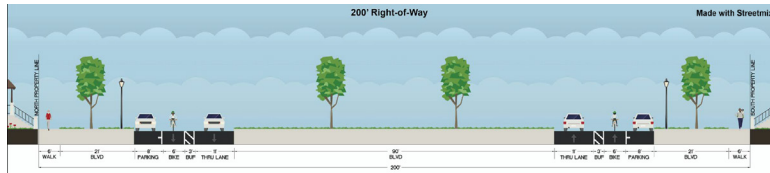
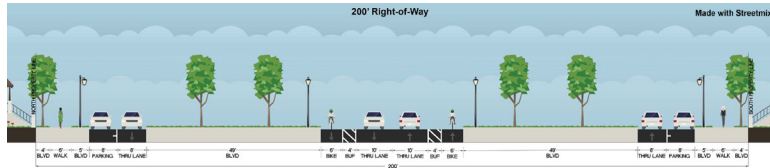


Figure 3: Typical Section, Segment B



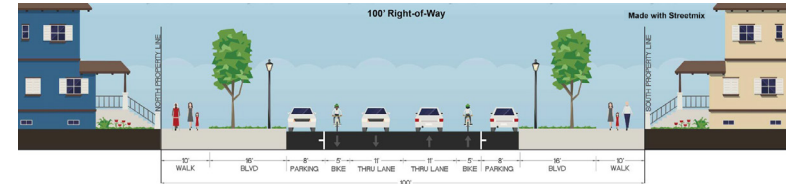
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Figure 4: Typical Section, Segments D, E, and F



#### Intersection Types

There are 48 roads intersecting the identified trail corridor between Mississippi River Boulevard and Kellogg Boulevard (segments A through F, 4.7 miles). Of these 48 intersections, **45 are full access** and **3 are reduced access** (S Wheeler St, Aldine St, Cambridge St). The dominant traffic controls at intersections are side street stops and signalized intersections. Intersections are spaced anywhere from approximately 350- to 900-feet apart. Intersection spacing is more regular, at around 650-feet, east of Snelling Avenue.

All segments – and sections - include both of these intersection types creating six “typical” intersections.

- Traffic signal at single median
- Side-street stop at single median
- Traffic signal at double median
- Side-street stop at double median
- Traffic signal without median
- Side-street stop without median

Two intersections fall outside of these intersection types. The intersection with Mississippi River Boulevard has side street stops on Summit and there is an all-way stop at the intersection with Ramsey Street.

The implications of intersection types will become more apparent as we narrow down feasible trail alignments.

#### Transition Types

The transitions between typical sections will require additional attention and exploration of how to best design the regional trail to ensure a consistent alignment, user-friendly wayfinding, and safe & comfortable crossings at roadways. The three transitions and their locations are listed below. All transitions occur at signalized intersections:

- Fairview Avenue - single to double median
- Hamline Avenue - double to single median
- Lexington Parkway - single median to no median

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### Atypical Areas

There are several sections and points in the corridor which are atypical and do not align with the previous descriptions. The Ayd Mill Road bridge is the primary atypical component in segments A through F. Segment G may also be considered atypical as its character and roadway characteristics differ considerably from Summit Avenue.

Trail alignment and design alternatives for these areas will be explored as we refine how the trail will be integrated in the more typical segments. This will provide a clearer understanding of what we are tying into and how to respond to the restraints of the atypical areas.

### Site Evaluation

#### Corridor Context

Summit Avenue is one of the most iconic public spaces in the Twin Cities with national recognition. Incorporating a regional trail connection between the Mississippi River to Downtown Saint Paul through this historic corridor requires careful consideration and sensitivity of the corridor context to create a value-adding amenity.

#### Corridor History

The historical significance of Summit Avenue cannot be overlooked. The historic architecture, the wide medians, and the mature tree canopy are a big part of what makes this corridor unique. The project team will coordinate with the applicable historic preservation agencies to identify design and alignment alternatives that will not detract from this special character.

The following historic districts overlay Summit Avenue. The implications of these designations will be explored as part of a future technical memo:

- **National Register of Historic Places** (National Park Service - NPS)
  - West Summit Avenue Historic District: Summit Avenue between Lexington Parkway and Mississippi River Boulevard (Segments A-C).
  - Historic Hill District: This district extends past Summit Avenue, but includes the corridor from Lexington Parkway to the intersection with Dayton Avenue (Segments D-F).
- **State Historic District** (State Historic Preservation Office - SHPO)
  - Historic Hill District: This district extends past Summit Avenue, but includes the corridor from Ayd Mill Road to the intersection with Marshall Avenue (Segments C-F).
- **Local Historic Districts** (City of Saint Paul Historic Preservation)
  - West Summit Avenue Historic District: Summit Avenue between Lexington Parkway and Mississippi River Boulevard (Segments A-C). *The extents of the local and national districts vary slightly, but include the same corridor segments as part of this trail master plan.*

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- Historic Hill District: This district extends past Summit Avenue, but includes the corridor from Lexington Parkway to the intersection with Dayton Avenue (Segments D-F).
- **Historic Sites:** Historic sites along the corridor have been identified on **Figures 6-12** and include:
  - Dr. Ward Beebe House, 2022 Summit Avenue (*local and nationally listed*)
  - Pierce and Walter Butler House, 1345 - 1347 Summit Avenue (*local and nationally listed*)
  - Irvine, Horace Hill, and Clotilde House (Governor's House), 1006 Summit Avenue (*local and nationally listed*)
  - F. Scott Fitzgerald House (Summit Terrace), 587-601 Summit Avenue (*Local, State, and Nationally Listed*)
  - Burbank-Livingstone-Griggs House (James C. Burbank House), 432 Summit Avenue (*Local, State, and Nationally Listed*)
  - James J. Hill House, 240 Summit Avenue (*Local, State, and Nationally Listed*)
  - St. Paul Cathedral-Catholic, 239 Selby Avenue/225 Summit Avenue (*Nationally Listed*)

#### Land Use

**Figures 6-12** identify government, education, and religious institutions along the corridor as well as commercial businesses. The primary land use along the corridor is single family homes; locations of multi-family housing have been identified on the figures.

Grand Avenue parallels Summit and includes a high concentration of commercial businesses and restaurants at the intersections with Cambridge Street (Segment B), Snelling Avenue (Segment B), and from the intersection of Ayd Mill Road to Dale Street (Segment C-E). A grocery store is at the intersection with Syndicate Street (Segment C). These commercial concentrations may have impacts on the demands within the right-of-way on Summit due to their proximity. These areas will be further explored as part of parking demand evaluation on the corridor.

#### Integrating Systems

The existing transit routes and stations, and bikeways have also been identified on the above referenced figures. It will be important as we begin to identify a preferred trail alignment that we consider connections to existing multi-modal transportation networks and facilities.

#### Property Impacts

Impacts to private property are not anticipated to be necessary to identify a trail alignment and design along Summit Avenue. The 100- and 200- foot right-of-way and existing parkway character are expected to provide sufficient space for a trail to be sited within the existing corridor section.

Should property impacts be identified, they are anticipated to be temporary in the form of easements for construction. Specific private property elements which may be impacted depending on the preferred design include:

- Existing stairs and retaining walls

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- Trees on private property (with critical root zones near the ROW)
- Planting beds



Figure 5: Retaining walls, concrete stairs, and planting beds about the right-of-way along Summit Avenue

### Vegetation

The mature tree canopy along Summit Avenue is highly valued by the community and visitors alike. Plantings in the boulevards and medians create the parkway character which invites a regional trail facility along this corridor. Impacts to vegetation will be considered as part of trail alignment alternatives.

The following information was provided to the design team by the City Forester regarding trees along Summit Avenue:

#### Preservation / Protection of Trees:

- City Code Chapter 176 applies, no overlays beyond Heritage Preservation District language
- 2010 Park and Street Tree Master Plan is latest version approved as a reference for approach to Street Trees
- “Landmark trees” notable by nomination as significant trees, not protected formally or beyond that recognition

#### Design and Mitigation of Impacts:

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- Critical and Structural root zones are starting points for evaluation; species comes into play as well, as to how a tree would be impacted
- Structural root zone: Once you begin damaging that there is more potential for failure of the tree; typically, within 8-10 feet of the trunk
- Zones of impact can be clipped at curb, generally speaking significant roots are not found beyond these existing paved areas.
- Best practices to mitigate impacts in structural root zone:
  - Minimize excavation
  - Air-space roots to evaluate field design and work around plant and get materials in (labor intensive)
  - City standard tree-protection details to be utilized
- Evaluate trees on private property within 10' of the back of sidewalks. These may be impacted or require further evaluation during construction to minimize impacts.

**Ash Trees:** The general approach for removal is a three-year planned process or as part of active construction projects: year 1 – removal; year 2 – stump removal; year 3 – re-planting

Summit Avenue ash tree removals typically occur January to July. Trees have been removed between Fairview Avenue and Dewey Street. Summit Avenue west (Mississippi River Boulevard to Arundel Street) is planned for removals starting in winter 2021. Summit Avenue east (Arundel Street to Kellogg Boulevard) is planned for removals starting in 2023.

### Multimodal Travel Volumes

The City of Saint Paul’s Department of Public Works has conducted annual bicyclist and pedestrian counts since 2013. These counts take place mid-week in September during peak hours (4-6 p.m.). Benchmark locations are used each year to measure annual changes in non-motorized traffic. Typically, 30 benchmark sites for bicyclist traffic and 25 benchmark sites for pedestrian traffic have been counted since 2013. The number of locations counted is dependent on the number of participating volunteers who manually tabulate the counts. In 2019, 21 benchmark sites were counted for bicyclist traffic and 13 benchmark sites were counted for pedestrian traffic.

In the 2019 bicyclist and pedestrian counts, Summit Avenue (east of Fairview Ave) had the second highest bicycle counts, and three of the top five top walking counts (east of Cleveland Ave, east of Fairview Ave, and east of Western Ave).

#### Bicycle:

- Summit Avenue (east of Fairview Ave) had 252 bicyclist counts in 2019, an average of 239 (2013-2019), a 6% drop from 2013-2019, and a 20% increase from 2018-2019.
- Summit Avenue (east of Dale St) had 126 bicyclist counts in 2018, an average of 135 (2013-2018), and a 25% drop from 2013-2018.
- Summit Avenue (east of Cleveland Ave) had 121 bicyclist counts in 2019, an average of 180 (2017-2019), and a 46% drop from 2017-2019.

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- Summit Avenue (east of Western Ave) had 78 bicyclist counts in 2019, an average of 112 (2013-2019), and a 37% drop from 2013-2019.

#### Pedestrian:

- Summit Avenue (east of Fairview Ave) had 180 pedestrian counts in 2019, an average of 239 (2013-2019), a 6% drop from 2013-2019, and a 20% increase from 2018-2019.
- Summit Avenue (east of Dale St) had 143 pedestrian counts in 2018, an average of 171 (2013-2019), and a 16% drop from 2013-2018.
- Summit Avenue (east of Cleveland Ave) had 228 pedestrian counts in 2019, an average of 256 (2017-2019), and a 22% drop from 2017-2019.
- Summit Avenue (east of Western Ave) had 171 pedestrian counts in 2019, an average of 135 (2013-2019), and an 8% increase from 2013-2019.

**Vehicular:** Annual average daily traffic volumes on Summit Avenue are 7,000-8,400 west of Lexington Avenue, 11,200 from Lexington Avenue to Ramsey Street, and 3,900 from Ramsey Street to John Ireland Boulevard. 2040 Forecasted volumes remain the same. Snelling Avenue, Lexington Avenue, and Kellogg Boulevard have the highest traffic volumes of the cross streets in the trail corridor at 17,000-28,000 AADT. (Source: MnDOT Traffic Counts)

#### Traffic Considerations

Traffic and intersection impacts will be evaluated as we identify feasible trail alternatives and alignments. Intersections which are more complex – for example, at transition points, with higher traffic volumes, or with a high number of conflict points – will be evaluated with potential trail facilities to identify design solutions that support the multi-modal nature of the corridor.

#### Parking

**Figures 13-19** inventory the existing parking conditions along the trail corridor. Parallel, on-street parking is consistent along Summit Avenue with variations in restrictions (permit requirements, hours, etc.). There is no on-street parking along Kellogg Avenue or Eagle Parkway (Segment G).

Further data is required to identify utilization level and implications to potential regional trail alignments. Utilization of on-street parking will be especially important from Lexington Avenue to Kellogg Boulevard (Segments D-F) where the 100-foot right-of-way adds limitations to where a trail facility can be constructed.

### Regional Trail Facility Guidance

#### Previous Planning Documents

Existing planning documents adopted by the City provide parameters on how the Summit Avenue Regional Trail fits into the larger vision for the City.

#### 2040 Comprehensive Plan

*Celebrating Parks* is one of the **core values** shaping the comprehensive plan for the City. Summit Avenue with its wide vegetated medians is characterized by many as a linear park. The alignment and design elements of the regional trail will support this character and use.

*Community/Public Health* is listed as a **focus area** of the comprehensive plan. The existing corridor serves as both an active transportation and recreation corridor enabling people to meet their daily

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physical activity needs. Enhancing this aspect with the regional trail will expand this function of the corridor and the geographic reach of the recreational user. Implementation of the bike and pedestrian plans (outlined below) are included with the draft policy (policy # T-24 and T-25) to support community health for all.

Summit Avenue is identified as a major collector with an existing on-road bikeway. Additionally, it has been identified as a Regional Bicycle Transportation Network (RBTN) Tier 2 Corridor.

#### Regional Bicycle Transportation Network (RBTN)

The goals of the RBTN include establishing an arterial network of on-street bikeways and off-road trails throughout the metro area to accommodate bicycle trips connecting regional destinations.

Tier 1 and Tier 2 priority corridors are identified based on where they can most effectively promote active transportation mode choices (biking, walking, transit) and where supporting travel demand exists.

The *Transportation* chapter identifies the following goals. We have included notes on the subsequent policies which are applicable to this master planning process.

- Investment that reflects the City's priorities.
  - T-3: Design per the following modal hierarchy: pedestrians, bicyclists, transit, other vehicles
- Safety and accessibility for all users.
  - T-7: Implement intersection safety improvements such as...pedestrian countdown timers, and leading pedestrian signal intervals...and other elements to lower motor vehicle speeds
  - T-10: Design sidewalks, trails, and transit stops for personal safety (real and perceived)...
  - T-13: When street design changes involve the potential loss of on-street parking spaces, prioritize safety for all transportation modes. Explore mitigation of lost spaces where feasible and practical.
- A transportation system that supports access to employment and economic opportunity.
- True transportation choice throughout the city, with a shift from single-occupant vehicles toward other modes.
  - T-24: Implement the Bicycle Plan
  - T-25: Implement the Pedestrian Plan
- Sustainable and equitable maintenance models.
- Environmentally-sustainable design.
- Functional and attractive Parkways.
  - T-41: Maximize space for recreation and landscaping uses within Parkway rights-of-way, and prioritize recreation and landscaping in Parkway design in order to maintain a park-like feel, particularly on the Grand Round.
- A system that responds to technology and shapes its implementation

The *Parks, Recreation, and Open Space* chapter identifies the following goals. We have included notes on the subsequent policies which are applicable to this master planning process.

- Equitable allocation of programs, resources and amenities.
- People, programming and spaces responsive to changing needs.

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- PR-9: Use customer and resident feedback on needs, satisfaction and trends to improve park experience, advance equity and bring in new users
- 3. Environmental and economic sustainability.
  - PR-19: Improve the environmental sustainability and resiliency of parks through strategies such as shared, stacked-function green infrastructure; best management practices in stormwater management; increased tree canopy; increased plant diversity and pollinator-friendly plantings
- 4. A healthy network of community partnerships.
- 5. Strong and accessible connections.
  - PR-35: Prioritize safety and equity when filling gaps in the trail and bikeway system to ensure seamless connections throughout the city for pedestrians and bicyclists of all ages and abilities.
  - PR-36: Integrate parkways and trails with the city’s broader transportation network to provide convenient and safe access to the park system.
  - PR-38: Improve and encourage pedestrian and bicycle connections between park facilities and other significant destinations, such as lakes and rivers, schools, transit facilities and Neighborhood Nodes.
  - PR-39: Emphasize safety, convenience and comfort when designing new trails or rebuilding those that already exist.
  - PR-40: Provide interpretive elements to educate users about unique aspects of the park system
  - PR-41: Provide consistent wayfinding signage in each project or park so that it is recognizable as part of the broader City system.
  - PR-44: Support facility improvements that better connect neighborhoods to the Mississippi River

### 2015 Bicycle Plan\*

Summit Avenue is identified in the 2015 Bicycle Plan as a major bikeway with planned in-street facilities (bike lanes, buffered bike lanes, one-way cycle tracks, or two-way cycle tracks).

The bicycle plan references the Metropolitan Council’s guidance on regional trails as facilities for recreational travel along linear pathways for bicyclists, pedestrians, and other users throughout the metropolitan area. In urban areas such as Saint Paul, the regional trail network also plays an important function for transportation bicycling and often forms the backbone of the bicycle transportation network. Regional trail facilities are often developed along natural or linear features, which can limit the number of intersections, greatly enhancing safety and comfort for trail users.

The Saint Paul Bicycle Plan identifies the existing regional trails and other linear trails that pass through regional parks, as well as planned regional trails and regional trail search corridors. The regional trail search corridors include Summit Avenue. The Metropolitan Council requires the city to prepare a master plan document for all planned regional trails. Regional trail search corridors are defined by the Metropolitan Council in the Parks Policy Plan.

**Action Item 6.5.1:** *Actively pursue designation and development of additional regional trails... Identify regional trail alignments within the regional trail search corridors and prepare regional trail master plans for trails where alignments are known.*

*\*Saint Paul is currently working on an update to the bicycle plan.*

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### 2019 Pedestrian Plan

The Saint Paul Pedestrian Plan addresses citywide walking needs such as connecting the sidewalk system, providing safer ways to cross streets and education and enforcement programs to support safe walking. It includes recommendations to achieve the plan’s vision: ***Saint Paul is a walking city—we are more healthy, resilient and connected when walking is safe and appealing for all.***

Saint Paul community members have identified three priorities for making walking safer and easier:

- Crossing busy streets
- Filling sidewalk gaps
- Improving snow and ice removal

Summit Avenue from Hamline Avenue to Lexington Parkway and from St Albans Street to John Ireland Boulevard are identified as medium priorities based on census tracts for sidewalk investment. There are no priority segments of Summit Avenue identified as sidewalk gaps.

The following actions are included in the Saint Paul Pedestrian Plan to improve pedestrian safety and comfort at busy street crossings.

- 1-1. Plan, design, build and maintain the city’s transportation system in a way that prioritizes walking first, followed by bicycling and transit use and lastly other vehicles.
- 1-2. Advocate for a statewide reduction in urban speed limits as part of the city’s legislative agenda.
- 1-3. Follow best practices for marking crosswalks. Convert crosswalks marked with parallel bars to high-visibility crossings to improve visibility of crosswalks. Whenever possible, use durable crosswalk marking materials.
- 1-4. Ensure visibility of pedestrian crossings. Review street lighting, sign placement, street furniture, bus shelters, foliage growth, and parking restrictions at intersections as part of all reconstruction projects and requests for crossing improvements.
- 1-5. Establish a consistent process for reviewing, improving and prioritizing pedestrian crossings. Review and update policies as necessary to incorporate best practices and national guidelines. Apply these policies to all projects and requests that include crossing improvements.
- 1-6. Reduce pedestrians’ exposure to motor vehicles and lower street design speeds. Pursue changes in street designs that lower design speeds and reduce roadway crossing widths.
- 1-7. Coordinate with transit providers and the Saint Paul Bicycle Plan to ensure pedestrian solutions complement bicycling and transit needs.
- 1-8. Develop a program to proactively implement infrastructure improvements in high crash risk locations. Conduct a Pedestrian Systemic Safety Analysis to identify the highest risk locations for pedestrian crashes. Develop a prioritized list of candidate pedestrian safety improvements on high-risk streets and a five-year plan for implementation.
- 1-9. Dedicate additional funding to improve pedestrian crossings in conformance with best practices and support on-going maintenance of these treatments.
- 1-10. Provide regular crossing opportunities on collector and arterial streets, prioritizing streets in High Priority Areas for Walking Investments.

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1-11. Work with partners to support safe walking environments through initiatives like Crime Prevention through Environmental Design, lighting improvements, neighborhood walks, and trash cleanup.

1-12. Identify resources to improve on-going maintenance of existing crossing facilities, including snow and ice removal at crossings, crosswalk markings and replacement of flexible traffic posts in temporary crossing improvements.

2-1. Design streets in accordance with Saint Paul’s Street Design Manual to promote a comfortable walking environment on all street types in Saint Paul.

3-1. Pursue opportunities to install and maintain interim pedestrian crossing improvements using low-cost materials.

3-2. Review and update the Saint Paul Department of Public Works Temporary Pedestrian Access Route (TPAR) policy (originally adopted 2014) to define requirements for TPAR implementation and mandate use of best practices identified by Public Right-of-Way Accessibility Guidelines. Proactively inspect TPARs and enforce contractor compliance with city policy.

3-3. Maximize impact of capital projects through coordination with partner jurisdictions such as Ramsey County, MnDOT and Metro Transit. Define internal structure for managing external partnerships and identifying opportunities to maximize use of resources during capital projects

### Metropolitan Council Regional Parks Policy Plan

The Summit Avenue Regional Trail has been designated as a regional trail search corridor in the Metropolitan Council’s 2040 regional Parks Policy Plan. As outlined in this document, regional trails:

- serve the entire metropolitan region
- are developed for one or more varying modes of nonmotorized recreational travel
- are a sufficient length to serve as a link between two or more regional parks
- connects public interest destinations
- serves as backbone to local trail network, with regional trail functioning much like regional highway
- include sufficient corridor width to protect natural resources
- are off-road facilities; on-road trails are acceptable when off-road trails are not feasible
- should not duplicate an existing trail
- should be placed where the trail treadway will have no adverse impact on the natural resource base

Regional trails are categorized further into Destination Trails and Linking Trails. These facilities meet all of the above characteristics and are distinct in that:

- **Regional Destination Trails or Greenways** are a sufficient length and highly scenic to be considered standalone destinations. They are preferably adjacent to high quality natural

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areas. Destination trails are visually separated from the road system (more than 50% off-road)

- **Regional Linking Trails:** when feasible, should attempt to connect to population, economic and social centers along its route. May be on-road separated facilities.

### Industry Best-Practices

The following table outlines current best practices for bicycle facilities based on traffic volumes. Based on the existing annual average daily traffic counts on Summit, the majority of the corridor falls into the > 6500 vpd category. The segment from Ramsey Street to John Ireland Boulevard is a 3,900 vpd.

Roadway Traffic Volume	Posted Roadway Speed	Recommended Facility Type		
		FHWA Bikeway Selection Guide	MnDOT Bicycle Facility Design Manual	NACTO Designing for All Ages & Abilities
< 3000	25-30 mph	Shared Roadway or Bike Boulevard	Shared Roadway or Bike Boulevard	Bike Boulevard (<25 mph)
3000 – 6500	25-30 mph	Bike Lane (Buffer Pref.)	Bike Lane (Buffer Pref.)	Bike Lane (<6000 AADT and <25mph)
> 6500	25-30 mph	Separated Bike Lane or Sidepath	Separated Bike Lane or Sidepath	Separated Bike Lane or Sidepath

Table 2: Industry Best-Practices

### Outstanding Items

Coordination items or clarifications needed in order to complete this master plan as of the submittal of this technical memo are listed below:

- Emergency services – minimum roadway width requirements
- Metropolitan Council – trail design requirements (materials, minimum design standards, and modal separation allowances)
- Historic Preservation – trail integration requirements or preferences

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Fax: (612) 416-0222  
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**TECHNICAL MEMORANDUM #2**

**Date:** January 28, 2022  
**To:** Mary Norton, PLA  
**From:** Cody Christianson, P.E. and Madeline Dahlheimer, PLA  
**Subject:** Summit Avenue Regional Trail Master Plan  
City of St. Paul  
BMI Project No.: OT4.126438

The goal of this technical memo is to summarize and centralize information from several discussions that have occurred over the past month related to design parameters and begin to explore potential alignments and characteristics of the regional trail.

**Agency Coordination**

The project team has connected with several agency stakeholders to discuss the design characteristics of the regional trail along Summit. As the interests in this corridor are wide and varied, it is our hope that these discussions will aid in setting design parameters from which we can begin to identify and evaluate feasible alternatives.

The following section summarizes primary takeaways from these meetings. It is important to note that the project team will need to further evaluate some of the agency positions to establish what is considered guidance or preference versus what is considered to be a mandatory requirement and any potential mitigation measures that may be necessary.

**Parks and Public Works Operations & Maintenance – November 30, 2021**

Participants: Karin Misiewicz, Nick Fadden (Parks O&M); Beverly Farraher, Matt Morreim (PW O&M); Mary Norton, Brett Hussong, Katie Hamerlinck (City Parks)

**Discussion Takeaways:**

- Maintenance division between departments
  - Parks - medians, boulevards, greenspace, and trail facility
  - Public Works – roadway, lighting, drainage
  - *Property owners – snow removal along sidewalks*
- Avoid impacts to corridor retaining walls – historically difficult to identify who owns
- Pervious pavement requires additional maintenance and resources
- No additional/new equipment is anticipated in either department – level of service expectations would be best if facility is compatible with existing equipment

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**Planning and Economic Development (PED) – January 2, 2022**

Participants: Emma Siegworth (PED); Barb Mundahl, Reuben Collins (City Engineering); Brett Hussong, Katie Hamerlinck (City Parks)

**Discussion Takeaways:**

- Selective removal of parking may have success – removal on both sides as non-starter
  - Citywide policies/guidance supporting pedestrians and multi-modal access priorities over parking
- Goal is to make bicycling and pedestrian travel safer as a priority
- More confident riders will continue to use the street, regardless of off-trail facilities
- Summit Hill District revised neighborhood plan (in progress)
  - More bicycle and pedestrian friendly access, improve safety (separated lanes, off-street paths)

**State Historic Preservation Office (SHPO) & Heritage Preservation Commission (HPC) – January 6, 2022**

Participants: Sarah Beimers (SHPO); George Gause (HPC Staff); Brett Hussong, Katie Hamerlinck, Barb Mundahl (City Staff)

**Discussion Takeaways:**

- Important to understand the historic nomination that currently exists, Historic Hill designation 1976 and West Summit Ave. Historic District designation 1993.
  - Recommend a preliminary study to evaluate what is the historic integrity of the corridor in the context of these historic districts.
  - Identify design strategies which would be considered to have an “adverse effect”
- SHPO and HPC have advisory role during planning; established processes to follow with implementation

**Metropolitan Council – January 7, 2022**

Participants: Tracey Kinney, Chee Yang (Met Council); Brett Hussong, Katie Hamerlinck, Barb Mundahl, Reuben Collins (City Staff)

**Discussion Takeaways:**

- Goal to identify community preferences through engagement
- Corridor constraints should be communicated related to design decisions
  - Trail may be separated or adjacent to curb
  - Maintain on-street bike lanes as part of trail if ROW or other constraints limit other alternatives
- Consider regional trail from edge of cycle track (curb) to edge of pedestrian realm (homes) – regional trails often include natural environment (boulevard) in corridor
  - Clarify and understand maintenance implications of greenspace between facilities in this scenario. Boulevards are currently maintained by homeowners.
- Combining existing 6’ sidewalks and new 12’ cycle track as regional trail facility may require additional wayfinding/placemaking to communicate trail status (signage as example)
- Aggregate surface acceptable if desire of community
- Excerpt from Thrive MSP Regional Linking Trail description (Table 3-1):

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- *When feasible, linking trails should attempt to connect to population, economic, and social centers along its route*
- *The trail treadway should be placed where it will have no adverse impact to the natural resource base*

### **Department of Safety and Inspections** – January 14, 2022

Participants (email correspondence): Ann Blaser (DSI); Mary Norton (City Parks)

#### **Discussion Takeaways:**

- 20-feet is the minimum roadway width to maintain emergency access
- The 20-foot requirement does not need to determine what the lane use are (drive lane, parking, bike lane, etc.)

### **Bolton & Menk (BMI) Cultural Resources** – January 18, 2022

Participants: Renee Barnes, Scott McBride (BMI); Mary Norton (City Parks)

#### **Discussion Takeaways:**

- NRHP Nomination for West Summit Historic district calls out medians as contributing element; width and plantings also discussed
  - Hill district includes same general characteristics
- Asphalt trail down center of median may be considered an adverse effect
- Design approaches which improve safety may supersede historic preservation requirements
- Commercial nodes and residential areas may have different considerations/standards
- *BMI to provide scope for corridor historical analysis*

### Mississippi River Corridor Critical Area (MRCCA)

The Mississippi River Corridor Critical Area program provides coordinated land use planning and regulations surrounding the Mississippi River as it winds through the seven-county metropolitan area. The development of local government plans and ordinances is required by state statute. **The west and east termini of the Summit Avenue Regional Trail cross into this critical area.**

The required MRCCA chapter in City's Comprehensive Plan includes the following guidance on *Open Space & Recreational Facilities*:

**Policy CA-35.** Maintain and expand public access to the river's edge.

**Policy CA-36.** Maintain and expand open space and recreational facilities along the river, connect them with one another as part of the Great River Passage, and connect them to adjacent neighborhoods.

**Policy CA-38.** Encourage the creation, connection and maintenance of open space, recreational facilities and other public connections to the Mississippi River.

The addition of a regional trail facility is not anticipated to create conflict with goals and guidance of the MRCCA program.

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### Corridor Vision, Goals, & Objectives

A draft corridor vision and objectives for the regional trail have been developed by the project team after review of the public engagement conducted by the City of St. Paul through the Engage Saint Paul online platform.

The following vision, goals and objectives will be refined following upcoming Technical Advisory Committee (TAC) and Design Advisory Committee (DAC) meetings where the vision for the trail will be discussed. Feedback from these meetings will be used to finalize these guiding statements and assist in identifying priorities and evaluation measures.

#### **Draft Vision**

The Summit Avenue Regional Trail offers a high-quality recreational experience celebrating the past and present along with the natural and built environments. The trail provides regional and local connections serving a broad range of users.

#### **Goals**

- Identify a regional trail alignment on Summit Ave. to improve recreation experience and safety for all users
- Identify ways to balance the context of Summit Ave. when modernizing infrastructure
- Improve connectivity and public access to open space
- Support the evolving needs of users to create a more resilient, people-oriented corridor

#### **Objectives**

1. Identify design strategies to improve safety and comfort
2. Serve all ages and abilities with trail facility design
3. Protect vegetation where possible to maintain the natural context and parkway character of the corridor
4. Identify a trail facility design and alignment compatible with the historic context
5. Identify infrastructure compatible with available or attainable maintenance practices
6. Align trail improvements with available funding opportunities and coordinated capital improvement projects

### Corridor Analysis

Evaluating land uses along the corridor and their compatibility with a regional trail facility can assist in identifying a preferred alignment. **Figures 1-6** illustrate the corridor land uses by segment along with other inventoried information from the Technical Memo #1. The following table outlines compatible, neutral, and conflicting land uses.

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**Table 1: Land Use Compatibility**

Compatible Land Use	Neutral Land Use	Conflicting Land Use
<ul style="list-style-type: none"> <li>green space (real or perceived)</li> <li>historically significant properties (interpretive opportunity)</li> <li>educational institutions</li> <li>multifamily homes</li> <li>commercial businesses*</li> </ul>	<ul style="list-style-type: none"> <li>single family homes</li> <li>religious institutions</li> </ul>	<ul style="list-style-type: none"> <li>commercial businesses*</li> </ul>

\*Commercial businesses have been identified as both potentially compatible and conflicting with the regional trail. While connections to commercial centers are generally an asset to a trail network, we are currently exploring the feasibility of removing on-street parking on one side of the street in order to construct a trail facility. In this case, it is assumed that the preference would be to maintain parking on the same side as the commercial businesses, therefore making them incompatible with the trail.

Specific corridor characteristics have also been called out on the figures which are compatible or could potentially be in conflict with the regional trail or construction of the regional trail:

- Compatible
  - Existing or planned transit stops
  - Ash trees
- Conflicting
  - Retaining walls
  - Landmark trees

**Note:** A third revision of this set of figures will be created following the stakeholder meetings and completion of a parking study. Additional insights or values related to compatible land uses may arise from stakeholder discussions. Underutilized parking areas may provide an opportunity for trail alignment or may provide additional insight into which side of Summit the trail. The final version of the figures, couples with the priorities identified through stakeholder engagement, should be a useful tool in identifying trail alignment

### Parking Study

Initial review of corridor typical sections and possible locations for the regional trail indicates the potential for a need to eliminate parking on one side of the street in order to avoid undesired impacts to the corridor character and vegetation. It is assumed that elimination or reduction in parking may be necessary in segments D, E, and F, where there is a 100-foot right-of-way, and not in segments with a 200-foot right-of-way.

Existing City planning documents, namely the 2040 Comp Plan, have set a modal hierarchy for designing rights-of-way with pedestrians first (with a focus on safety), bicyclists second (with a focus on safety),

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transit third, and other vehicles last. In order to better understand the feasibility of removing parking and the impact it may have on surrounding uses, the project team is compiling parking utilization rate information along the corridor.

### **2019 Parking Study**

A parking study was conducted by the City along Summit Avenue in the summer and fall of 2019 to determine the feasibility of overnight parking restrictions in order to perform routine maintenance along the road. The parking counts spanned from Mississippi River Boulevard to Selby Avenue (segments A-F of the trail alignment). Counts were taken on three different Thursday and Friday nights between the times of midnight and six a.m. The following excerpt from the memorandum dated January 31, 2020 (Kathy Lantry, Department of Public Works), summarizes the results of the study:

- Parking utilization rates well below 50% were observed along most of Summit Avenue on all six count dates.
- Parking utilization rates above 75% were consistently observed for a two block segment near Dale Street as well as on intersecting side streets near Dale Street.
- Parking utilization rates above 50% were observed near the University of St. Thomas in September when school was in session.

### **2022 Supplementary Parking Study**

As part of this trail master planning process, Bolton & Menk will collect additional parking utilization information from Lexington Avenue to John Ireland Boulevard to supplement the overnight counts from 2019. To provide a full picture of the parking demand the following days and times have been proposed. Results of this parking study will be provided with Technical Memo #3.

- Weekday afternoon – identify parking utilization when Mitchell Hamline School of Law is in session
- Saturday evening – understand parking utilization with commercial activity along Grand Avenue
- Sunday morning - understand impact to parking due to corridor churches

### Traffic Analysis

Intersections which will require traffic analysis are yet to be determined at the time of this Technical Memo. It is still the position of the consulting project team that these intersections will become more evident once trail alignment and/or typical sections alternatives are identified.

It is assumed that traffic analysis on intersecting local streets may not be necessary as the addition of a regional trail facility is not anticipated to impact traffic patterns or intersection controls. Consideration may need to be made if pedestrian leading intervals or separate bicycle signal phases are suggested at intersections and would drastically change the signal timing or if roadway configuration changes are proposed (ex. eliminating a turn lane). A meeting with the City's traffic group representative will allow

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the project team to understand what information is readily available for local streets and intersections and where additional information may be needed.

State and County intersecting roads may require additional traffic analysis in order to communicate potential impacts to those agency stakeholders. These roads include Snelling Avenue (State Highway 51), Lexington Parkway (County Road 51), Dale Street (County Road 53).

### Possible Trail Configuration

**Table 2** identifies possible trail configurations based on corridor typical sections. Maintaining the existing bike lanes assumes that the trail facility would need to be multiuse for recreational cyclists who are not comfortable using the on-street bike lanes. If the bicycle facilities were reimagined as separated cycle tracks, it is assumed that the trail facility could be split between the cycle track and a separate path for pedestrians.

Segment:	Segment A/C	Segment B	Segment D/E/F
<i>Typical Section:</i>	Single Median, 200' ROW	Double Median, 200' ROW	No Median, 100' ROW
<b>Maintain Existing Bike Lanes</b>	Trail in median	Trail in N median	Trail on N side
	Trail on N side	Trail in S median	Trail on S side
	Trail on S side	Trail on N side	
		Trail on S side	
<b>Re-Imagine Bike Facilities</b>	One-way separated cycle track in median	One-way separated cycle track in median	One-way separated cycle track in boulevards
	One-way separated cycle track in boulevards	Two-way separated cycle track in median (north or south)	Two-way separated cycle track in boulevard (north or south)
	Two-way separated cycle track in median		
	Two-way separated cycle track in boulevard (north or south)		

**Table 2:** Possible Trail Configurations

### Trail Design Tools

This section outlines and briefly describes design tools that can be used to improve corridor safety and user experience regardless of recommended trail alignment. The majority of the tools contribute to traffic calming and/or improve visibility of pedestrian, cyclists, and motorists. Once a preferred trail alignment has been identified recommended locations for these tools can be made for further exploration during design and implementation of individual trail segments.

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### Crossings

#### Reduce corner radii

Corner radii directly impact vehicle turning speeds and pedestrian crossing distances. A smaller curb radii reduces turning vehicle speeds and decreases the crossing distances for pedestrians.

#### Curb extensions (bump-outs) at crossings

Curb extensions are devices that physically narrow the roadway, increasing the overall visibility of pedestrians by aligning them with the edge of the travel lane.

#### Median refuge island

A median refuge island is a protected space in the center of the roadway to facilitate 2-stage pedestrian crossing. An offset crossing is similar to a median refuge island, however the two legs of the crossing area offset to turn pedestrians in the direction of approaching traffic.

#### Raised crosswalks

A raised crosswalk is a crosswalk or bicycle crossing that is combined with a speed table, which raises the entire wheelbase of a motor vehicle. In addition to slowing motor vehicle traffic, raised crosswalks can also improve visibility between drivers, bicyclists and pedestrians at crossing locations.

#### High-visibility crosswalk

High-visibility crosswalk markings are ladder markings used to increase the visibility of a crossing location for drivers.

#### Rectangular Rapid Flashing Beacon (RRFB)

A rapid flashing beacon is an activated warning to drivers that pedestrians are present and intend to cross the road.

#### Bike signal phase (signalized intersections)

Bike signals should be considered at intersections where dedicated right turn lanes are present if a separated bike lane is considered as an alternative. Per FHWA guidance, no conflicting vehicular movements of any kind can be present during the bicycle crossing phase. All parallel vehicular traffic would need to be stopped during the bicycle crossing phase. Conversely, bicyclists would be held during parallel vehicle greens. For these reasons bicycle signal faces may be impractical without a dedicated right turn phase and substantial turn volumes (over 150 per hour).

#### Leading pedestrian interval (signalized intersections)

Leading pedestrian intervals give pedestrians and bicyclists a 3-7 second head start to cross an intersection during an all-red signal phase, allowing pedestrians to better establish their presence in the crosswalk before vehicles are allowed to turn.

#### Bicycle box (signalized intersections)

An intersection bicycle box is a designated area at the approach to a signalized intersection consisting of an advance stop line and bicycle symbols. Bike boxes are used primarily to facilitate queuing a larger number of bicyclists at the head of the traffic queue to reduce conflicts between drivers and bicyclists at the beginning of the green signal phase.

#### Two-stage turn queue box (signalized intersections)

A two-stage turn queue box designates an area at the intersection for bicyclists to wait for traffic to clear an intersection. It allows the bicyclist to traverse the intersection, enter the turn box, reorient

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themselves to cross the road, and wait until the cross-street signal changes to cross. They can be used for either left or right turns.

### **Corridor**

#### **Median closures**

There are several secondary intersections along Summit which are currently full access, including a split in the median. Where feasible with traffic operations, some of these gaps could be closed to create a more continuous median and fewer conflict points between user groups.

#### **Differential pavement/pavement markings**

Utilizing different pavement types or finishes can aid in distinguishing the trail from other facilities and increase awareness of the trail. This approach can be applied along the trail corridor and/or at crossing locations where appropriate.

### **Placemaking**

The following tools support placemaking, help to establish a trail character, and aid in traffic calming by adding additional detail to the experience of those traveling along the corridor.

#### **Trail wayfinding signage**

Wayfinding is signage intended to help pedestrians and bicyclists navigate an area, inform them of the direction and distance to specific destinations, or mark the location of a designated pedestrian or bike path. Wayfinding signage can be paired with community branding to mark a specific district.

#### **Community Branding**

Community branding is recognizable neighborhood character with consistent style of site amenities which may include monumentation, light poles with banners, or various site furnishings (benches, bike racks, etc.).

#### **Interpretive Signage**

Informational plaques or signs and historical markers can be used to draw attention to the unique history of Summit Avenue.

#### **Public Art**

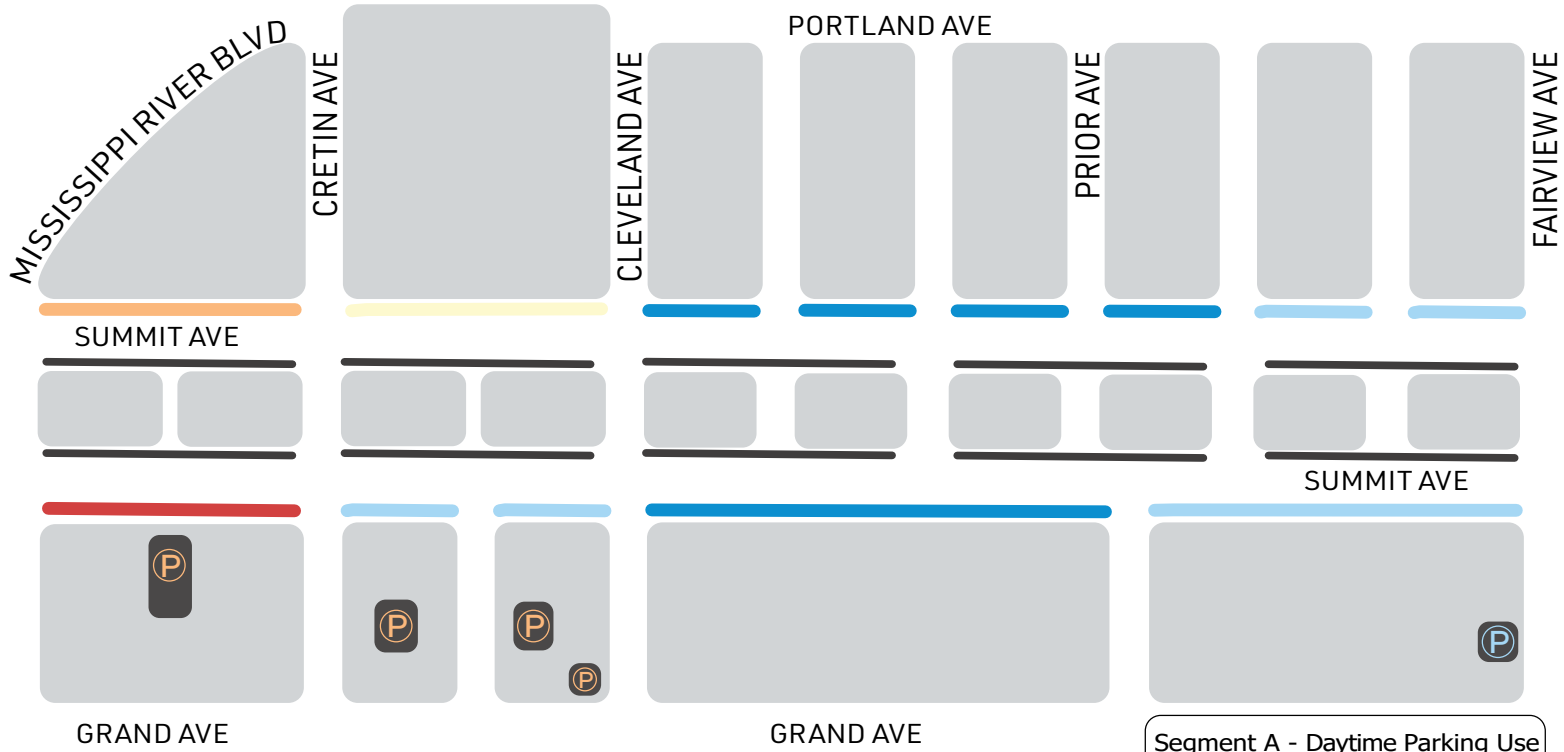
Art in the boulevard or pedestrian space can be used as a tool for traffic calming as well as wayfinding or establishing a sense of place. Public art could be a sculpture, incorporated onto or into the pavement, added to vertical infrastructure, etc.

### **Outstanding Items**

Coordination items or clarifications needed in order to complete this master plan as of the submittal of this technical memo are listed below:

- Corridor cultural resources review – *BMI waiting on direction from City*
- Supplementary parking study – *in progress*
- Meeting with St. Paul traffic to discuss traffic analysis needs
- Width of city maintenance equipment for sidewalks/trails

**FIGURE 13:**  
**PARKING INVENTORY - SEGMENT A**



**Segment A - Daytime Parking Use**

- No Overnight Parking
- No Restrictions
- Permit Parking (All hours)
- Permit Parking (8am-8pm wkdy)
- 2-Hour Parking
- No Parking
- P Public/Business Parking Lot
- P Permit Parking Lot

Not to Scale



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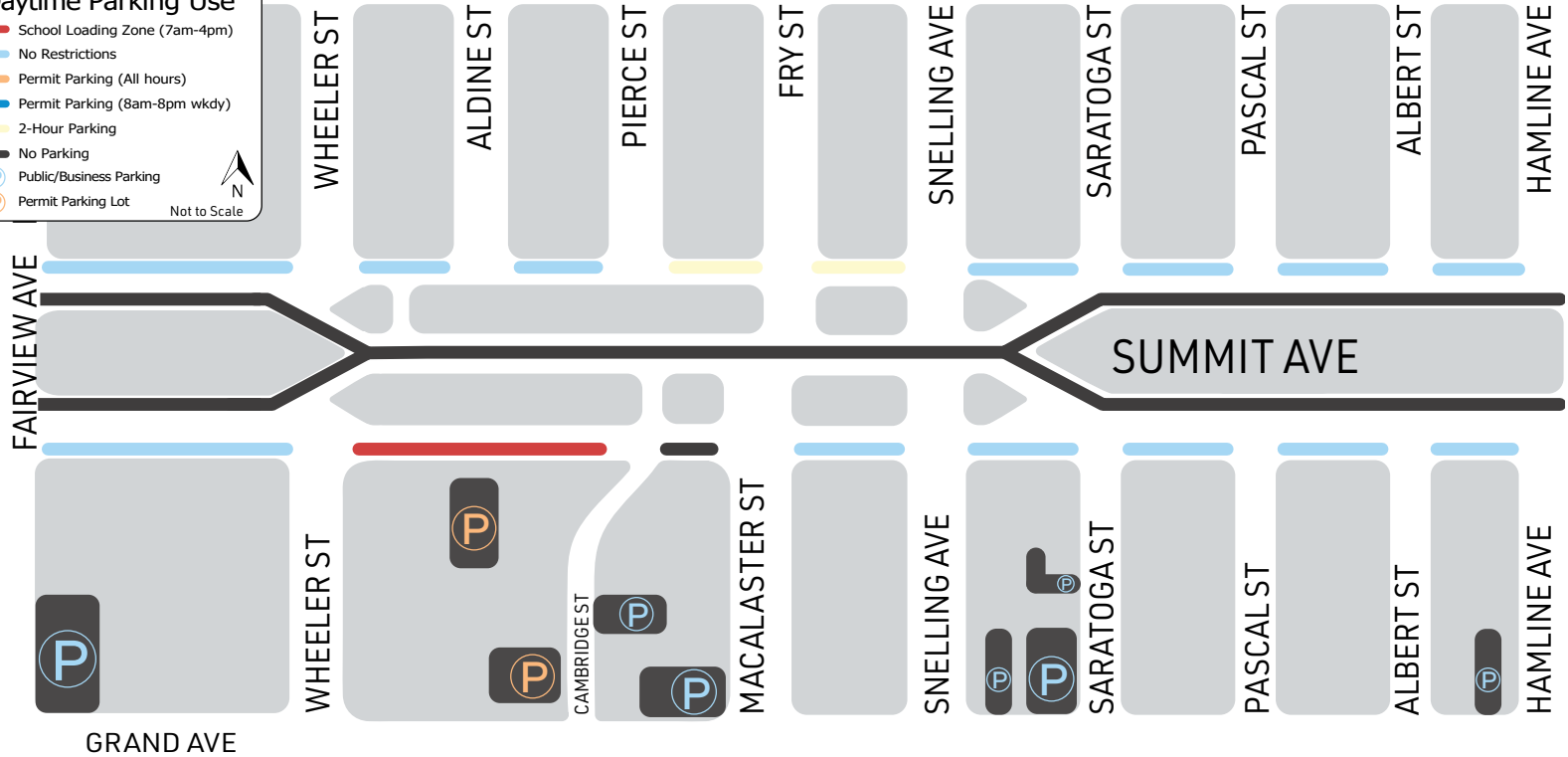
**SITE EVALUATION | SUMMIT AVE. MASTER PLAN**

**FIGURE 14:**  
**PARKING INVENTORY - SEGMENT B**

**Segment B**  
**Daytime Parking Use**

- School Loading Zone (7am-4pm)
- No Restrictions
- Permit Parking (All hours)
- Permit Parking (8am-8pm wkdy)
- 2-Hour Parking
- P No Parking
- P Public/Business Parking
- P Permit Parking Lot

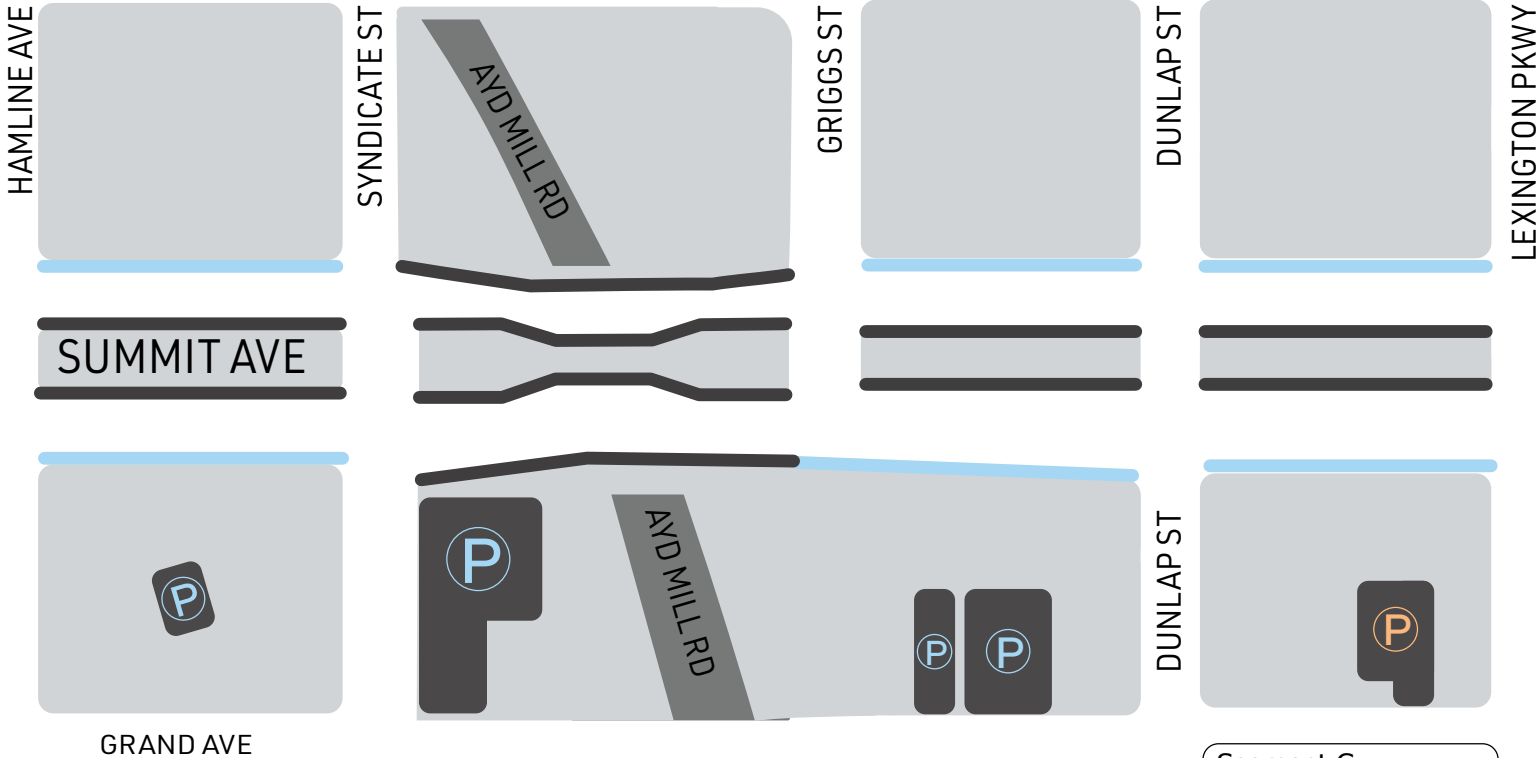
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[SITE EVALUATION | SUMMIT AVE. MASTER PLAN](#)

**FIGURE 15:**  
**PARKING INVENTORY - SEGMENT C**



**Segment C  
Daytime Parking Use**

- No Parking
- No Restrictions
- P Public/Business Parking
- P Permit Parking Lot

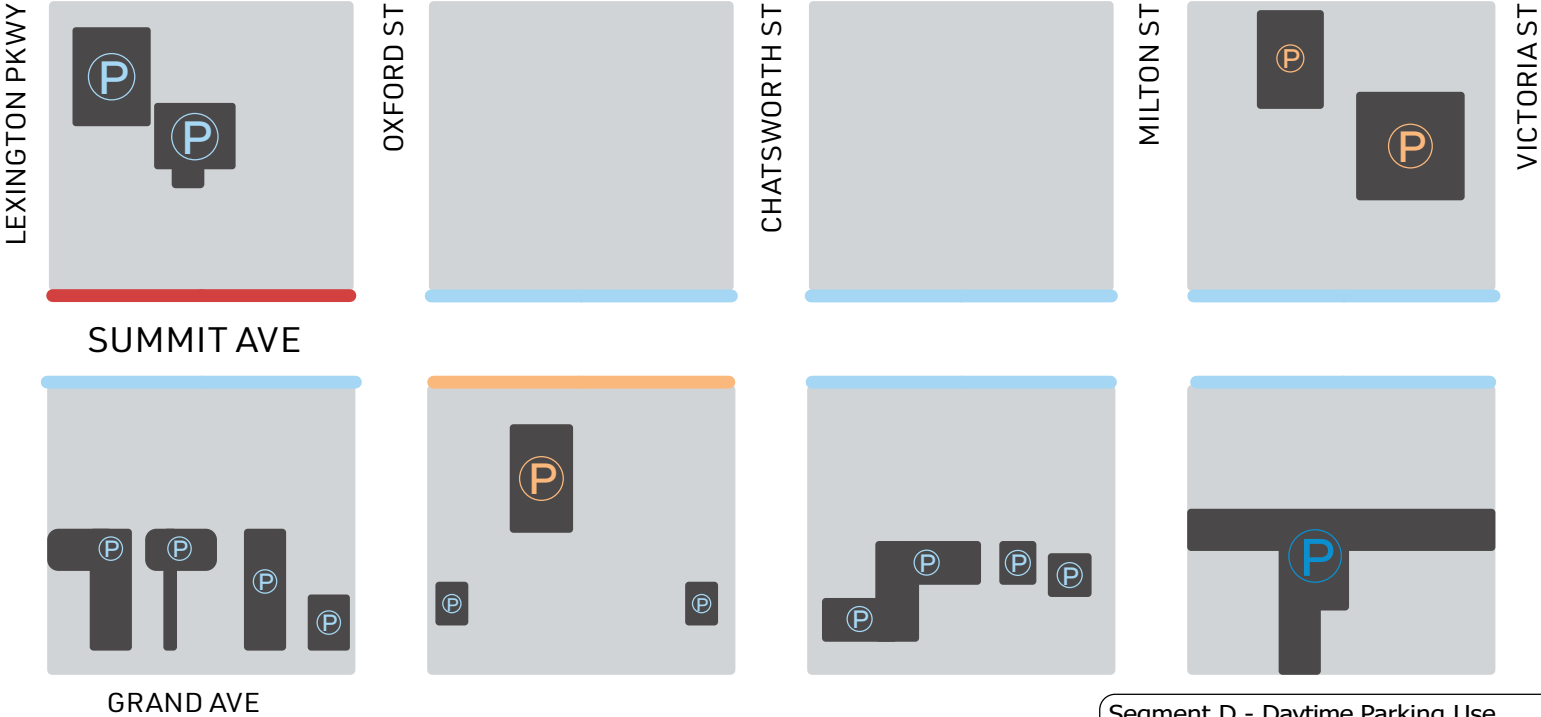
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**SITE EVALUATION | SUMMIT AVE. MASTER PLAN**

**FIGURE 16:**  
**PARKING INVENTORY - SEGMENT D**



**Segment D - Daytime Parking Use**

- School Loading Zone No Parking (7am-4pm)
- No Restrictions
- Emergency Vehicles Only
- P Public/Business Parking
- P Time-Limited Parking
- P Permit Parking Lot

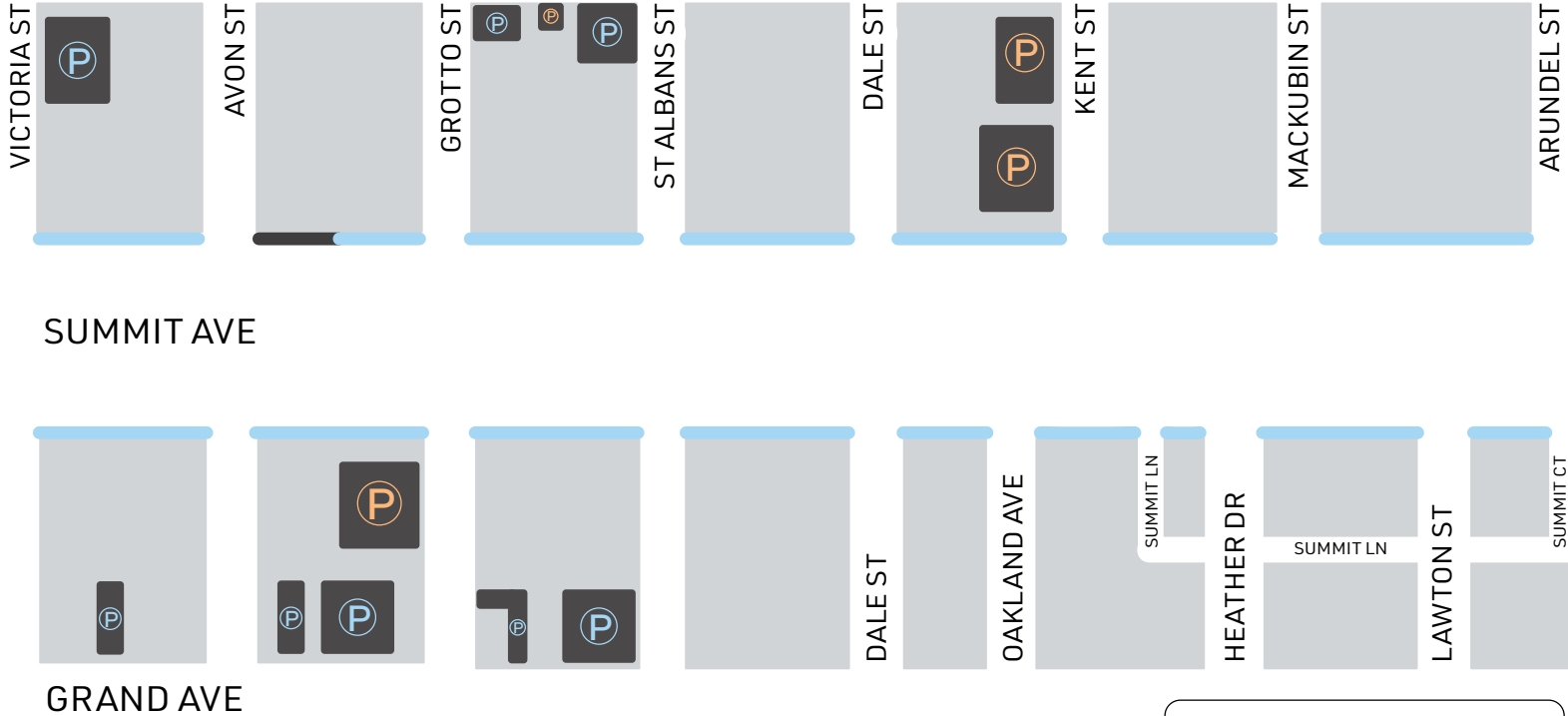
  
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**SITE EVALUATION | SUMMIT AVE. MASTER PLAN**

**FIGURE 17:**  
**PARKING INVENTORY - SEGMENT E**



**Segment E - Daytime Parking Use**

- No Parking
- No Restrictions
- Public/Business Parking
- Permit Parking Lot

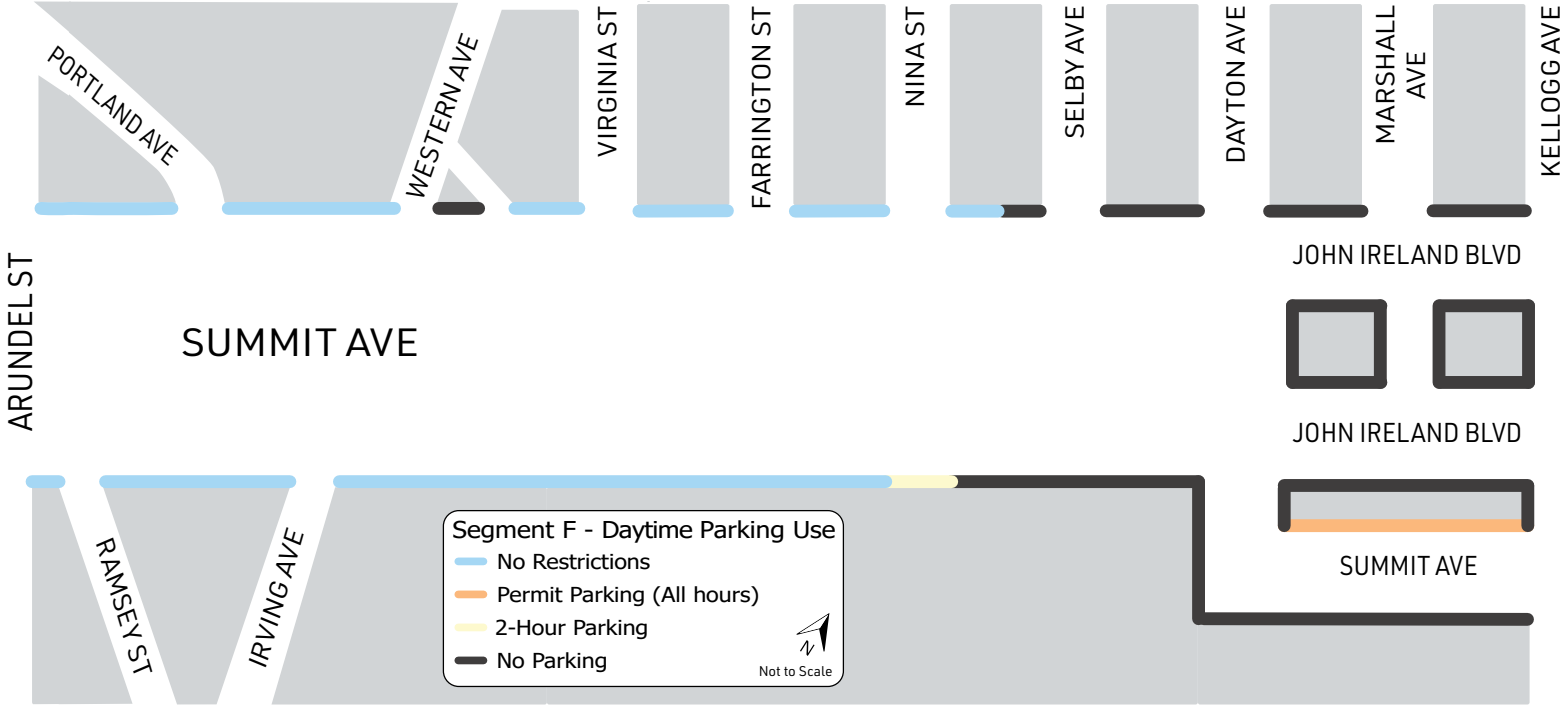
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**SITE EVALUATION | SUMMIT AVE. MASTER PLAN**

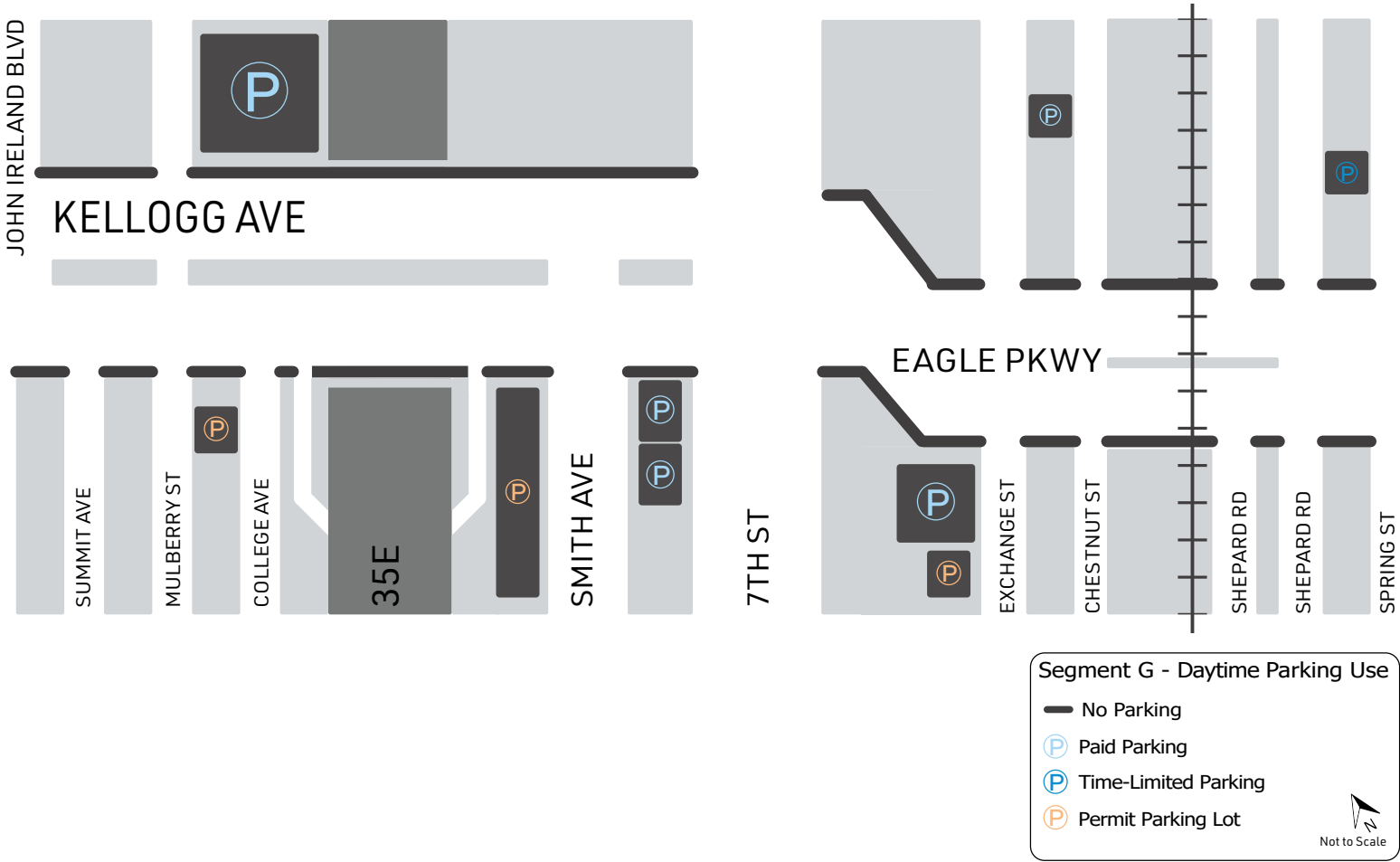
**FIGURE 18:**  
**PARKING INVENTORY - SEGMENT F**



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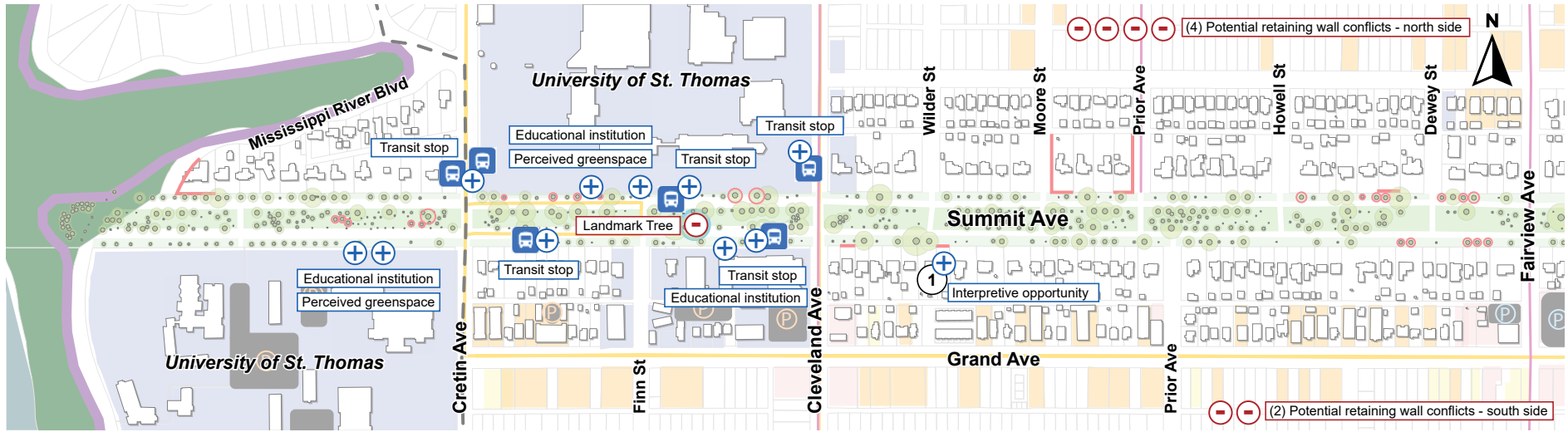
**FIGURE 19:**  
**PARKING INVENTORY - SEGMENT G**



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**SITE EVALUATION | SUMMIT AVE. MASTER PLAN**

**FIGURE 1:**  
**CORRIDOR ANALYSIS - SEGMENT A**



**Legend**

- Institutional Use (Government, Educational, Religious)
- Residential - Multi Family
- Commercial Use
- Transit Route
- Transit Stop
- Bikeway
- P Public/Business Parking Lot
- P Permit Parking Lot

① Dr. Ward Beebe House, 2022 Summit Avenue  
*Local and nationally listed*

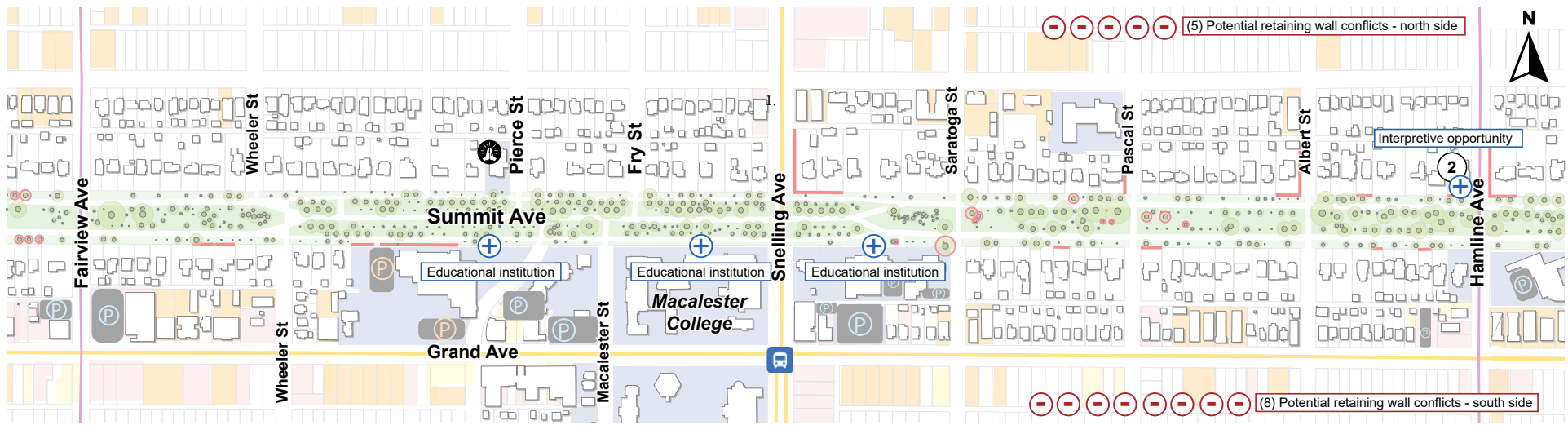


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**TRAIL ALIGNMENT ANALYSIS | SUMMIT AVE. MASTER PLAN**

**FIGURE 2:  
CORRIDOR ANALYSIS - SEGMENT B**



**Legend**

- Institutional Use (Government, Educational, Religious)
- Residential - Multi Family
- Commercial Use
- Transit Route
- Transit Stop
- Bikeway
- P Public/Business Parking Lot
- P Permit Parking Lot

② Pierce and Walter Butler House, 1345 - 1347 Summit Avenue  
*Local and nationally listed*



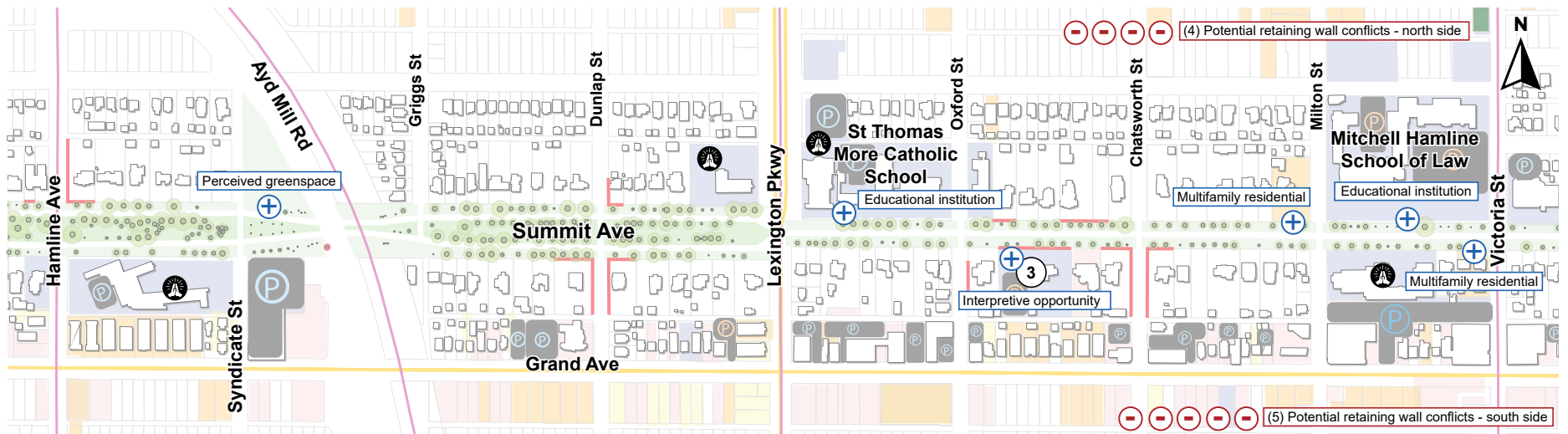
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**FIGURE 3:**  
**CORRIDOR ANALYSIS - SEGMENT C**

**CORRIDOR ANALYSIS - SEGMENT D**



**Legend**

- Institutional Use (Government, Educational, Religious)
- Residential - Multi Family
- Commercial Use
- Transit Route
- Transit Stop
- Bikeway
- P Public/Business Parking Lot
- P Permit Parking Lot

3 Irvine, Horace Hill, and Clotilde House (Governor's House), 1006 Summit Avenue  
*Local and nationally listed*



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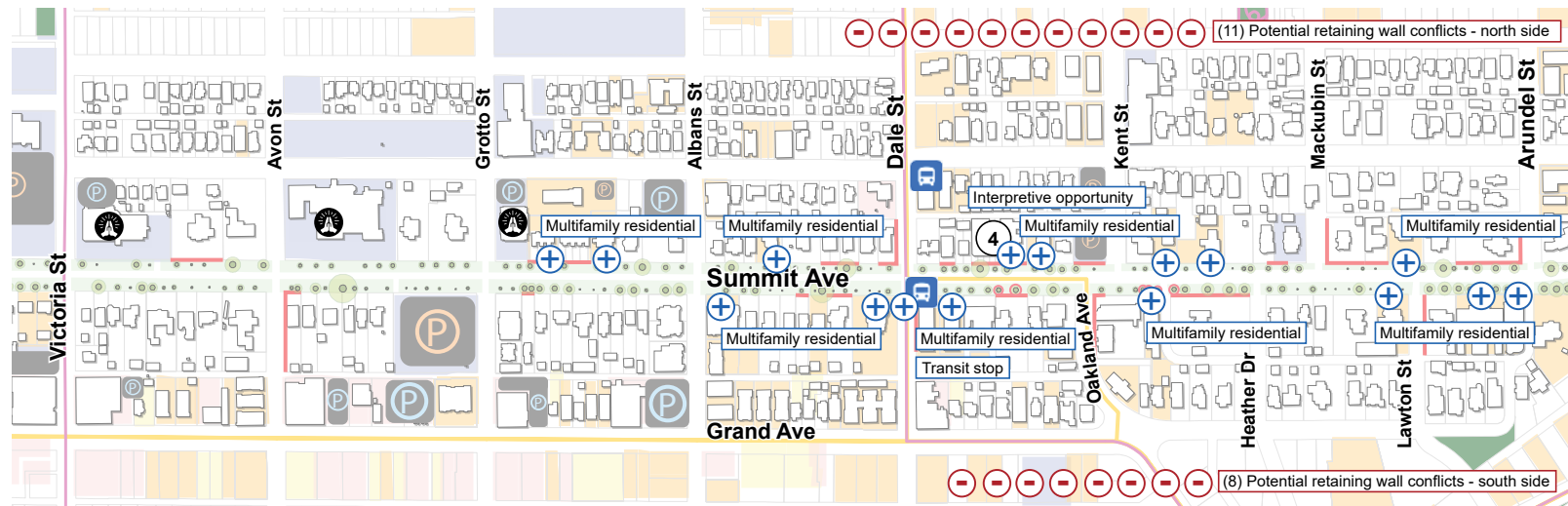
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**TRAIL ALIGNMENT ANALYSIS | SUMMIT AVE. MASTER PLAN**

**DRAFT**

Technical Memo #2  
January 28, 2022

**FIGURE 4:  
CORRIDOR ANALYSIS - SEGMENT E**



**Legend**

- Institutional Use (Government, Educational, Religious)
- Residential - Multi Family
- Commercial Use
- Transit Route
- Transit Stop
- Bikeway
- P Public/Business Parking Lot
- P Permit Parking Lot

④ F. Scott Fitzgerald House (Summit Terrace), 587-601 Summit Avenue  
*Local, State, and Nationally listed*

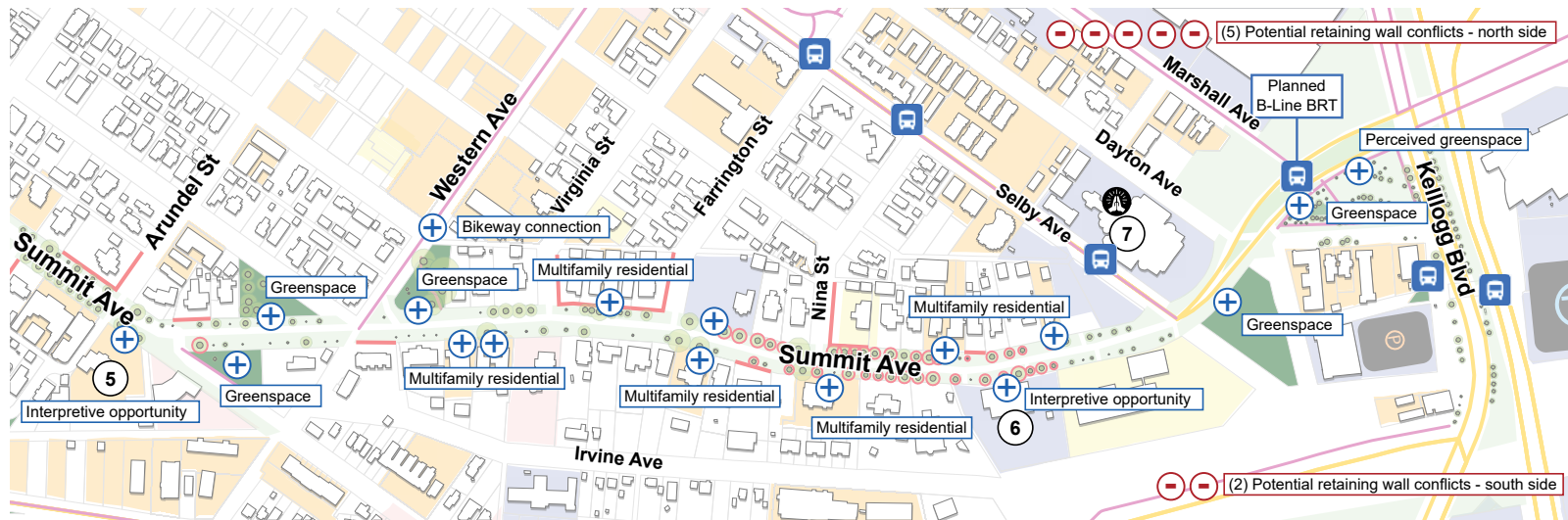


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**FIGURE 5:  
CORRIDOR ANALYSIS - SEGMENT F**



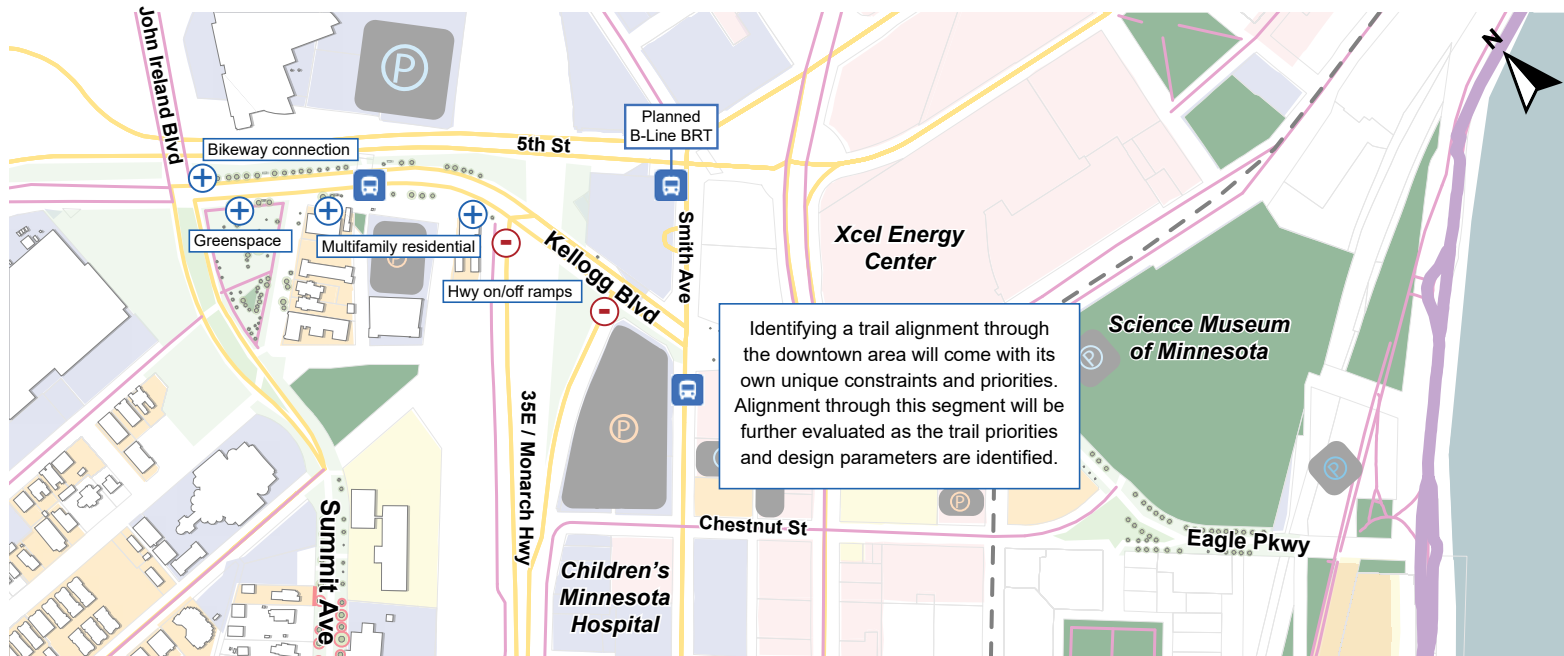
**Legend**

- Institutional Use (Government, Educational, Religious)
- Residential - Multi Family
- Commercial Use
- Transit Route
- Transit Stop
- Bikeway
- P Public/Business Parking Lot
- P Permit Parking Lot

- 5 Burbank-Livingstone-Griggs House (James C. Burbank House), 432 Summit Avenue  
*Local, State, and Nationally listed*
- 6 James J. Hill House, 240 Summit Avenue  
*Local, State, and Nationally listed*
- 7 St. Paul Cathedral-Catholic, 239 Selby Avenue/225 Summit Avenue  
*Nationally listed*



**FIGURE 6:**  
**CORRIDOR ANALYSIS - SEGMENT G**



**Legend**

- Institutional Use (Government, Educational, Religious)
- Residential - Multi Family
- Commercial Use
- Transit Route
- Transit Stop
- Bikeway
- P Public/Business Parking Lot
- P Permit Parking Lot



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111 Washington Avenue S  
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Minneapolis, MN 55401

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**TECHNICAL MEMORANDUM #3**

**Date:** April 14, 2022 **DRAFT**  
**To:** Mary Norton, PLA  
**From:** Cody Christianson, P.E. and Madeline Dahlheimer, PLA  
**Subject:** Summit Avenue Regional Trail Master Plan  
City of St. Paul  
BMI Project No.: OT4.126438

The goal of this technical memo is to summarize input received from the Technical Advisory Committee (TAC) and Design Advisory Committee (DAC) and information collected regarding the historical significance of the corridor typical section evaluation. Additionally, segment transitions were evaluated based on the typical sections as presented in Technical Memo #2. Together, these three lenses have informed the evaluation matrix related to project goals around community priorities, identifying alternatives with respect to the corridor context, and the safety and function of the proposed trail.

**Stakeholder Feedback**

A meeting with the Technical Advisory Committee (TAC) was held on February 4, 2022. This group is comprised of agency stakeholders including city staff from various departments and representatives of the Metropolitan Council and various state departments. A meeting with the Design Advisory Committee (DAC) was held on February 15, 2022. This group is comprised of corridor stakeholders including representatives from education and religious institutions, neighborhood associations, residents, and community groups. Both meetings were held virtually. Content included an introductory presentation providing background of the master planning process and breakout rooms where stakeholders were provided an opportunity to discuss the various corridor segments based on typical sections. Exercises related to trail vision as well as exploring potential trail facility configurations were conducted.

Overall corridor-wide feedback from both groups included:

- Separate bike and pedestrian facilities preferred
- Protect trees and greenspace
- Design in support of historic context

Segment specific feedback for Segments A/C (200-foot ROW with single median) included a desire to stay out of the median from the DAC and a preference for one-way bicycle facilities.

Segment specific feedback for Segment B (200-foot ROW with double median) included an interest in exploring the use of the frontage roads for the trail facility from the TAC. This concept was broached with the DAC, with minimal support. Further exploration of this possibility illustrated challenges related

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to parking, access, and maintenance that have eliminated it from further consideration. The discussion has, however brought safety concerns at the intersection of Snelling Avenue to the forefront. There may be opportunity with this or a future project to explore intersection improvements to improve safety at this location.

Segment specific feedback for Segments D/E/F (100-foot ROW with no median) included conflicting parking preferences to maintain existing parking from the DAC and support for eliminating parking on one side of the street from the TAC.

It is important to note that in addition to these advisory committee meetings, there has been robust public participation via online engagement opportunities (survey and comment map). It is essential to balance the feedback from all sources when evaluating potential trail solutions. The city has compiled summary information related to all stakeholder engagement activities.

**Historic Resources Technical Memo**

A historic resources technical memo has been attached at the end of this document. The document reviews and summarizes the character defining features of the corridor as presented in federal, state, and local historic registries. The document provides information related to the development and evolution of the historic street. Primary character defining features are listed below. Impacts to these should be minimized to avoid an adverse effect.

- **The tree canopy and wide grass medians and boulevard**
- The typical sections of the corridor including **how the right-of-way is split between transportation corridors and boulevards/pedestrian space.**
- The **existing curbs** contribute to the allocation of space between roadway and median/boulevard space. Additionally, granite curb exists in specific locations and should be maintained or incorporated back into place where possible.

Several precedents of bicycle and trail facilities through historic districts elsewhere in the country are also included in the memo. The majority of these include on-street bicycle facilities and a standard city sidewalk. While none of these fit exactly into what a regional trail on Summit Avenue would look like, the context of evolving standards in active transportation design must be considered. Separated bicycle facilities have become an increasingly preferred design standard for safety and user comfort.

An interesting inference from the report is the evolution of transportation methods through time, beginning with carriage rides for recreation, to the popularity of the bicycle, the rise of the automobile, to today with a growing interest in multi-modal transportation options. Through this project, we have an opportunity to examine the reallocation of space within the existing transportation corridors to meet current transportation and recreation preferences while minimizing impacts to surrounding corridor features.

The parameters identified in the Historic Resources Technical Memo outline the *path of least resistance* through the historic review process for any infrastructure changes along Summit Avenue, essentially eliminating any impacts to existing conditions. It is, however, important to note that historic context is only one lens to use in reviewing potential trail alternatives. While this is a strongly weighted priority for this specific project, there are additional lenses, such as user safety, to consider in determining a preferred facility type.

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## Technical Memorandum #3

### Segment Transitions

In considering the various alternatives through the different segments, the transition from segment to segment was analyzed looking at the safety and functionality of changing from one trail composition to another. The three transition areas analyzed are as follows:

- Segment A to Segment B at Wheeler Street: wide, single median to double median
- Segment B to Segment C at Snelling Avenue: double median to wide, single median
- Segment C to Segment D at Lexington Parkway: wide, single median to no median

These segment transitions were analyzed with the consideration of the historical context of Summit Avenue; therefore, no median trails were considered. For this same reason, a two-way bikeway in Segments A and C was not considered.

Figures illustrating these transition areas are included as an attachment at the end of this document.

#### Summit Ave and Wheeler St – Segment A to Segment B Transition

Transition Type	Safety Considerations	Function Considerations
1-way bikeway (median) to 1-way bikeway	-Bicyclists must cross over through traffic at an uncontrolled intersection to continue along Summit	-Trail users (pedestrians and bicyclists) are separated by vehicular traffic in Segment A -Bicyclists go from left-side of traffic to right-side of traffic and vice versa
1-way bikeway (median) to 2-way bikeway	-Bicyclists must cross over through traffic at an uncontrolled intersection to continue along Summit, with one direction crossing head-on traffic	-Trail users (pedestrians and bicyclists) are separated by vehicular traffic in Segment A -Eastbound bicyclists go from left-side of traffic to right-side of traffic
1-way bikeway (boulevard) to 1-way bikeway	-Bicyclists remain outside of through traffic in the intersection -Bikeway crossed by right turning vehicles turning off of and on to Summit Ave	-Trail users (pedestrians and bicyclists) are separated by boulevard in Segment A -Bicyclists remain along right-side of traffic through the intersection
1-way bikeway (boulevard) to 2-way bikeway	-Counterflow bicyclists forced to cross both directions of traffic at an uncontrolled intersection	-Trail users (pedestrians and bicyclists) are separated by boulevard in Segment A

## Technical Memorandum #3

#### Summit Ave and Snelling Ave – Segment B to Segment C Transition

Transition Type	Safety Considerations	Function Considerations
1-way bikeway to 1-way bikeway (median)	-Bicyclists must cross over through traffic at an uncontrolled intersection east of Snelling to continue along Summit	-Trail users (pedestrians and bicyclists) are separated by vehicular traffic in Segment C -Bicyclists go from right-side of traffic to left-side of traffic and vice versa
1-way bikeway to 1-way bikeway (boulevard)	-Bicyclists remain outside of through traffic in the uncontrolled intersection -Bikeway crossed by right turning vehicles turning off of and on to Summit Ave	-Trail users (pedestrians and bicyclists) are separated by boulevard in Segment C -Bicyclists remain along right-side of traffic through the intersection
2-way bikeway to 1-way bikeway (median)	-Bicyclists must cross over through traffic at an uncontrolled intersection east of Snelling to continue along Summit	-Westbound bicycles need to use a two-stage turn queue box to enter 2-way bikeway -Trail users (pedestrians and bicyclists) are separated by vehicular traffic in Segment C
2-way bikeway to 1-way bikeway (boulevard)	-Bicyclists remain outside of through traffic in the uncontrolled intersection -Bikeway crossed by right turning vehicles turning off of and on to Summit Ave	-Westbound bicycles need to use a two-stage turn queue box to enter 2-way bikeway -Trail users (pedestrians and bicyclists) are separated by boulevard in Segment C

#### Summit Ave and Lexington Ave – Segment C to Segment D Transition

Transition Type	Safety Considerations	Function Considerations
1-way bikeway (median) to 1-way bikeway	-Eastbound bicyclist transition to the right side of traffic prior to the Lexington intersection, requiring bicyclists to cross through traffic outside of an intersection	-Westbound bicycles need to use a two-stage turn queue box to enter bikeway along median -Trail users (pedestrians and bicyclists) are separated by boulevard in Segment C
1-way bikeway (median) to 2-way bikeway	-Alternatively, to the 3 phase eastbound bicyclist approach, the bike could transition to the right side of traffic prior to the Lexington intersection and then cross the intersection in 2 phases. This would require bicyclists to cross through traffic outside of an intersection	-Eastbound bicyclists cross the signalized crossing in up to 3 phases -Westbound bicyclists cross the signalized intersection in 2 phases -Trail users (pedestrians and bicyclists) are separated by vehicular traffic in Segment C
1-way bikeway (boulevard) to 2-way bikeway	-Bicyclists remain outside of through traffic through the intersection -Bikeway crossed by right turning vehicles turning off of and on to Summit Ave on the western leg	-Eastbound bicycles need to use a two-stage turn queue box to enter 2-way bikeway -Trail users (pedestrians and bicyclists) are separated by boulevard in Segment C

## Technical Memorandum #3

### Possible Trail Configuration – Minimum Design Standards

Trail configuration alternatives have been updated to reflect the minimum design standards to reduce impacts to corridor greenspace. Minimum design standards from various guiding agencies are listed below. Updated section alternatives are included as an attachment to this memo.

	FHWA	MnDOT Bikeway Facility Design Manual	State Aid	City Preference/Precedent
<b>One-way cycle track</b>	P: 7 ft M: 5 ft	P: 6.5-8 ft M: 5-6.5 ft	P: N/A M: 5 ft	P: 6 ft M: 5 ft
<b>Two-way cycle track</b>	P: 12 ft M: 10 ft	P: 11-12 ft M: 10-11 ft	P: N/A M: 8'	P: 12 ft M: 10 ft

**Notes:**

1. All agencies require 2-foot min. buffer along vehicle lanes and 3-foot min. buffer along parking lanes.
2. The City's preference is for 3-foot min. buffer along vehicle lanes and parking lanes.
3. The MnDOT Bikeway Manual has different minimum and preferred widths based on the peak hour bidirectional bicyclist volume.

**Trail configuration eliminated from process:** trail configurations with separated bike facilities along the boulevard of the frontage roads in Segment B (200-foot ROW with double medians) have been eliminated from consideration due to space constraints. While possible, if the parking were removed, there are several other alternatives within this segment that will have fewer impacts.

### Evaluation Matrix

Based on the City's draft trail concept evaluation objectives, an evaluation matrix was assembled to objectively compare the various alternatives for each segment of Summit Avenue. Listed below are the City's objectives and the associated measures that were evaluated. These measures ensured that all appropriate lenses were considered – safety, history, function, greenspace, parking, and maintenance.

The full evaluation matrix is included as an attachment at the end of this document.

Objectives	Measures
<b>Increase pedestrian and bicyclist safety</b>	Trail connectivity/consistency
	Separation of bicycle traffic from transit
	Separation of bicycle traffic from vehicle traffic
	Reduced crossing distance
	Improved visibility of pedestrians to drivers
	Calm traffic speeds
<b>Comfortable trail experience supporting an all ages and abilities facility</b>	Reduced pedestrian-vehicle conflict points
	Provides separate pedestrian and bicycle facilities
<b>Support high quality regional trail experience</b>	Reduces barriers to accessible facilities
	Trail facility meets state and federal standards
	Maximize wayfinding and amenity opportunities

## Technical Memorandum #3

<b>Compatible with historic context</b>	Limits impacts to character-defining visuals
	Limits impacts to greenspace
	Prioritizes use of existing areas of pavement
<b>Limits impacts to green space and trees</b>	Impacts to existing tree canopy in ROW
	Limits impacts to green space
<b>Limits impacts to vehicle and parking functions</b>	Parking impacts
	Impacts to vehicular traffic patterns
<b>Meets standard level of service for maintenance</b>	Net increase/decrease in required maintenance
	Level of effort for winter maintenance

**Trail configurations eliminated from process:** trail configurations with impacts to the Summit Avenue medians in Segments A/C (200-foot ROW with single median) and Segment B (200-foot ROW with double medians) have been eliminated from consideration due impacts to existing trees and green space and notable adverse effects to the historic designations given to Summit Avenue.

### Recommended Concepts to Carry Forward

Segment:	Segment A/C	Segment B	Segment D/E/F
	Single Median, 200' ROW	Double Median, 200' ROW	No Median, 100'ROW
<b>Trail Facilities</b>	One-way separated cycle track along median, existing sidewalks	One-way separated cycle track in center of corridor, existing sidewalks	One-way separated cycle track along boulevards, existing sidewalks
	One-way separated cycle track along boulevards, existing sidewalks	Two-way separated cycle track in center of corridor (north or south), existing sidewalks	Two-way separated cycle track along boulevard (north or south), existing sidewalks

### Next Steps

- Traffic analysis at key intersections
- Wayfinding and trail amenities
- 1-way versus 2-way cycle track evaluation
- North versus south side evaluation

### Attachments

- Historic Resources Technical Memo
- Segment Transition Figures
- Trail Configuration Alternatives (typical sections)
- Evaluation Matrix



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Fax: [612] 416-0222  
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**MEMORANDUM**

Date: March 23, 2022  
To: Mary Norton, PLA  
From: Cody Christianson, P.E., ENV SP  
Subject: Summit Avenue Parking Study  
City of St. Paul  
Project No.: OT4.126438

**I. Introduction**

As a part of the Summit Avenue Parking Study project a parking study was conducted to analyze both the park supply and utilization along portions of the project corridor and on adjacent side streets. Data was collected on Summit Avenue between Lexington Parkway and Selby Avenue, as well as on sides streets immediately adjacent to Summit Avenue between Grotto Street and Selby Avenue. Figure 1 shows the roadways on which data was gathered. The data collected in this study was compared to data collected between July and September 2019 (before COVID-19) for an overnight parking restriction study to help contextualize the results.

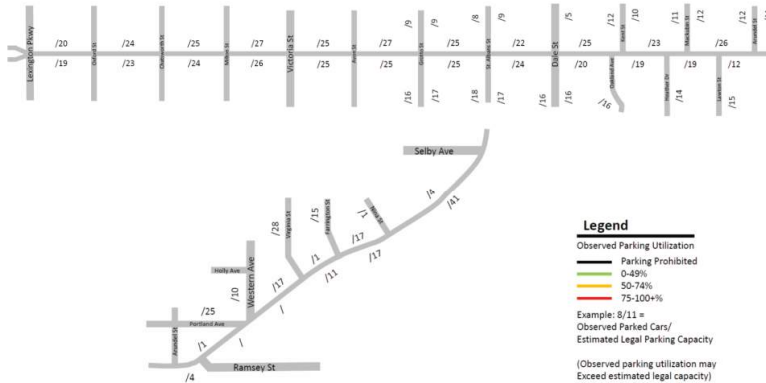


Figure 1 – Study Area

Summit Avenue Parking Study

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Summit Avenue Regional Trail Master Plan

Summit Avenue Parking Study  
March 23, 2022  
Page: 2

**II. Methodology**

Parking data was collected on three dates in February 2022: Thursday February 10<sup>th</sup>, Saturday February 12<sup>th</sup>, and Sunday February 13<sup>th</sup>. Data was collected during the following times, which include three sets on Thursday and Saturday and two sets on Sunday:

- Thursday (3 Collections): 12:00 PM, 2:00 PM, 4:00 PM
- Saturday (3 Collections): 4:00 PM, 6:00 PM, 8:20 PM
- Sunday (2 Collections): 8:15 AM, 10:15 AM

Data was collected about public on street parking at the locations shown above in Figure 1, which included both sides of Summit Avenue between Lexington Parkway and Selby Avenue, as well as the immediately adjacent side streets next to Summit Avenue between Grotto Street and Selby Avenue. For each location, data was collected by cars parked per block face, which allowed us to collect not only block by block data but also data by side of the street. One pass was recorded per collection. While every block face on Summit Avenue allows parking, nine of the side street blocks only allow parking on one side of the street.

The data collection locations for this study were similar to the overnight parking restriction study conducted in 2019. While the overnight parking restriction study went the entire length of Summit Avenue, from Mississippi River Boulevard to Selby Avenue, the new study collected data in the exact same spots east of Lexington Avenue. In 2019, the data was only collected during overnight periods, so the numbers cannot be directly compared, however they can help to provide context to the study.

**III. Parking Supply**

The total parking supply of the study area shown in Figure 1 is 1,095 spots, with 754 spots on Summit Avenue and 341 spots on side streets. Parking is allowed on every block face on Summit Ave, while many of the side streets have parking restrictions on one side of the street. Nine side street block faces have one sided parking restrictions, many of these due right of way constraints. These nine side streets are:

- Dale St
- Oakland Ave
- Heather Dr
- Lawton St
- Portland Ave
- Western Ave
- Virginia St
- Farrington St
- Nina St

Summit Avenue Parking Study

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**IV. Parking Utilization**

Table 1. Average Daily Usage

Average Usage - Total				
Location	Thursday	Saturday	Sunday	Combined
Summit Ave	26.7%	28.8%	23.9%	26.8%
Side Streets	33.3%	39.3%	39.7%	37.2%
<b>Total</b>	<b>28.8%</b>	<b>32.1%</b>	<b>28.8%</b>	<b>30.0%</b>

Over the entire study area, utilization was modest compared to the total supply of spaces. Table 1 shows the average usage of parking each day of the study. Combined, the analysis shows that the average parking utilization over all eight counts was 30%. The utilization of parking spaces was higher on side streets than on Summit Avenue, with 37% overall utilization on side streets compared to 27% overall utilization on Summit Ave. Saturday saw the most parked vehicles in total, with an average of 32.1% of spots being occupied during the three counts. Table 2 shows the average usage for each count broken up into spaces directly on Summit Avenue and spaces counted on side streets. The final count on Saturday, at 8:20 PM, had 33.2% usage among all block faces in the study area. At this time, 41% of side street parking spots were occupied, the highest percentage over the whole study. Summit Avenue spaces were 29.7% full, which was also the highest number seen on Summit Avenue over the duration of the study.

Table 2. Average usage per count

Average Usage – Thursday				
Location	12:00 PM	2:00 PM	4:00 PM	Daily Average
Summit Ave	28.4%	27.5%	24.3%	26.7%
Side Streets	30.5%	35.5%	34.0%	33.3%
<b>Total</b>	<b>29.0%</b>	<b>30.0%</b>	<b>27.3%</b>	<b>28.8%</b>

Average Usage – Saturday				
Location	4:00 PM	6:00 PM	8:20 PM	Daily Average
Summit Ave	29.2%	27.6%	29.7%	28.8%
Side Streets	37.2%	39.6%	41.1%	39.3%
<b>Total</b>	<b>31.7%</b>	<b>31.3%</b>	<b>33.2%</b>	<b>32.1%</b>

**Average Usage – Sunday**

Location	8:15 AM	10:15 AM	N/A	Daily Average
Summit Ave	21.6%	26.1%	N/A	23.9%
Side Streets	39.9%	39.6%	N/A	39.7%
<b>Total</b>	<b>27.3%</b>	<b>30.3%</b>	<b>N/A</b>	<b>28.8%</b>

These results were similar to what was found during the 2019 overnight parking restriction study. Those overnight counts found that parking on this portion of Summit Avenue was generally well below 50% full. Most of summit avenue was well below the 50% mark for all eight counts, with only a few sections having less than 50% of the spots available at any time.

One of the spots where parking utilization was high was near Dale Street. Both studies found that the blocks surrounding the Dale Street and Summit Avenue intersection were the busiest segments, with the observed parking utilization during the overnight study and the current study often above 75% full.

One section of note is Grotto Street north of Summit Avenue. For the first seven counts there were zero observed cars parked there. During the final count, at 10:15 AM on Sunday Morning, 14 of the 18 spots were utilized. Unity Church – Unitarian is located on the northeast corner of Portland Avenue and Grotto Street, which is a likely cause for the influx of parked cars in this location. They have services every Sunday at 9:00 and 11:00 AM.

Full counts of each observation of parking supply and utilization per block face are available in Appendix A.

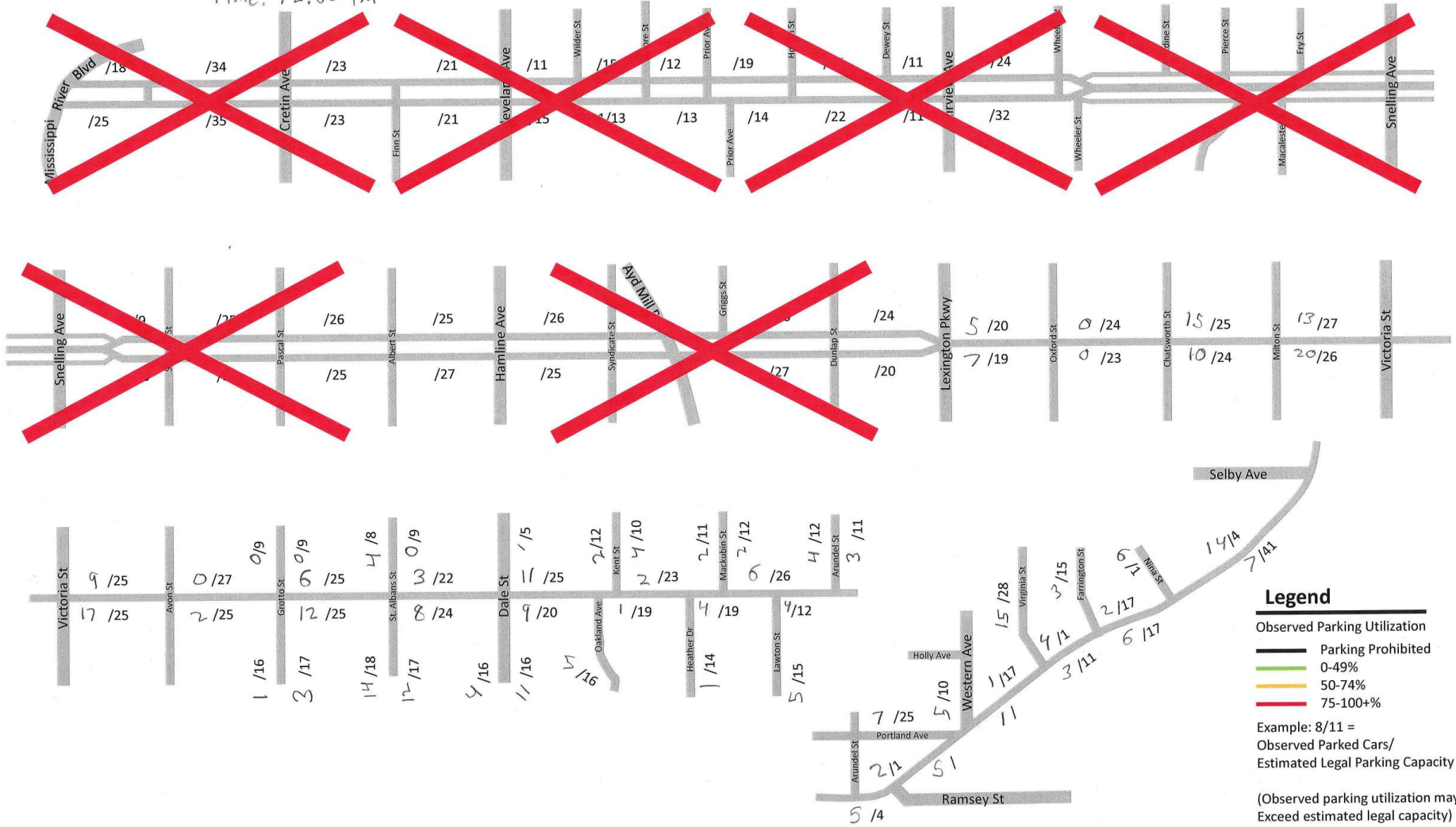
**V. Conclusion**

Parking utilization information was gathered across three days in February 2022, on a Thursday, a Saturday, and a Sunday. Eight counts in total were conducted, three counts on both Thursday and Saturday and two counts on Sunday. The analysis found that parking utilization in this corridor is generally modest, with an average of 30% utilization over the entire study area and all counts. There appeared to be ample parking available almost everywhere, with only the blocks surrounding Dale Street seeing consistently high usage. This amount of utilization is consistent with the overnight figures recorded before the COVID-19 pandemic started as a part of the overnight parking restrictions study.

**Summit Avenue Parking Utilization**

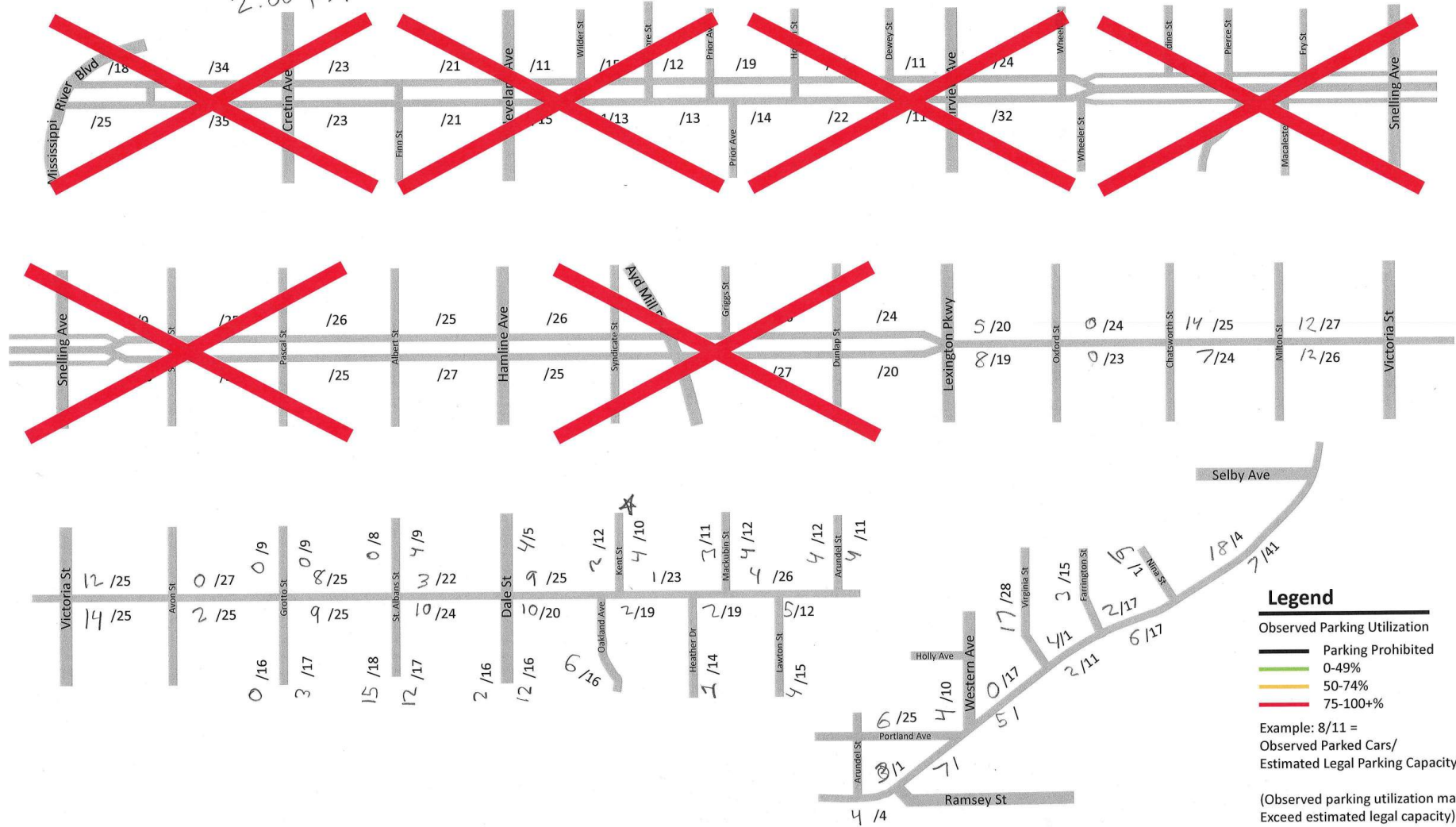
Weekday Afternoon 2/10/2022

Time: 12:00 PM



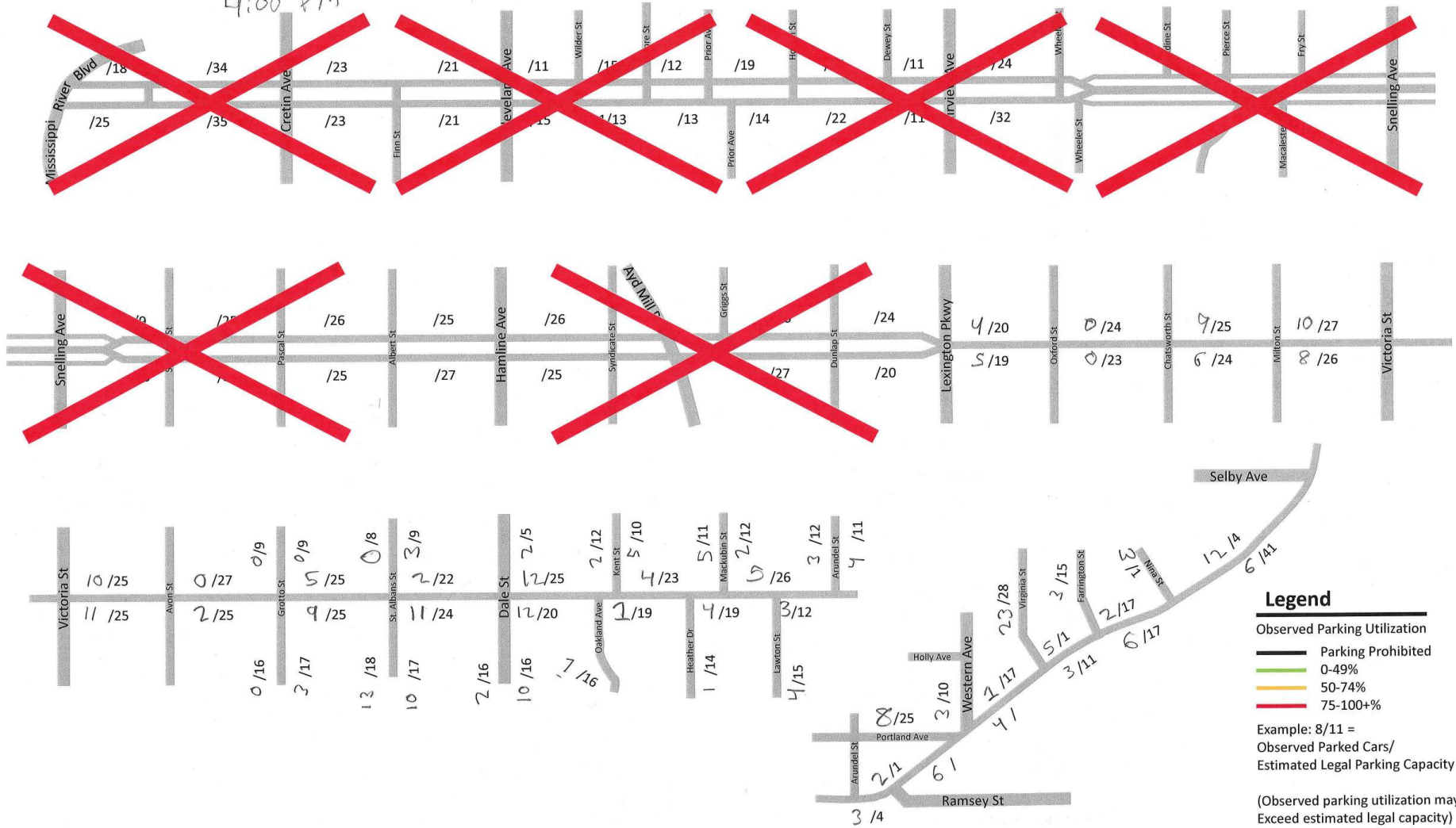
**Summit Avenue Parking Utilization**

Weekday Afternoon  
2/10/2022  
2:00 PM



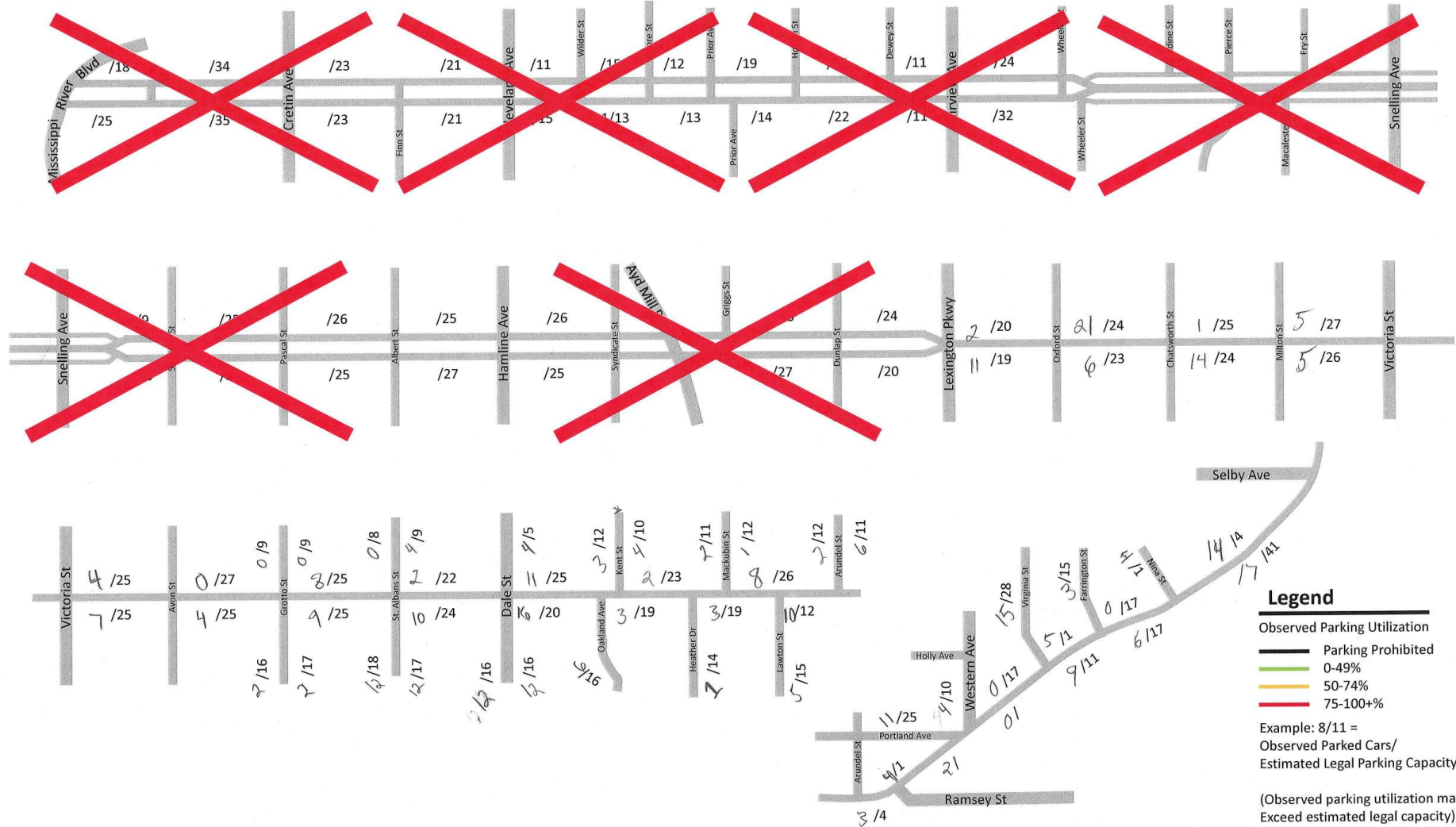
**Summit Avenue Parking Utilization**  
Weekday Afternoon 2/10/2022

4:00 PM



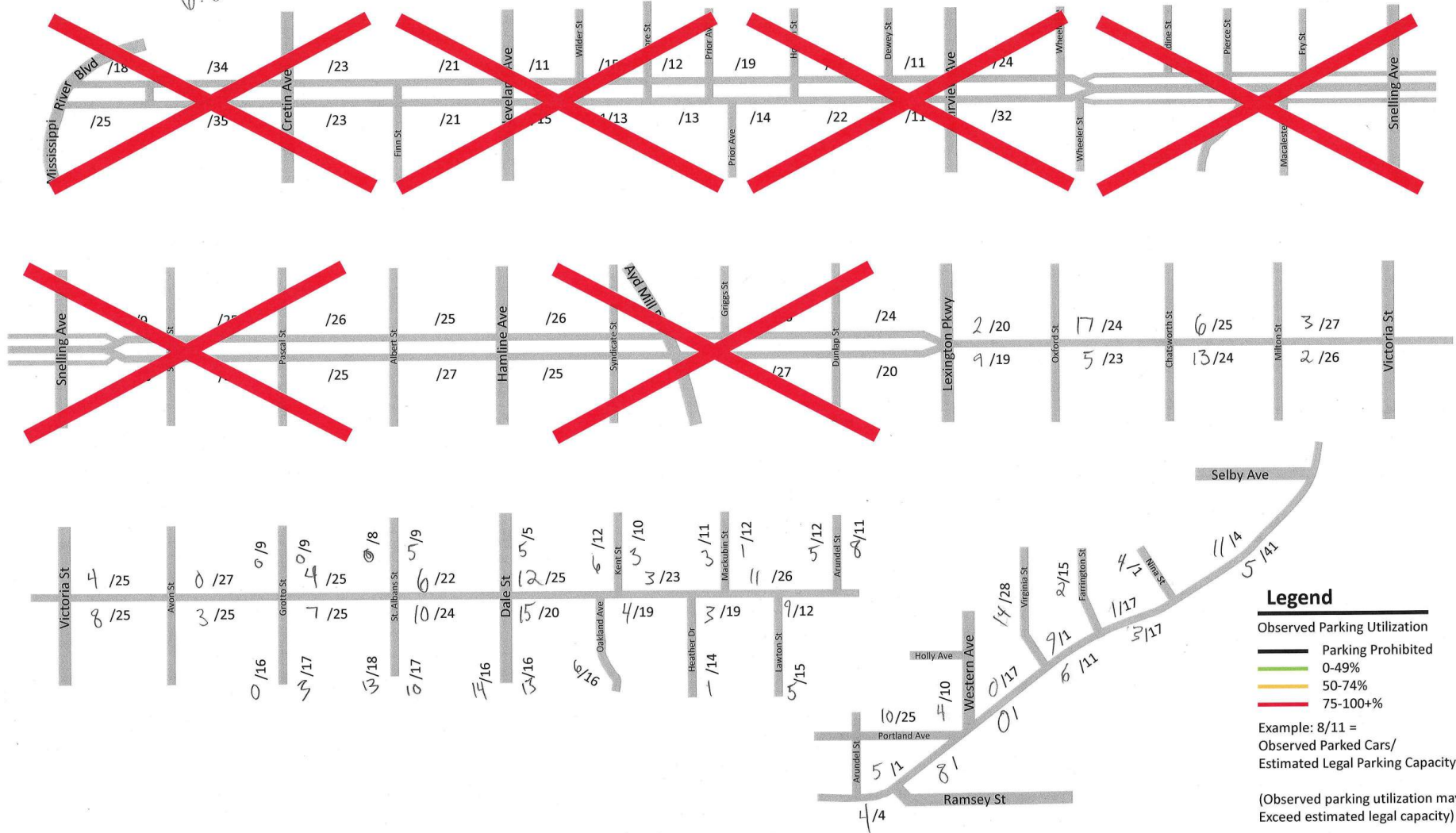
**Summit Avenue Parking Utilization**  
Saturday Evening

4:00



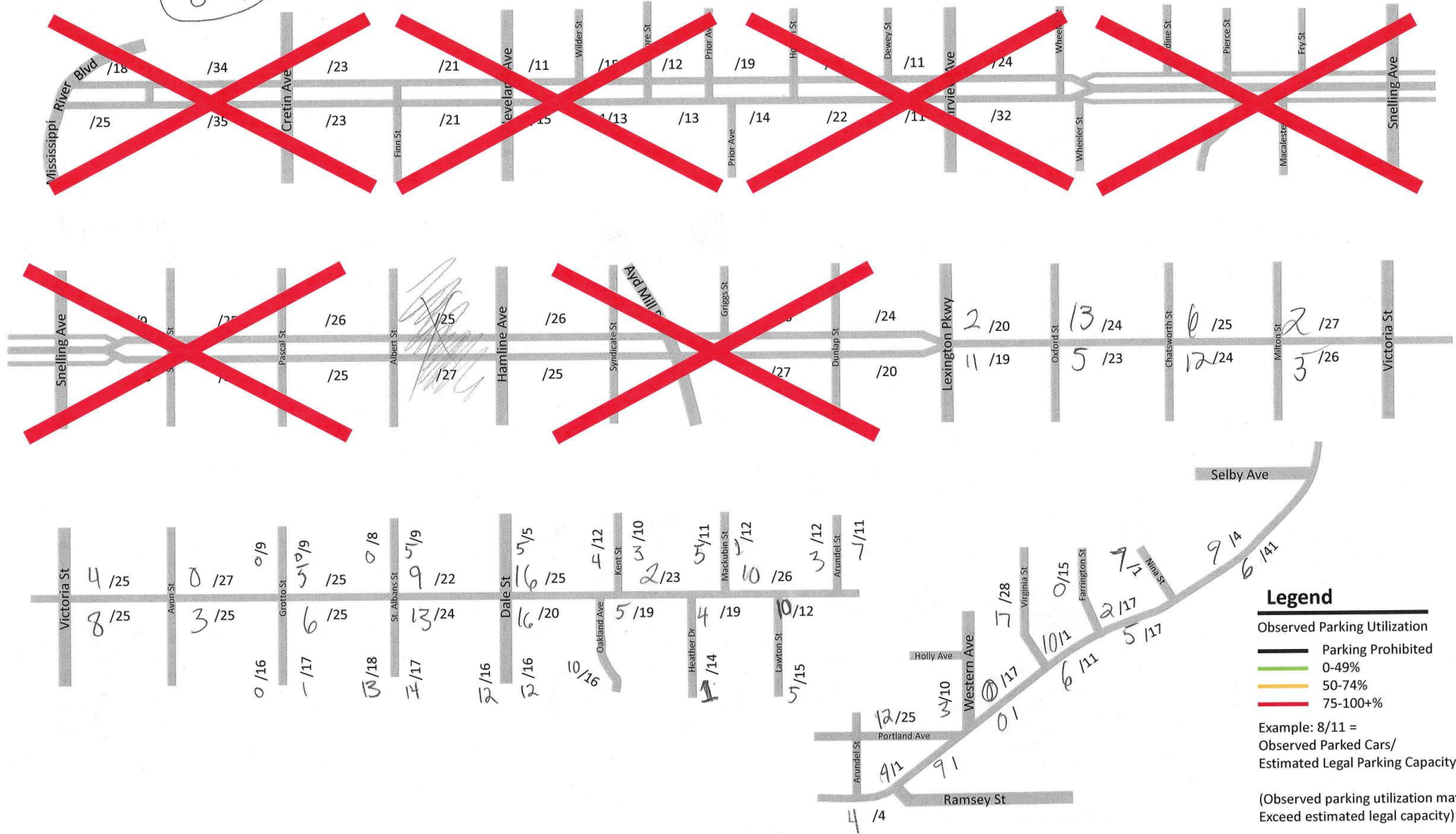
**Summit Avenue Parking Utilization**  
Saturday Evening

6:00



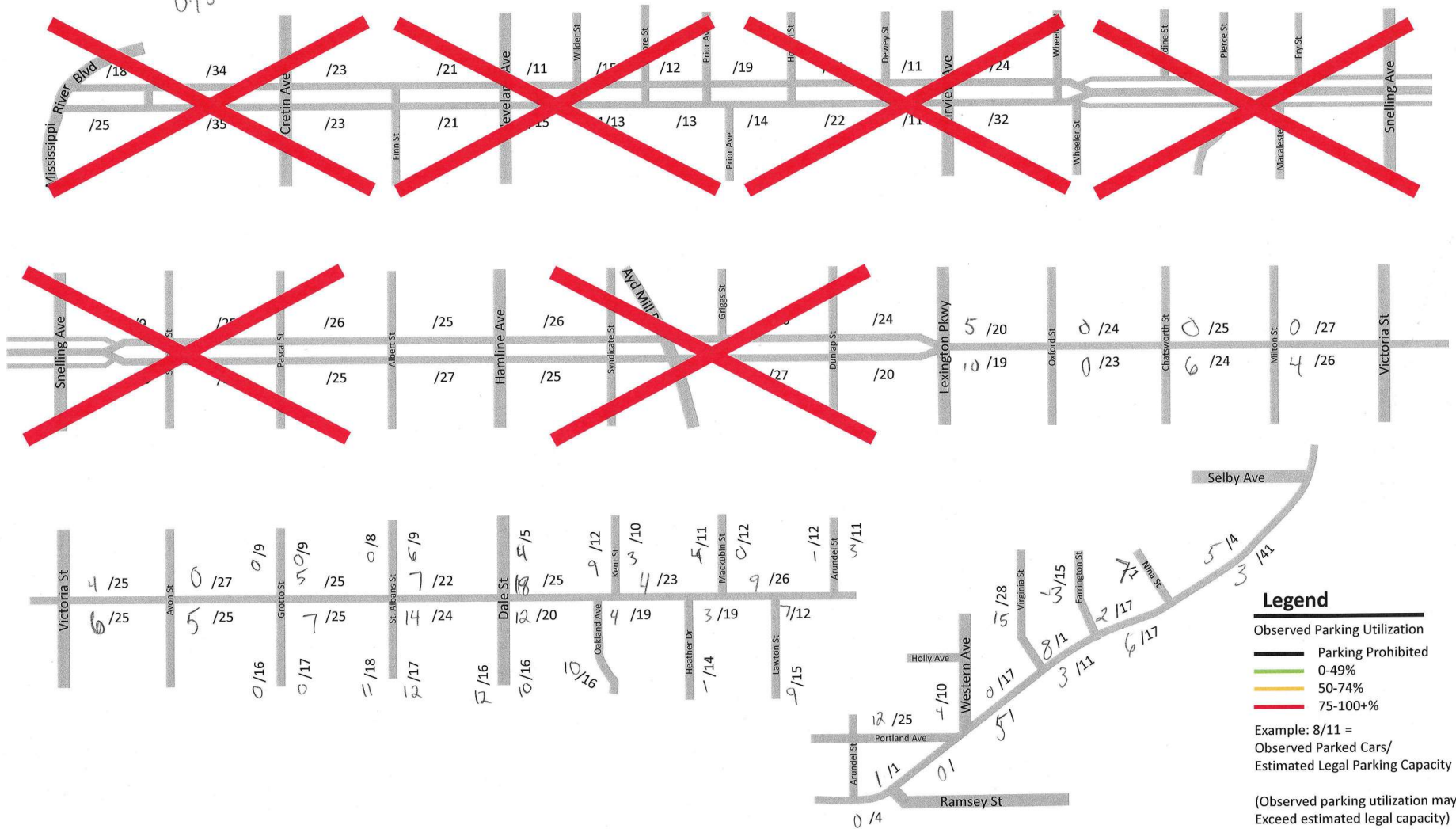
**Summit Avenue Parking Utilization**  
Saturday Evening

8:20



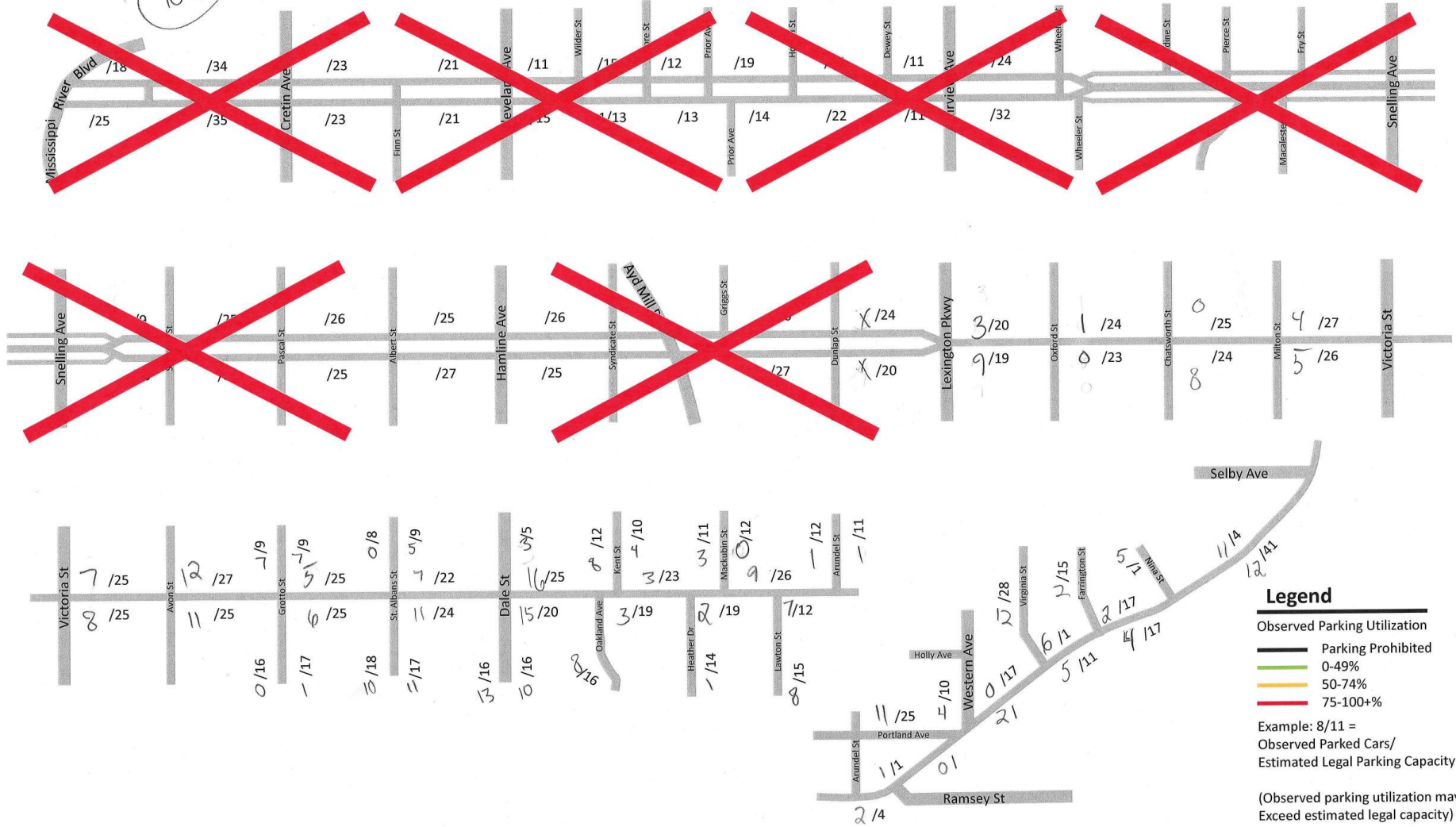
### Summit Avenue Parking Utilization Sunday Morning

8:15



**Summit Avenue Parking Utilization**  
Sunday Morning

10:15

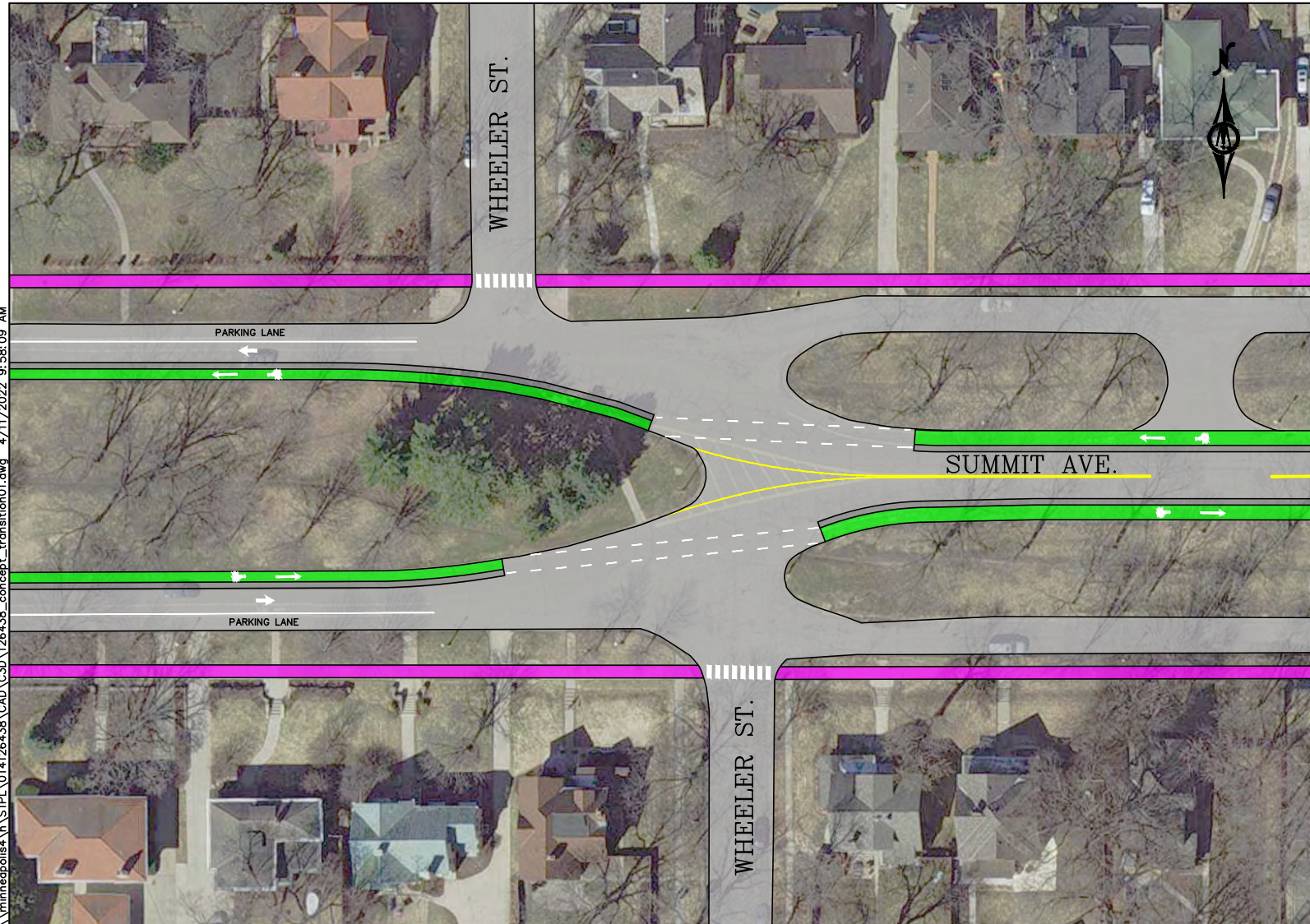


**Summit Ave Bike Plan: Wheeler St & Summit Ave**

**1-Way Bikeway (Median) to 1-Way Bikeway**

City of St Paul

April 2022



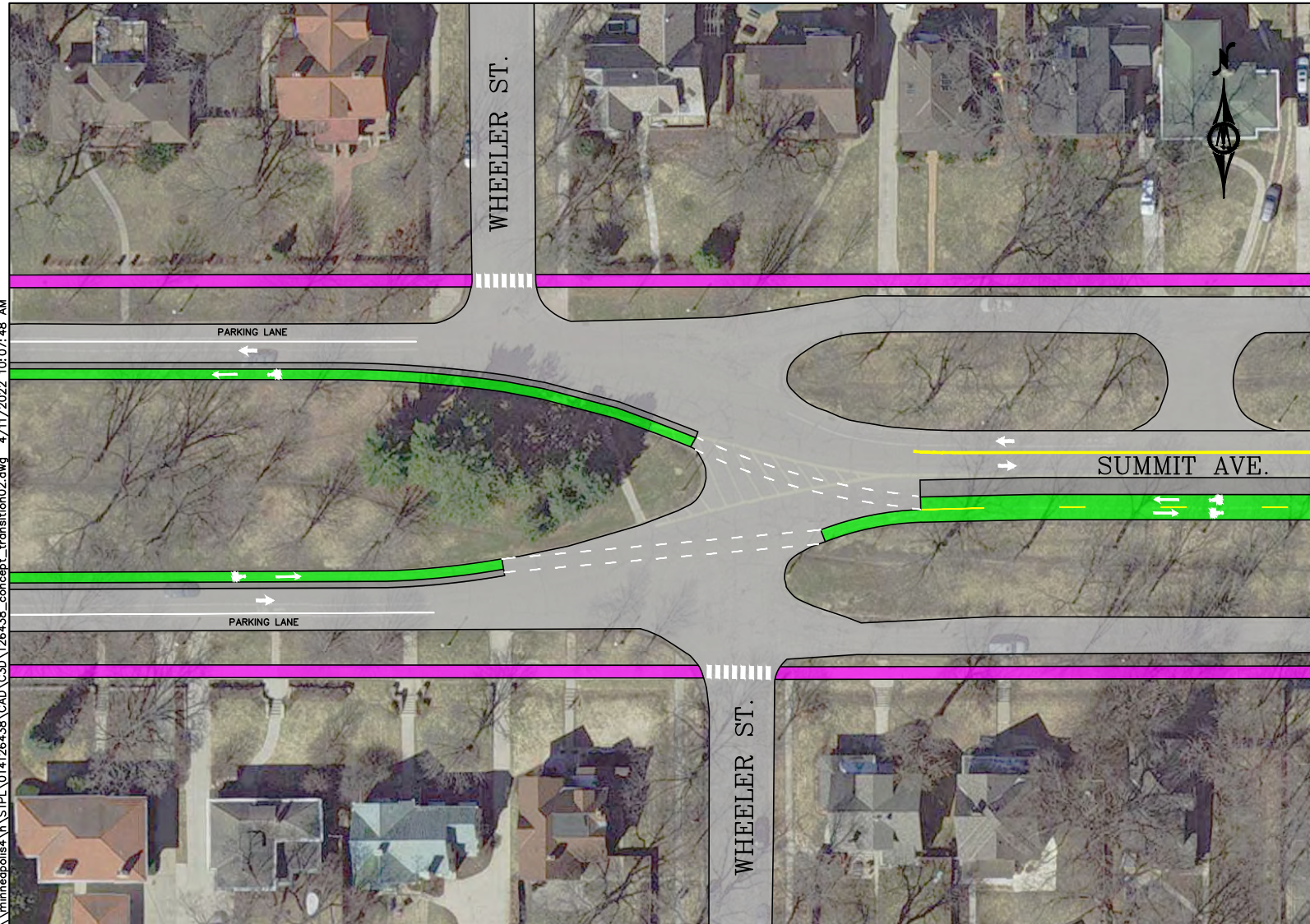
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**Summit Ave Bike Plan: Wheeler St & Summit Ave**

**1-Way Bikeway (Median) to 2-Way Bikeway**

City of St Paul

April 2022



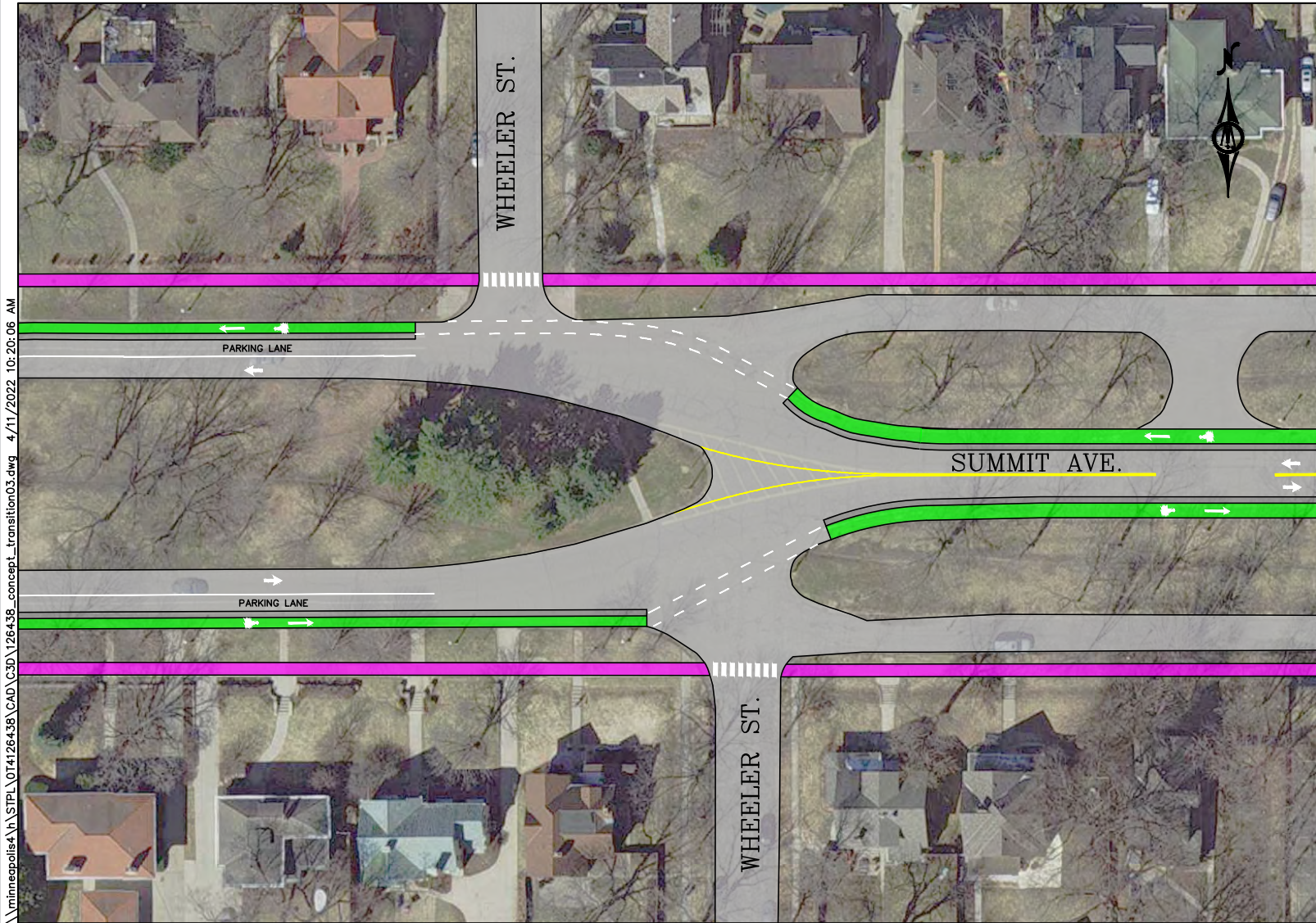
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**Summit Ave Bike Plan: Wheeler St & Summit Ave**

**1-Way Bikeway (Boulevard) to 1-Way Bikeway**

City of St Paul

April 2022



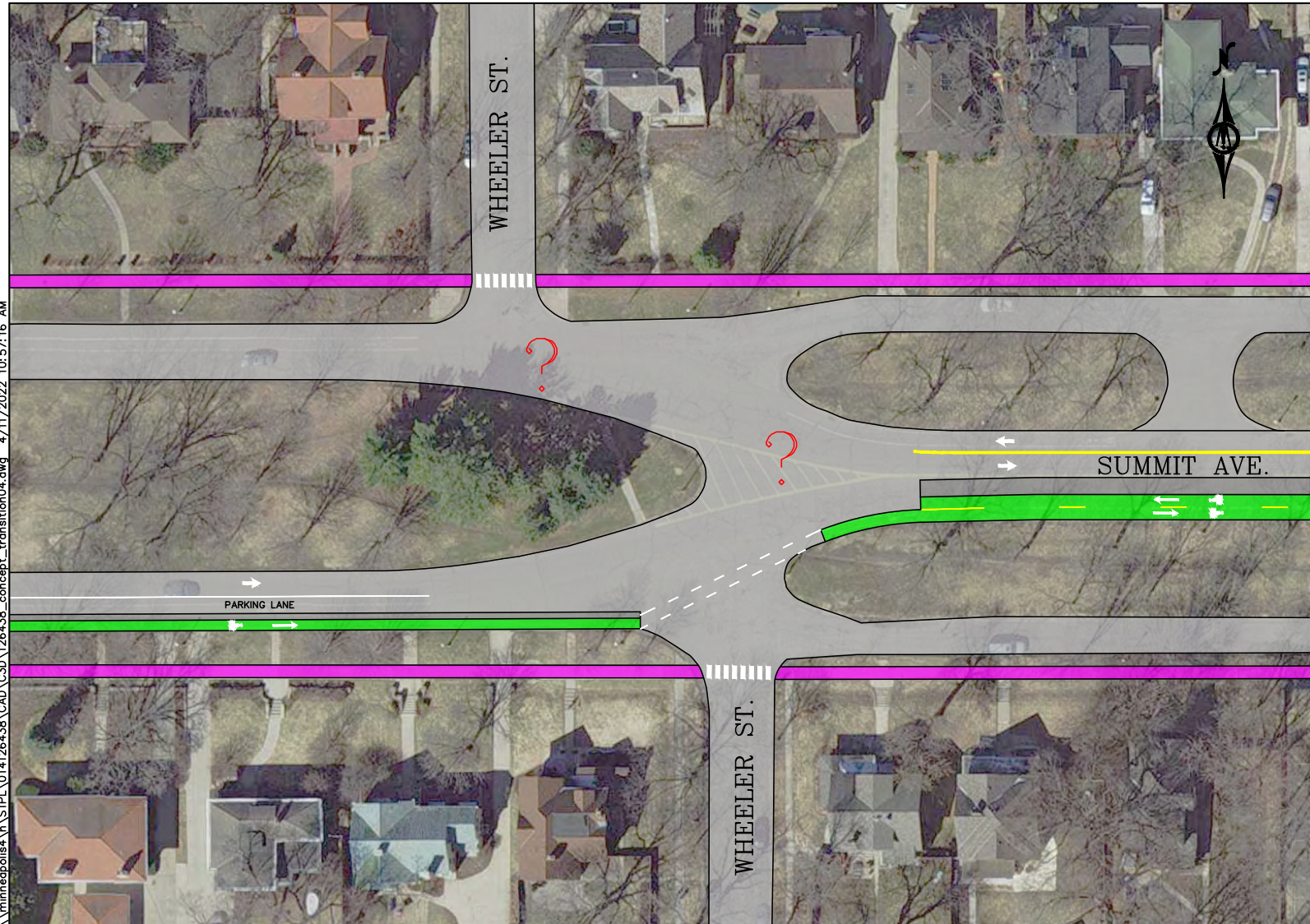
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**Summit Ave Bike Plan: Wheeler St & Summit Ave**

**1-Way Bikeway (Boulevard) to 2-Way Bikeway**

City of St Paul

April 2022



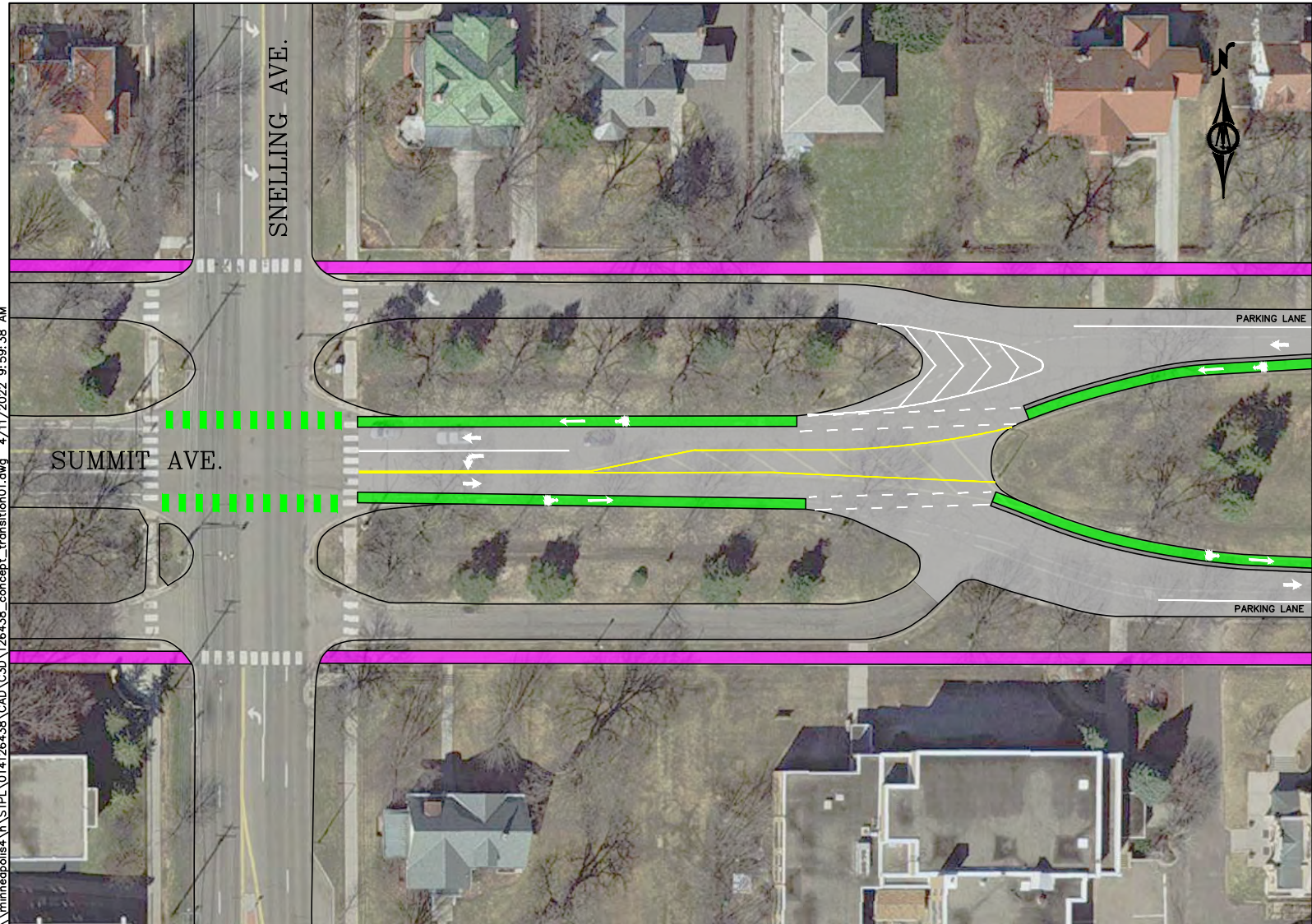
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Summit Ave Bike Plan: Snelling Ave & Summit Ave

1-Way Bikeway to 1-Way Bikeway (Median)

City of St Paul

April 2022



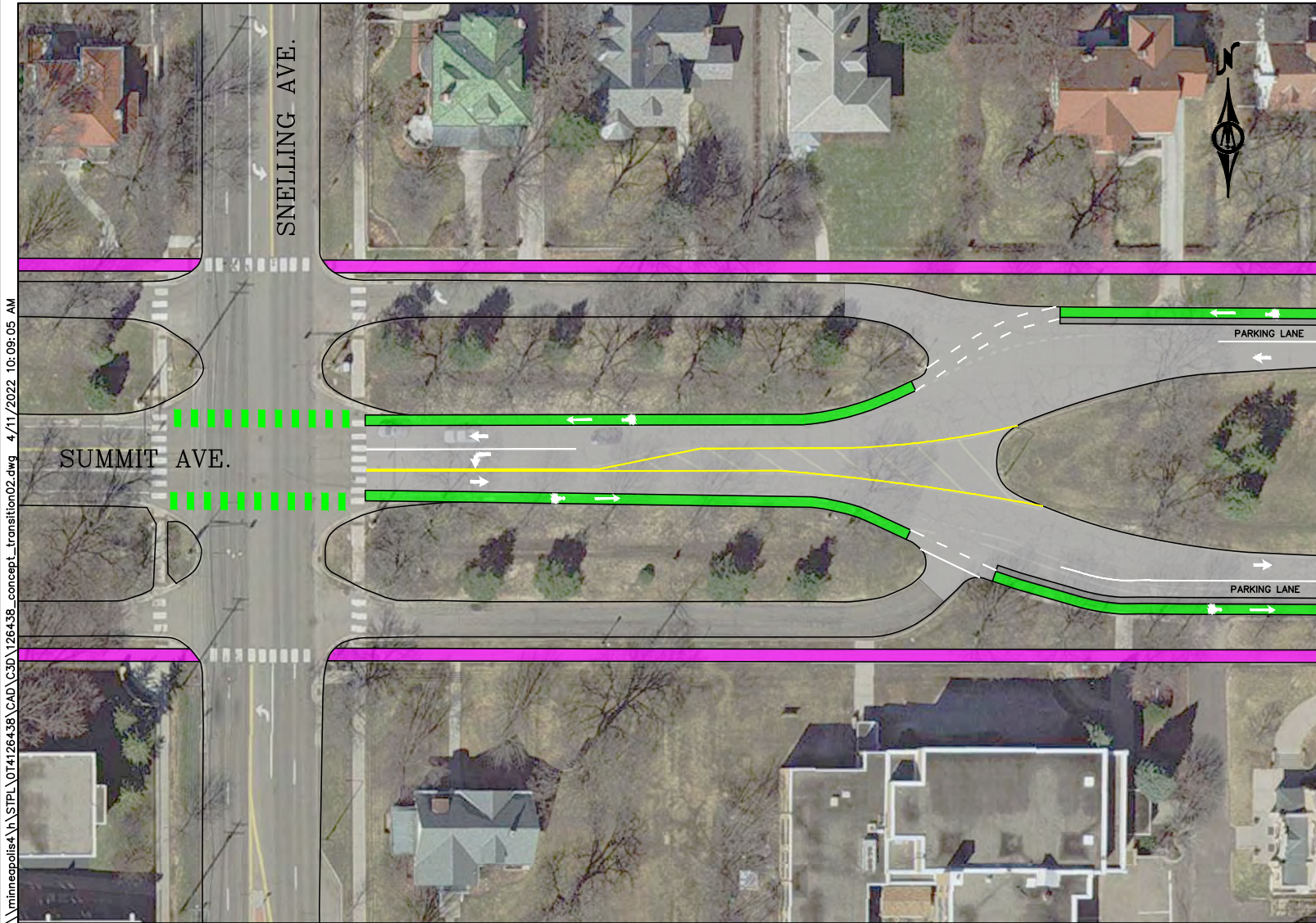
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**Summit Ave Bike Plan: Snelling Ave & Summit Ave**

**1-Way Bikeway to 1-Way Bikeway (Boulevard)**

City of St Paul

April 2022

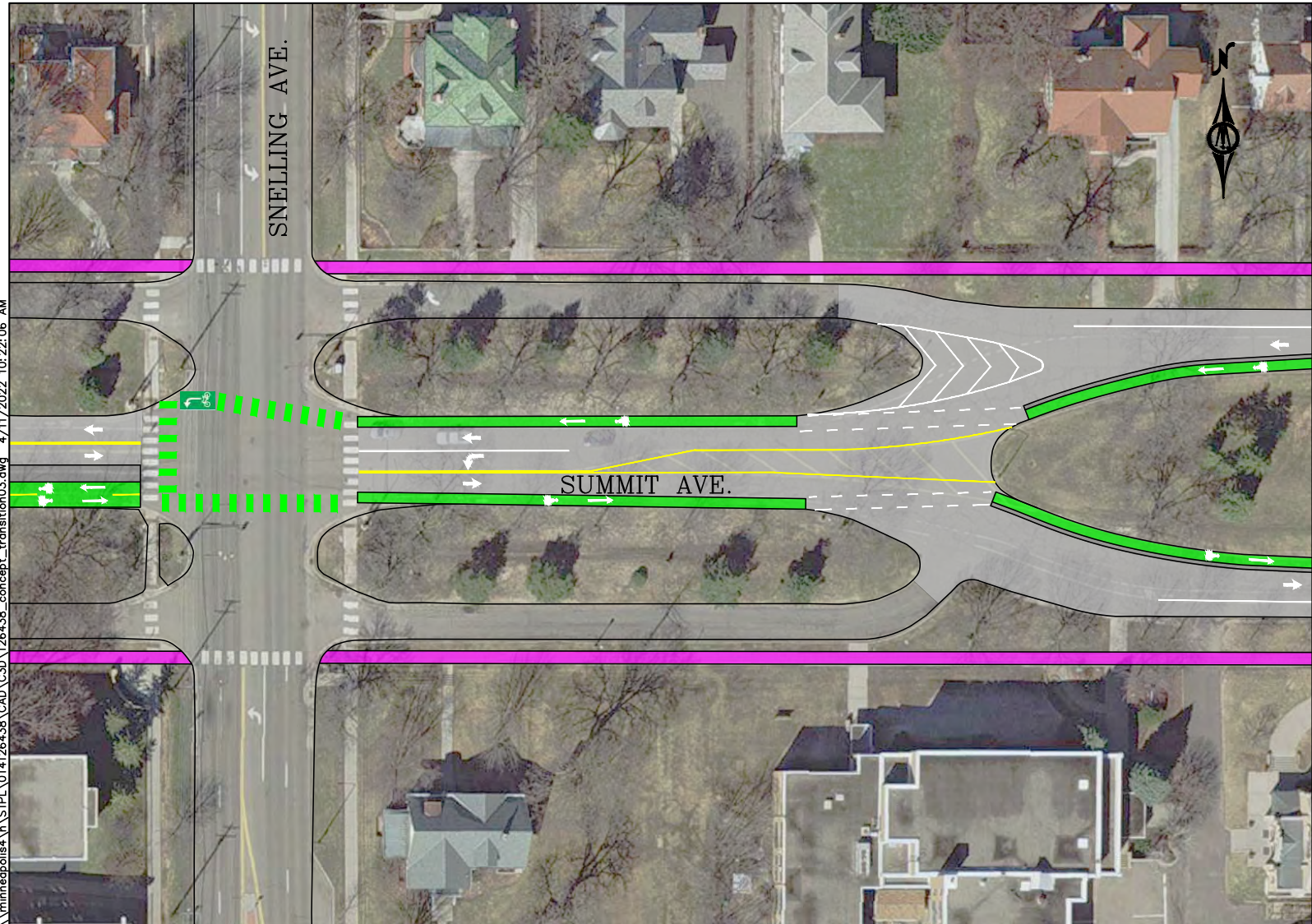


**Summit Ave Bike Plan: Snelling Ave & Summit Ave**

**2-Way Bikeway to 1-Way Bikeway (Median)**

City of St Paul

April 2022



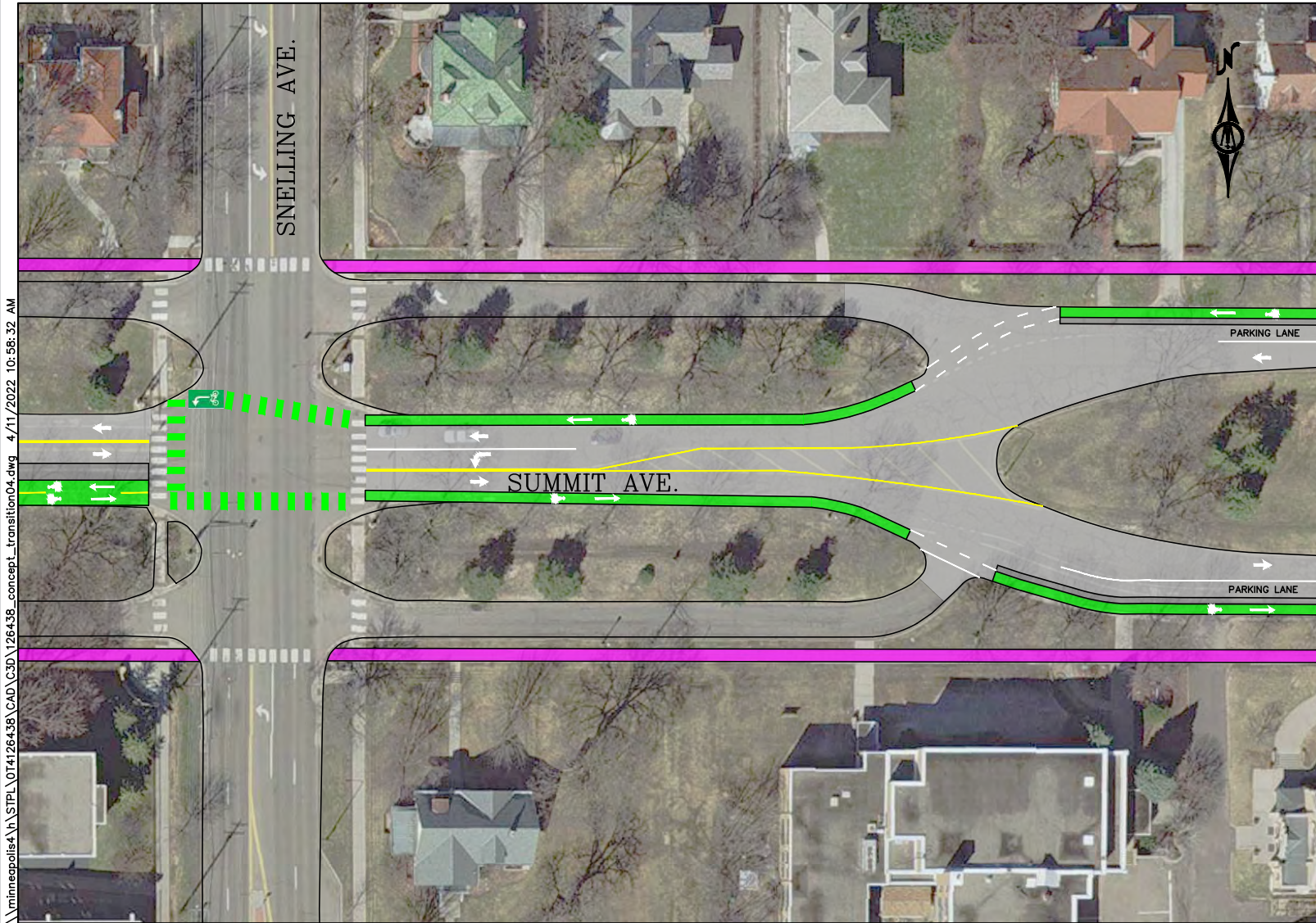
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**Summit Ave Bike Plan: Snelling Ave & Summit Ave**

**2-Way Bikeway to 1-Way Bikeway (Boulevard)**

City of St Paul

April 2022

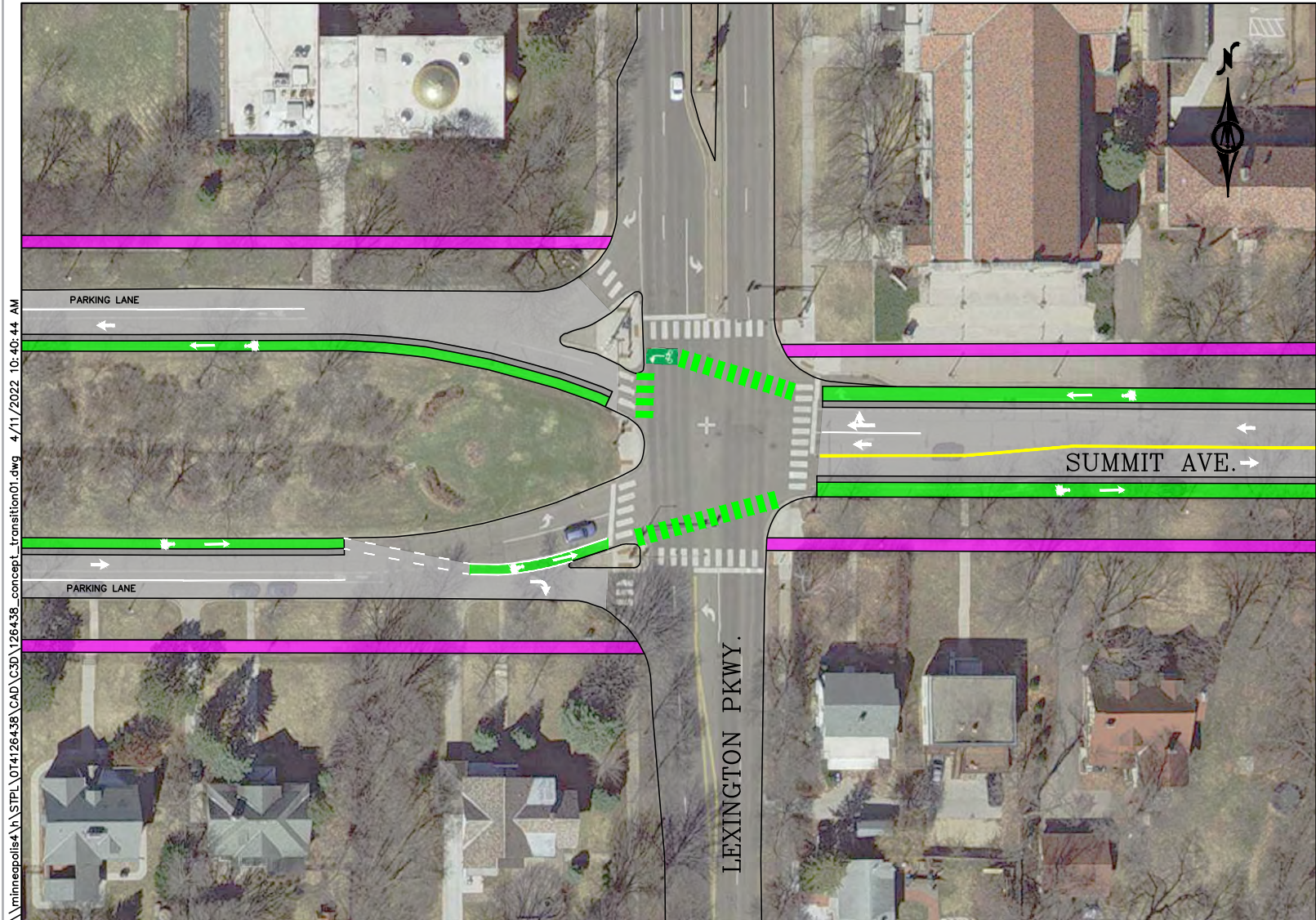


**Summit Ave Bike Plan: Lexington Pkwy & Summit Ave**

**1-Way Bikeway (Median) to 1-Way Bikeway**

City of St Paul

April 2022

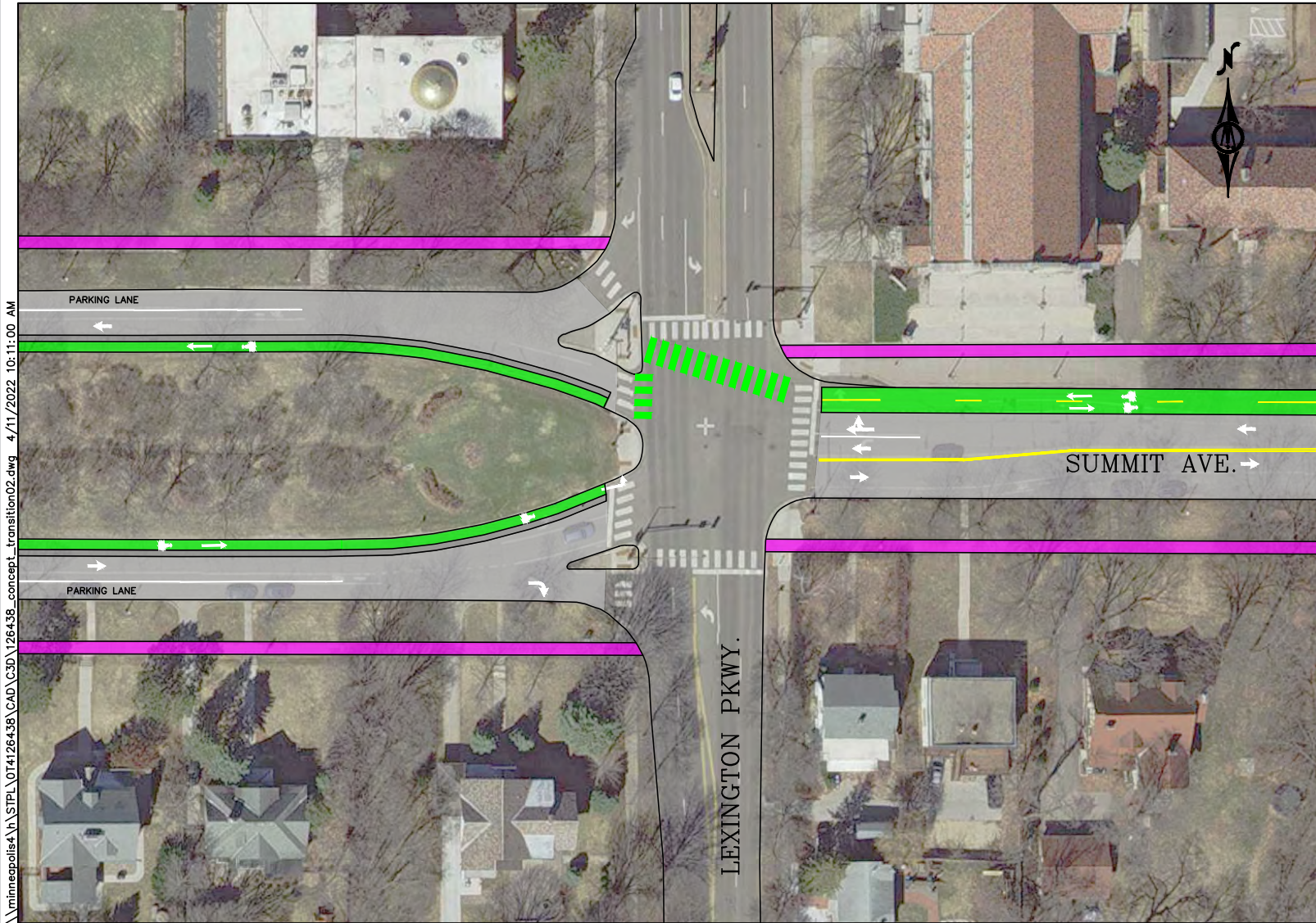


**Summit Ave Bike Plan: Lexington Pkwy & Summit Ave**

**1-Way Bikeway (Median) to 2-Way Bikeway**

City of St Paul

April 2022

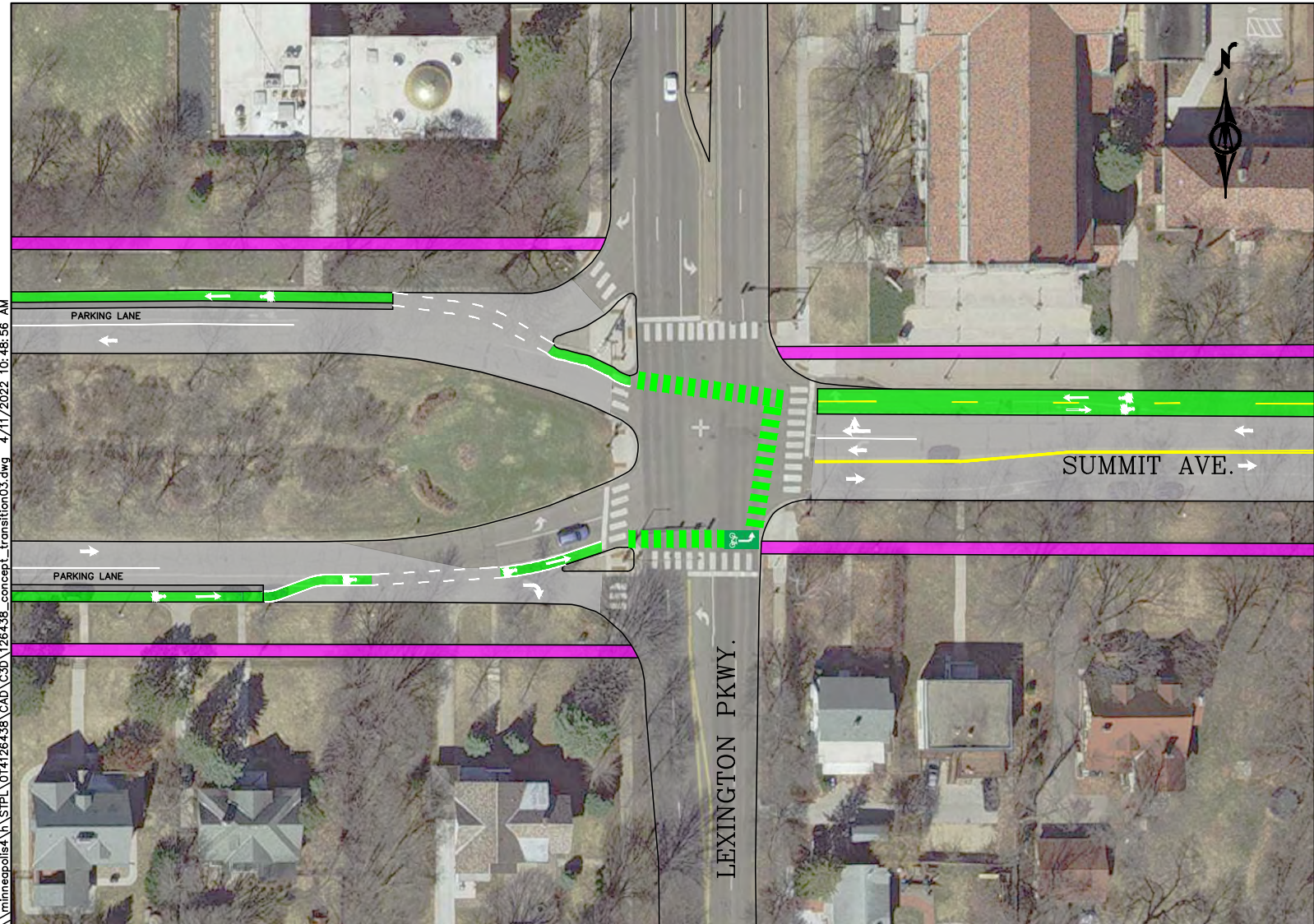


Summit Ave Bike Plan: Lexington Pkwy & Summit Ave

1-Way Bikeway (Boulevard) to 2-Way Bikeway

City of St Paul

April 2022



## SEGMENTS A/C

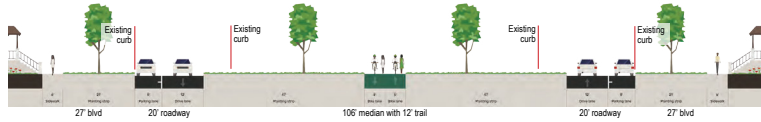
200' right-of-way, single median

### Existing Typical Section

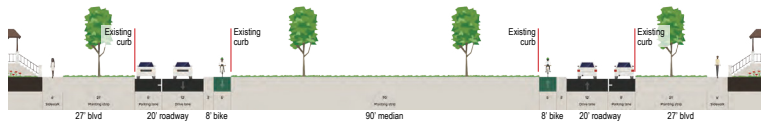


### Multiuse Trail Facility in Median

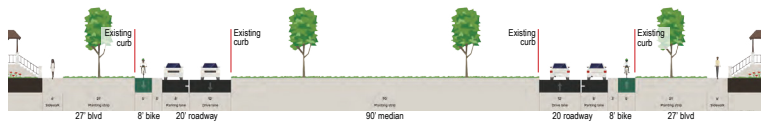
- could be located in the center or at back of curb
- expand median by 16-feet



### One-Way Separated Bicycle Facility at Median Edge



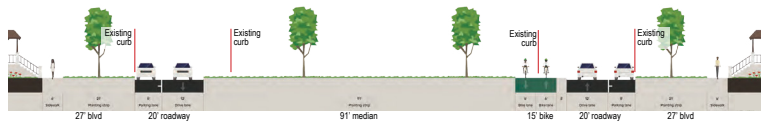
### One-Way Separated Bicycle Facility at Boulevard



### Two-Way Separated Bicycle Facility at Median Edge

- existing space for bike lane reallocated to median or blvd, can be incorporated as additional greenspace
- similar median impacts to multi-use trail facility in median

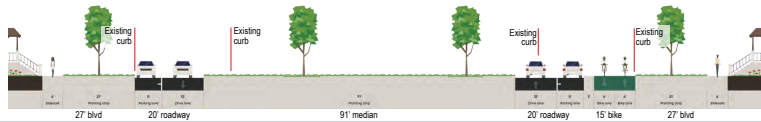
Ayd Mill Bridge, one-way facilities



### Two-Way Separated Bicycle Facility at Boulevard

- existing space for bike lane reallocated to median or blvd, can be incorporated as additional greenspace
- impacts to both sides of existing median

Ayd Mill Bridge, one-way facilities



## SEGMENT B

200' right-of-way, double median

### Existing Typical Section



### Multiuse Trail Facility in Median

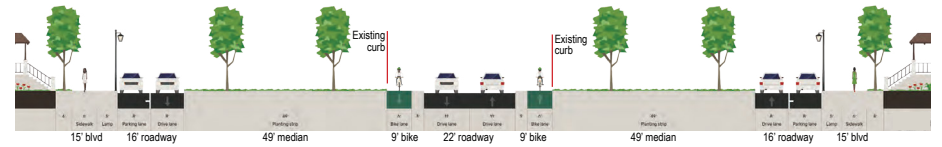
- could be located in the center or at back of curb
- expand both medians by 9-feet - greenspace and trail facility



### One-Way Separated Bicycle Facility at Median

- no impact to median greenspace
- above minimum bike standards (4-foot flex)

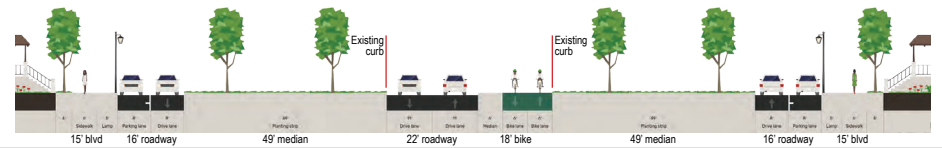
Separation of pedestrian facility



### Two-Way Separated Bicycle Facility at Median

- no impact to median greenspace
- above minimum bike standards (3- to 5-foot flex)

Separation of pedestrian facility



## SEGMENTS D/E/F

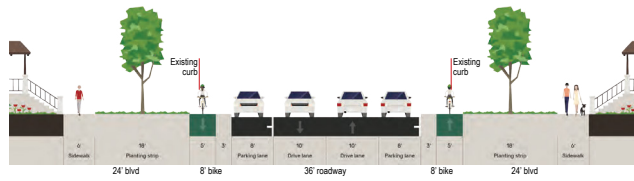
100' right-of-way, no median

### Existing Typical Section



### One-Way Separated Bicycle Facility

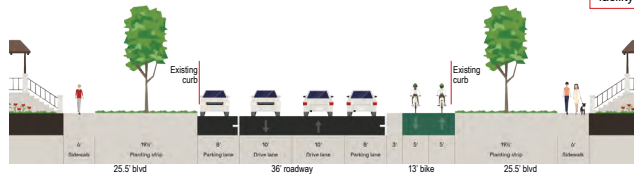
- 2-foot impact to boulevard greenspace (each side)



### Two-Way Separated Bicycle Facility

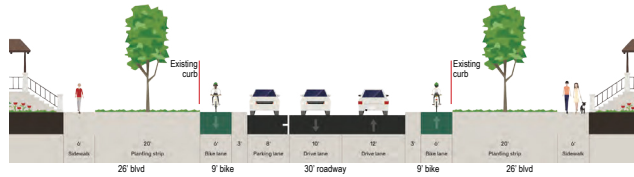
- .5-foot impact to boulevard greenspace (each side)

Proposed two-way facility at Kellogg



### One-Way Separated Bicycle Facility - Remove Parking

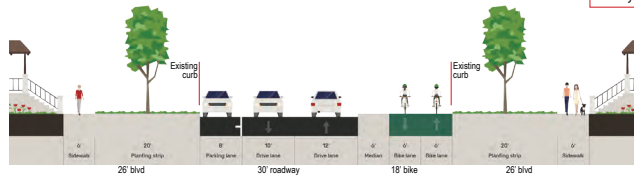
- No impact to boulevard greenspace



### Two-Way Separated Bicycle Facility - Remove Parking

- No impact to boulevard greenspace

Proposed two-way facility at Kellogg



# SEGMENT D/E/F - PARKING CONSIDERATIONS & IMPACTS

100' right-of-way, no median

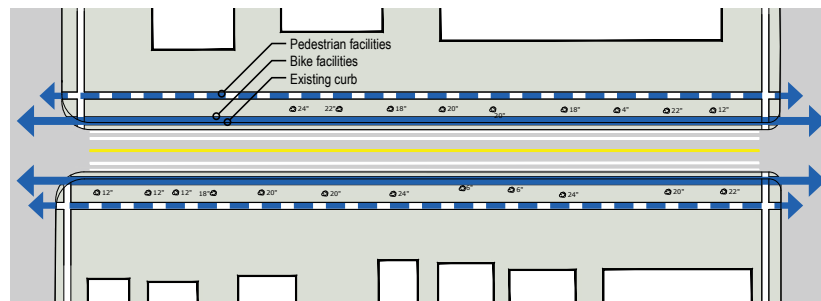
City Preferred Minimum Dimensions: 11'/12' Traffic Lanes; 8' Parking; 4' Buffer, 7' One-Way Bike Facilities, 12' Two-Way Facilities

**Existing Conditions**  
 • Transportation Envelope (road width): 48'

## 1-Way Cycle Facility

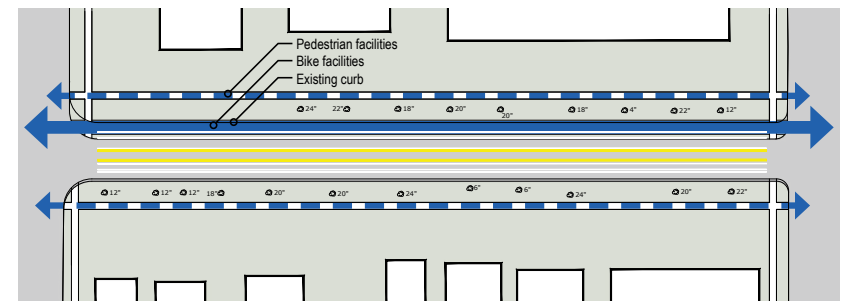
## Two-Way Cycle Facility

**Retain Parking**



**Anticipated Impacts**

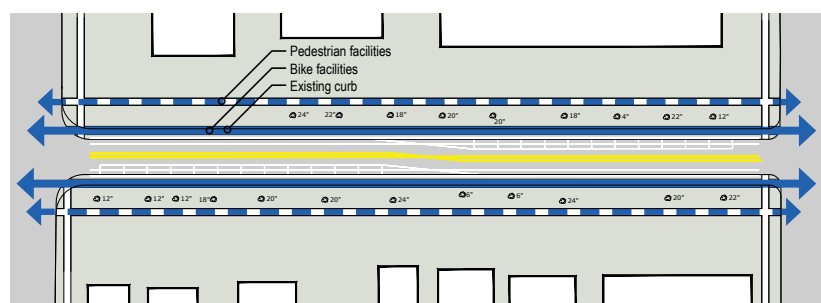
- Boulevard Greenspace: 6-foot impact on both sides (60' transportation envelope)
- Curb: move in 5-feet both sides
- Road Center Line: no change (38' width)



**Anticipated Impacts**

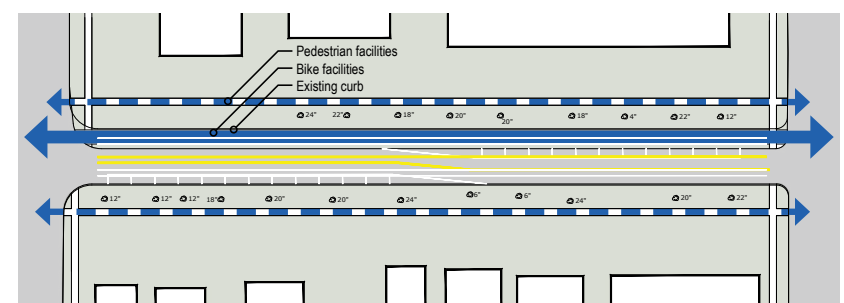
- Boulevard Greenspace: 3-foot impact on both sides (54' transportation envelope)
- Curb: move in 14-feet / move out 3-feet
- Road Center Line: shift 8-feet (38' width)

**Remove Parking**



**Anticipated Impacts**

- Boulevard Greenspace: 2.5-foot impact on both sides (53' transportation envelope)
- Curb: move in 8.5-feet both sides
- Road Center Line: shift 3-feet (31' width)



**Anticipated Impacts**

- Boulevard Greenspace: 1-foot addition (47' transportation envelope)
- Curb: move in 16.5-feet / move in .5-foot
- Road Center Line: shift 5-feet (31' width)

**Summit Avenue Regional Trail Master Plan**  
**Alternative Matrix**  
**Concept Layout Overview**  
 April 2022

Criteria		Segment A/C			Segment B			Segment D/E/F	
		Trail in Median	Road-Adjacent Bikeway at Median	Road-Adjacent Bikeway at Boulevard	Trail in Median	Road-Adjacent 1-way Bikeway	Road-Adjacent 2-way Bikeway	Road-Adjacent 1-way Bikeway	Road-Adjacent 2-way Bikeway
<b>Evaluation Matrix Goals</b>	Increase pedestrian and bicycle safety	0	+	++	0	+	++	++	++
	Comfortable trail experience supporting an all ages and abilities facility	0	+	+	0	+	+	+	+
	Support high quality regional trail experience	+	0	0	+	0	+	0	+
	Compatible with historic context	-	+	+	-	+	+	0	+
	Limits impacts to greenspace and trees	-	++	++	-	++	++	0	+
	Limits impacts to vehicle and parking functions	++	+	+	++	++	++	+	+
	Meets standard level of service for maintenance	+	0	0	+	0	0	0	0

Legend			
-	0	+	++
Does Not Meet Measure	Somewhat Meets Measure	Meets Measure	Exceeds Measure

Technical Memorandum #3 | Evaluation Matrix

**Summit Ave Regional Trail Alternative Evaluation**

Objectives	Measures	Measure Definitions
<b>Increase pedestrian and bicycle safety</b>	Trail connectivity/consistency	
	Separation of bicycle traffic from transit	
	Separation of bicycle traffic from vehicle traffic	
	Reduced crossing distance	Reduced exposure time
	Improved visibility of pedestrians to drivers	Sight line review, Stopping Sight Distance, Decision Sight Distance, Pedestrian Sight Distance
	Calm traffic speeds	
	Reduced pedestrian-vehicle conflict points	Number of conflict points
<b>Comfortable trail experience supporting an all ages and abilities facility</b>	Provides separate pedestrian and bicycle facilities	
	Reduces barriers to accessible facilities	
<b>Support high quality regional trail experience</b>	Trail facility design meets state and federal standards	
	Maximize wayfinding and amenity opportunities	
<b>Compatible with historic context</b>	Limits impacts to character-defining visuals	Limited use of vertical obstructions higher than the curb
	Limits impacts to green space	
	Prioritizes use of existing areas of pavement	
<b>Limits impacts to greenspace and trees</b>	Impacts to existing tree canopy in ROW	
	Limits impacts to green space	
<b>Limits impacts to vehicle and parking functions</b>	Parking impacts	Net loss of parking spaces
	Impacts to vehicular traffic patterns	
<b>Meets standard level of service for maintenance</b>	Net increase/decrease in required maintenance	
	Level of effort for winter maintenance	Equipment used and time to clear
<b>SCORE</b>		

CONCEPTS							
Segment A/C			Segment B			Segment D/E/F	
Trail in Median	Road-Adjacent Bikeway at Median	Road-Adjacent Bikeway at Boulevard	Trail in Median	Road-Adjacent 1-way Bikeway	Road-Adjacent 2-way Bikeway	Road-Adjacent 1-way Bikeway	Road-Adjacent 2-way Bikeway
-	++	++	-	++	++	++	++
0	++	+	0	+	+	+	+
++	0	++	++	0	++	++	++
Not a differentiator at concept stage To be determined with corridor-wide safety improvements toolbox							
0	++	++	0	++	++	++	++
+	+	+	+	+	+	+	+
+	+	+	+	+	+	+	+
++	-	0	++	0	+	0	+
Not a differentiator at concept stage To be determined with corridor-wide safety improvements toolbox Item also covered under Goal #5							
-	++	++	-	++	++	0	+
-	++	++	-	++	++	+	++
-	++	++	-	++	++	0	+
++	+	+	++	++	++	+	+
Not a differentiator at concept stage To be determined with corridor-wide safety improvements toolbox							
0	0	0	0	0	0	0	0
++	0	0	++	0	+	0	+
0	+	+	0	+	++	+	+

Scoring Criteria
1 = bike/ped facilities separated by traffic, 2 = bike/ped facilities separated by boulevard w/ 1-way bikeway, 3 = 1 = no bike facilities, 2 = shared facilities, 3 = separate buffered, but loads into bike facility, 4 = separate buffered facilities
1 = no bike facilities, 2 = <3' separation, 3 = 3-5' separation, 4 = >6' separation
1 = <5' reduction, 2 = 5-10', 3 = 10-15', 4 = 15'+
Factors that would reduce speed: Reduced Lane Width, Parking, Reduced General Traffic Lanes, Trees in Blvd. 1 =
1 = no bike facilities, 2 = mixed facilities, 3 = separate facilities, 4 = vertically separated facilities
All concepts will provide accessible facilities
All concepts will meet state and federal standards
1 = bike & ped separated by traffic, 2 = one-way bike & ped separated by blvd, 3 = two-way bike & ped separated by blvd
1 = >5' encroachment, 2 = 1-5' encroachment, 3 = <1' encroachment, 4 = no encroachment
1 = impacts to >25% tree canopy, 2 = impacts to 10-25% tree canopy, 3 = impacts to <10% tree canopy, 4 = no impacts to
1 = >5' encroachment, 2 = 1-5' encroachment, 3 = <1' encroachment, 4 = no encroachment
1 = loss of >25%, 2 = loss of 10-25%, 3 = loss of < 10%, 4 = no loss
2 = requires additional maintenance, 3 = maintains levels of maintenance, 4 = requires less maintenance
2 = multiple equipment passes, potential to haul-off snow, 3 = one equipment pass, potential to haul-off snow, 4 = one



Real People. Real Solutions.

**Summit Avenue Regional Trail Master Plan  
Historic Resources Technical Memo**

**By:**  
Renee L.H. Barnes, MFA

**Prepared for:**  
City of Saint Paul

**Prepared by:**  
Bolton & Menk, Inc.  
12224 Nicollet Ave  
Burnsville, MN 55337  
P: (952) 890-0509

March 2022

**Summit Avenue Regional Trail Master Plan Historic Resources Technical Memo**  
Prepared for the City of St. Paul

**Principal Investigator & Author**

Renee L. H. Barnes, MFA

Prepared by:  
Bolton & Menk, Inc.  
12224 Nicollet Avenue  
Burnsville, MN 55337

March 2022

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## Historic Resources Technical Memorandum

### INTRODUCTION

#### PROJECT INFORMATION

The City of St. Paul Parks and Recreation Department is developing a Master Plan for Summit Avenue Regional Trail. In this Master Plan the City will review the corridor from the Mississippi River to Downtown St. Paul. The Master Plan is evaluating opportunities, constraints, and feasibility of a regional trail facility within the Summit Avenue corridor.

One such constraint is that Summit Avenue is the location of two National Register of Historic Places-listed Historic Districts (National Register) and numerous individually listed historic properties. This memo will address numerous questions (listed below) the City has regarding the vast history and architectural character of the above mentioned resources.

- What are the character defining features of the landscape? What role do those play in guiding new features?
- What is the rhythm of street curb? What was there previously? What would the scale of new elements need to be and where could they be implemented?
- How has the public right-of-way evolved through time? As a designed landscape, how is the historical design intent defined, what uses have endured from the way people use the space, or have changed? (example of 1923 informal paths and current footpaths, St. Paul Bicycling early 1900s)
- What new features could be introduced to a historic landscape? What would we need to consider during design such that they are unlikely to be an adverse effect?
- What project precedents exist?
- What will the process be for implementation?

This memo will consolidate the character defining features into one document as an easy reference for planners of the above referenced Master Plan. The memo will document the changes through time and explore what new features could be introduced. It will provide examples of pedestrian and bike facilities within historic districts and how those addressed addition of these facilities to the district.

#### LAWS AND RESPONSIBILITIES

Before these questions can be addressed it is important to understand the laws that offer protection to individual historic resources and districts. There are federal, state, and local laws that can guide the work that occurs within or adjacent to these properties. Additionally, these laws also dictate the parties that should be involved in decisions regarding the work within these properties.

#### FEDERAL LAWS AND GUIDANCE

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies consider the effects of undertakings/projects involving historic properties. An undertaking can be any construction project the federal government provides money to, permits, or has jurisdiction over. Therefore, a project with a federal tie must adhere to Section 106 regulations. Since the Summit Avenue area has been researched intensely most of the regulations that relate to Assessment of Effects on historic properties will be the most useful. An Effect is defined as "alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register." In addition to the

Prepared by: Bolton & Menk, Inc.

Summit Avenue Regional Trail Master Plan Technical Memo | H19.114590

INTRODUCTION

4

## Historic Resources Technical Memorandum

NHPA guidance the National Park Service (NPS) provides guidance on how to limit adverse effects of new construction within the boundaries of historic properties within their Standards for Rehabilitation, specifically Standard 9 but also expanded to be more specific on their website.<sup>1</sup> Additionally, the NPS has developed guidance specifically for Cultural Landscapes.<sup>2</sup> In the broadest sense a cultural landscape is a historically significant property that shows evidence of human interaction with the physical environment. Even though the historic districts discussed below were listed prior to a formal definition of cultural landscapes by the NPS, it is important to take these guidelines for their treatment into consideration. The NPS guidance provided below will aid in the discussion about new features or designs that could be incorporated into the historic districts.

If a project has a federal nexus, the designated federal agency will need to participate in review of the Undertaking and decide on whether proposed actions will cause an adverse effect to the National Register properties.

#### STATE LAWS

The Minnesota Historic Sites Act (MS 138.661-138.669) states that the state, state departments, agencies, and political subdivisions (which responsible government unit [RGU], i.e. cities or municipalities) have a responsibility to protect the physical features and historic character of the properties listed in the National Register or in the State Register.

If a project only has state or local involvement, the State Historic Preservation Office (SHPO) would be consulted regarding the undertaking, determine appropriate treatments, and seek ways to avoid, minimize, and/or mitigate any adverse effects on the designated or listed properties.

#### LOCAL LAWS

Lastly, if a city has adopted a historic designation for districts or individual properties, they may have their own guidelines written in the municipal code that provide guidance regarding protecting the physical features and historic character of these properties. Specifically, the City of St. Paul's Code of Ordinances Chapter 74, Articles I and II relate to the district's Summit Avenue West Heritage Preservation District and Heritage Hill Historic Preservation District, respectively.<sup>3</sup> The guidelines focus are the structures within the district rather than the streetscape, but there are a few references to Public Infrastructure, New Construction, Landscaping, and Signs that will be valuable in guiding design within the districts.

The City of St. Paul Heritage Preservation Commission would be consulted regarding the undertaking, suggest appropriate treatments, and seek ways to avoid and mitigate any adverse effects on the designated properties.

#### SUMMARY OF HISTORIC RESOURCES

Summit Avenue has been a prominent and prestigious avenue for building residences in St. Paul since the 1850s. It was recognized early on that the buildings along this stretch of Summit Avenue were unique, needed to be documented, and listed in the National Register. The Historic Hill District was listed in the National Register in 1976 and is significant as the largest concentration of nineteenth and

<sup>1</sup> <https://www.nps.gov/tps/standards/applying-rehabilitation/successful-rehab/new-construction.htm>

<sup>2</sup> <https://www.nps.gov/Tps/standards/four-treatments/landscape-guidelines/index.htm>

<sup>3</sup> The National Register listing names the Heritage Hill Historic Preservation District as Historic Hill District. This formal name will be used through the rest of the memo.

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early twentieth century architectural styles in Minnesota. The period of significance for the district is the 1880s to the 1930s and the boundary comprises approximately seventy-five blocks (**Figure 1**).<sup>4</sup>

The West Summit Avenue Historic District was listed in the National Register in 1993. The district is significant for community planning and urban development, and the largest unbroken avenue of Colonial Revival and Classical Revival-style architect-designed houses in the Twin Cities. The period of significance for the district is 1885 to 1938 and the boundary is approximately 2.5 miles along Summit from Lexington Parkway on the east and the Mississippi River Boulevard to the west (**see Figure 1**).

Moreover, there are seven individually listed National Register properties along Summit Avenue, which are also contributing resources to the above referenced districts. They are listed below as they appear on Summit from the east to the west:

- St. Paul Cathedral, 225 Summit Avenue (national only)
- James J. Hill House, 240 Summit Avenue (state and nationally listed)
- Burbanks-Livingstone-Griggs House (James C. Burbank House), 432 Summit Avenue (state and nationally listed)
- F. Scott Fitzgerald House (Summit Terrace), 587-601 Summit Avenue (state and nationally listed)
- Irvine, Horace Hill, and Clotilde House (Governor’s House), 1006 Summit Avenue
- Pierce and Walter Butler House, 1345-1347 Summit Avenue
- Dr. Ward Beebe House, 2022 Summit Avenue

Each of the above listed districts and individual properties are also locally designated as a Local Heritage Preservation district or property (unless otherwise noted above).

### CHARACTER DEFINING FEATURES

This discussion will focus on the districts and the features of Summit Avenue specifically since the individual properties are contributing to the whole. Any character defining features adversely effected by the undertaking would in-turn be an adverse effect on the individual properties.

#### Historic Hill District

The Historic Hill District encompasses many more streets than just Summit Avenue and the bulk of the focus of this nomination is on the substantial structures in this district. For this early nomination character defining features are not called out directly, especially not in relation to the streetscape. The nomination is split into areas and “Area 2” is reserved just for the sixteen-block segment of Summit Avenue from Kellogg Boulevard to Lexington Parkway. The historic context does say that Summit Avenue was and still is home to large mansion-type residential properties on spacious lots. Summit Avenue was the first offshoot from the main downtown area, and it provided excellent building sites on the bluff’s edge. The nomination also points out it was undeveloped and a clean slate for development with plenty of space to build large homes.<sup>5</sup> It is expected that with these large homes, associated landscape and streetscape would also be very important.

Other resources help to determine that the street width was planned early on. The 1888 and 1903 Sanborn Maps for Summit Avenue shows a 100-foot avenue. In comparison, adjacent streets Grand Avenue to the south was 80 feet and Portland Avenue to the north was 66 feet. A review of other

<sup>4</sup> The figure shows the local, state and National Register boundaries.

<sup>5</sup> *Historic Hill District*, National Register of Historic Places Nomination Form, available from:

<https://npgallery.nps.gov/GetAsset/a8ab70fe-59a3-4d80-b71f-181710588c01>

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streets in Saint Paul on these maps indicate that 66 feet was the normal street width (**Figures 2-3, street widths in red box**).<sup>6</sup> Thus the layout of Summit Avenue was unique and distinctive, relative to surround roadways, from a very early timeframe within the city.

### West Summit Avenue Historic District

The West Summit Avenue Historic District encompasses mainly the parcels fronting Summit Avenue. This nomination was completed in the early 1990s and offers more insight into the character-defining features of the streetscapes. In the description of the property types found in the district it notes that the district includes “the parkway and its electric lighting stretching from Lexington to Mississippi River Boulevard, one marble sidewalk, wrought iron and/or brick fences, brick piers, a monument, a flagpole, and miscellaneous outbuildings.” It goes on to call out the “most visually distinguishing feature of the avenue is its width and median boulevard.” From Lexington to mid-block west of North Saratoga Street and from just east of North Wheeler Street to Mississippi Boulevard, Summit Avenue maintains a 200-foot-wide street with a median encompassing 90 feet of that width. The nomination goes on to state that this wide boulevard was accomplished by a group of citizens in 1886 who organized as the Summit Avenue Boulevard and Park Association to widen the street. Property owners along this stretch gifted the land to the city to accomplish this. The boulevard was started the next year. This interest in a boulevard also has its roots in the hiring of H.W.S. Cleveland, who consulted for the City of St. Paul on the outline of the park system in the city. Cleveland noted Summit Avenue as an excellent area for such a parkway with wide boulevards and he advocated that these were superior to isolated and discrete neighborhood parks.<sup>7</sup>

Considering the interest in the public to create a street that was grand and noteworthy, Summit Avenue did experience some neglect in the beginning years as noted in park board annual reports from 1898, 1901, and 1903, but by 1907 it was noted that the avenue was in good condition and trees were trimmed. It remained a dirt road until sometime around 1913-1924 when it was completely paved.<sup>8</sup>

Granite curbing is not called out in the nominations but was widely used throughout St. Paul and is still used in portions of Summit Avenue. If an inventory of the remaining granite curb along Summit has not been completed recently, it is recommended that is done before any work on the street is performed.

After a review of these sources, it is clear the character-defining features are:

- The width of Summit Avenue:
  - 100 feet between Kellogg Boulevard and Lexington Avenue (this measurement includes the 48-foot roadway and two 28-foot grassy boulevard)
  - 200 feet between Lexington Avenue and Mississippi River Boulevard (this measurement includes the 90-foot median, two 28-foot roadways, and two 27-foot boulevards)
- Maintaining the 90-foot median where it exists between Lexington Avenue and Mississippi Boulevard.
- If granite curbs or marble sidewalks do still exist, these should be considered character-defining features and incorporated back into place if possible.

<sup>6</sup> Sanborn Map Company, 1888 Volume 3, page 60, available from: <https://www.loc.gov/collections/sanborn-maps/?fa=location:minnesota%7Clocation:saint+paul>; Sanborn Map Company, 1903 Volume 2, page 51, available from: <https://www.loc.gov/collections/sanborn-maps/?fa=location:minnesota%7Clocation:saint+paul>

<sup>7</sup> *West Summit Avenue Historic District*, National Register of Historic Places Registration Form, available from: <https://npgallery.nps.gov/GetAsset/109d6f44-c9af-4cb2-8f63-4ad938f772f0>

<sup>8</sup> *West Summit Avenue Historic District*, National Register of Historic Places Registration Form, available from: <https://npgallery.nps.gov/GetAsset/109d6f44-c9af-4cb2-8f63-4ad938f772f0>

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- Maintaining the general rhythm of trees and manicured law/vegetation in the median and on the boulevards.

### Changes Over Time

It is not hard to believe a neighborhood in a quickly growing city that was platted over 140 years ago would experience change. While most of the research supports that the width of the street has not changed over the years, the question remains what has changed within that street width and if any of those changes could support a change now for a trail facility along Summit Avenue.

An early photograph dated 1890 from Macalester College Archives shows Summit Avenue looking west near the college (**Figure 4**). On the left-hand side of the photograph are early professors' houses and a church. The photograph looks down Summit at the portion between Snelling Avenue and N Wheeler Street where the main roadway divides the green boulevard space. This section is different than other portions of Summit Avenue, but it appears to have been an early design choice that has remained to this day. This photograph also shows fencing around green space. This could have been to protect the newly planted trees in the newly laid out boulevards, but it was not something that would become permanent.

Ten years later there are a few photographs that show some changes to the same area. A circa 1900 photograph from Macalester College Archives shows an aerial view from the house shown in the previous photograph (**Figure 5**). The fences appear to have been removed and paths/sidewalks have been added to the center of the divided boulevards (foreground) and down the center of the large main boulevard (background). Wooden boards are used for the sidewalks on the north side of the street. Another photograph dated circa 1900 states it is on Summit Avenue but does not say where (**Figure 6**). It looks like it could be in the same general area but there are no houses in the picture. It is assumed this is further west of Snelling looking toward the river where development was slower.

The paths down the center of the boulevard were most likely for the use of bicycles as evidence by newspaper articles in the late 1890s and early 1900s.<sup>9</sup> The path is referenced to be made of crushed stone, which can be confirmed in Figure 3 referenced above. The paths are very white in the photograph.

Aerials from the mid-1920s show that the bike paths down the middle of all the medians were no longer there (**Figure 7**). The sidewalks were a short-lived concept and the area returned to the green space that was originally planned.

While there were some changes along Summit Avenue in early years, it was returned to the basic configuration seen today. Additionally, since the aforementioned bike paths were only installed for a brief time in contrast to Summit Avenue's long history, it is not something that can be considered a character-defining feature within the period of significance for the districts. In summary the integrity of Summit Avenue's streetscape is still well preserved as first conceived as a broad boulevard and greenspace.

<sup>9</sup> This information comes from an article found here: <https://streets.mn/2018/06/22/restoring-summit-avenues-historic-bike-lanes/>, which also references and links the appropriate newspaper articles.

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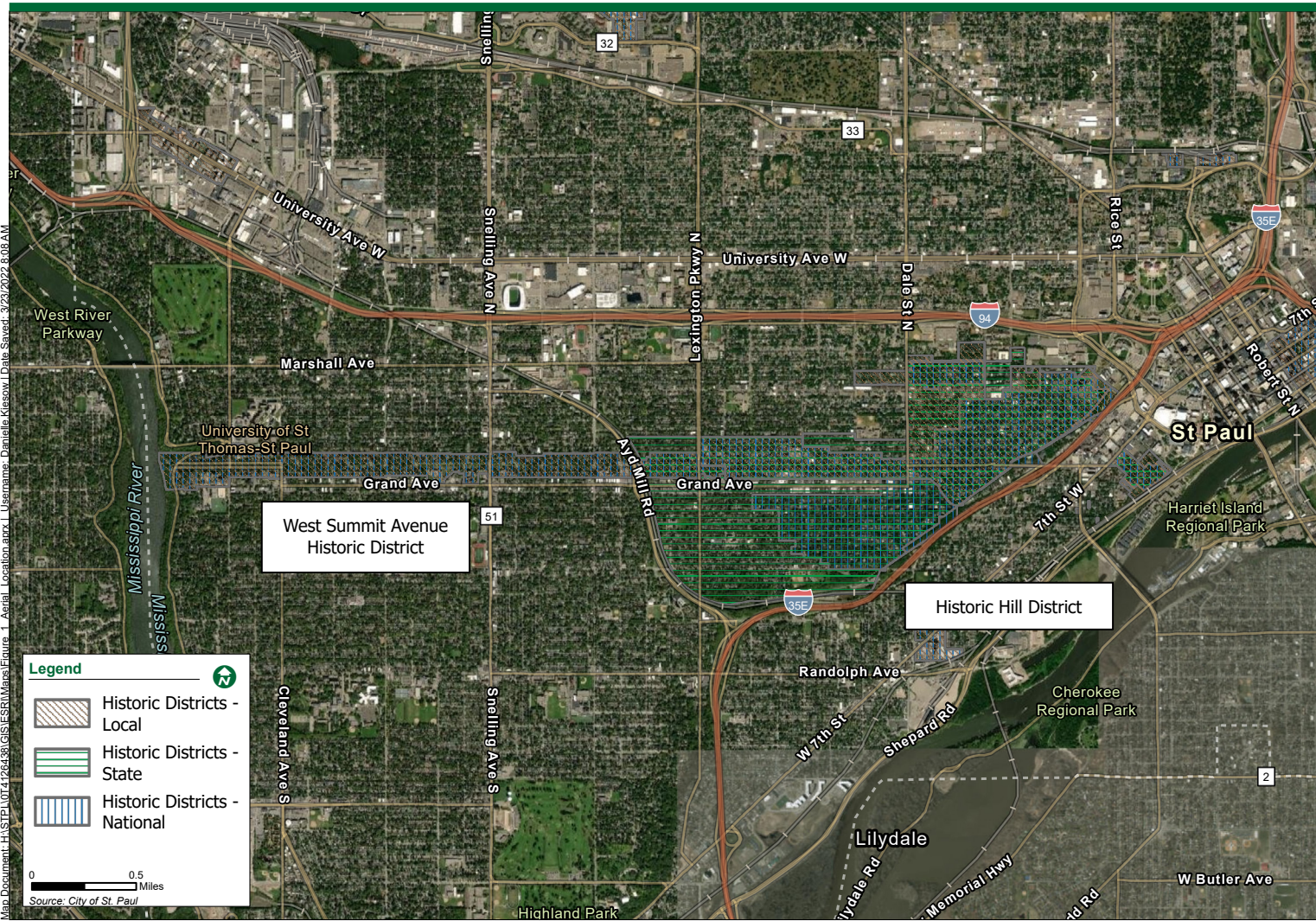
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Figure 1: Aerial Location



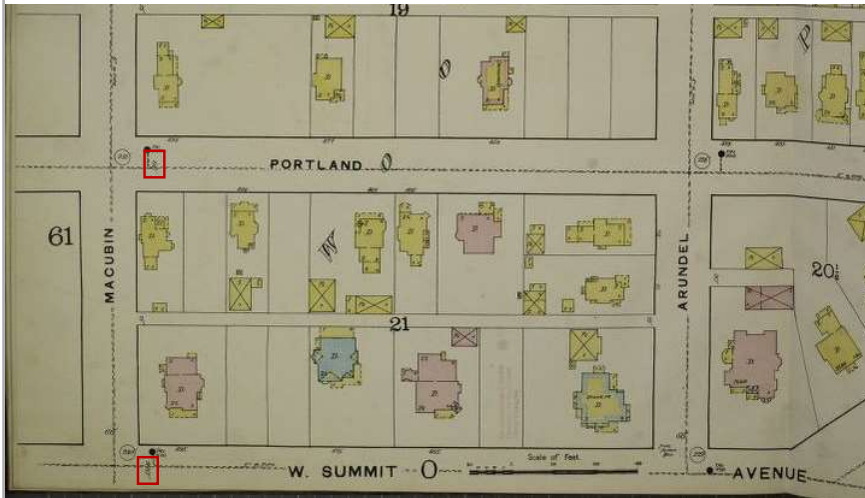
March 2022



Map Document: H:\STP\UT\17264381\ESR\Maps\Figure\_1\_Aerial\_Location.mxd | User: daniel.kiesow | Date Saved: 3/22/2022 8:08 AM

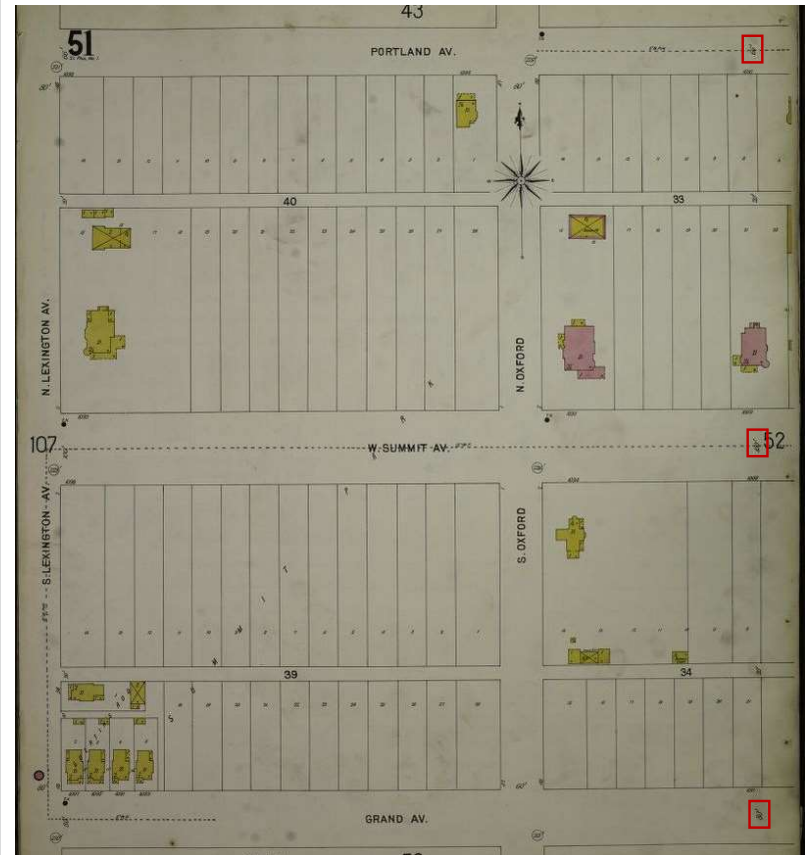
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Figure 2. Sanborn Map from 1888 showing Summit and Portland.



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Figure 3. Sanborn Map from 1903 showing Summit and Portland.



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Figure 4. View of Summit Avenue near Macalester College, looking west, 1890.



Showing sweep of prairie on Summit Avenue  
looking west. Row of faculty homes; church

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Figure 5. View of Summit Avenue from rooftop, looking northwest, c. 1900.



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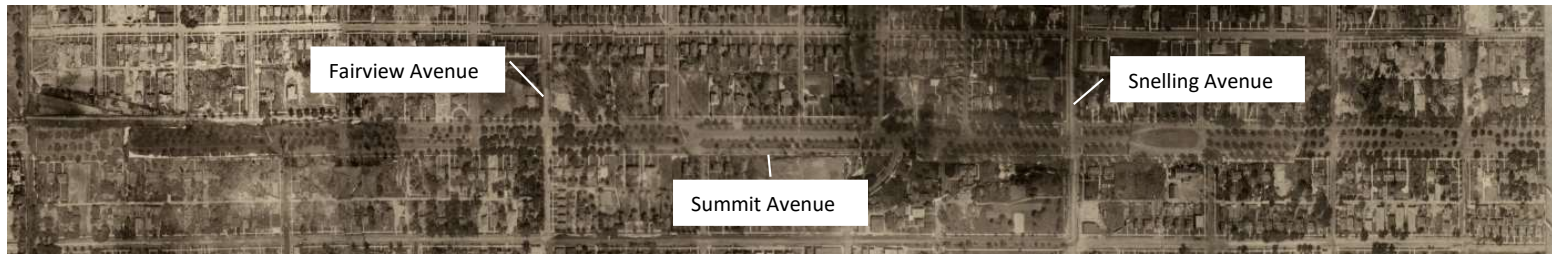
Figure 6. View of Summit Avenue, looking west, circa 1900.



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**Figure 7. Aerial from mid-1920s of Summit Avenue, between Fairview and Snelling Avenues.**



**PRECEDENTS**

The Twin Cities biking facilities has experienced a boom in the last 10 years and there are numerous historic districts with these facilities within them. This section will look at those districts and provide examples and descriptions of what was done to accommodate bike/trail facilities.

**MINNESOTA**

**St. Paul**

St. Paul has five additional national, state-listed, or locally designated districts besides the Summit Avenue pair described above. Of those only one is adjacent to the installation of an off-street path dedicated to the use of bicycles. The locally designated Lowertown District is roughly bounded by Jackson Street on the west, 7<sup>th</sup> Place East on the north, Broadway Street on the east and Kellogg Boulevard East on the south and includes Union Depot. The National Register district is slightly smaller and only includes one of the four blocks along Jackson Street. The Lowertown Historic District is a collection of buildings from 1870s–1920s and is significant for its river and rail connections, economic impact, architecture, and urban planning.<sup>10</sup>

The off-street path is on Jackson Street and extends from Kellogg Boulevard East north to the I-94 corridor and it was constructed in 2016 and 2017. St. Paul has been undergoing many years of improving bicycle and trails throughout the city.

The Jackson Street is a one-way, two-lane traffic road traveling south. The project consisted of reconfiguring the roadway and sidewalk to incorporate an off-street two-lane bike lane on the west side of the street (Figures 8-9). This district is purely an urban district that does not have much in the way of landscaping or a residential feel. The bikeway has been designed in a way that is a minimal intrusion within the district. The bike lanes are denoted through different color asphalt and yellow and green pavement markings.

**Minneapolis**

The twin sister city of St. Paul has 18 historic districts within the city limits. For this memo a representative sample of residential districts will be reviewed since the Summit Avenue project will occur within a mostly residential neighborhood. Two residential districts located just south of downtown are located close to each other: Stevens Square and Washburn/Fair Oaks. Stevens Square is comprised of apartment buildings and single-family homes constructed during the 1910s and 1920s and is centered around Stevens Square Park. It is roughly bounded by 1<sup>st</sup> Avenue South on the west, 17<sup>th</sup> Street East on the north, 3<sup>rd</sup> Avenue South on the east and Franklin Avenue on the south. The neighborhood is significant for its part in the residential development of Minneapolis before World War I.<sup>11</sup> Washburn/Fair Oaks is comprised of significant residences built at the turn of the century by prominent Minneapolis developers. It is roughly bounded by the alley between First Avenue South and Nicollet Avenue on the west, Franklin Avenue on the north, I-35W on the east, and 26<sup>th</sup> Street East on the south.<sup>12</sup>

<sup>10</sup> *Lowertown Historic District*, National Register of Historic Places Inventory-Nomination Form, available from: <https://www.rchsc.com/wp-content/uploads/2017/09/National-Register-Nomination-Lowertown-Historic-District-1983.pdf>

<sup>11</sup> *Stevens Square Historic District*, National Register of Historic Places Registration Form, available from: <https://npgallery.nps.gov/GetAsset/06340d92-701f-4ce8-8e7d-91d4dea6d56b>

<sup>12</sup> *Washburn-Fair Oaks Historic District*, available from: <https://www2.minneapolismn.gov/resident-services/property-housing/property-info/landmarks/alphabetical/washburn-fair-oaks-historic-district/>

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The main bike routes through these two historic districts are located on 1<sup>st</sup> Avenue South, 24<sup>th</sup> Street East and 26<sup>th</sup> Street east. The 1<sup>st</sup> Avenue corridor is a two-way, two-lane street with parking on the east side of the street and the bike lane markings next to the parking (Figures 10-11). The absence of a second

lane on the west side indicates this sole bike lane is for two-way traffic. The 24<sup>th</sup> Street East corridor is a two-way, two-lane street with parking on the south side only, an east-bound bike lane next to parking and then a west-bound bike lane on the north side (Figure 12). The 26<sup>th</sup> Street East corridor is a one-way, two-lane street traveling east, with parking on the south for the block between 1<sup>st</sup> Street and Stevens Avenue and a wide bike lane on the north. The bike lane is further divided with diagonal lines and has yellow plastic bollards denoting no vehicular traffic allowed in that lane (Figures 13-14).

A third historic district is located near the University of Minnesota campus, the Fifth Street Southeast Historic District, which is comprised of apartments buildings and single-family homes. The district is significant for its nineteenth century architectural styles built by influential Minneapolis citizens. It is roughly bounded by 4<sup>th</sup> Avenue Southeast on the west, the alley between 5<sup>th</sup> Street Southeast and 6<sup>th</sup> Street Southeast on the north, I-35W on the east, and the alley between 4<sup>th</sup> Street Southeast and 5<sup>th</sup> Street Southeast on the south.<sup>13</sup>

The main bike route through this district is 5<sup>th</sup> Street Southeast, although there is a route on 4<sup>th</sup> Street Southeast, which is just outside the district. The 5<sup>th</sup> Street Southeast corridor is a one-way, one-lane street traveling east with parking on the south side. The north side of the street has a bike lane with a double yellow line indicating the west bound bike traffic can travel using that lane. It is indicated with a pavement marking and "BLVD" that the east bound bike traffic must share the road with the east bound vehicular traffic (Figure 15).

As mentioned above the adjacent bike route exists on 4<sup>th</sup> Street Southeast is just outside the district but will be described as it appears to be an accompaniment to the 5<sup>th</sup> Street Southeast corridor. The 4<sup>th</sup> Street Southeast corridor is a one-way, two-lane street traveling west, with parking on blocks between I-35W and 6<sup>th</sup> Avenue SE the south side of the street. A bike path is marked on the pavement but instead of being directly adjacent to the curb it is offset by a couple of feet (Figure 16).

**Rochester**

Rochester has a residential historic district named Pill Hill, which is significant for its collection of architecturally significant houses built in the early nineteenth century till the late 1930s, and the large number of medical professionals associated with the nearby Mayo Clinic which made the area their home. The district is roughly bounded by 3<sup>rd</sup> Street Southwest on the north, 7<sup>th</sup> Avenue Southwest on the east, 9<sup>th</sup> Street Southwest on the south, and 10<sup>th</sup> Avenue Southwest on the west.<sup>14</sup>

The main bike route through this district is 6<sup>th</sup> Street Southwest corridor is a two-way, two-lane street with no parking and a bike lane on the south side of the street (Figure 17). According to an aerial from 2015 the street was restriped to accommodate the bike lane on the south side.

**NATIONAL**

The following examples from cities outside of Minnesota are cities that are of a similar population size to St. Paul or Minneapolis and contain historic districts that are mostly residential in character.

<sup>13</sup> *Fifth Street Southeast Historic District*, available from: <https://www2.minneapolismn.gov/resident-services/property-housing/property-info/landmarks/alphabetical/fifth-street-southeast-historic-district/>

<sup>14</sup> *Pill Hill Residential Historic District*, National Register of Historic Places Registration Form, available from: <https://npgallery.nps.gov/GetAsset/0d11339c-02c9-489b-b305-599a231a0660>

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### Virginia Beach, Virginia

Virginia Beach has a residential historic district named Cavalier Shores, which is significant for being platted by Cavalier Shores a subsidiary of the adjacent Cavalier Hotel for having a collection of revival styles prevalent in the late 1920s and 1930s. The period of significance for the district is 1927 to 1968

and is roughly bounded by 45<sup>th</sup> Street on the north, the Atlantic Ocean on the east, Cavalier Drive on the south, and Holly Road on the east.<sup>15</sup>

The main bike route through this district is Atlantic Avenue (US 60), which is a two-way, four-lane street with a grassy and landscaped boulevard with no parking. The bike route is an off-street asphalt path located on the west side of the road. (Figure 18).

### Greensboro, North Carolina

Greensboro has a residential historic district named College Hill Historic District, which is significant for being among Greensboro most important and intact late nineteenth and early twentieth century neighborhoods. The period of significance for the district is 1837 to 1941 and is roughly bounded by W. Market Street S. on the north, S. Cedar Street on the east, Oakland Avenue on the south, and McIver Street on the west.<sup>16</sup>

The main bike route through this district is Spring Garden Street, which is a two-way, two-lane street with a grassy boulevard for a portion of the street through the district. There is occasional parking on the north side of the street where there is no boulevard. The bike lanes are marked on the north and south side of the street (Figures 19-20).

### Santa Ana, California

Santa Ana has a residential historic district named French Park Historic District, which is significant as an intact 1890s to 1920 neighborhood. The district is roughly bounded by E Washington Avenue on the North, N Garfield Street on the east, Civic Center Drive E on the south and N Bush Street on the west.<sup>17</sup>

The main bike route is adjacent to the district and the southern boundary of the district, Civic Center Drive E, which is a two-way, four-lane street with bike lane indications in the northern and southern most lanes. At the intersection of N Bush Street and Civic Center Drive E there is a green square marking a bike route and a sign on the south side of street indicating bikes may use the full lane (Figure 21). This is the condition until the last two blocks of the historic district where the street turns into a two-way, two-lane street with curb bump outs and roundabouts at the intersections (Figure 22). No specific markings are identified for a bike lane.

### Pittsburgh, Pennsylvania

Pittsburgh has a residential historic district named Allegheny West Historic District, which is significant as a collection of late nineteenth and early twentieth century revival architecture. The district is roughly bounded by Jabok Way on the north, Brighton Road on the east, Ridge Avenue on the south, and Allegheny Avenue on the west.

The main bike route through the historic district is the western boundary Brighton Avenue, which is a two-way, two-lane street with parking on the east and west sides. A pavement marking indicates the

<sup>15</sup><https://www.vbgov.com/news/pages/selected.aspx?release=4123&title=cavalier+shores+historic+district+listed+in+virginia+landmarks+register#:~:text=Cavalier%20Shores%20encompasses%20approximately%20seven,of%20the%20adjacent%20Cavalier%20Hotel.>

<sup>16</sup> *College Hill Historic District*, National Register of Historic Places Registration Form, available from <https://files.nc.gov/ncdcr/nr/GF1248.pdf>

<sup>17</sup> *French Park Historic District*, National Register of historic Places Registration Form, available from <https://npgallery.nps.gov/GetAsset/8e137761-f560-4541-8eae-aac17c51d6bb>

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Figure 8. Saint Paul, Jackson Street at 7<sup>th</sup> Place, looking south



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Figure 9. Saint Paul, Jackson Street at Kellogg, looking north.



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Figure 10. Minneapolis, South 1<sup>st</sup> Avenue and East 24<sup>th</sup> Street intersection, looking to the north.



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Figure 11. Minneapolis, South 1<sup>st</sup> Avenue and East 26<sup>th</sup> Street, looking to the north.



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Figure 12. Minneapolis, View of East 24<sup>th</sup> Street and South 1<sup>st</sup> Avenue intersection, looking east.



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Figure 13. Minneapolis, View of East 26<sup>th</sup> Street and South 1<sup>st</sup> Avenue intersection, looking east.



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Figure 14. Minneapolis, View of East 26<sup>th</sup> Street and South 3<sup>rd</sup> Avenue intersection, looking west.



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Figure 15. Minneapolis, View of 5<sup>th</sup> Street Southeast, looking east.



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Figure 16. Minneapolis, View of 4<sup>th</sup> Street Southeast and 8<sup>th</sup> Avenue Southeast intersection, looking northwest.



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Figure 17. Rochester, View of 6<sup>th</sup> Street Southwest, looking east.



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Figure 18. Virginia Beach, View of Atlantic Avenue, looking south.



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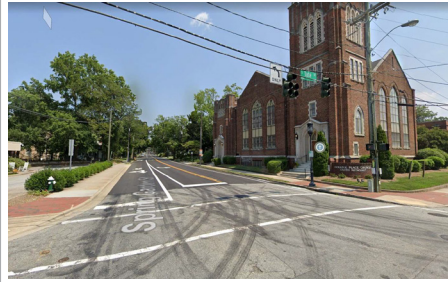
Figure 19. Greensboro, View of Spring Garden Street and Cedar Street intersection, looking southwest.



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Figure 20. Greensboro, View of Spring Garden Street and South Tate Street, looking southeast.



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Figure 21. Santa Ana, View of Civic Center Drive E and N Bush Street intersection, looking east.



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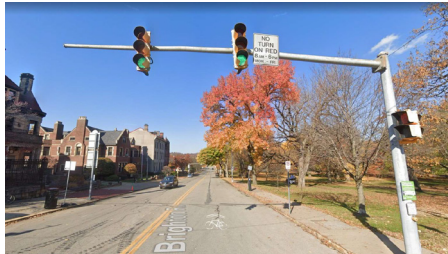
Figure 22. Santa Ana, View of Civic Center Drive E and Minter Street intersection, looking west.



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Figure 23. Pittsburgh, View of Brighton Road, looking north.



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Figure 24. Pittsburgh, View of Brighton Road and North Avenue intersection, looking south.



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**REHABILITATION AND DESIGN GUIDELINES**

Several sources are available to guide rehabilitations and new construction within historic districts. The National Park Service (NPS) has developed guidelines for rehabilitation and new construction within historic districts. Some cities have developed guidelines for design within their individual historic districts. Most of the local guidelines are focused on the historic structures within the district and maintaining the character defining features of those contributing structures within the historic districts. Some guidelines do address streetscapes and landscaping. The following section will look at the national guidelines, St. Paul and Minneapolis guidelines and other districts noted above if available, to see what guidelines are provided for trails, bikes or other multi-modal facilities or other transportation-related improvements within the public right-of-way.

**NATIONAL PARK SERVICE**

**Treatment of Historic Properties**

The NPS Standards for Rehabilitation has ten standards that should be followed when working within a National Register district or property, and the first eight focus on the existing standing structures. Guidance is given on how the historic character or defining features should be retained and preserved and there should be as minimal of change as possible to those features. Additionally, deteriorated features should be repaired rather than replaced. The last two standards are focused on new additions and according to the NPS website these two standards have been expanded on. The website states that the “design, density, and placement of the new construction respect the overall character of the site.” As with the rehabilitation, new construction needs to protect the Integrity of the property or districts setting. The following is found on the website:

- Related new construction – including buildings, driveways, parking lots, landscape improvements and other new features – must not alter the historic character of a property. A property’s historic function must be evident even if there is a change of use.
- The location of new construction should be considered carefully to follow the setbacks of historic buildings and to avoid blocking their primary elevations. New construction should be placed away from or at the side or rear of historic buildings and must avoid obscuring, damaging, or destroying character-defining features of these buildings or the site.
- Protecting the historic setting and context of a property, including the degree of open space and building density, must always be considered when planning new construction on an historic site. This entails identifying the formal or informal arrangements of buildings on the site, and whether they have a distinctive urban, suburban, or rural character. For example, a historic building traditionally surrounded by open space must not be crowded with dense development.
- In properties with multiple historic buildings, the historic relationship between buildings must also be protected. Contributing buildings must not be isolated from one another by the insertion of new construction.
- As with new additions, the massing, size, scale, and architectural features of new construction on the site of a historic building must be compatible with those of the historic building. When visible and near historic buildings, the new construction must be subordinate to these buildings. New construction should also be distinct from the old and must not attempt to replicate historic buildings elsewhere on site and to avoid creating a false sense of historic development.
- The limitations on the size, scale, and design of new construction may be less critical the farther it is located from historic buildings.

- As with additions, maximizing the advantage of existing site conditions, such as wooded areas or drops in grade, that limit visibility is highly recommended.
- Historic landscapes and significant viewsheds must be preserved. Also, significant archeological resources should be considered when evaluating the placement of new construction, and, as appropriate, mitigation measures should be implemented if the archeological resources will be disturbed.<sup>18</sup>

**Guidelines for the Treatment of Cultural Landscapes**

These guidelines discuss the components of cultural landscapes and how the spatial organization and land patterns are important. For cultural landscapes there are five main character-defining features which include: topography, vegetation, circulation, water features, structures, site furnishings and objects. These guidelines should be used hand-in-hand with the standards listed above.<sup>19</sup>

**ST. PAUL**

Chapter 74 of the City Code of Ordinance addresses the Heritage Preservation Districts and Programs for St. Paul. Within this chapter, Article II addresses the Summit Avenue West Heritage Preservation District and Article VI addresses the Heritage Hill Historic Preservation District. Furthermore, Division 2 of these articles addresses the Guidelines for Design Review.

Most of the guidelines echo the national standards for preservation. The general principles follow closely the Standards for Rehabilitation. Additional guidelines included in the city codes address Site and Public Infrastructure under New Construction [(Sec. 74.37 (e) and (f)]. Sec. 74.37 (e) identifies the streetscape as three visual areas: public (sidewalks, boulevards, streets, and medians), semipublic (front yards and side yards on corners), and private (behind front face of buildings). Sec. 74.37 (f) identifies Summit Avenue as a wide parkway with well-landscaped boulevards within a 200-foot right-of-way and it represents an early city planning effort to create an exclusive residential area. It also reiterates its importance to the significance and integrity of the district. The section goes on to say that the pattern of Summit Avenue’s boulevards and sidewalks should be maintained, distinctive features of public spaces in the area, such as the early twentieth century lantern-style streetlights, should be preserved. New street furniture such as benches, sign standards, traffic signals and trash containers should be compatible with the character of the district.

The Code of Ordinances for Heritage Hill Historic Preservation District is very similar to the above for Summit Avenue West. One addition to the code under Public Infrastructure [(Sec. 74.65 (g))] adds that the traditional pattern of the public streets, curbs, boulevards, and sidewalks should be maintained. Distinctive features including brick alleys, stone slab sidewalks, granite curbs should be preserved.<sup>20</sup>

**MINNEAPOLIS**

Stevens Square guidelines, much like the ones for St. Paul, focus on the standing structures themselves and are broken down into individual sections pertaining to features like masonry, wood, architectural metals, roofs, windows, entrances and porches, storefronts, and mechanical systems. One section pertains to the district/neighborhood. The guideline recommends identifying, retaining, and preserving buildings, and streetscapes and landscape features which are important in defining the overall historic

<sup>18</sup> NPS, Technical Preservation Services <https://www.nps.gov/tps/standards/applying-rehabilitation/successful-rehab/new-construction.htm>

<sup>19</sup> Guidelines for the Treatment of Cultural Landscapes, Accessed March 2022. <https://www.nps.gov/Tps/standards/four-treatments/landscape-guidelines/index.htm>

<sup>20</sup>[https://library.municode.com/mn/st.\\_paul/codes/code\\_of\\_ordinances?nodeId=PTIILECO\\_TITIXCIPL\\_CH74HEPRD\\_IPR](https://library.municode.com/mn/st._paul/codes/code_of_ordinances?nodeId=PTIILECO_TITIXCIPL_CH74HEPRD_IPR)

## Historic Resources Technical Memorandum

character of the district or neighborhood. These features can include streets, alleys, paving, walkway, streetlights, signs benches, parks and gardens, and trees. The guidelines go on to include other recommendations and design for missing historic features, and alterations/additions for new uses. It is interesting to note that the guidelines note that destroying streetscape and landscape features by widening existing streets, changing paving material, or introducing inappropriately located new streets or parking lots is not recommended.

The Washburn-Fair Oaks guidelines only focus on the structures of the historic district. One section addresses signs but as related to business or institutional identification. Unfortunately, a similar set of guidelines seemed to have been adopted for the 5<sup>th</sup> Street Southeast Historic District and they provide no further guidance on streetscapes.

### VIRGINIA BEACH, VA

Virginia Beach produced “Virginia Beach Historic & Cultural District Design Guidelines” in 2021 which includes most of the historic properties or districts within Virginia Beach, save for the one studied above.<sup>21</sup> Chapter seven of this document is most relevant to site/setting, but mostly pertains to the private property and the transition from public to private space. Since this guide is targeted for use of the private citizen this is not surprising. The addition of the bike lane outside the main right-of-way described above through this historic district is a minimal intrusion in the district and is in keeping with the Secretary of the Interior’s standards outlined above and with the spirit of the local guidelines.

### GREENSBORO, NC

The City of Greensboro recently completed their “Historic District Program Manual and Design Standards” in the Winter of 2021.<sup>22</sup> In this document is a chapter specifically on neighborhood setting. This chapter contains guidance on maintaining historic street patterns, widths, and materials, historic paving materials and granite curbing where it exists. Work within the historic districts require a Certificate of Appropriateness (COA) to be reviewed by the Historic Preservation Commission in Greensboro. Some examples of public right-of-way work that needs a COA is widening or realigning of streets, and construction of bicycle paths and walking trails. In the College Hill Historic District example above, the bicycle lanes are within the existing streetscape and is distinguished by pavement markings only.

### SANTA ANA, CA

The City of Santa Ana completed guidelines for Historic French Park in 1995.<sup>23</sup> This document details the housing types located within the district and the character-defining features of each type. It also outlines basic repairs expected on historic houses and how to repair according to the Secretary of Interior Standards, which is the benchmark for this document. There is no mention of streetscape or infrastructure improvements. The bike lanes, where they exist, in the example described above are minimally intrusive to the district and are located on the edge of the district.

### PITTSBURGH, PA

The City of Pittsburgh completed guidelines for Allegheny West Historic District sometime after its designation as an historic district in 1985.<sup>24</sup> The document is like the other cities documented here in

<sup>21</sup> <https://www.vbgov.com/government/departments/planning/boards-commissions-committees/Documents/VA%20Historical%20Preservation/Design%20Guidelines%20November%202021.pdf>

<sup>22</sup> <https://www.greensboro-nc.gov/home/showpublisheddocument/5380/637684265813400000>

<sup>23</sup> [http://www.frenchpark.org/images/French\\_Park\\_Guidelines.pdf](http://www.frenchpark.org/images/French_Park_Guidelines.pdf)

<sup>24</sup> [https://apps.pittsburghpa.gov/dcp/05\\_Allegheny\\_West\\_Guidelines.pdf](https://apps.pittsburghpa.gov/dcp/05_Allegheny_West_Guidelines.pdf)

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REHABILITATION AND DESIGN GUIDELINES

Summit Avenue Regional Trail Master Plan Technical Memo | H19.114590

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that it focuses mainly on the individual houses rather than the setting or streetscapes of the public realm. Section C of the document minimally addresses Streetscape and Building Site. Like previous guidelines reviewed it states that distinctive historic features of the streetscape, walkways, alleys, building setbacks, lighting, signage, planters, curbing and paving should be retained to give the district its distinguishing character. The bike lanes in this city are also located on the edge of the district and are all within the existing right-of-way and are minimally intrusive.

### SUMMARY AND RECOMMENDATIONS

This memo set out to address numerous questions the City of St. Paul had regarding how to develop a Master Plan for the proposed Summit Avenue Regional Trail. The City will need to balance the needs of users to the trail and the needs of the historic properties along Summit Avenue. This memo outlined the different historic property laws that could govern projects within the districts, but it also clarified the character-defining features that exist within those districts. This memo also documents what other bike/trail facilities exist within historic districts in Minnesota and in cities nationwide that are similar in population as St. Paul. These examples showed a variety of designs including separated trails, lane sharing and on-road separated lanes with and without bollards for the separation. Lastly, this memo looked at the design guidelines laid out by the National Park Service and by the individual city’s historic districts chosen as examples, to see if any offered guidance regarding the streetscape and changes to the streetscape. Most of these guidelines reiterated keeping the character-defining features intact and that new elements should not overwhelm or destroy those characteristics. Both of St. Paul’s local codes for the districts emphasize the pattern of the roadway, sidewalks and boulevards should be maintained within the historic districts along Summit Avenue. All the national example design guidelines included in the above discussion conveyed this same sentiment within their historic districts.

It is recommended that additions to Summit Avenue should be as simple as possible and not change the existing curb lines whether it is within the 100-foot-wide or 200-foot-wide section of the avenue.

Minimal or no impact to the greenspace that is a character-defining feature to the historic districts is recommended to avoid any potential adverse impacts. Keeping the design simple will not only benefit the character-defining features but also be user friendly. If barriers are needed whether its bollards or another approach not demonstrated above, these should be used sparingly and scaled so that they are not overwhelming the street view. Wayfinding signs for the trail should be combined with other signs in order to not create a lot of clutter in the greenspace of the corridor. The goal is to create a safe place for trail users while limiting the negative impacts on the character-defining features.

Prepared by: Bolton & Menk, Inc.

Summit Avenue Regional Trail Master Plan Technical Memo | H19.114590

SUMMARY AND RECOMMENDATIONS

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Technical Memorandum #4



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Fax: (612) 416-0222  
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TECHNICAL MEMORANDUM #4

**Date:** July 20, 2022  
**To:** Mary Norton, PLA  
**From:** Bryan Nemeth, P.E.  
**Subject:** Summit Avenue Regional Trail Master Plan: Crash Review  
City of St. Paul  
BMI Project No.: 0T4.126438

To understand the current safety concerns on the Summit Avenue corridor the reported crash information available from the Department of Public Safety and distributed by the Minnesota Department of Transportation to the City of St Paul was reviewed and analyzed. This includes a review of all crashes along the corridor and a specific look into the pedestrian and bicyclist involved crashes.

**Corridor Length:** 4.5 miles (East River Blvd to Kellogg Blvd)

All Crashes

(includes vehicle to vehicle, vehicle to fixed object, vehicle to pedestrian, and vehicle to bicyclist crashes)

- Total crashes (2015 to 2019\*): 283
- 171 crashes occurred at intersections
  - 92 crashes occurred between intersections

\*for relative consistency in traffic volume the analysis looked at the five year time period without pandemic impacts

The following Summit Avenue intersections have a crash rate or fatal and serious injury crash rate outside of the normal expected range in comparison to similar facility types and similar volumes statewide (Critical Index >1):

- Lexington Ave
  - Fatal and Serious Injury Crash Rate: 3.9 crashes per Million Entering Vehicles (MEV)
  - Critical Index: 1.14
- Victoria St
  - Total Crash Rate: 0.9 crashes per MEV
  - Critical Index: 1.05
- Dale St
  - Total Crash Rate: 0.9 crashes per MEV

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Technical Memorandum #4

Summit Avenue Regional Trail Master Plan

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- Critical Index: 1.03
- Fatal and Serious Injury Crash Rate: 8.3 crashes per MEV
- Critical Index: 2.15

Pedestrian and Bicyclist Crashes

(includes vehicle to pedestrian and vehicle to bicyclist crashes)

Total pedestrian and bicyclist involved crashes (2012 to 2021\*\*): 63

- 31 pedestrian-involved crashes
- 32 bicyclist-involved crashes

\*\*since pedestrian and bicyclist involved crashes are more random in nature and occur less frequently, a full ten-year analysis was conducted

This may be underestimated as many pedestrian and bicyclist involved crashes go unreported, especially if there are no injuries or fatalities involved.

A map showing the location of reported pedestrian and bicyclist crashes, and a heat map of the crash frequency is attached.

The **highest concentration of pedestrian and bicyclist involved crashes** occurred between Lexington Avenue and Ramsey Street.

- East River Blvd to East of Fairview Ave: 10.4 ped and bike crashes/mile
- East of Fairview Ave to East of Snelling Ave: 13.7 ped and bike crashes/mile
- East of Snelling Ave to Ayd Mill Rd: 3.2 ped and bike crashes/mile
- Ayd Mill Rd to East of Lexington Ave: 11.8 ped and bike crashes/mile
- East of Lexington Ave to East of Ramsey St: 24.8 ped and bike crashes/mile
- East of Ramsey St to West of Kellogg Blvd: 5.4 ped and bike crashes/mile

No information on how this compares to other facilities or locations is available.

The intersections with the **highest crash concern for pedestrians and bicyclists** based on their frequency are:

- Cretin Ave
- Snelling Ave
- Chatsworth St
- Colfax St
- St Albans St
- Dale St

No information on how this compares to other facilities or locations is available

Crash severity

- 100% of reported pedestrian crashes resulted in an injury or fatality
- 90% of reported bicyclist involved crashes resulted in an injury or fatality

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## Technical Memorandum #4

Summit Avenue Regional Trail Master Plan

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The crash data available indicates that pedestrian and bicyclist crashes on Summit Avenue tend to result in injuries or fatalities. This is relatively consistent with national trends on reported pedestrian and bicyclist crashes.

### Conclusion

There have been 63 crashes involving pedestrians and bicyclists in the past ten years. Most of these pedestrian and bicyclist involved crashes resulted in injuries or fatalities.

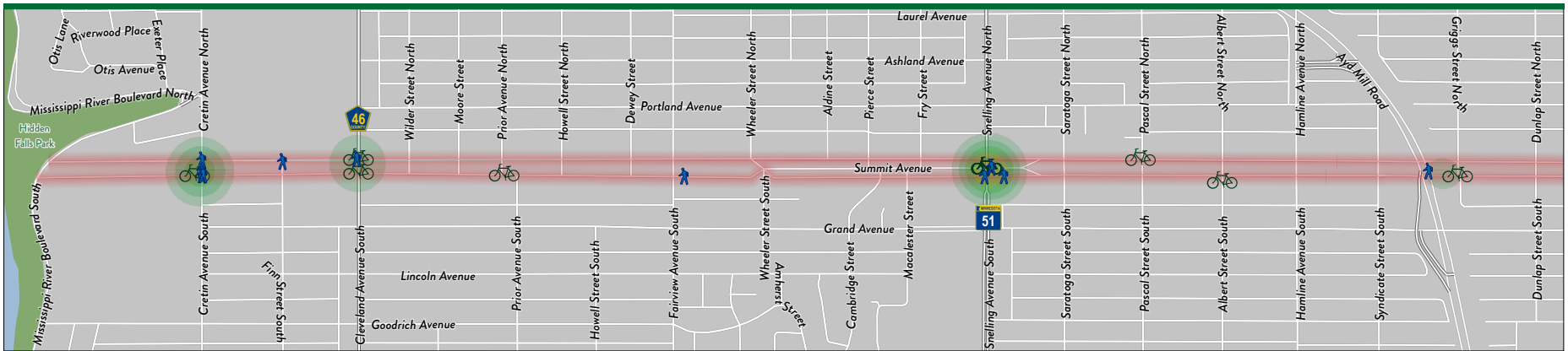
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Technical Memorandum #4



Summit Avenue Regional Trail Master Plan  
St. Paul, Minnesota

Pedestrian and Bike Crashes (2012-2021)  
July 2022



# A3. Meeting Materials

October 27, 2022 Community Open House

## THE ROADWAY

Many segments of Summit Avenue have not been reconstructed since the 1930's, almost 100 years ago.

Over time, roadways need to be reconstructed to replace aging infrastructure, this includes underground utilities, roadway base structure and surface, lighting, curb & gutter and sidewalks.

**Improvements**

**Near-Term** (2-3 yr.)

- Surface: Mill & Overlay
- Crossings: Bump-Outs, Ramps
- Funded for construction

**Long-Term** (Phased process, ~10-15+ yr.)

- Roadway Reconstruction
- Regional Trail Facility
- NOT funded for construction

**ROADWAY Composition & Construction**

**SURFACE IMPROVEMENTS**  
Occurs every 8-10 years\*

**STREET RECONSTRUCTION**  
Occurs every 50-100 years\*

**How does this relate to a trail facility?**

Reconstruction projects replace all elements of the road: the surface, curb, ramps, and utility infrastructure beneath the surface.

The most cost-effective opportunities to add pedestrian and bicycle improvements come when roads are being fully redesigned.

SUMMIT AVENUE REGIONAL TRAIL MASTER PLAN  
COMMUNITY OPEN HOUSE | OCTOBER 2022

## CORRIDOR TREES

The trees along Summit Avenue play an integral role in creating a recreational parkway experience east to west across the City. In planning for roadway reconstruction and a regional trail facility, it is important to develop a design approach that prioritizes tree health and preservation.

Roadway and trail construction carry risk to existing vegetation. To evaluate a design approach, this study looks at location of curb lines relative to tree critical root zones (CRZ) and structural root zones (SRZ).

**Evaluating Impacts**

Tree diameter is measured 4.5' from the ground

- SRZ: Structural Root Zone
- CRZ: Critical Root Zone

Construction encroachments shall occupy no more than 25% of the total area in the critical root zone.

- Low Vulnerability: Low risk to crown and structural root zone
- Medium Vulnerability: Medium risk to crown and structural root zone
- High Vulnerability: High risk to crown and structural root zone

**Potential Risk of Tree Impacts**

Risk to trees is highly variable depending on specific site conditions, health of tree, and tree species.

1,561 TREES CORRIDOR-WIDE

132 HIGH VULNERABILITY TREES (8%)

**Trail Facility Design Approaches**

221 (+89) HIGH VULNERABILITY TREES (14%)

221 (+89) HIGH VULNERABILITY TREES (14%)

SUMMIT AVENUE REGIONAL TRAIL MASTER PLAN  
COMMUNITY OPEN HOUSE | OCTOBER 2022

## HISTORY & PROCESS

**Land Acknowledgement**

St. Paul stands on the ancestral, traditional, and contemporary Dakota homelands.

As we consider that the many legacies of violence, displacement, migration and settlement that has brought us to current day, we commit to understanding, respecting, supporting and advocating for Indigenous People and for this land.

Let this land acknowledgement be more than a reminder. Let it be a marker in time of dedicating ourselves to be better and do better. Through this land acknowledgement, let us lead to make changes which respect history.

**Engagement & Review Processes**

- Master Plan Development
- Technical Advisory Committee (TAC)
- Design & Engineering
- Formal Review

**Historical Sites and Districts**

SUMMIT AVENUE REGIONAL TRAIL MASTER PLAN  
COMMUNITY OPEN HOUSE | OCTOBER 2022

## SAFETY & CROSSINGS

Safety for all modes and users of the Summit Avenue corridor is an important factor in planning for a regional trail facility. This project looks to create more physical separation between users with a separated bicycle trail facility.

The Summit Avenue corridor has experienced a number of crashes along its approximately 4.5 mile length from East River Blvd. to Kellogg Blvd.

Within a 10-year time frame between 2012 to 2021, there have been a total of 31 bicyclist involved crashes, or 3 per year on average. Of these crashes, 90% resulted in an injury or fatality. While the circumstances vary, the less time a vehicle and pedestrian or bicyclist share the same space, the less opportunity there is for conflict.

**BEST PRACTICE TOOLKIT**

- Lane Separation
- Raised Crosswalks
- Corner Bump-outs
- Intersection Closing Markings
- Reducible Sidewalk Curb Call

**Median Closures**

Median closure concept focuses on creating contiguous spaces for pedestrians in the corridor to improve connectivity and reduce crossings with vehicles. The concept works with existing roadway geometry to maintain spatial and historic landscape elements.

**Intersections: Tool Kit Application Examples**

Signalized

Signalized

NOTE: Adjusting sidewalks at intersections will be determined based upon tree health, and final alignment will be evaluated beyond the master plan during design and engineering of a trail facility.

SUMMIT AVENUE REGIONAL TRAIL MASTER PLAN  
COMMUNITY OPEN HOUSE | OCTOBER 2022

# PROJECT PROCESS AND BACKGROUND



## Project Timeline



## Project Overview

The City of Saint Paul Parks and Recreation Department, with input from other City departments, technical professionals, and community members, is in the process of developing a Master Plan for a regional trail along Summit Avenue. The proposed trail corridor is approximately 5.4 miles long along Summit Avenue, Kellogg Boulevard, and Eagle Parkway from Mississippi Gorge Regional Park to the Samuel H. Morgan Regional Trail. The master plan will evaluate opportunities, constraints, and feasibility of a regional trail facility within the corridor and will serve as a guide to future transportation, pedestrian, and parkway improvements. Project goals include:

- Evaluate and identify a regional trail alignment on Summit Avenue to improve recreation experience and safety for all users.
- Identify ways to balance the character of Summit Avenue when modernizing infrastructures including but not limited to trees, greenspace, parking, vehicles, recreation, and historical designation.
- Improve connectivity and public access to parkland.
- Support the evolving needs of users to create a more resilient, people-oriented corridor

## Project Partners



## Larger City and Regional Policy Goals

**Saint Paul 2040 Comprehensive Plan (2020)**

- Safe and accessibility for all
- True transportation choice throughout the City, with a shift from single-occupant vehicles toward other modes
- Strong and accessible connections
- Equitable public access/strong connections to the Mississippi River

**Saint Paul Pedestrian Plan (2019)**

- Safety for all modes particularly at intersections and crosswalks
- Improved winter maintenance for all facility types

**Saint Paul Climate Action Resilience Plan (2019)**

- Emphasis on walkable and bike-friendly neighborhoods
- Enhance transportation infrastructure not solely focused on single-occupant vehicles
- Prioritize increasing safe and reliable access to city destinations without the use of a private automobile

**Saint Paul Bicycle Plan (2015)**

- Increase the mode share of bicycling and establish and expand the city-wide bicycle networks
- Develop bikeways that allow all Saint Paul residents and visitors to safely and comfortably ride bicycles

## Frequently Asked Questions

**What is a Regional Trail?**

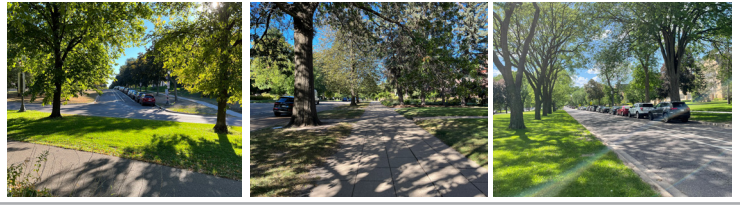
- Regional Trails provide recreational opportunities along linear pathways in the metropolitan area.
- Linking Trails pass through or provide connections to other regional amenities or significant natural resource areas.
- These trails intersect with local trail networks to serve as commuting routes for bicyclists in addition to recreational purposes.

**Why Summit Avenue?**

- Parallel routes such as Grand Avenue and Portland Avenue have been explored as regional trail facilities, but have similar and additional drawbacks including a narrower public right-of-way and similar historic and cultural guidelines.
- Summit Avenue currently has high multi-modal use and parkway characteristics that make it a desirable setting for a regional trail facility.
- Much of the roadway has not been improved since the 1910s and is in need of reconstruction. This provides an opportunity to include improved bicycle infrastructure with a roadway reconstruction project.

**Why a Separated Facility?**

- High traffic volume and industry standards
- Aligns with City and Regional policy
- Comfort and safety for all modes and abilities



# COMMUNITY ENGAGEMENT



## Engagement Events To Date



## Engagement Participation

**VIRTUAL ENGAGEMENT**

Virtual Community Meeting Content

Engagepaul.org Feedback

**OVERALL CORRIDOR FEEDBACK**

Category	Feedback
Route	... (text)
Alignment	... (text)
Width	... (text)
Surface	... (text)
Lighting	... (text)
Signage	... (text)
Wayfinding	... (text)
Connectivity	... (text)
Other	... (text)

**What's Next?**

- PUBLIC COMMENT PERIODS, DRAFT DOCUMENT REVISIONS, FINAL RECOMMENDATIONS
- LATE 2022 - 2023

**Ways to Stay Engaged**

- Sign up for e-mail updates about the project on [engagepaul.org/summit](https://engagepaul.org/summit)
- Connect with your district and city council members
- Check project website for important project updates



## Summary of Feedback Themes

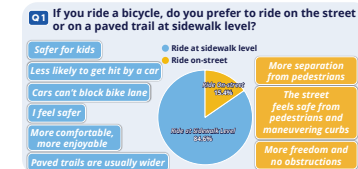
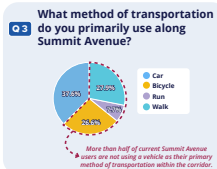
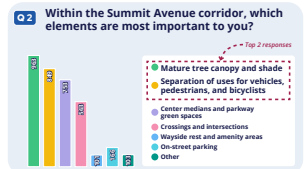
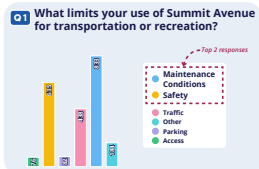
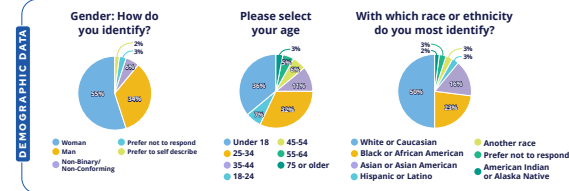
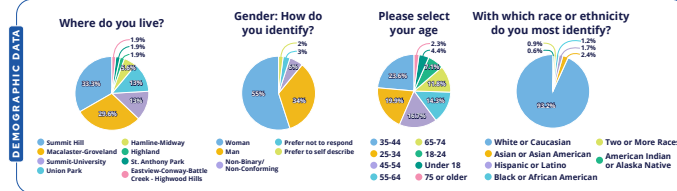
- Greenspace**
  - Importance of tree preservation
  - Desire to maintain open median space for informal park uses
- Safety**
  - Minimize conflicts between vehicle, bicycles, and pedestrians
  - Reduce confusion at roadway transition areas
  - Provide more separation between users
- Facility Conditions**
  - Current pavement condition is poor - repairing the roadway is critical
  - Snow clearing on roadway and bike lanes is important for year-round use
  - Desire to keep informal central median running path as-is for recreational use
- No Change**
  - Desire to maintain existing functions and on-street bike lanes
  - Roadway surface repairs only

# COMMUNITY ENGAGEMENT

RESULTS FROM ENGAGESTPAUL.ORG ONLINE SURVEY  
AUGUST 2021 - OCTOBER 2022 | ONLINE SURVEY FORMAT  
1,341 PARTICIPANTS

## Survey Summary

RESULTS FROM FOCUSED ENGAGEMENT USER SURVEY  
JULY 2022 - OCTOBER 2022 | IN-PERSON AND ONLINE SURVEY FORMAT  
82 PARTICIPANTS

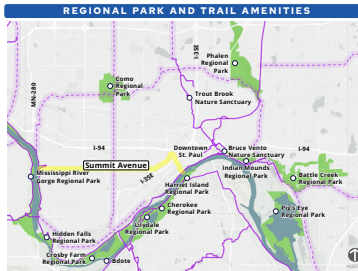


**Q4 If you could change one thing, what would it be?**

- Nothing in particular - it's a very nice street
- More art / history public spaces
- Protected bike lanes!
- Fix the holes!
- Bike lanes. Summit is one of the most used bike corridors through the city and to downtown. It should have better bike lanes. Ideal would be lanes that are protected and separated from cars, lie the new lanes on Como or Johnson Parkway.
- Eliminate the risk of being "doored"
- Don't destroy mature trees
- Slower traffic speeds
- Accessibility: make Summit Avenue safer for walking pedestrians, especially for disabled people
- Better, safer bike infrastructure. It's such a beautiful road to bike on, but it feels increasingly unsafe. There is no barrier between speeding cars and bikes.
- More green spaces
- ...remove parking on one side and create a permanently protected and separated bike lane. It would return Summit to its historical purpose as a bike path and would make the street safer for everyone as a main thoroughfare in St. Paul.
- Replace the road! It is horrible!
- De-prioritize motor vehicles. Most of the problems with Summit Avenue stem from the presence of motor vehicles and the backwards planning priorities that favor them.
- Eliminate parking to increase biking and pedestrian use...We don't need 2 lanes of parking on the city's most beautiful parkway.
- Places to rest - benches, public parks, public greenspace
- I think Summit Avenue is just right. Just keep the streets clear of pot holes and the sidewalks level
- Make it a safe place for families to bike
- Separation between bike lanes and drive lanes
- Safety at intersections
- Pavement Condition
- Connections to other bikeways and/or transit
- Other
- Nothing, the bike lanes could not be improved
- Location/Proximity - I don't travel or connect to places near Summit Avenue
- Safety/Comfort/Experience - biking on-street does not feel safe to me
- Accessibility - Bikeway is not ADA accessible or I do not have a bicycle
- Interest - I am not interested in biking

# ANALYSIS

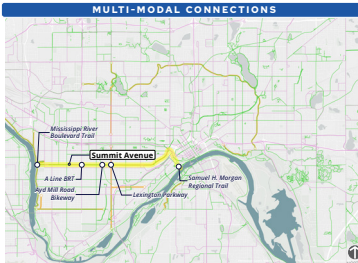
## Regional Analysis



**Legend**

- Project Area
- Regional Park
- Regional Trail
- Regional Trail Search Corridor

Summit Avenue provides a valuable regional connection from river to river, between Mississippi Gorge Regional Park and Sam M. Morgan Regional Trail. In addition to these two connection points, the Summit Avenue regional trail would create another link in the regional trail system, providing access to other regional parks and trails across the City of Saint Paul, and the broader region.



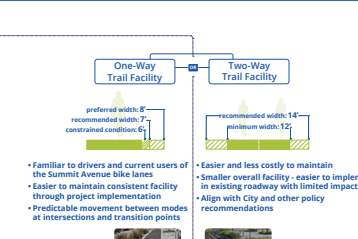
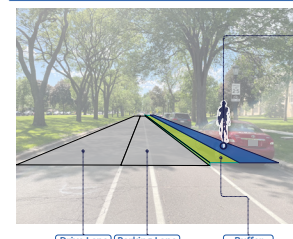
**Legend**

- Project Area
- Bikeway
- Transit Route
- Parkway

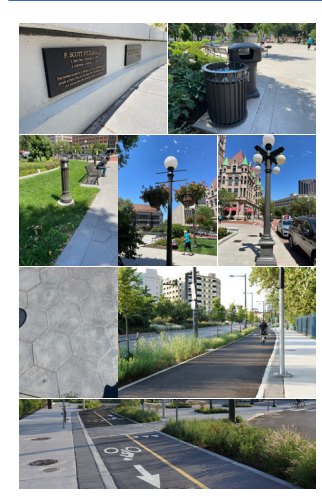
Summit Avenue is intersected by several other major transportation routes within the City. Several transit lines, other bikeways, and parkways cross Summit Avenue throughout the corridor. A regional trail along Summit Avenue would strengthen the city-wide transportation network and provide additional safe and equitable routes for non-vehicular uses.

## Design Considerations

### COMPONENTS OF THE TRANSPORTATION ENVELOPE



### TRAIL AMENITIES AND MATERIALITY



### OTHER CONSIDERED ROUTES

Other potential routes connecting Mississippi Gorge Regional Park to the Sam Morgan Regional Trail were evaluated at a high-level. These routes include the following locations:

- Grand Avenue
- Portland Avenue
- Marshall Avenue and Selby Avenue
- Ayd Mill Road/Little Bohemia Trail
- Jefferson Avenue/Ayd Mill Road

These routes were not preferred to Summit Avenue due to various conditions including the following factors:


- Indirect or interrupted connections
- Profile changes along the roadway affecting user comfort and experience
- Lack of parkway characteristics for recreation
- Narrow right-of-way conditions and constraints
- Contextual land use and compatibility for a regional trail
- Does not connect two regional facilities via downtown Saint Paul

### MATURE TREE CANOPY AND GREENSPACE



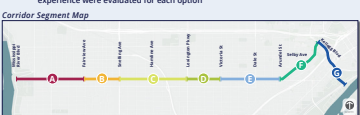
## DESIGN PROCESS

**Summit Avenue Regional Trail Master Plan**  
Community Open House | October 2022

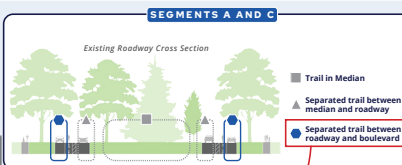


### 1 Initial Alignment Study

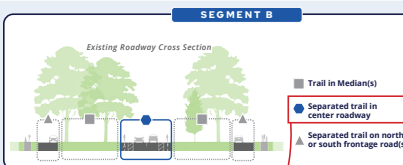
- Review of entire 100'/200' public right of way in each segment
- Study the impact of a regional trail in various locations within the cross section of the existing roadway
- Consider existing median, boulevard, roadway, and sidewalks
- Mature tree canopy, historic preservation, safety, and user experience were evaluated for each option



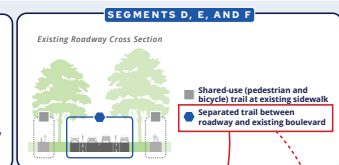
**SEGMENTS A AND C**



**SEGMENT B**



**SEGMENTS D, E, AND F**



### 2 Corridor Exploration

Of the options explored, a trail facility at the outside edge of the roadway is preferred for minimal impact to greenspace, intuitive user experience, and safety of traffic flow at crossings.

Several considerations required exploration including one- or two-way trails, and how to address the other modes within the Summit Avenue corridor including pedestrians, and vehicular traffic

Mature tree canopy and greenspace are a top priority within these considerations

	SEGMENTS A AND C				SEGMENT B		SEGMENTS D, E, AND F			
	One-Way Trails <i>Most Parking Remains</i>	One-Way Trails <i>Parking Removed One Side</i>	Two-Way Trail <i>Most Parking Remains</i>	Two-Way Trail <i>Parking Removed One Side</i>	One-Way Trails	Two-Way Trail	One-Way Trails <i>Most Parking Remains</i>	One-Way Trails <i>Parking Removed One Side</i>	Two-Way Trail <i>Most Parking Remains</i>	Two-Way Trail <i>Parking Removed One Side</i>
<b>Parking</b> <i>On-street parking meets demand observed in parking studies</i>	✓	⊙	✓	⊙	⊖	⊖	✓	⊙	✓	⊙
<b>Mature Tree Canopy</b> <i>Healthy trees within the corridor are preserved</i>	✓	⊙	✗	✓	✓	✓	✗	✓	✗	✓
<b>User Experience</b> <i>Trail facility is familiar to cyclists and drivers</i>	✓	✓	⊙	⊙	✓	⊙	✓	✓	⊙	⊙


**Legend**

- ✓ Concept meets stated goal
- ⊙ Concept partially meets stated goal
- ✗ Concept does not meet stated goal
- ⊖ Does not apply

\* The preferred alignment for segments D, E, and F of the regional trail are one-way bike facilities. However, the two-way trails are still under consideration and the feasibility of both alignments is still being reviewed.

## DESIGN PROCESS

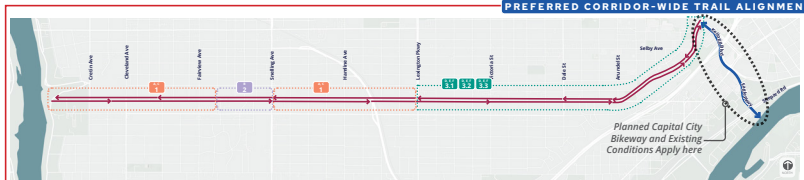
**Summit Avenue Regional Trail Master Plan**  
Community Open House | October 2022



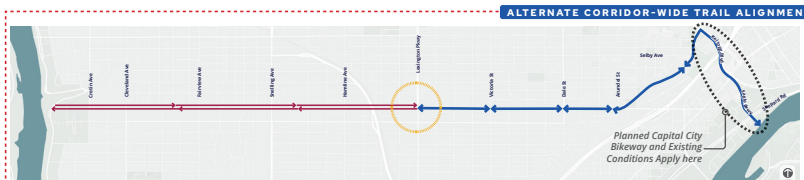
### 3 Corridor-Wide Approach

- Overall, the preferred alignment for the Summit Avenue Regional Trail includes two one-way trail facilities on the north and south sides of Summit Avenue.
- The secondary approach includes two one-way bike facilities on both sides of Summit Avenue from Mississippi River Boulevard to Lexington Parkway, and one two-way facility from Lexington Parkway to Kellogg Boulevard on either the north or south side of Summit Avenue.
- A number of factors influence the feasibility of one-way or two-way trails including user safety and comfort, mature tree canopy and greenspace, and parking, among others.

**PREFERRED CORRIDOR-WIDE TRAIL ALIGNMENT**




**ALTERNATE CORRIDOR-WIDE TRAIL ALIGNMENT**




**TRAIL VARIATIONS**


① Sidewalks  
*Variable*




② Tabled Crossing  
*10' and 12' table width*




③ One-Way Trail  
*Grade Separated*




④ Two-Way Trail  
*Grade Separated*




⑤ Buffer  
*Fronted*




⑥ Buffer  
*Flared*




⑦ Vehicle  
*Corridor*



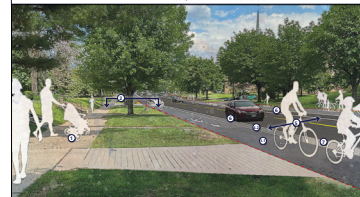
⑧ Curb  
*4' Height*



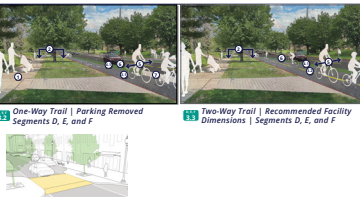
⑨ Driveway  
*Apex*



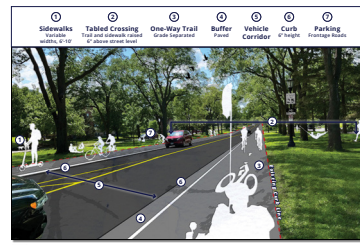
15 One-Way Trail | Narrowed Treadway  
Segments D, E, and F



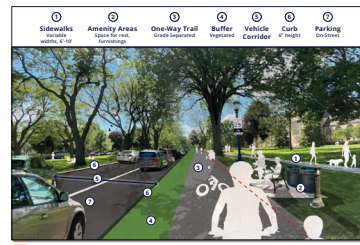
16 Two-Way Trail | Recommended Facility  
Dimensions | Segments D, E, and F



17 One-Way Trail | Segment B



18 One-Way Trail | Segments A and C



# DESIGN PROCESS



Corridor Segment Map



## 4 Concept Refinement

WE ARE HERE

### Constrained Conditions

Outlined below is a framework for decision making during future design and construction projects in the corridor. It sets up the tree tiers in reverse-priority that reflect what areas would need to be impacted when the recommended "typical" section ("Trail, 4' buffer) is not feasible or there is an opportunity to provide more greenspace given a site condition. Departure from the typical section would be determined during the design and engineering phase of the regional trail, identified due to context-specific site conditions found in the corridor.

### 1 Parking

Citywide planning and policies in general do not prioritize on-street parking for single-occupancy vehicles. Parking counts conducted as a part of master plan analysis phase reflect on-street parking is under-utilized corridor-wide which supports a strategy of reducing on-street parking options to reallocate space for a regional trail facility.

#### West of Lexington Parkway

- Parking removal if design alternatives are not feasible and is determined to be critical to meet design standards for safety
- Parking to remain typically
- Design flexibility for parking removal at each block to accommodate emergency vehicles and sight lines

#### East of Lexington Parkway

- Context based approach - 50% parking reduction assumed (typical)
- Remove parking one-side of street, create lane shift to vary parking locations north/south
- Remove parking both sides; if needed, look for consistency and re-introduce 50% on-street parking options every 1/2 blocks
- Prioritize maintaining 50% parking near areas of multi-unit housing and limited off-street options

### 2 Paved Surface Dimensions

- Vehicle corridor: Lane width reduction where possible (11' Minimum: 10' drive lane with 1' curb reaction)
- Bicycle Corridor:
  - Narrower 6' treadway
  - Narrower 3' buffer
  - Street lights, signs, and other obstructions to be outside of trail corridor (11' away from curb)

### 3 Boulevard/Buffer Condition

- Paved in lieu of grass for maintenance
- Tree Health: Forestry and Planned Removals
  - Dead or declining health, potential hazard
  - Ash Tree
- Relocate or replant immature/young trees with smaller root zones further away from curb

### SEGMENTS A AND C

#### One-Way Bike Facilities

Existing Conditions

Proposed Trail Facility  
Public Right-of-Way Corridor | Facing West

### SEGMENT B

#### One-Way Bike Facilities

Existing Conditions

Proposed Trail Facility  
Public Right-of-Way Corridor | Facing West

### SEGMENTS D, E, AND F

#### One-Way Bike Facilities

Existing Conditions

#### Proposed Trail Facility

#### Preferred Alignment One-Way Trail Facilities

Constrained Condition | Narrow Treadway, remove vegetated buffer (preferred)

Constrained Condition | Remove Parking in Some Areas (only appropriate where possible to remove parking both sides)

#### Alternate Alignment Two-Way Trail Facility

Secondary Alignment | Two-Way Trail

Summit Hill Association Comments on the  
Summit Avenue Regional Trail Plan

860 St Clair Ave  
St Paul MN 55105



651.222.1222  
SummitHillAssociation.org

14th March, 2023

To: Parks and Rec Commission  
Transportation Committee of the Planning Commission  
Saint Paul City Council  
Metropolitan Council

CC: Rebecca Noecker  
Andy Rodriguez  
Mary Norton

Re: Summit Hill Association Comments on the Summit Avenue Regional Trail Plan

**Recommendation**

Having weighed all the testimony received and evaluated the plan, the Summit Hill Association Board of Directors voted on the following recommendation:

SHA supports the following aspects of Summit Avenue Regional Trail 90% Plan:

1. **Bike safety improvements including a separated trail, especially for less-confident riders.**
2. **A design that minimizes changes to Summit Avenue's structure and symmetry and does not expand beyond current curb lines within District 16.**
3. **A design that creates a consistent user experience throughout the trail.**
4. **Opportunities to work with the City of St. Paul, MacGroveland Community Council, and Grand Avenue Business Association to improve connections and wayfinding between the Regional Trail and Grand Avenue businesses.**
5. **The City of St. Paul's commitment to best practices for tree health mitigation measures during demolition and reconstruction of Summit Avenue. Unavoidable tree loss should be minimized and any tree loss should be repaired through replanting and watering to ensure long-term tree canopy health and sustainability.**

Summit Hill Association Comments on the  
Summit Avenue Regional Trail Plan

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SHA requests further analysis or explanation of the following issues before implementation:

1. **The plan and funding for appropriate winter maintenance of the off-road trail and to clearing snow from sidewalks for pedestrian recreational use.**
2. **Refreshed analysis on trees at risk and best practices for tree health mitigation before finaling construction designs.**
3. **Further, specialized analysis on intersection safety that considers site conditions and specific neighborhood needs like schools, multi-family housing, and civic institutions.**
4. **Updated parking utilization studies that cover multiple times of day and multiple days of the week to ensure impacts to residents, visitors and Grand Avenue businesses are understood before construction designs are finalized.**
5. **Updated traffic bike and pedestrian counts before and after construction to measure the performance of the plan and assess impacts to alternative routes/adjoining streets. This should specifically include spillover impacts to Grand and St. Clair within District 16.**
6. **Opportunities for neighborhood council involvement as the plan moves to implementation to consider impacts at a block by block level to:**
  - a. Crossings
  - b. Parking
  - c. Different user groups including recreational and commuter bicyclists
  - d. Trees

**Overview of the Plan**

The Summit Avenue Regional Trail Plan (SARTP) is a high-level planning document, directly responsive to Summit Avenue's designation as a Regional Trail Search Corridor by the Metropolitan Council. Its purpose is to establish a guiding vision and a set of *constraints* for a future phased reconstruction of Summit Avenue.

The plan should be thought of not as a detailed specification, but as a flexible 'toolkit' to be drawn from as each project is developed. There are limits to its specificity, as well as its power to predict future conditions. At a cost of approximately \$100 million for complete reconstruction, and no currently identified sources of funding, reconstruction will take place in phases over a 10-15 year period or more. Each phase of reconstruction would be its own project - going through its own individual design, planning, multiple rounds of community

## Summit Hill Association Comments on the Summit Avenue Regional Trail Plan



860 St Clair Ave  
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engagement, and review / approval processes. At that stage, many of the ambiguities inherent to a high-level plan would be resolved.

What can be said today – definitively – is that Summit Avenue is in need of reconstruction. The roadway is beyond repair, and the century-old utilities that lie beneath are at high risk of failure. And yet, the need for reconstruction presents a generational opportunity to restore, preserve, and enhance the very qualities that attract people to Summit Avenue. Ultimately, great streets such as Summit Avenue remain so, not because they are kept under glass in an arbitrary and ahistorical status quo, but because they *change*. A reimagined Summit Avenue that slows and quietens traffic, and creates space for other types of user, would feel less like an expressway and more like the leafy, expansive linear park and community social space of its original conception. Summit Avenue is also *home* to many whose needs should also be considered. There may be considerable differences of opinion in how these goals are best achieved, but there is near universal agreement that when making changes to Summit Avenue, we have a responsibility to elevate, not diminish, the essential qualities that make it a treasured community resource.

### Engagement Summary

Summit Hill Association’s (SHA) Zoning and Land Use Committee met in June and November 2022 to discuss the Summit Avenue Regional Trail Plan drafts. SHA also hosted a joint community forum with the Summit-University Planning Council on February 27th, 2023 to hear community questions on the 90% draft which was attended by approximately 200 people, and has accepted written comments throughout this period. Based on those meetings and other City-led public engagement opportunities, the SHA board held a discussion and vote on March 7th, 2023 about the plan.

Please see below for a list of issues raised by neighbors and SHA board members:

### Issues Raised in our Preliminary Letter

We sent a letter with a number of questions based on unresolved neighborhood concerns on 1/31/23:

- **Safety concerns** included the high number of intersections and other potential conflict points along Summit Avenue vs. other grade-separated trails as well as how the removal of on-street facilities would impact confident cyclists who would continue to use the roadway. We requested that the two-way trail option be eliminated as categorically less safe than one-way trails.
- **Trail alignment** questions, including why Summit Avenue was chosen vs. adjacent, quieter streets, and why potential routes outside of the search corridor that would also achieve the primary objective of connection to the wider trail network were excluded.

## Summit Hill Association Comments on the Summit Avenue Regional Trail Plan



860 St Clair Ave  
St Paul MN 55105

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- **Clarifications** including the criteria for use of the 100% parking removal alternate option, and why and how the present engagement timeline had been established, especially the reasonableness of asking the community at large to digest a highly technical 200 page document over a 30 day period during the holidays. We also requested that a summary and presentation accompany the 90% draft.

Most of these questions were answered and addressed, either directly in response to our letter, through subsequent public engagement, or through the updates to the 90% plan itself.

### Connections to Grand Avenue

Summit Avenue runs parallel to Grand Avenue – Saint Paul’s premier shopping street – for almost its entire length. Grand Avenue is unlikely to be designated as a cycle route in its own right. As a Regional Trail bringing in cyclists from across the metro area, reconstructing Summit Avenue provides a once-in-a-generation opportunity to improve connectivity to Grand Avenue, especially for cyclists and pedestrians. Summit Avenue should be thought of as a gateway to bring more customers to the shops and restaurants along Grand Avenue.

We’d like to see the final draft of the SARTP consider how to encourage visitors to Grand Avenue. For example, through wayfinding and signage towards key intersections with commercial centers along Grand Avenue, such as the Neighborhood Node at Victoria St., paired with facilities such as painted bike lanes and bike corrals (potentially seasonally) for convenient transfers and cycle parking along connecting side streets. If possible, trail amenities like restrooms and water fountains could support connections to neighborhood nodes.

### Slowing Traffic and Enhancing the Parkway Experience

Neighbors are united in their desire to preserve and enhance the park-like feel of Summit Avenue. Several studies<sup>1</sup> have noted the relationship between the real or perceived width of a street and driver speed. There is widespread consensus around stated plans to narrow driving lanes to the legal minimum. While the City has stated that the numbers used in the SARTP are maximums, we hope that widening driving lanes or curb-to-curb widths will be a last resort, not the default, and that wherever possible the roadway, including the bike lane, stays within its current envelope.

We also note with approval that situating the bike lanes at the same grade as the boulevard and moving the curb line inwards will extend the *perceived* width of the boulevard and decrease that of the road, while shortening crossing distances for pedestrians, even where the overall curb-to-curb width inclusive of cycling facilities does not technically change.

<sup>1</sup> e.g. [https://nacto.org/docs/usdg/narrow\\_residential\\_streets\\_daisa.pdf](https://nacto.org/docs/usdg/narrow_residential_streets_daisa.pdf)

Summit Hill Association Comments on the  
Summit Avenue Regional Trail Plan

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**Cycle and Pedestrian Safety at Intersections**

As a great number of less confident cyclists experience Summit Avenue along trails at the side of the road, special consideration should be given to how cyclists cross intersecting streets or Summit Avenue itself, now that they will be starting their crossing from an equivalent position to pedestrians rather than from a lane within the flow of traffic. The potential closure of the median to traffic in certain sections is likely to encourage more joggers, pedestrians etc. to cross into the median from the sidewalk,

Particular consideration should be given to transitions from the bike trail to crosswalks. Timings of signalized intersections should be re-biased towards shorter wait times for pedestrians and cyclists.

**Tree Protection**

Much of the public discourse on this issue has focused on concerns that reconstruction of Summit Avenue would entail the loss of large numbers of trees. SHA would like additional analysis and commitment to tree protection as the plan is finalized and as sections of the road move into implementation.

We request additional information as to the specific, additive tree impacts of a grade-separated bike trail along Summit Avenue vs. like-for-like street reconstruction. The City has stated that its impact assessment was limited to reconstruction curb-to-curb, and that as the bike trail was remaining within the existing right of way there would be no difference in impact. By definition this would not seem to account for the removal and reconstruction of driveway aprons to meet the new curb line, or for the proposed trail curve out from the current curb line at intersections. These potential impacts may be beyond the curb line but are still uniquely attributable to the proposed grade-separated trail. We noted the City's clarification at the 2/27 meeting that the figures showing *expanded* roadway widths listed in the 90% draft plan for sections A and C are *maximums* where space allows, not minimums, and can be narrowed as needed at the design phase to mitigate tree impacts.

With the extent of the necessary reconstruction and the poor condition of the roadway, significant tree impacts may be unavoidable. We urge the city to pursue all reasonable tree protection measures during planning, construction, and maintenance of the new Summit Avenue. We also encourage prompt and complete replanting with appropriate watering and maintenance to protect Summit Avenue greenspace for generations to come with a maintained or expanded and healthy tree canopy.

**Winter Snow Clearing**

We received multiple questions and comments skeptical of the City's ability to keep a grade-separated bicycle trail free from snow and ice buildup in the winter, rooted in real world experience of winter maintenance of the

Summit Hill Association Comments on the  
Summit Avenue Regional Trail Plan

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existing surface streets in Saint Paul, and off-street trails such as Wheelock. Neighbors remain concerned that it may not prove cost-effective to separately maintain ~10 miles of new trail vs. the present arrangement where bike lanes are cleared as part of general plowing of the roadway. Data demonstrating the City's track record of maintaining similar off-street facilities clear of substantial snow and ice buildup would be reassuring to many. SHA would also like the city to add winter snow clearing for pedestrians using the sidewalks on Summit Avenue, to maintain the parkway experience and to discourage the cleared bike lane from turning into a shared use trail during the winter time.

**Parking**

We received multiple questions and comments on potential parking loss in District 16, particularly near the intersection of Dale Street and Summit Avenue. SHA requests updated parking utilization studies as the plan moves into implementation to identify areas where parking can be preserved or added to nearby streets as well as areas where more parking can be removed to allow additional green space or daylighted intersections.

We appreciate City staff participation in the 2/27 forum with Summit-University Planning Council and SHA. It was important to our neighbors to have an in-person engagement opportunity about the 90% plan.

SHA looks forward to future engagement on specific implementation planning. Thank you for your consideration, and please let us know if you have any further questions.

Sincerely,

Monica Haas

Sion Taghioff

Maggie Wenger

Monica Haas  
Executive Director

Simon Taghioff  
President

Maggie Wenger  
Chair, Zoning & Land Use Committee

This document has been electronically signed.

Attachments:

Comments received by email or e-portal regarding the plan.

Macalester Groveland Community Council Summit  
Avenue Regional Trail Plan Recommendation



320 South Griggs Street  
St. Paul, MN 55105  
www.macgrove.org

651-695-4000  
mgcc@macgrove.org

April 18, 2023

Director Andy Rodriguez  
Project Manager Mary Norton  
Parks and Recreation Department  
City of Saint Paul  
VIA EMAIL

To Whom It May Concern:

On Thursday, April 13<sup>th</sup>, 2023 the Board of Directors of the Macalester Groveland Community Council ("MGCC") held a special public eMeeting via Zoom, at which it considered the a recommendation from its standing Transportation Committee regarding the Summit Avenue Regional Trail Plan. The Board of Directors passed the following resolution by a final vote of 12-0 with 1 abstention:

**MORE DAILY TRIPS ON FOOT AND BY BIKE; PLANNING SUMMIT AVENUE FOR OUR CHILDREN'S FUTURE**

WHEREAS the reconstruction of Summit Avenue presents a rare opportunity to restore, preserve, and enhance this city street as the leafy, expansive linear park and community social space of its original conception;

WHEREAS Summit Avenue serves as a route to seven middle and high schools in the area\* as well as many other youth destinations including parks, recreational centers, faith institutions, commercial establishments including tea and coffee shops, candy and ice cream stores, book and toy stores, dance and fitness clubs, and summer camps;

WHEREAS the current, 90% Draft, Summit Regional Trail Plan lacks information, analysis or explanations to develop Summit Avenue as a safe corridor for children, families and youth to make more of their daily trips to the many destinations near Summit Ave on foot and by bike;

WHEREAS the current, 90% Draft, Summit Regional Trail Plan does not refer to Saint Paul's 2017 Safe Routes to School plan, which does support children and families in making daily trips by bike or on foot;

WHEREAS the plan has not sufficiently included the community engagement and input from children and youth under 18 years old\*\*;

WHEREAS year after year, a well-configured and safer Summit Avenue could provide thousands of these children, youth and their families with the option to more safely bike or walk along one of the nations greatest Victorian residential boulevards--which, over a ten-year period would impact the lives of tens of thousands of children and youth on their daily trips to school and to many other destinations in the area;

WHEREAS the above becomes an issue of equity as well as children's and youth's rights to health, happiness, safety and protection;

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WHEREAS promoting walking and biking on Summit Avenue for daily trips in this part of the city would show our commitment to support future generations and to combat climate change;

THEREFORE, BE IT RESOLVED that the Macalester-Groveland Community Council requests that the City Parks and Recreation Department will better document their engagement with youth community members and families, as well as school boards and PTO's of middle and high schools, faith institutions, and business associations in the vicinity of Summit Ave to inform and develop a section of the Summit Regional Trail Plan that presents information, analysis, requirements and recommendations to reconstruct Summit Avenue as a safe corridor for children and youth to make more of their daily trips to visit the many destinations along Summit Avenue by bike and on foot. This section should also have a few pictures of youth biking; not any such picture is included in the current plan.

\* Every year 500 to 600 students start grade 6, and a cohort of about 4.200 students is enrolled across all grades of these seven schools

\*\* For instance, in the survey of over 1,300 participants children and youth under 18 formed 7% of survey respondents, while this age groups forms about 17% of the neighborhood's population.

If you have questions or concerns, please do not hesitate to contact me.

Alexa Golemo  
Executive Director  
Macalester-Groveland Community Council

cc (via email): Ward 3, City of Saint Paul  
Ward 4, City of Saint Paul