SUMMIT AVENUE REGIONAL TRAIL PLAN

FEBRUARY 2023

SAINT PAUL
MINNESOTA

SAINT PAUL Parks and Recreation

SUMMIT AVENUE REGIONAL TRAIL

EAST - WEST
connection across the city

SAINT PAUL
MINNESOTA

SAINT PAUL Parks and Recreation

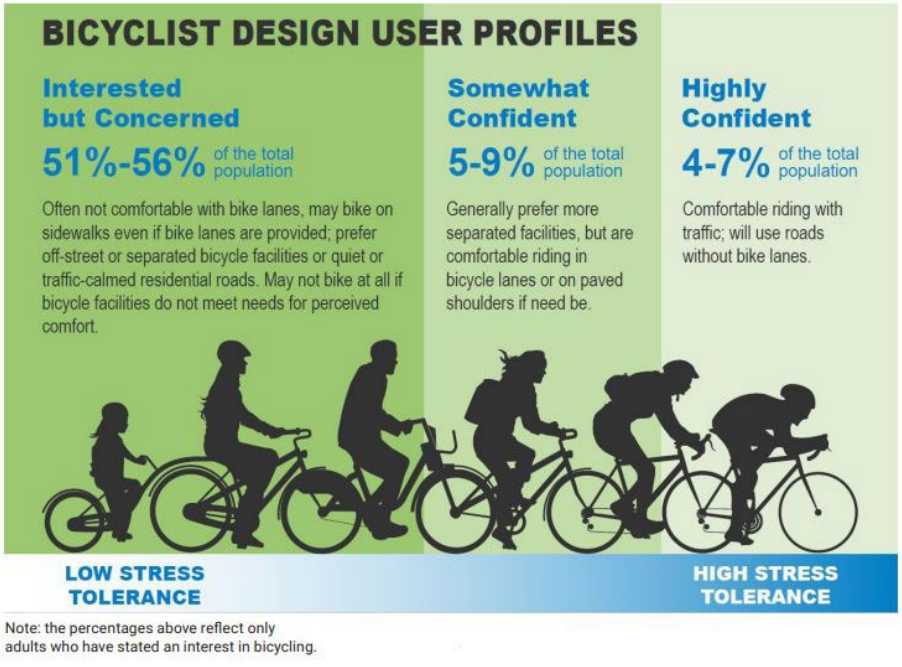
BOLTON & MENK

Why is this being considered + why now?

1 Long-range planning

2 User Experience

3 Existing Infrastructure



Source: U.S. Department of Transportation - Federal Highway Administration Bikeway Selection Guide, 2019

Existing Bicycle Lanes

The Roadway

Many segments of Summit Avenue have not been reconstructed for more than 100 years.

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.

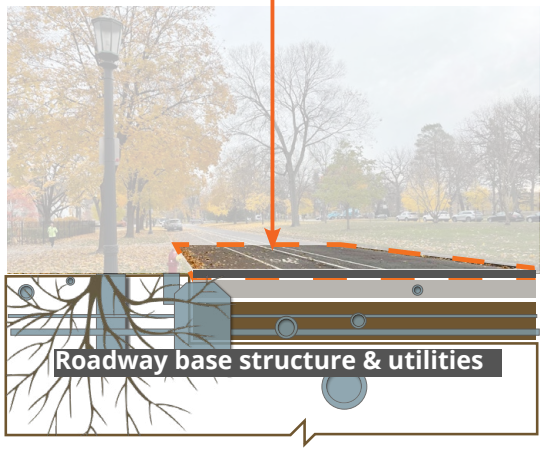
Improvements

Near-Term (2-3 yr.)

- Surface Improvements
- Crossings: Bump-Outs, Ramps
- Surface Improvements are Funded

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*

*Specific scope and timing of roadway construction projects vary depending on existing conditions and funding availability

How does this relate to a trail facility?

The most cost-effective opportunities to add pedestrian and bicycle improvements come when roads are being fully redesigned.

Separated Trail Facility

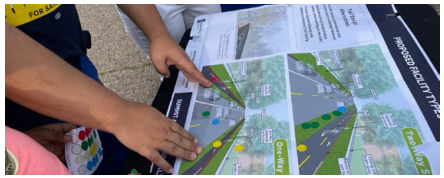
Industry Best-Practices, Recommended Facility

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 St to John Ireland Blvd is 3,900 vehicles per day.

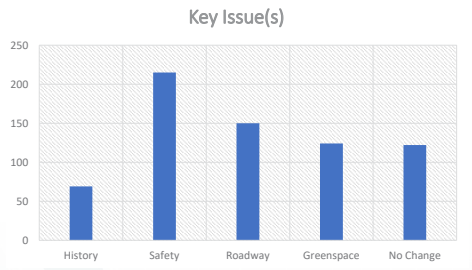
Roadway Traffic Volume *(vehicles per day)*	Posted Roadway Speed	Recommended Facility Type		
		FHWA Bikeway Selection Guide	MnDOT Bicycle Facility Design Manual	NACTO Designing for All Ages and Abilities
< 3,000	*25-30 mph*	*Shared Roadway or Bike Boulevard*	*Shared Roadway or Bike Boulevard*	*Bike Boulevard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

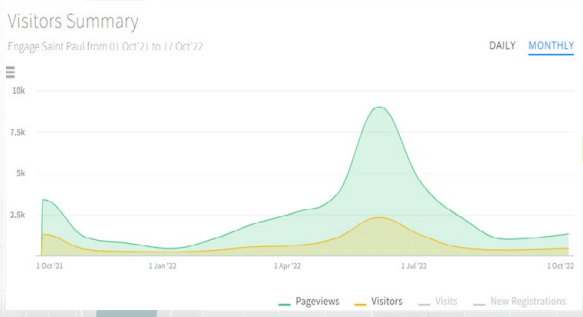
Fig. 4-33 | Recommended Facility Types

Community Engagement



60% Draft: Comment Period





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

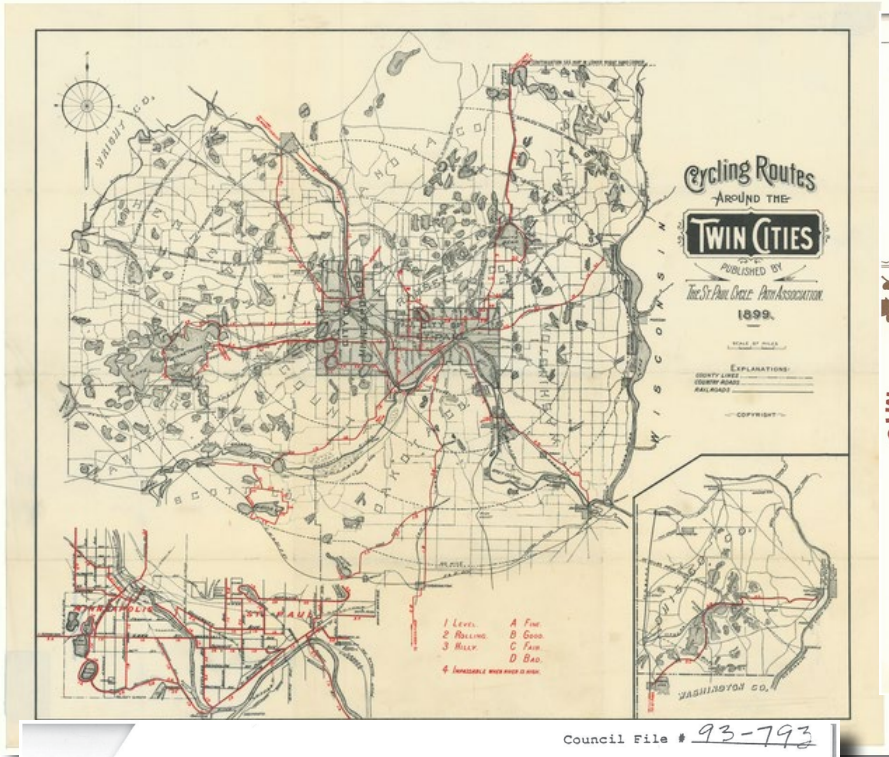
593 Comments received
60% Draft Document - Engage Saint Paul

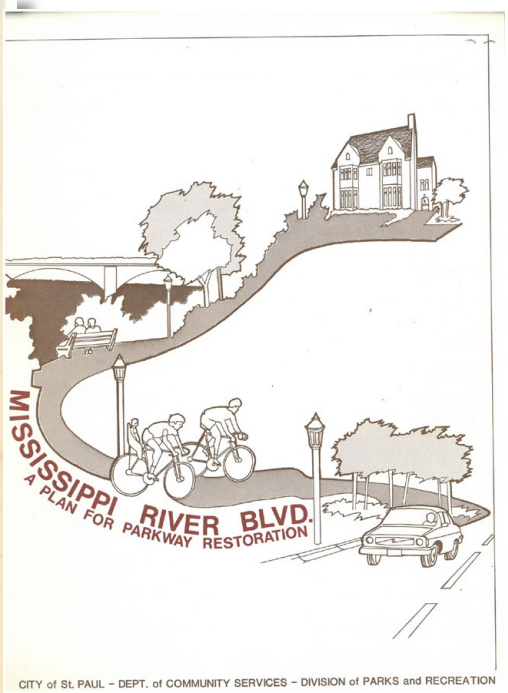
--- Comments received
90% Draft Document - Engage Saint Paul

How has engagement informed the Regional Trail Plan?

- **Tree preservation**
  - Distrubance within roadway footprint
  - Framework for constrained conditions when needed
- **Safety & User Experience**
  - Physical separation
  - Removes two-way trail & contra-flow
  - Intersection toolkit
- **Historical Significance**
  - Retains roadway footprint
  - Patterns and symmetry
  - Future formal SHPO and HPC reviews

Recreational Planning

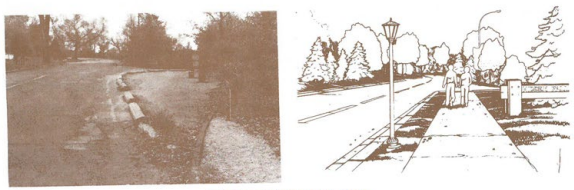




recreational path:

No additional paths or walks will be installed on the residential side of MRB. A continuous hard surface path will be installed on the bluff side of the boulevard.

TYPE:	Combined pedestrian/bike casual recreational path.
LOCATIONS:	The path will be continuous the length of the parkway and located on the bluff side to take advantage of the river corridor's scenic quality.
WIDTH:	Typically 8' 0" but narrower where limited space exists. Separated pedestrian/bike paths where space permits adjacent the Ford Motor Co.
MATERIAL:	Bituminous pavement with an earthtone color crushed gravel surface (seal coat).
OTHER CONSIDERATIONS:	A turf boulevard strip will be provided between the path and the roadway wherever possible as an aesthetic and protective buffer and for utilities, park furnishings, trees, and snow storage. The provision of a boulevard will take precedence over path width. The path will be reduced in width up to a minimum of 4' 0" to accommodate the boulevard.



MRB at MAGOFFIN AVE.

MRB NORTH of SHADOW FALLS

7

Council File # 93-793
Green Sheet # 23334

RESOLUTION
CITY OF SAINT PAUL, MINNESOTA

...ented By _____

...ferred To _____ Committee: Date _____

WHEREAS, the quality of our urban environment requires that the City address the problems associated with pollution from automobile emissions; and

WHEREAS, carbon dioxide and carbon monoxide emissions can be reduced by using alternative forms of transportation; and

WHEREAS, bicycling emits no undesirable emissions as well as being a popular commuting and recreational activity for many residents of the City of Saint Paul; and

WHEREAS, Summit Avenue is a popular bicycling route due to its continuity between Mississippi River Blvd. and the Capitol/Downtown area as well as its aesthetic appeal; and

WHEREAS, the Public Works Department placed a bicycle test section on Summit Avenue betwe... Mississippi River Blvd. and Wheeler St. in August, 1992; and

WHEREAS, two neighborhood meetings and hundreds of calls to the Citizen Service office have indicated popular acceptance to the concept; and

WHEREAS, Public Works has observed no operational problems and an early indication of

Summit Avenue Corridor

Roadway construction near Summit Avenue and Grotto, 1915
Credit: Minnesota Historical Society

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

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

Consistency & Adaptability

- **Wide Public Right-of-Way & Parkway Design**
- **Expansive, park-like Green Spaces**
- **Pattern and Rhythm of Landscape and Public Space**
- **Materials & Movement**
  - **Pavements**
  - **Walkways**
  - **Bikeways**

Corridor Layout

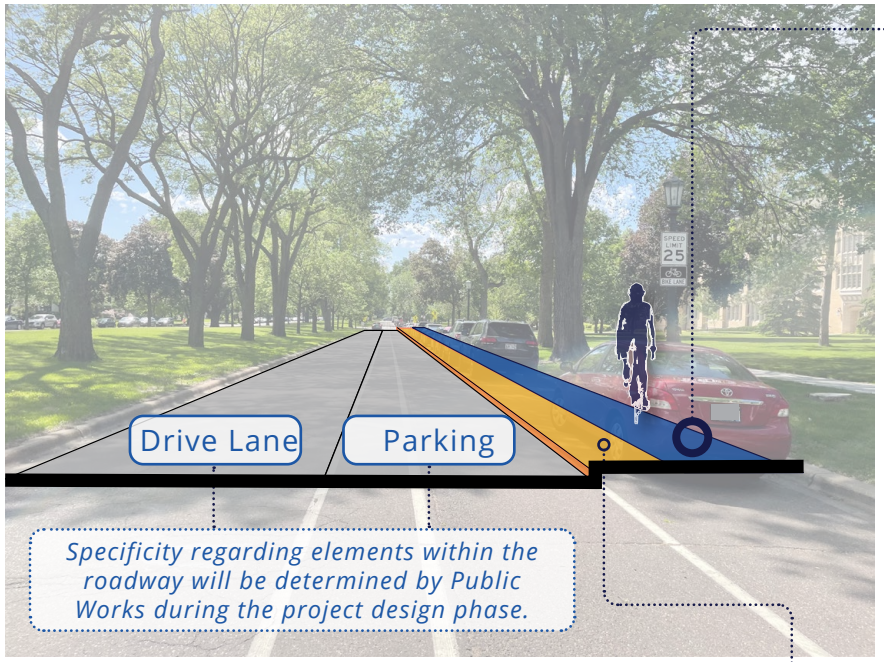
Summit Avenue Corridor Segments

Preferred Proposed Corridor-wide Trail Alignment

Legend

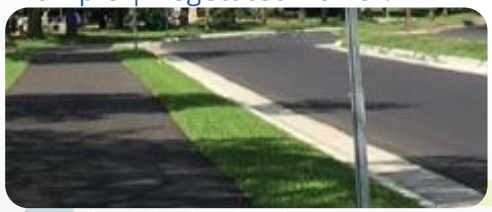
- Proposed Bike Facility - Two One-Way Facilities
- Proposed Bike Facility - One Two-Way Facility (Kellogg & Eagle Parkway)

Proposed Components of the Transportation Envelope



Example | Paved Buffer:

Example | Vegetated Buffer:



Buffer

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

One-Way Trail Facility

OR

Two-Way Trail Facility

Kellogg and Eagle Pkwy only

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

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

- 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

- 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

Drive Lane Widths & Design Minimums

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

1. **Sidewalks**
Variable widths, 6’-10’

2. **Amenity Areas**
Space for rest, furnishings

3. **One-Way Trail**
Grade Separated

4. **Buffer**
Grass

5. **Vehicle Corridor**

6. **Curb**
6” Height

7. **Parking**
On-Street

1 **Sidewalks**
Variable widths, 6’-10’

2 **One-Way Trail**
Grade Separated

3 **Buffer**
Paved

4 **Vehicle Corridor**

5 **Curb**
6” Height

6 **Parking**
Frontage Roads

1. **Sidewalks**
Variable widths, 6'-10'

2. **Tabled Crossing**
Trail and sidewalk raised 6" above street level

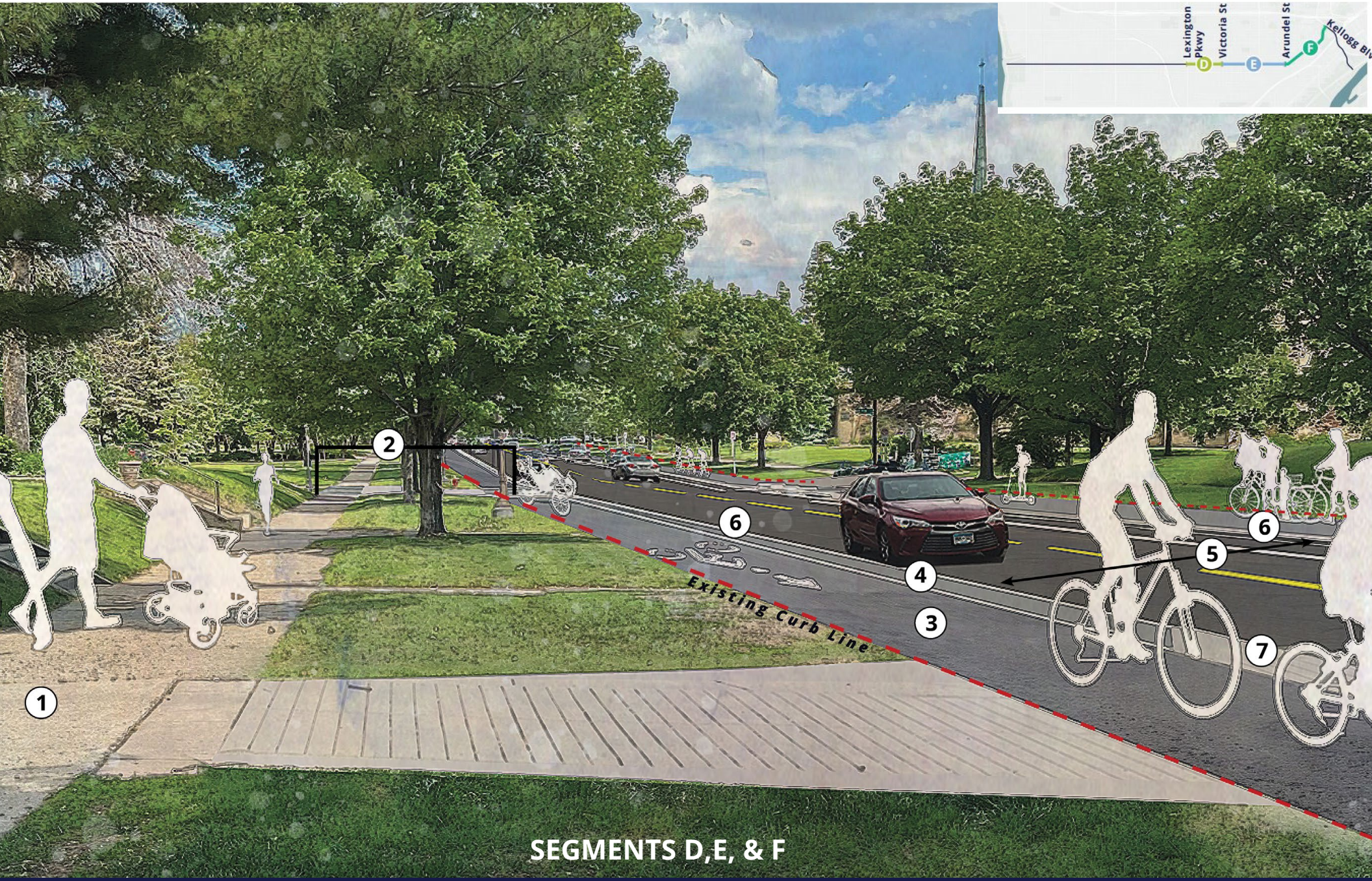
3. **One-Way Trail**
Grade Separated

4. **Buffer**
Paved

5. **Vehicle Corridor**

6. **Curb**
6" Height

7. **Driveway Apron**



SEGMENTS D,E, & F

Historic Lens

Engagement & Review Processes

- **Plan Development**

Technical Advisory Committee (TAC)
Staff from Heritage Preservation Commission (HPC) and State Historic Preservation Office (SHPO) are invited to participate in TAC meetings to provide guidance and initial feedback

BEYOND THE PLAN
PROJECT UNDERTAKING | SECTION 106

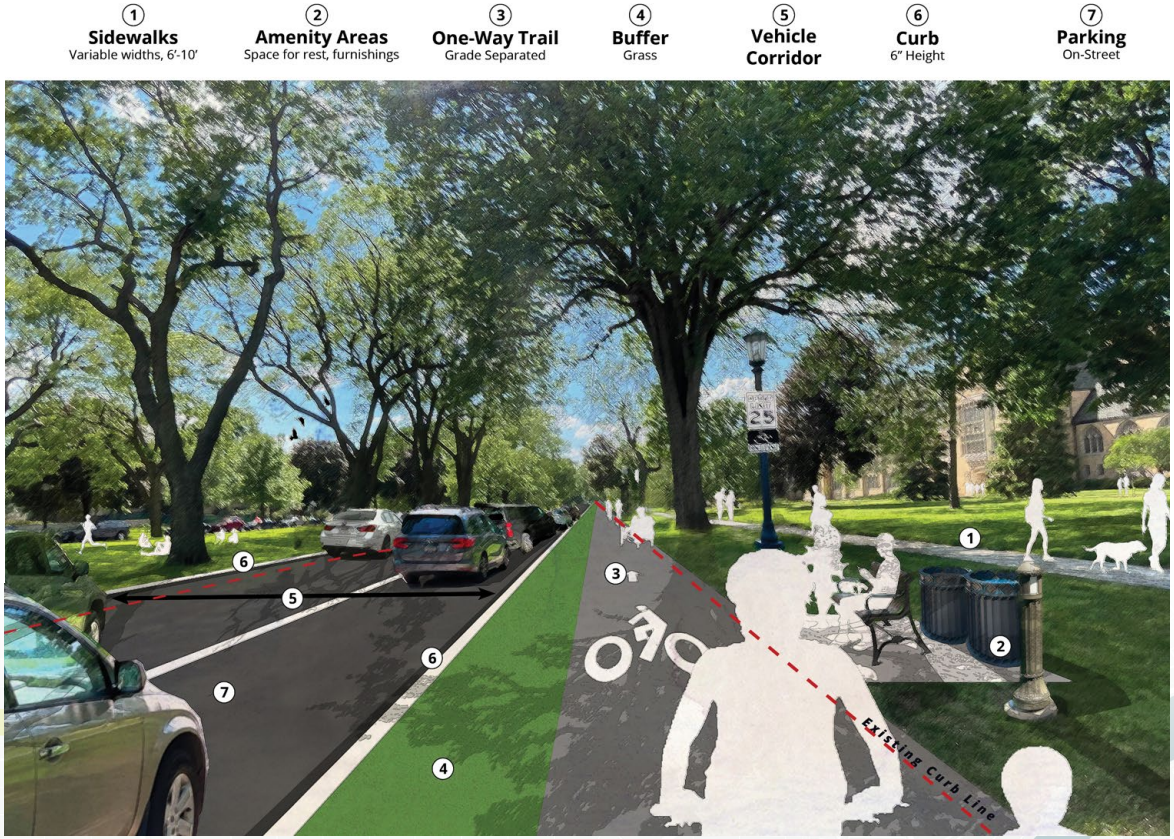
- **Design & Engineering**

Formal Review
Depending on funding sources, Local, State, and Federal Review Processes Apply

Any undertaking identified in the National Historic Preservation Act (NHPA) as a project, activity, or program that is funded in whole or in part with federal financial assistance requires that affects to designated or potentially eligible structures are identified and assessed

Departure from the typical section would be determined during design and engineering, constrained conditions could remove parking or reduce paved surface dimensions as a way to adapt to site conditions within the roadway.

- **PARKING**
- **PAVED TREADWAY**



Evaluating Potential Tree Impacts

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 will need to be evaluated beyond the master plan during design and engineering phases of a project.

NOTE: Exercise is reflective of data currently available and is subject to variability. Existing Ash trees are included in the exercise overall. **Surveyed data, site specific tree and field conditions corridor-wide are not available at this time.**

Existing Condition

Proposed Trail Concepts

Driveways

Drivers should yield to cyclists on the trail similar to yielding to pedestrians on a sidewalk. Different treatments of driveway crossings may be necessary depending on their use classification (high, medium, low). Many of the driveways in the corridor are for residential properties and would potentially have a lower use frequency

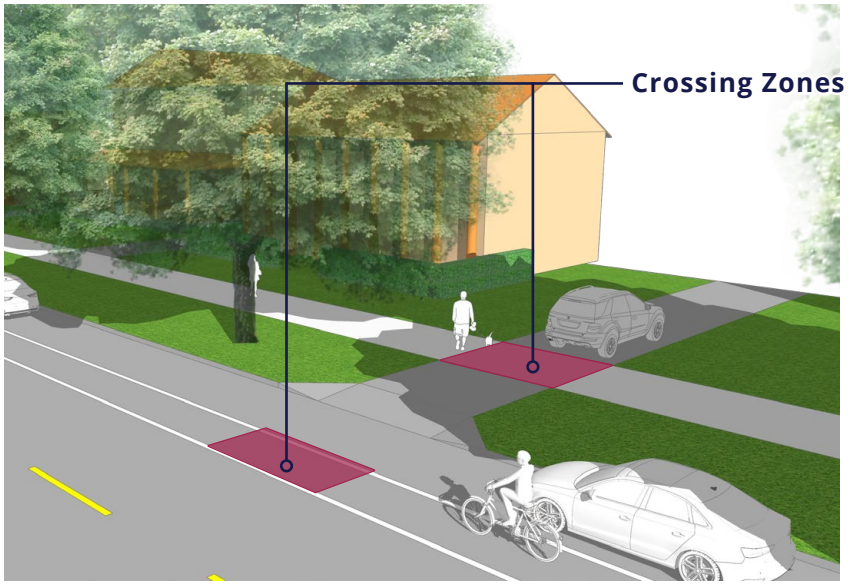


Fig. 4-1| Typical Driveway Condition - Existing

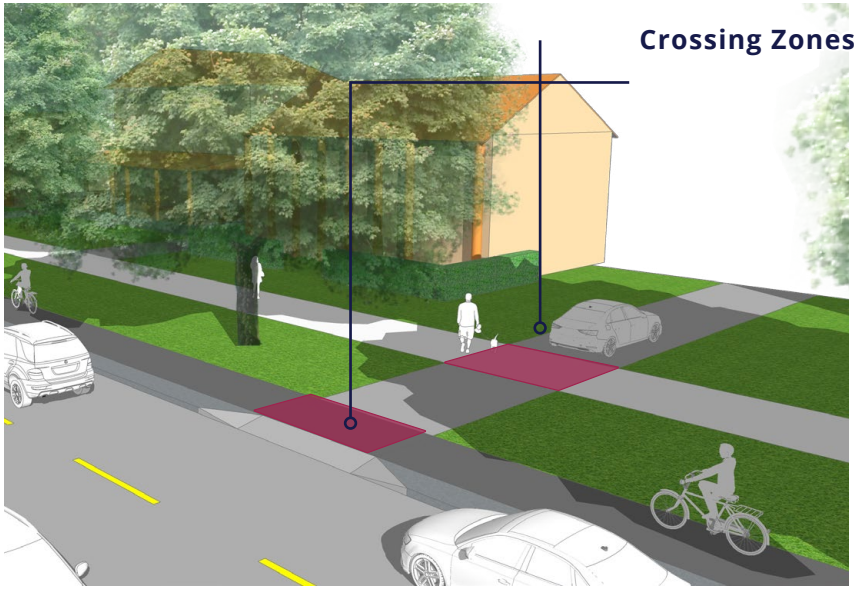


Fig. 4-2| Typical Driveway Condition - Proposed

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.

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

User Experience

- **Proximity of modes**
- **Safety & accessibility**
- **Perceived comfort**
- **Seasonal conditions**

SUMMIT AVENUE REGIONAL TRAIL

EAST - WEST
connection across the city

SAINT PAUL
MINNESOTA

SAINT PAUL Parks and Recreation

BOLTON & MENK

Process

Project Timeline

UPDATED 02/21/2023

WHERE WE'VE BEEN

OCTOBER 2021
- ENGAGEMENT WEBSITE AND PROJECT KICK-OFF
  - » ON-SITE COMMUNITY ENGAGEMENT EVENTS
  - » ONLINE ENGAGEMENT TOOLS AVAILABLE

FEBRUARY 2022
- TECHNICAL ADVISORY AND DESIGN ADVISORY COMMITTEE MEETINGS (#1)

MAY 2022
- TECHNICAL ADVISORY AND DESIGN ADVISORY COMMITTEE MEETINGS (#2)

FEBRUARY - APRIL 2022
- VIRTUAL DROP-IN ENGAGEMENT SESSIONS
- PROJECT UPDATES WITH COMMUNITY MEMBERS

JUNE 2022
- PUBLIC INFORMATION SESSION

JULY/AUGUST 2022
- FOCUSED ENGAGEMENT

OCTOBER 27, 2022
- COMMUNITY OPEN HOUSE!
- RELEASE 60% DOCUMENT DRAFT

NOVEMBER 2022
- PUBLIC COMMENT PERIOD - 30 DAYS

WHERE WE'RE GOING

DECEMBER 2022 - JANUARY 2023
- DOCUMENT REVISIONS
- METROPOLITAN PARKS AND OPEN SPACE COMMISSION (MPOSC) - COUNCIL INFORMATION & CONSULTATION

WE ARE HERE

FEBRUARY 2023
- FEBRUARY 1 - RELEASE 90% DOCUMENT DRAFT
- FEBRUARY 1-28 - PUBLIC COMMENT PERIOD - 28 DAYS

MARCH 2023
- DOCUMENT REVISIONS & FINAL REGIONAL TRAIL PLAN
- PARKS AND RECREATION COMMISSION - PUBLIC HEARING: MAR. 9
- TRANSPORTATION COMMITTEE: MAR. 20

APRIL 2023
- SAINT PAUL CITY COUNCIL - ACTION ITEM: DATE TBD

JUNE 2023
- METROPOLITAN COUNCIL: REVIEW AND APPROVAL

FUTURE
- IF APPROVED, WORK TOWARDS IMPLEMENTATION

90% DRAFT plan is available for public comment in February
www.engagestpaul.org/summit

SUMMIT AVENUE
REGIONAL TRAIL PLAN

SAINT PAUL
MINNESOTA

SAINT PAUL Parks and Recreation