

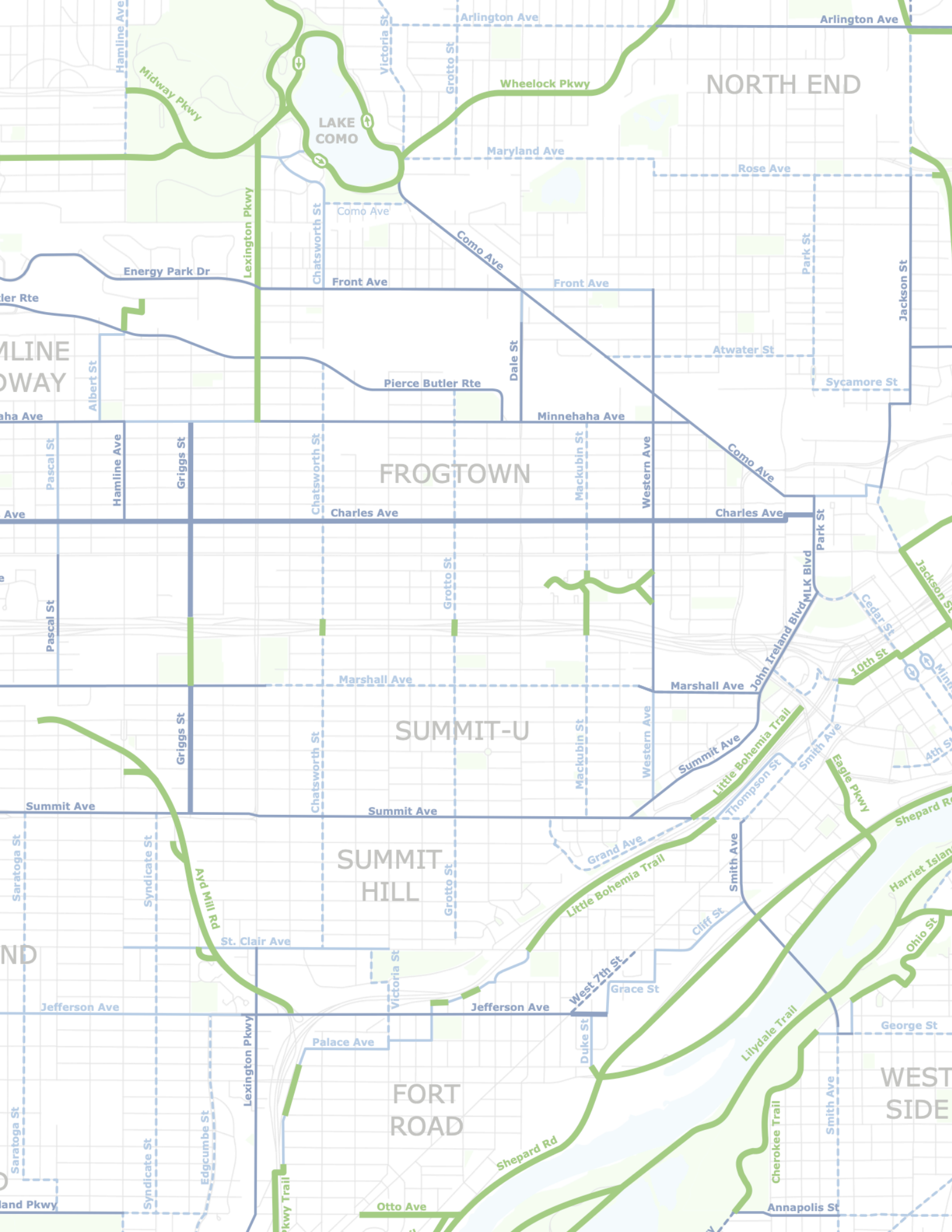
SAINT PAUL



BICYCLE COALITION

RETHINKING SUMMIT AVENUE

PUBLISHED FEBRUARY 2021



NORTH END

FROGTOWN

SUMMIT-U

SUMMIT HILL

FORT ROAD

WEST SIDE

LAKE COMO

Midway Pkwy

Wheelock Pkwy

Energy Park Dr

Lexington Pkwy

Chatsworth St

Como Ave

Front Ave

Como Ave

Front Ave

Rose Ave

Park St

Jackson St

Pierce Butler Rte

Dale St

Atwater St

Sycamore St

Minnehaha Ave

FROGTOWN

Charles Ave

Charles Ave

Marshall Ave

Marshall Ave

SUMMIT-U

Summit Ave

Summit Ave

SUMMIT HILL

St. Clair Ave

Jefferson Ave

Palace Ave

West 7th St

Grace St

Jefferson Ave

Otto Ave

Shepard Rd

Lilydale Trail

Cherokee Trail

Annapolis St

George St

Ohio St

Shepard Rd

Harriet Island

Eagle Pkwy

Little Bohemia Trail

Smith Ave

Cliff St

Grand Ave

West 7th St

Duke St

Chatsworth St

Grotto St

Mackubin St

Western Ave

Charles Ave

Park St

John Ireland Blvd

10th St

4th St

Minnehaha Ave

Summit Ave

Thompson St

Smith Ave

Cliff St

Grace St

West 7th St

Duke St

Palace Ave

St. Clair Ave

Jefferson Ave

Edgumbe St

Syndicate St

Saratoga St

Land Pkwy

Lexington Pkwy

Hamline Ave

Albert St

Pascal St

Energy Park Dr


Midway Pkwy

Wheelock Pkwy

Arlington Ave

RETHINKING SUMMIT AVENUE

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"I used to crisscross Minneapolis and Saint Paul daily by bike. The two near-misses with cars I had were both on Summit... both times I was nearly broadsided at night. I had lights, but the left-turning cars going through yield signs couldn't see my lights."

- Faith Krogstad

"I'm often sideswiped on the curve headed west from Ramsey Street. Utility and delivery trucks frequently block the bike lane."

- Will Jones

"I have only taken my parents on a bike ride around Saint Paul once. They live a block off Summit, and we rode down the Summit bike lane. It turns out, it was a terrifying experience for them!"

- Bill Lindeke

"My husband got hit biking on Summit at Victoria, resulting in a dislocated collar bone. 18yo driver stopped and offered him a Coke while waiting for the ambulance."

- Dana DeMaster

"Winter riding along Summit is terrifying. The bike lane is too small and rarely cleared of snow."

- Andrew Simons

"I drove behind a cyclist on Summit one winter after snow. They had to bike in the traffic lane due to the bike lane not being clear. At Fairview/Summit, they went down due to ice. Good thing I bike and drove at 10mph, or I would have slid into them."

- Rob Leduc

EXECUTIVE SUMMARY

Summit Avenue is the preeminent parkway of Saint Paul, a 4.5 mile corridor that features many of our city's most prominent destinations and historic architectural gems. It's the heart of the Historic Hill District and the Summit Avenue West Heritage Preservation District, two of the nation's largest urban historic districts, and it provides crucial access to destinations including the Cathedral of Saint Paul, the Grand Avenue business district, Macalester College, the University of St. Thomas, and the Mitchell-Hamline School of Law. Summit Avenue is Saint Paul's oldest and busiest on-street bikeway, very likely the busiest on-street bikeway in all of Minnesota.

It is also one of the most dangerous streets to walk and bike on in Saint Paul. There have been 23 reported crashes involving people biking or walking since 2016, when the City began collecting data, and two people have lost their lives biking on Summit Avenue in recent memory: Virginia Heuer, 51, in 2008; and Alan Grahn, 75, in 2018. Despite repeated improvements, the on-street bike lanes on Summit Avenue are still not safe for the number of people of all ages and abilities biking. The SPBC surveyed our membership and the public about Summit Avenue and received 167 responses. The survey results found many people currently feel unsafe on Summit, especially in winter. There was also a wide consensus that other designs—and especially a trail—would improve safety.



Virginia Heuer, killed biking on Summit in 2008.

While the City has implemented new protected bikeway designs on many other parkways throughout Saint Paul, Summit Avenue is stuck in a 1990s design paradigm. It's time to boldly reimagine Summit Avenue to prioritize safety for everyone and create a safe, protected route for people walking and riding bikes that respects Summit Avenue's 19th-century roots while moving boldly into the 21st century.

THE PROBLEM OF SUMMIT AVENUE

Summit Avenue is the single most-used and most important bikeway in the Saint Paul. According to bicycle and pedestrian count data collected by the City, any given section of Summit Avenue will see several hundred people riding bikes during afternoon peak hours, with estimated total use in the thousands.¹ People from across the Twin Cities and Minnesota visit Saint Paul to bike on Summit Avenue, including for well-known events such as the Saint Paul Classic.

Unfortunately, despite its popularity, biking on Summit Avenue is plagued with issues. Even with recent changes west of Lexington Parkway, the bike lanes are too narrow to be comfortable for many users. People in the bike lane are constantly at threat of being “doored” when the doors of parked cars open, or hit when inattentive drivers enter or leave the parking lane. Bike lanes disappear or significantly narrow near many intersections, replaced by right-turn lanes. Sightline issues at intersections make it difficult for people driving and biking to see each other, particularly when they need to cross the wide medians. Most problematic, the bike lanes become virtually unusable in winter, as accumulated snow pushes parked cars out into the bike lane and makes it difficult or impossible for plows to clear the bike lanes of ice and snow.

“Every single winter the parked cars along Summit prevent the roads from being plowed and bikes end up with no lane and are forced to ride in the road. I've had too many dangerous passes to count, and constantly have drivers yell/honk.”

- @portmanfaux

Although these issues are not unique to Summit Avenue, its high use and regional significance make the problems with this bikeway particularly glaring. Summit is classified as a Tier 1 corridor in the Metropolitan Council’s Regional Bicycle Transportation Network, and as a Major Bikeway in the Saint

¹ <https://www.stpaul.gov/sites/default/files/Media%20Root/Public%20Works/Saint%20Paul%20Bicycle%20and%20Pedestrian%20Manual%20Count%20Data%202007-2019.pdf>

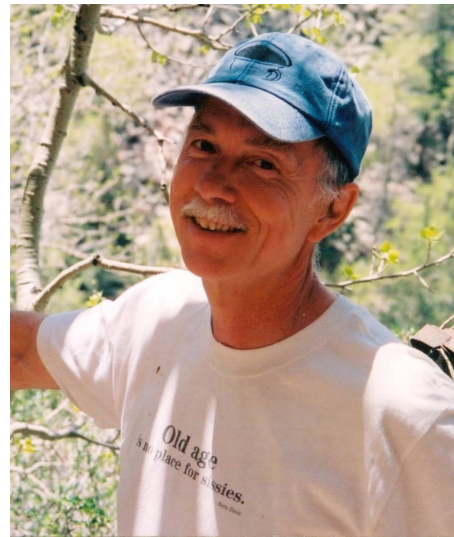
Paul Bicycle Plan. In these roles, Summit Avenue is supposed to function as the primary east/west bikeway for people throughout the western neighborhoods of Saint Paul south of Interstate 94, but planners have recognized that in its current configuration Summit does not play this role well, especially (but not only) for younger riders, less confident riders, and anyone not comfortable riding in traffic.

Even for the people who do choose to bike on Summit Avenue, these challenges can create significant risk of injury or even death. A few examples collected by the City since 2016 show the toll in injuries and hospitalizations of the existing bikeway:

- On March 24th, 2016, a 29-year-old man was struck at Summit and Lexington Parkway by a 27-year-old driver and sent to the hospital with serious injuries.
- On August 22nd, 2016, a 47-year-old man was struck at Summit and Kent Street by a 31-year-old driver and sent to the hospital with suspected injuries.
- On September 23rd, 2017, a 33-year-old man was struck at Summit and Dale Street by a 26-year-old driver and sent to the hospital with suspected injuries.
- On March 2nd, 2018, a 69-year-old man was struck at Summit and St. Albans Street by a 22-year-old driver and sent to the hospital with possible injuries.
- On August 22nd, 2018, a 52-year-old man was struck at Summit and Chatsworth Street by a 50-year-old driver and sent to the hospital with suspected injuries.
- On June 1st, 2019, a 36-year-old man was struck on Summit at Albert Street by a 54-year-old driver and sent to the hospital with suspected injuries.

These are only the injuries that were successfully recorded in the Saint Paul Police Department's tracking initiative since collection began in 2016. Many more crashes occurred that avoided serious injury by pure luck, and even in the crashes where immediate hospitalization was not required, the victim may have suffered longer-term financial and health consequences as a result of the crash. Many other crashes, especially ones that do not result a subsequent call to SPPD, are not recorded in the system but may still have longer-term consequences.

Recent attention to the problem of Summit Avenue was catalyzed by the death of Alan Grahm, who was killed biking on Summit at Snelling Avenue in 2018. In response to his death, a group of residents organized as "Safety on Summit" (part of Sustain Saint Paul) and brought neighbors, city officials, and many others together at a town hall held at Macalester College. At that event, dozens of people shared their experiences of biking on Summit Avenue and their fear that they could be the next Alan Grahm as a result of a single mistake or inattentive moment—not just their own, but that of anyone who happened to be operating a vehicle near them at the wrong place or time. Many in attendance demanded that the bikeway on Summit Avenue be converted to a protected bikeway that physically separates people biking, walking, and driving and reduces the likelihood of crashes, injuries, and death. After that town hall, officials with the City of Saint Paul committed to exploring changes, and worked quickly to make short-term changes including wider lanes west of Lexington Parkway, conflict markings at certain major intersections, and a left-turn phase at Snelling Avenue to prevent the particular circumstance that killed Alan Grahm. Still, these changes do not meet the demands of Safety on Summit or the SPBC, and have had no impact on Summit Avenue east of Lexington Parkway where the majority of crashes and injuries occur.

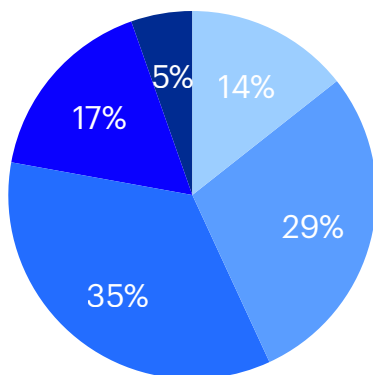


Alan Grahm, killed biking on Summit in 2018.

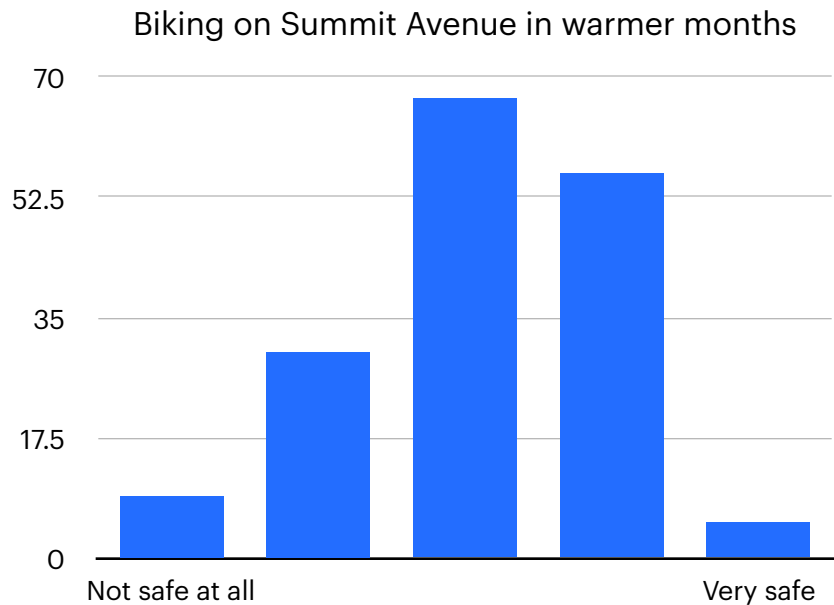
SUMMIT AVENUE SURVEY RESULTS

In late January 2021, SPBC conducted an online survey of our membership to help guide our vision for the future of Summit Avenue. The survey asked respondents 12 questions about Summit and demographic characteristics, including gender, age, and ZIP code. We received 167 responses. More than 60% of respondents identified as living in ZIP codes adjacent to Summit Avenue (55102, 55104, and 55105) with the remainder in various ZIP codes throughout the Twin Cities.

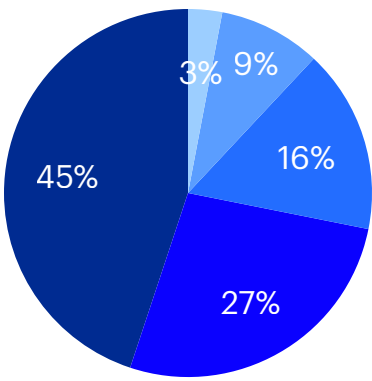
Respondents were first asked about biking on Summit Avenue in “warmer months.” Respondents were asked to assess how often they bike on Summit in these months and how safe they feel when doing so:



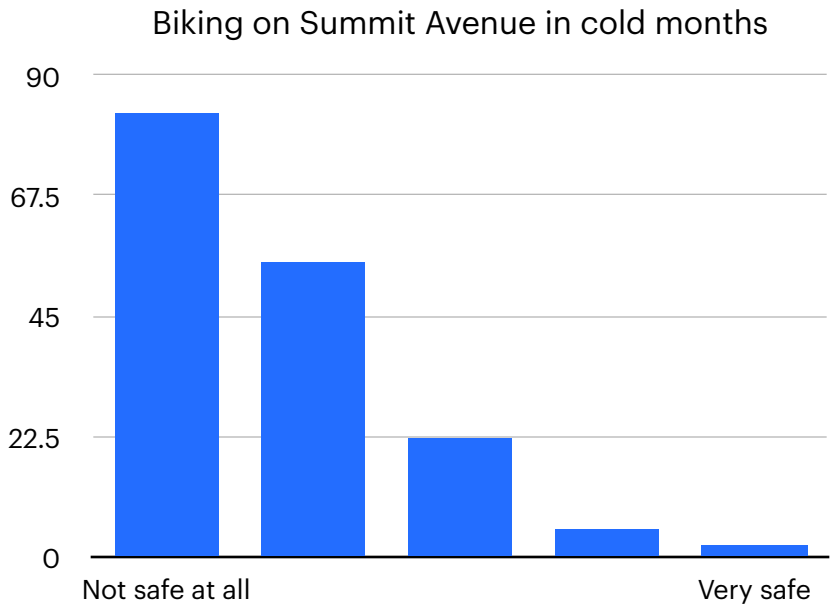
- Daily or most days
- A few times a week
- A few times a month
- Sometimes
- Never or almost never



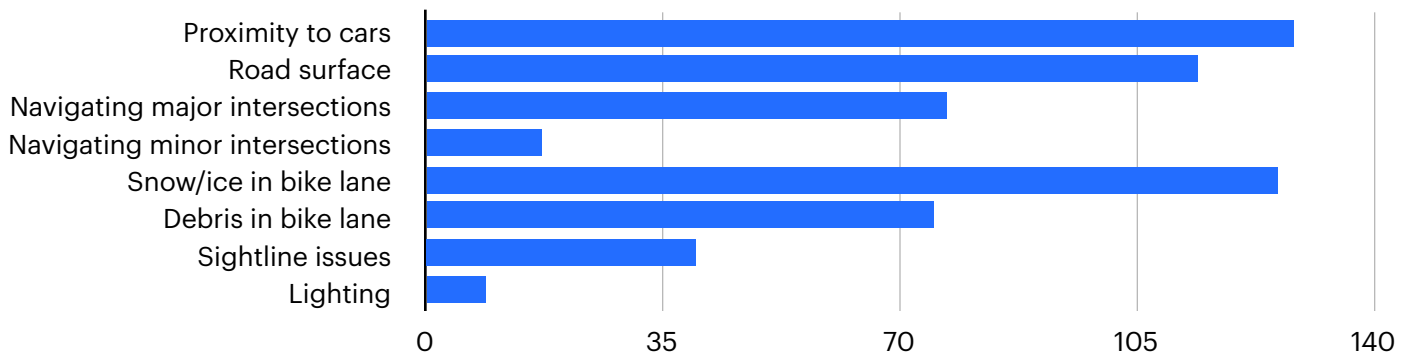
Respondents were then asked about biking on Summit Avenue in “cold months” and asked to make identical assessments:



- Daily or most days
- A few times a week
- A few times a month
- Sometimes
- Never or almost never



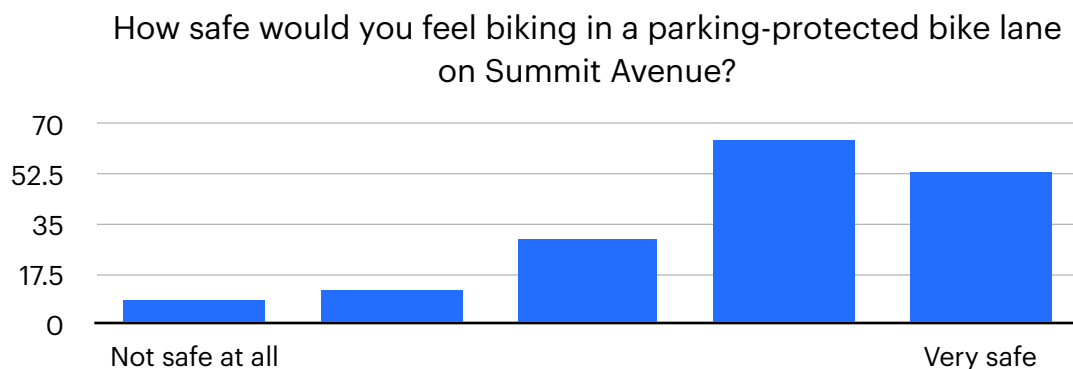
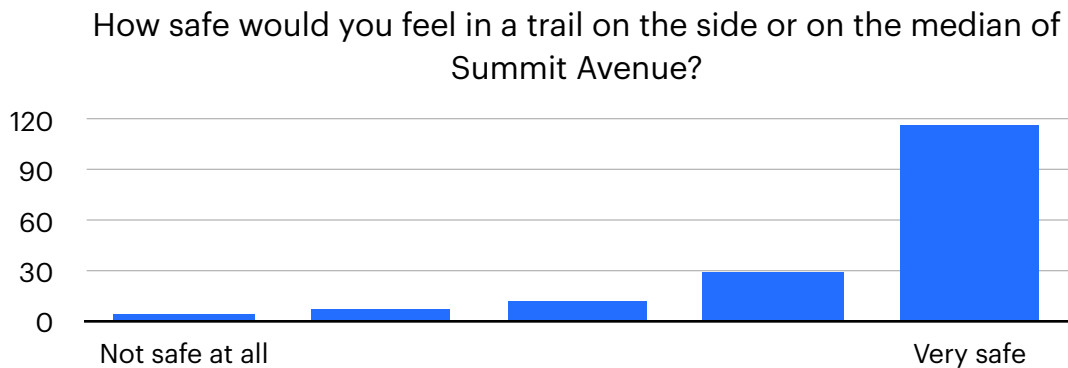
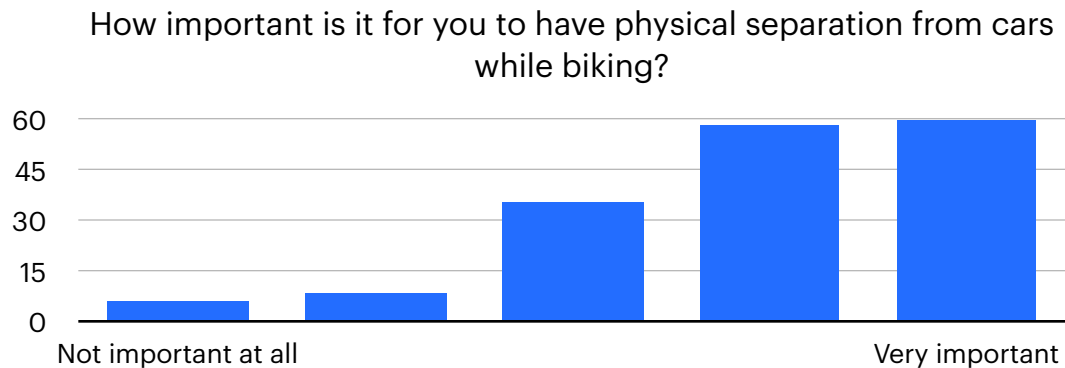
Respondents were then asked to identify possible reasons they felt unsafe and were prompted to select as many as applied:

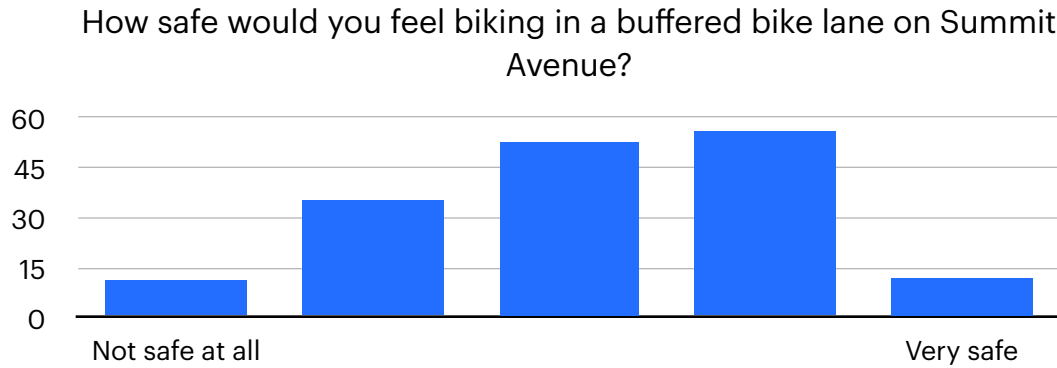


Respondents were allowed to offer additional reasons they might feel unsafe. Many focused on the interaction of parked cars with people biking, including cars parked in the bike lane, parked car doors opening into the bike lane, and driver behavior when cars pull into or out of the parking lane and pass through the bike lane. Additionally, multiple respondents offered the speed of traffic on Summit Avenue as a safety concern, especially when biking in the street next to traffic.

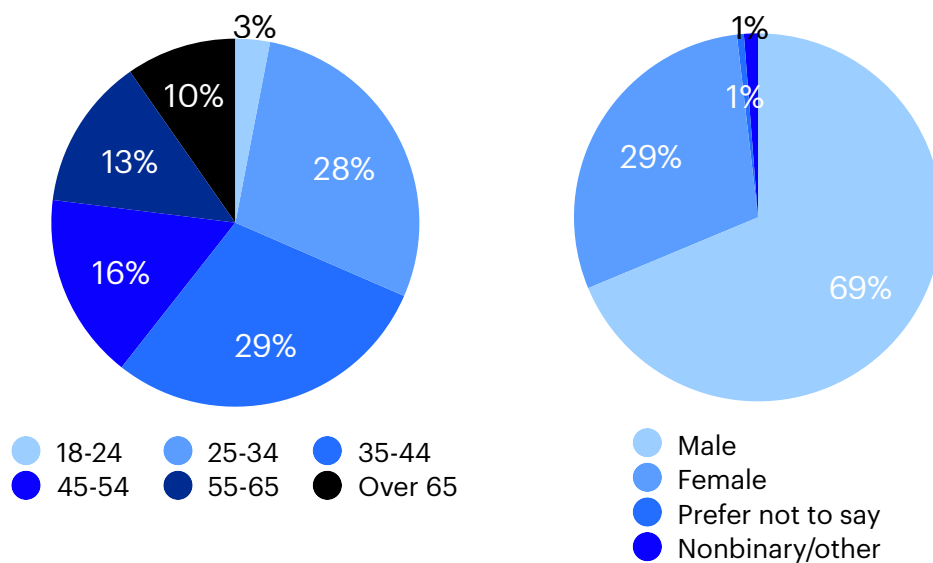
Next, respondents were asked to rate how important it is for them to have physical separation from cars while biking. They were then offered pictures

of three possible design options for improved bike lanes on Summit Avenue: a trail running alongside or in the median of Summit; a “parking protected” bike lane, where the positions of the bike lane and parking lane are flipped; and a “buffered bike lane” similar to the design installed on Summit Avenue west of Lexington Parkway in 2020:





The survey asked several demographic questions of respondents:

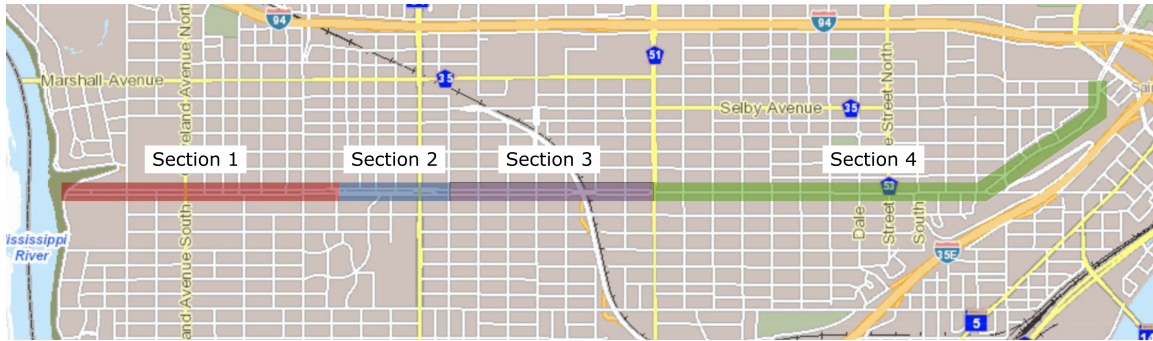


There was no significant variation in perceived safety ratings between male- and female-identifying respondents. Age subgroups showed somewhat more variation, but the small size of the subgroups made it impossible to draw significant conclusions from this data.

Most respondents identified as living in ZIP codes 55104 (56 respondents), 55105 (35 respondents), 55102 (18 respondents), and 55116 (13 respondents). No other ZIP code had more than 6 respondents, and most had only 1. In total, respondents identified as living in 23 separate ZIP codes across the Twin Cities.

SUMMIT AVENUE REVISITED

We propose a bold reimagining of Summit Avenue that prioritizes safety and comfort for users of all ages and abilities while respecting and preserving the historic character of the parkway. Based on our survey results, we propose constructing a trail and divide Summit Avenue into four sections:



- **Section 1:** From Mississippi River Boulevard to Wheeler. This section is approximately 200' wide and features a broad landscaped median with one-way traffic on each side of the median.
- **Section 2:** From Wheeler to approximately 300' east of Snelling. This section is approximately 200' wide and features two narrower landscaped medians with outer carriage roads and two-way traffic in the middle.
- **Section 3:** From approximately 300' east of Snelling to Lexington Parkway. This section is largely identical to Section 1 and will not be described separately.
- **Section 4:** From Lexington Parkway to Marshall. This section is approximately 100' wide and features two-way traffic with no medians.

Summit Avenue continues to the State Capitol as John Ireland Boulevard. Compatible changes should be pursued on that street in cooperation with the Capitol Area Architecture and Planning Board.

SECTION 1 - MISSISSIPPI RIVER BLVD TO WHEELER ST

This section connects the regional trail on Mississippi River Boulevard to a variety of major destinations including the University of St. Thomas as well as numerous existing and planned north/south bikeways. The existing wide ornamental median generally features two rows of mature trees near the roadways with a wide grassy area running down the middle, occasionally interrupted by trees or other plantings. The median is interrupted by street crossings as frequently as every 375'. Although the median does not have facilities for biking or walking, a well-defined "desire path" has been worn into the grass. On the roadways, buffered bike lanes provide bicycle access for confident or high-speed cyclists.

We propose constructing a 12-15' shared use path in the center of the median that provides a safe facility for slower and/or less confident people biking as well as people walking. In-street bike lanes are retained for users who feel most comfortable in the street. The City should explore closing selected intersections through the median to reduce conflict points for people biking and walking and to increase the amount of green space and room for tree planting. Where necessary, the path can shift from the center of the median to preserve existing trees.



Summit Avenue at Wilder Street, current.

Summit Avenue at Wilder Street, proposed.

SECTION 2 - WHEELER ST TO 300' EAST OF SNELLING AVE

This section connects to major destinations including the Macalester College and the Grand/Snelling business district. The two existing narrow ornamental medians generally features two rows of mature trees near the roadways with a narrow grassy area running down the middle, occasionally interrupted by trees or other plantings. The medians are interrupted by street crossings as frequently as every 200'. Although the medians do not have facilities for biking or walking, both feature well-defined "desire paths" worn into the grass. On the central roadway, buffered bike lanes provide bicycle access for confident or high-speed cyclists.

We propose constructing a 10-12' shared use path in the center of the south median that provides a safe facility for slower and/or less confident people biking as well as people walking. In-street bike lanes are retained for users who feel most comfortable in the street. The City should explore closing selected intersections through the median to reduce conflict points for people biking and walking and to increase the amount of green space and room for tree planting. Where necessary, the path can shift from the center of the median to preserve existing trees.



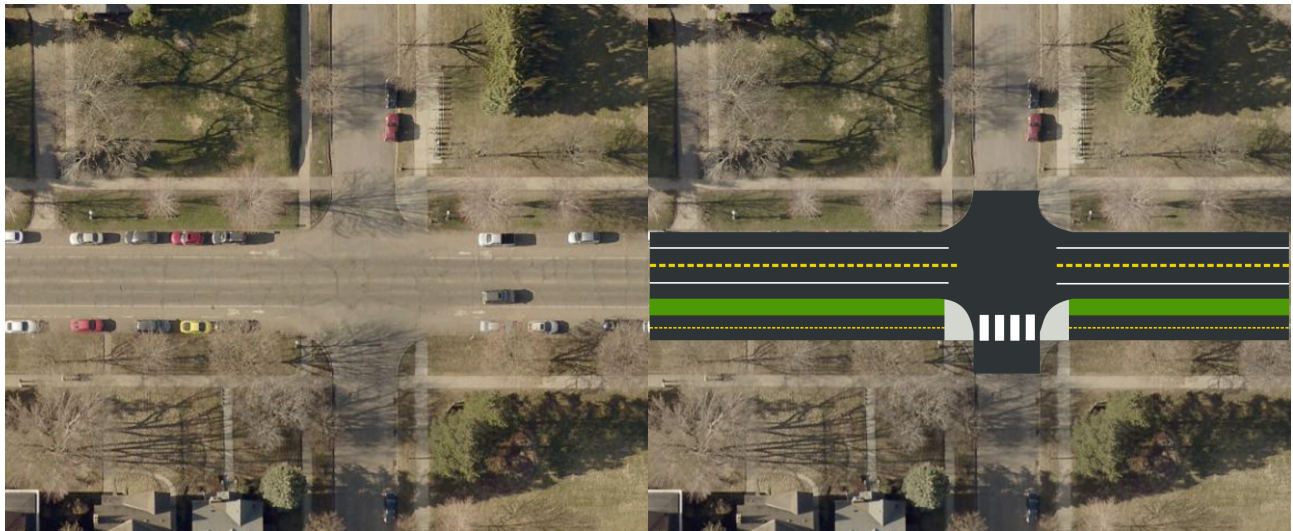
Summit Avenue at Cambridge Street, current

Summit Avenue at Cambridge Street, proposed

SECTION 4 - LEXINGTON PARKWAY TO MARSHALL AVENUE

Summit Avenue narrows dramatically east of Lexington Parkway, from 200' to 100'. The road through this section is a typical Saint Paul 46' roadway, with two-way traffic, parking lanes, and on-street bike lanes. All features are at substandard widths according to Saint Paul's Street Design Guide, and this section has the highest concentration of serious crashes. This section is a critical route for residents commuting by bike to downtown, and connects to planned protected bikeways on Kellogg Boulevard and St. Peter Street as well as numerous existing and planned north/south bikeways.

We propose narrowing the existing roadway to remove the substandard, unsafe on-street bike lanes and repurpose the space to provide a 10' off-street bike trail on either the north or south side of Summit Avenue (south side rendered below). Because this trail will not be shared with people walking, who can use the wide sidewalks which will be significantly buffered from the trail, it can serve people biking at a variety of speeds and comfort levels.



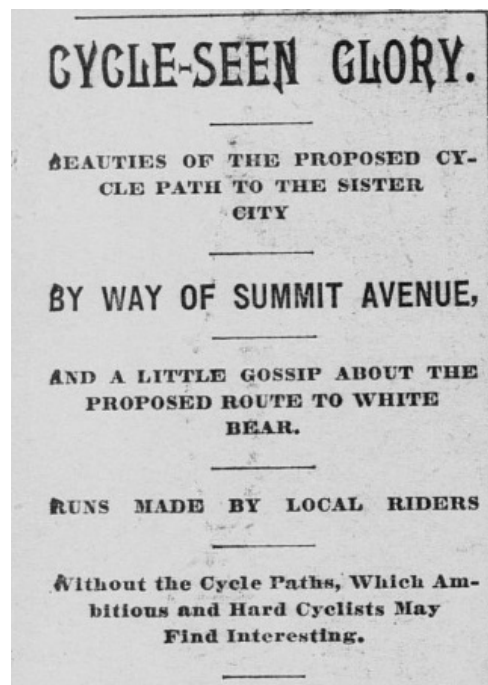
Summit Avenue at Milton Street, current

Summit Avenue at Milton Street, proposed (south side option)

HISTORIC SUMMIT AVENUE

Summit Avenue is Saint Paul's original and most important parkway, both for its built form and historic integrity. Summit "is considered to be the best preserved example of the grand Victorian avenue in America."² Summit Avenue's landscaping, wide parkway, and abundant green space are essential parts of its historic character, and we are confident that our design does not compromise those qualities or negatively impact this character.

Summit Avenue's broad period of significance (1885-1938) encompassed a time of rapid transformation for Saint Paul and America as a whole, and Summit Avenue was no exception. In this period, Summit was transformed from a largely rural, unpaved, often under maintained linear park into a major transportation thoroughfare with wide paved roads. This legacy of adaptation to the needs of the times is carried forward in our proposal, which thoughtfully reallocates space without changing the basic character of the parkway.



Furthermore, the addition of a trail is not inconsistent with the history of Summit Avenue. Indeed, the parkway previously featured a dedicated "cyclepath" during the "bike boom" of the 1890s which was maintained for decades. This proposal largely restores that 1890s cyclepath while updating its design to reflect modern standards and practices.

² Saint Paul Heritage Preservation Commission (1990). "Saint Paul Historic Hill District Guidelines for Design Review". <https://www.stpaul.gov/sites/default/files/Media%20Root/Planning%20%26%20Economic%20Development/15221.pdf>

CONCLUSION

Our proposal to adapt Summit Avenue reflects emerging best practices in bike infrastructure design and continues the design principles adopted by the City of Saint Paul for its other parkways, including historic Wheelock Parkway and Johnson Parkway, in the Grand Round Design Guide (2017).

This proposal would have key advantages over existing conditions:

- **Safety:** People biking would be physically separated from vehicles on the road. Road crossings could be treated to provide additional protections and slow motor vehicle traffic through raised crosswalks or other features.
- **Winter Maintenance:** The City of Saint Paul has demonstrated ability to maintain similar facilities year-round, including along major roads. In-street bike lanes such as those on Summit Avenue today are virtually impossible to keep clear of snow. Snow and ice were identified as a major safety concern in our survey.
- **Comfort for All Ages:** This proposal creates a high-comfort facility for people of all ages and abilities, especially children and young adults, who today would have difficulty successfully navigating Summit Avenue but who represent many potential users. A separated trail received the highest comfort rating in our survey.
- **Access for People with Disabilities:** Unlike the existing sidewalks, this proposal would create a shared-use facility that could be maintained by the City rather than adjacent property owners and which could be kept level and accessible year-round.

If the City of Saint Paul is serious about meeting its climate goals, we need high-quality bike facilities on streets like Summit Avenue that allow more people to get around the city comfortably without vehicles. This Summit Avenue redesign is an important first step. Let's make it happen.



PHOTO CREDITS

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