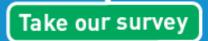
# Aurora Ave Project

Aurora Ave N Safety Planning Survey Findings Report



Want to improve safety on Aurora? Take our survey and share your input.









### Contents

ntroduction	3
Executive Summary	4
Survey Audiences	5
Key Findings	8
Survey Results	13
Recognize how community members get around Aurora Ave and for what purpose	13
Identify safety priority improvements for people walking, bicycling, and driving on Aurora	
Avenue	17
Safety overall	17
Safety improvements for people walking	19
Safety improvements for people bicycling	21
Safety improvements for people driving	23
Identify potential transit service improvements and connections on Aurora Avenue	24
Identify key crossing locations on Aurora Ave N/State Route 99 corridor	27
Demographics – who did we talk to?	32
Respondent Geography	34
Respondents Survey Engagement	35
Lessons learned	36
Appendices	37

# Do you walk, bike, or take transit on Aurora Ave?

Help us improve safety for all Aurora travelers!

Take our survey





## 您在Aurora 大道 上步行、騎自行車 或乘坐公交嗎?

幫助我們為所有在Aurora 上的旅行者改善安全。

參与我們的調<mark>查</mark>

# **济**

#### Introduction

Together, King County Metro and SDOT are working to develop a refreshed planning and design study for Aurora Ave that will evaluate new design options for the corridor as well as extension and upgrade options for the RapidRide E Line. This project is funded with a WSDOT Pedestrian and Bicycle Program grant received in 2021 and from King County Metro and the Levy to Move Seattle.

Between July and October 2022, the Seattle Department of Transportation (SDOT) launched the first phase of community engagement for the Aurora Ave Project. This initial phase included relationship building with community leaders, local businesses, and residents as well as launching the *Aurora Ave N Safety Planning Survey* - a multi-language survey to help SDOT better understand ways to improve safety for people walking, rolling, biking, driving, and taking transit along Aurora Ave.

This report presents findings from the *Aurora Ave N Safety Planning Survey*, which gathered input from 2,082 unique respondents, and was available in Chinese, English, Korean, Spanish, Tagalog, Tigrinya, and Vietnamese.

The survey was promoted through in-person outreach, partnerships with community organizations and leaders, and engaging local and multicultural media outlets.

Digital tactics such as email outreach, social media ads, and digital ads were also used to target residents along Aurora Ave via retargeting (utilizing web browser data to re-show the same ad across different platforms),

geo-targeting (serving impressions to audience members within a certain zip code or location), and geofencing (serving impressions to audience members based on demographic criteria).

#### **Executive Summary**

Overall, the survey focused on:

- 1. Understanding how, when, and for what purposes people use the Aurora Ave N/State Route 99 corridor.
- 2. Identifying the types of safety and mobility improvements that are important for people walking, biking, and driving through Aurora Ave N/State Route 99 corridor.
- 3. Identifying areas of improvement for public transit, specifically E-Line/RapidRide service.
- 4. Identifying key crossing locations on Aurora Ave N/State Route 99 corridor.
- 5. The most relevant values and challenges to consider when planning and designing the study for the *Aurora Ave Project*.

2,082 people responded to the survey. Of these, 1,982 identified their ethnicity as follows: 73% white, 1% Native Hawaiian or Pacific Islander, 8% Latino (a), 14% Asian, 4% Black, 2% Indigenous/First People of the Americas, 2% Middle Eastern and 6% said they identified themselves otherwise. Participation is almost equal between men (46%) and women (47%). Most respondents identified their age between 26 – 45 years old (56%), and with no disabilities (88%) as defined by the Americans with Disabilities Act. (See *Demographics – who did we talk to?* section for in-depth demographic data).

In the survey, the main improvement identified by respondents is safety infrastructure for people walking and biking. For example, sidewalks, signalized and marked crossings, and physical separation from motorized traffic. Another area of improvement respondents prioritized is collision reduction measures that address speeding and high traffic.

These areas of improvement are also highlighted in the open-ended responses. Keywords such as "walk", "sidewalks" and "crosswalks" were mentioned 1,043 times by survey participants in the open-ended responses, and "bike" and "bike lane" were mentioned 762 times. Keywords such as "speed", "fast" and "speeding" were mentioned nearly 400 times.

The top transit improvements identified by respondents are related to the lack of bus connectivity and the location of current bus stops.

In terms of crossing locations, the N 130th St crossing was identified by the respondents as both one of the busiest and most avoided crosswalks. Other busy and most used crossing locations identified are the N 85th St and Bridge Way N crossings. While the other most avoided crossings are the N 125th St, N 46th St, and N 85th St crossings.

Regarding improvements indirectly related to road infrastructure, most respondents expressed social concerns, like personal safety and crime, as the main issue that needs to be addressed. This feedback will be considered as we evaluate corridor designs and shared with the Seattle Police Department and the Human Services Department who have ongoing efforts to address these social issues on the corridor.

Additional community feedback will be solicited during the future phases of the Aurora Ave Project to shape the future vision of the corridor and transit services. We will consider this feedback alongside data and technical recommendations as we develop design options.

#### **Survey Audiences**

SDOT is interested in feedback from everyone who walks, bikes, rides the bus, drives, travels and/or lives within and beyond the project area. However, to better understand the needs of everyone along the Aurora Ave N/State Route 99 corridor, SDOT identified 5 audience segments. They are, in no particular order:

- Segment 1: Harrison St to N 38th St
- Segment 2: 38th St to Winona Ave N
- Segment 3: Winona Ave N to N 85th St
- Segment 4: 85th St to N 115th St
- Segment 5: 115th St to N 145th St

145th St to Mountlake Terrace was also an area of focus, specifically for the E Line assessment.

According to the American Community Survey 2020 (5-year Series: 2016-2020), about 84,000 people live in the project area (Exhibit A1). 35.4% of them live in and around Segment 1, specifically around McGraw St & Nickerson St (Table 1). Segment 2 represents around 20% of the project area population, Segment 3 represents 13.5%, Segment 4 represents 12% and Segment 5 represents 19%.

These 5 segments are multigenerational, with median ages ranging from 29 to 50 (Table A1). On average the age across the project area is 35 years old, with 51% female and 49% male (Table A1). Ethnically, 70% of the project area identifies as white only. Segments 4 and 5 are more diverse, while segments 2 and 3 are predominantly white (Exhibit A2).

Exhibit A1: population on Aurora Ave project area

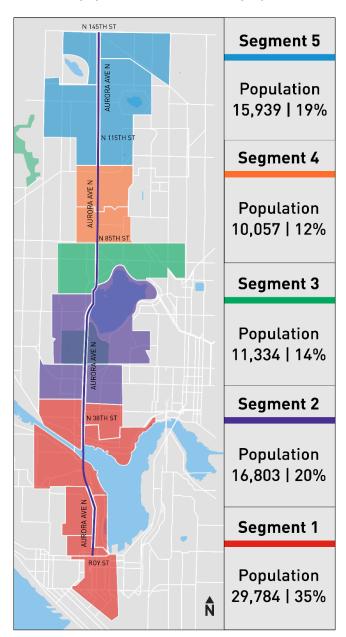
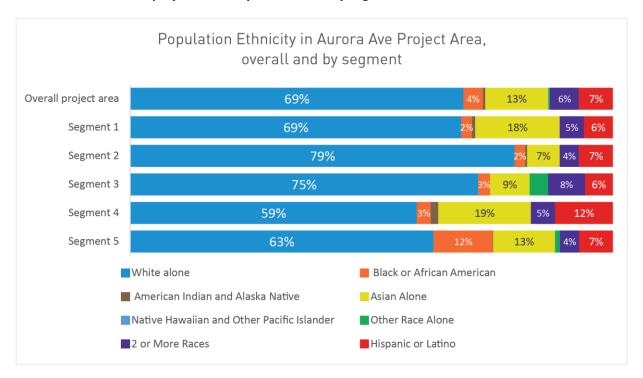


Exhibit A2: Aurora Ave project ethnicity, overall and by segment



Median household income along the corridor in past 12 months (inflation-adjusted dollars to last year of 5-year range) is \$105,722.40. Around Segment 5, from N 107 St to N 130th St, and around Segment 4, from N 95th St to N 107th St, the median income is \$55,440.00, 48% less than the average of the project area. Conversely, around Segment 3, from N 50 St to Winona Ave N, and Segment 4, from Green Lake Dr N to N 85th St, median income is \$143,089.50, 32% higher than average (Table 1).

Table T1: project area demographics

Project Segment	Boundaries (  is to locate where is Aurora Ave)	Total Population	Female population	Male population	Median Age of Total Population	Median Household Income in past 12 months *
(1) Harrison St - N 38th St	Denny Way to Roy St	3358	1,124	2,234	28.7	\$130,504
(1) Harrison St - N 38th St	McGraw St - Nickerson St	6460	3,253	3,207	34.2	\$97,883.00
(1) Harrison St - N 38th St	N 34th St - N 42nd St	3517	1,868	1,649	29.8	\$122,422.00
(1) Harrison St - N 38th St	N 34th St - N 38 St	3257	1,511	1746	31.4	\$126,380.00
(1) Harrison St - N 38th St	N 38th St - N 41 St	3401	1,837	1,564	33	\$98,913.00
(1) Harrison St - N 38th St	Roy St - Crockett St	3109	1,264	1,845	29.5	\$131,904.00
(1) Harrison St - N 38th St	Highland Dr - McGraw St	3021	1,273	1,748	31.4	\$113,913.00
(1) Harrison St - N 38th St	Roy St - Highland Dr	3661	2,106	1,555	35.7	\$98,776.00
(2) N 38th St – Winona Ave N	N 42nd St - N 50 St	4397	2307	2,090	31.9	\$105,053
(2) N 38th St – Winona Ave N	N 50th St - N 70th St	4370	2,275	2,095	40.2	\$107,702.00
(2) N 38th St – Winona Ave N	N 50 St - Winona Ave N	3660	1,960	1,700	36.8	\$136,940.00
(2) N 38th St – Winona Ave N	N 41 St - N 50 St	4376	2,394	1,982	31	\$108,022.00
(3) Winona Ave N – N 85th St	Green Lake Dr N - N 85th St	6129	3,140	2,989	37.1	\$149,239.00
(3) Winona Ave N - N 85th St	N 70 St - N 85 St	5205	2,531	2,674	35.9	\$122,813.00
(4) N 85th St – N 115th St	N 95th St - N 107th St	4998	2,922	2,076	36.1	\$77,791.00
(4) N 85th St – N 115th St	N 85th St - N 95th St	5059	2,373	2,686	30.7	\$95,885.00
(5) N 115th St – N 145th St	N 137th St - N 145th St	2943	1,405	1,538	35.1	\$101,897.00
(5) N 115th St – N 145th St	N 107 St - N 130th St	5374	2,894	2,480	46.3	\$75,472.00
(5) N 115th St – N 145th St	N 107 St - N 130th St	3739	2,366	1,373	50.4	\$33,089.00
(5) N 115th St – N 145th St	N 107 St - N 137th St	3883	2,123	1,760	35.7	\$79,850.00
Total		83,917	42,926	40,991	35.04	\$105,722.40

Source: Own elaboration based on data from American Community Survey 2020,

(5-year Series: 2016-2020)

#### **Key Findings**



**Participation:** Of 2,082 survey respondents, 1,970 took it in English, 40 in Spanish, 30 in Korean, 16 in Vietnamese, and 16 in Chinese.

 Survey feedback was provided by a diverse population that represents the demographics of the overall project area. (Exhibit A-T1).



**Residency**: Nearly two-thirds of the respondents live in the project area, specifically in Segment 1 (29.7%) and Segment 5 (27.1%).



**Travel behavior**: Overall, walking (7.8%) or biking (5.9%) alone are the least commonly travel mode among respondents.

- o 18.5% take the bus.
- o 64.2% use other motor vehicles to travel.
- Among respondents traveling everyday more than once a day along the corridor, the most common way of going around are motor vehicles (62%), bus (18%), and walking (11%) (Exhibit A-T2).



**Priority improvements:** Overall, other than social concerns, physical safety improvements for people walking are the most identified by respondents (22.7%) (Exhibit A-T3).

- o 20.6% identified collision reduction.
- 16% identified general infrastructure improvements, such as better lighting, physical separation between the road and pedestrian and bikers, among others.



**Public transit:** Most respondents ride the E Line (59.2%). Nearly one-third ride it sporadically (27.9%) and 16.1% ride it frequently. Lack of connectivity and bus stop locations are the main transit service improvements identify by respondents.

 Most respondents (58%) say they might consider using it when connections to Shoreline and Mountlake Terrace become available in 2024.



**Avoided crossings:** Speeding vehicles near crossing locations at Aurora Ave is the main reason (50.7%) for avoiding crossing, according to respondents.



**Who said what**: Exhibit A-T4 only shows where and what challenges and improvements respondents able to track along key questions (residency & challenges identified on the corridor) expressed.

Project area ethnicity and survey participation ethnicity Hispanic or Latino 2 or More Races Other Race Alone Native Hawaiian and Other Pacific Islander **Asian Alone** American Indian and Alaska Native **Black or African American** White alone 50% 10% 20% 30% 40% 60% 70% 80%

Exhibit A-T1: project area ethnicity and survey participation ethnicity

To visualize the data, we grouped self-identified "East Asian, South Asian, and Southeast Asian" respondents into "Asian Only"; and included self-identified "Middle Eastern" respondents into "Other Race Only." We did not include the option "2 or more races" in our survey.

Project Area
Survey Participation

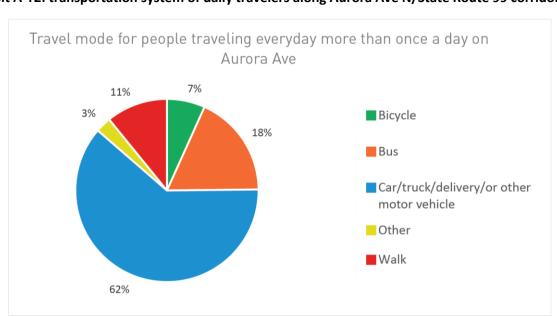


Exhibit A-T2: transportation system of daily travelers along Aurora Ave N/State Route 99 corridor

Exhibit A-T3: safety improvements and changes respondents would like to see along Aurora Ave N/State Route 99 corridor.

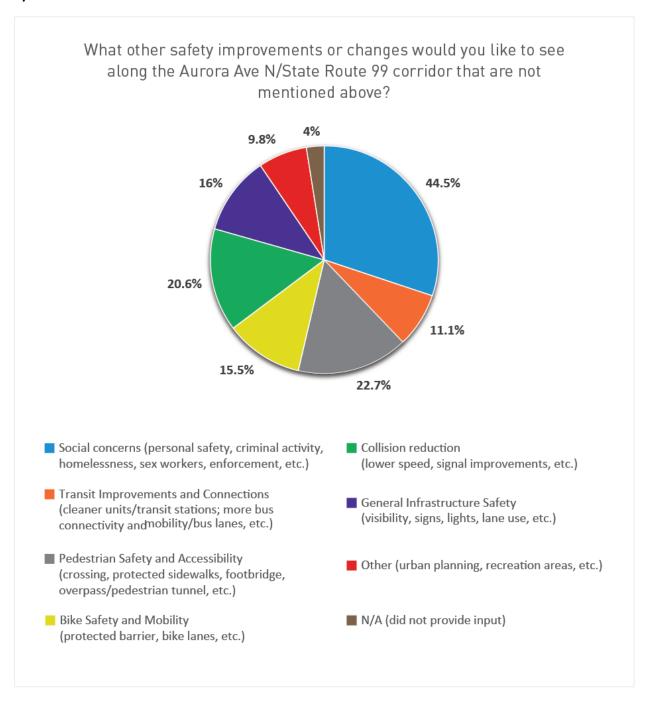
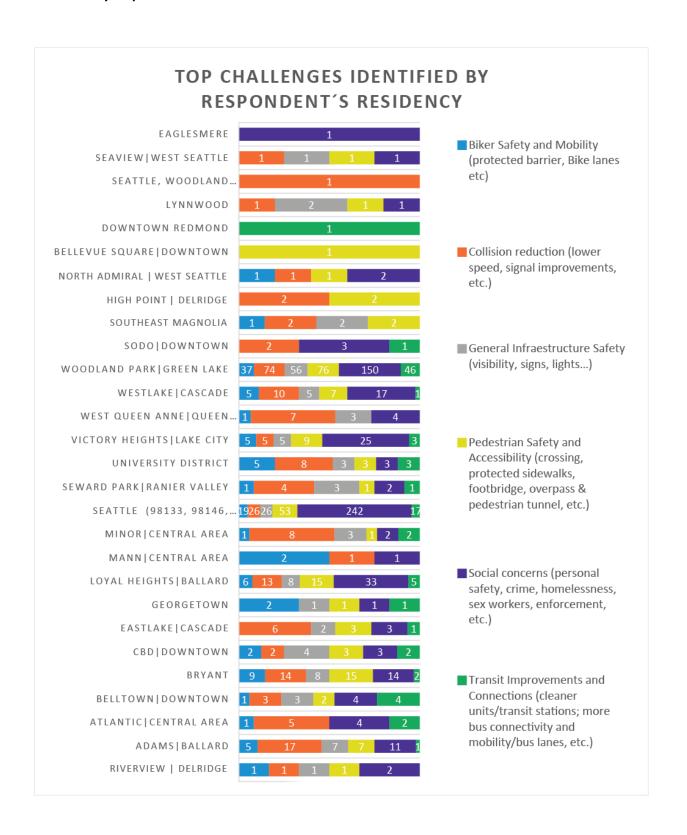


Exhibit A-T4: safety improvements or changes along the Aurora Ave N/State Route 99 corridor identified by respondent residence



#### **Survey Goals**

The following survey goals anchored our study:

- 1. Recognize how community members get around Aurora Ave and for what purpose.
- 2. Identify priority safety improvements for people walking, bicycling, and driving on Aurora Avenue.
- 3. Identify potential transit service improvements and connections on Aurora Avenue.
- 4. Identify key crossing locations on Aurora Ave N/State Route 99 corridor.

The Aurora Ave N Safety Planning Survey (Appendix A) was developed with these goals in mind. Among the 30 survey questions, 20 focused on safety for all travelers along the corridor. The remaining 10 questions were demographic questions to help shape the equity of this project and let us know where we need more engagement.

Specifically, the survey questions that help us accomplish the survey goals are as follows:

- 1. Recognize how community members get around Aurora Ave and for what purpose.
  - a. How often respondents travel along Aurora Ave Q1
  - b. Why do respondents take transit on Aurora Ave? Q4 & Q8
  - c. Where do respondents go when taking transit on Aurora Ave? Q7
  - d. How do respondents get around Aurora Ave? Q3 & Q20
  - e. When do respondents travel along Aurora Ave? Q5 & Q6
- 2. Identify priority safety improvements for people walking, bicycling, and driving on Aurora Avenue.
  - a. Safety overall: Q19 & Q25.
  - b. Safety improvements for people walking: Q10, Q11 & Q16.
  - c. Safety improvements for people bicycling: Q12 & Q13.
  - Safety improvements for people driving: Q18 & Q19 (corresponding category)
- 3. Identify potential transit service improvements and connections on Aurora Avenue:
  - a. Identified E line riders: Q20, Q21 & Q23.
  - b. Transit improvements impacts in ridership: Q22.
  - c. Features recognized about RapidRide Service: Q24.
- 4. Identify key crossing locations on Aurora Ave N/State Route 99 corridor.
  - a. Crossing questions: Q17, Q14 & Q15.

#### Methodology and Statistical Significance

- The survey was available online between July 20<sup>th</sup> October 7<sup>th</sup>, 2022.
- The survey was available in Chinese, English, Korean, Spanish, Tagalog, Tigrinya, and Vietnamese, and was promoted by in-person outreach along the five segments of the corridor, and by digital tactics covering the project area and beyond.
- Neighborhood categorization was made according to unitedstateszipcodes.org database.
- With 2,082 participants we have a maximum confidence interval of 2% at 95% confidence level.

#### Reporting notes

- Unless otherwise noted, respondents who did not answer a specific question are excluded from the statistics shown for that question.
- Some questions allowed multiple responses and may sum to more than 100%. These will be noted when applicable\*.

#### **Survey Results**

Recognize how community members get around Aurora Ave and for what purpose

**In short**: Most respondents travel along the corridor regularly as part of their daily activities, usually more than 3 times per week, between 7 AM and 9 PM and by automobile.

#### What they say:

"I commute by bus 2-3x per week, I also run along segments 1 & 2 frequently. I live off of segment 2 and drive all of Aurora frequently (sic)".

#### By the numbers:

- Travel frequency. 31.9% of respondents travel 3 to 5 times a week, and 28.6% travel every day, more than once per day (Exhibit B1-Q1).
- Most typically travel mode. Most respondents use a motor vehicle to travel along the corridor instead of walking or taking transit. 18.5% of respondents take the bus, 7.8% usually walk, and 5.9% ride a bike when traveling along the corridor (Exhibit B2-Q3).
- Travel purposes\*1. Most respondents use the corridor for shopping, including grocery and retail (73.97%) and for recreation purposes (57%), including playgrounds, parks, trails, pools, tennis, field sports, and/or dog parks; 51.5% of respondents access the corridor for entertainment purposes, including restaurants, music venue, sporting events, clubs and theaters (Exhibit B3-Q4).
  - Most of the destinations mentioned by respondents include stores for goods (21%) and food (21%) (Exhibit B4-Q7).
- Travel time and day\*. 78.9% of respondents travel along the corridor between 3 PM 7 PM, and 65.5% of respondents travel along the corridor between 9 AM 3 PM (Exhibit B5-Q5).
   64.7% of respondents travel along the corridor both during weekdays and the weekend (Exhibit B6-Q6).

<sup>•</sup> ¹ Some questions allowed multiple responses and may sum to more than 100%. These are noted by \*.

Exhibit B1-Q1: respondents travel frequency on Aurora Ave

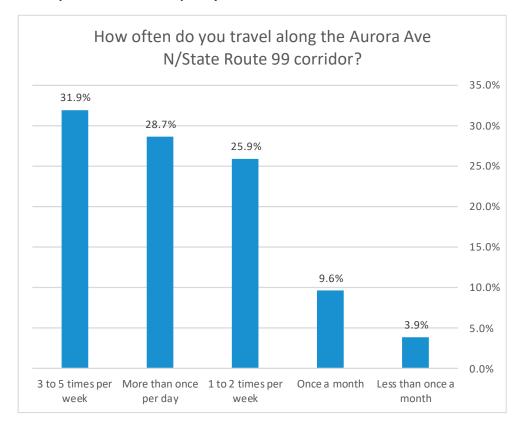


Exhibit B2-Q3: respondents most typically travel mode on Aurora Ave

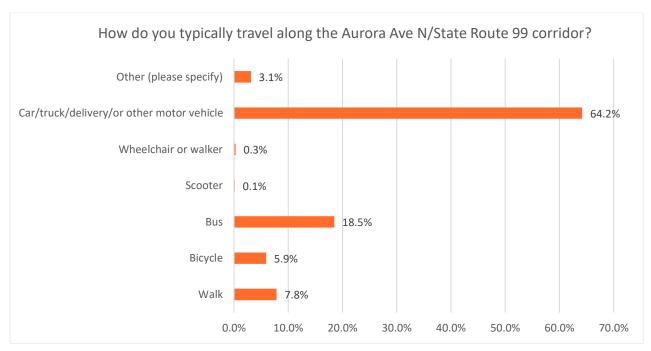


Exhibit B3-Q4\*: respondents travel purpose on Aurora Ave

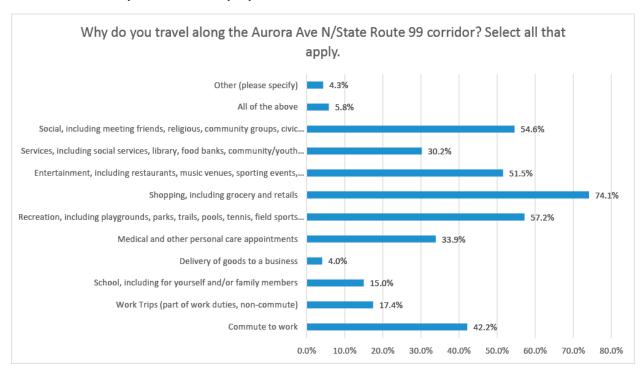


Exhibit B4-Q7: respondents travel purpose on Aurora Ave

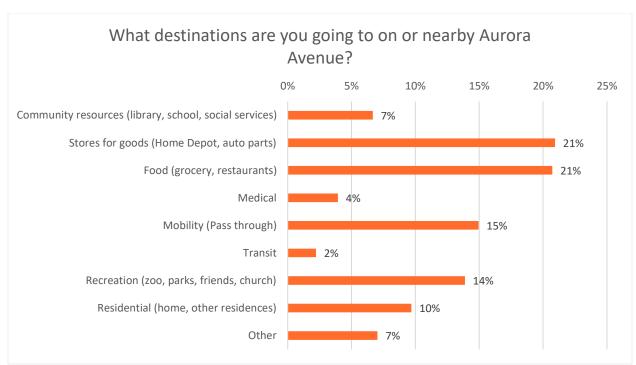


Exhibit B5-Q5: respondents travel time on Aurora Ave

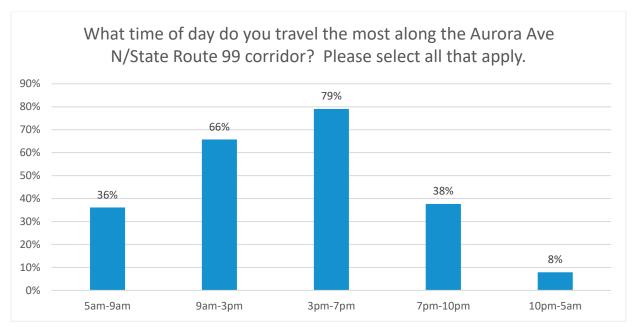
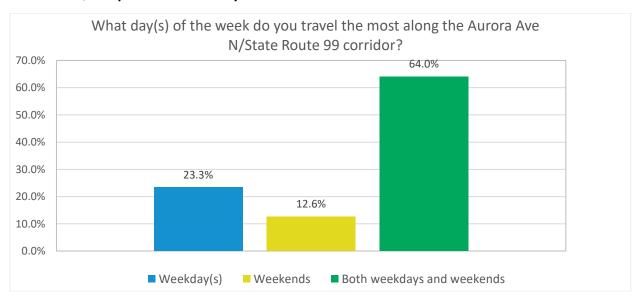


Exhibit B6-Q6: respondents travel day on Aurora



#### Safety overall

Identify safety priority improvements for people walking, bicycling, and driving on Aurora Avenue

**In short:** High-speed traffic and pedestrian safety are the priorities most recognized by respondents.

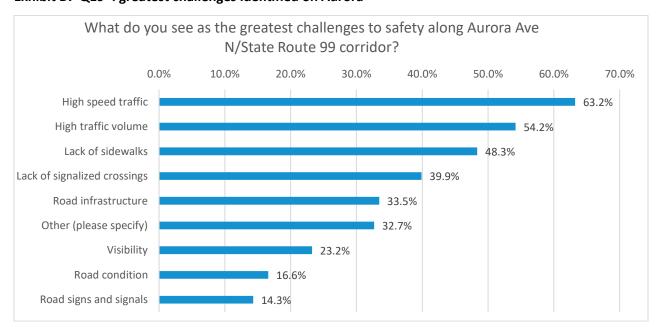
#### What they say:

"Aurora should be dramatically reconfigured to include wide, separated sidewalks, separated bike lanes, dedicated transit lanes throughout the corridor, and fewer/narrower car lanes with MUCH SLOWER TRAFFIC. Street trees would also be great to reduce the heat island effect. The corridor should be completely re-integrated into the street grid so that there are safe and convenient pedestrian crossings at every single intersection (sic)"

#### By the numbers:

- **Greatest challenge\***<sup>2</sup>. From an open-ended list of 8 challenges, "high speed traffic" (63.2%) and "high traffic volume" (54.2%) were identified by respondents as the greatest challenges to safety in this corridor (Exhibit B7-Q19).
- Safety improvements\*<sup>3</sup>. Other than addressing social concerns in Aurora Avenue "pedestrian safety and accessibility" (22.7%) and "reducing collisions" (20.6%) are the most needed safety improvements identified by respondents (Exhibit B8-Q25).

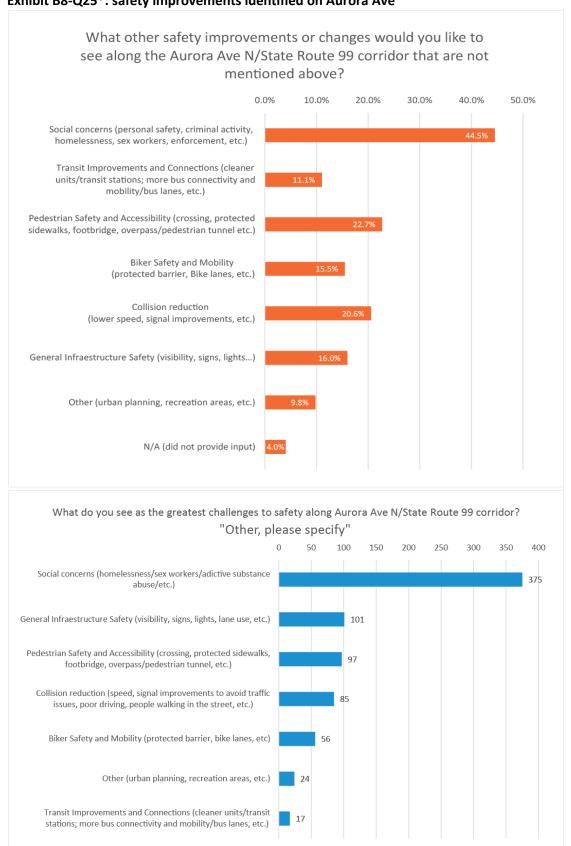
#### Exhibit B7-Q19\*: greatest challenges identified on Aurora



 $<sup>^{\</sup>rm 2}$  Some questions allowed multiple responses and may sum to more than 100%. These are noted by \*.

<sup>&</sup>lt;sup>3</sup> Some questions allowed multiple responses and may sum to more than 100%. These are noted by\*.

Exhibit B8-Q25\*: safety improvements identified on Aurora Ave



#### Safety improvements for people walking

**In short:** Overall, respondents expressed the need for infrastructure improvements that would make them feel safer when walking along Aurora Ave, including sidewalks, crosswalks, and signals.

#### What they say:

"Narrow sidewalk, too close to traffic, difficult to cross to bus stops (sic)"

"Crossing takes too long because the lights are too long (sic)"

"Improve 85th crossing/slow car speed (sic)"

#### By the numbers:

- **Pedestrian infrastructure**. If better sidewalks, trails, and other pedestrian infrastructure existed along or next to the corridor, most of survey respondents (48.1%) would feel safer crossing or walking along Aurora Ave (Exhibit B9-Q10).
- **Pedestrian safety.** On a scale of 1 to 6 (6 being most needed and 1 being not at all needed) pedestrian safety improvements related to signalized and marked crossings (3.91 score) and adding new sidewalks (3.74 score) are the most needed, according to survey respondents (Exhibit B10-Q11).
- Crossing locations safety. "Speeding vehicles nearby" is the reason 50.7% of respondents avoid crossing locations in Aurora (Exhibit B11-Q16).
  - The most typically avoided crossing locations are: N 85th St, N 130th St, and N 125th St.
  - o For all crossings avoided in Aurora Ave by respondents, see Appendix B.

#### Exhibit B9-Q10: safety level by walking and crossing along Aurora Ave

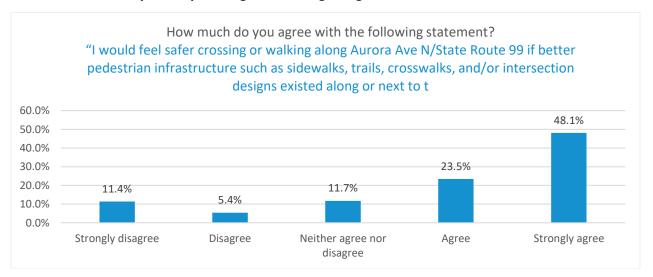
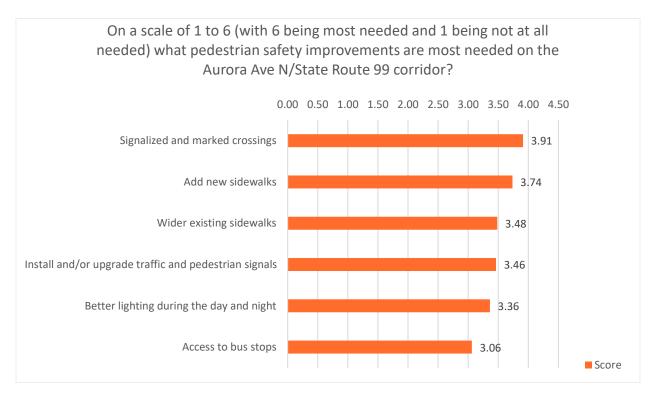
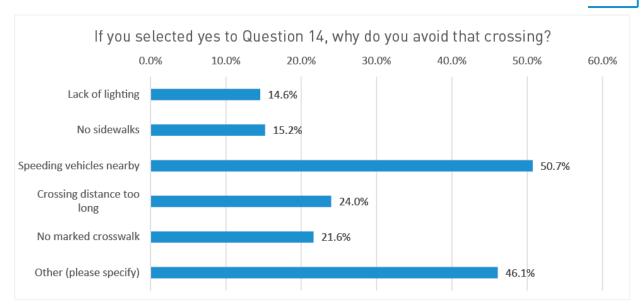


Exhibit B10-Q11: safety infrastructure for people walking in Aurora Ave



#### Exhibit B11-Q16: crossing locations safety

**Note**: only 11% (224 of 2011) of respondents selected "yes" in Q14 when asked if they avoid existing crossing locations in Aurora, but 90% (1104 of 1230) of respondents provided input in Q16 when asked why they avoid crossing.



From those selecting "other" in Q16, social concerns (31.7%) is the main reason why.

#### Safety improvements for people bicycling

**In short:** Overall, respondents expressed the need for infrastructure improvements that would make them feel safer when biking along Aurora Ave, including protected bike lanes and well-marked lanes.

#### What they say:

"Separated bike lanes on Aurora. I used to do food deliveries for the U District food bank by bike and it was very difficult/unsafe to get to customers on Aurora (sic)"

#### By the numbers:

- Crossing opportunities. Lack of safety and mobility infrastructure for people bicycling, including protected barriers, dedicated bike lanes, were identified 89 times as a reason for avoiding crossings on Aurora Avenue in Q16 (Exhibit B12-16.1).
  - In Q12, 5 in 10 respondents agree to some extent that improved opportunities to cross Aurora Ave N/State Route 99 by bicycle would make them travel more along the corridor (Exhibit B13-Q12).
- **Biking infrastructure.** On a scale of 1 to 5 (5 being most needed and 1 being not at all needed) physical separation (3.52 score) and marked crossings from motorized traffic (3.21 score) are the most important bicycle safety improvements for respondents (Exhibit B14-Q13).

Exhibit B12-16.1: lack of safety and mobility infrastructure for people bicycling were identified 89 times by respondents as a reason for avoiding crossings at Aurora Avenue.

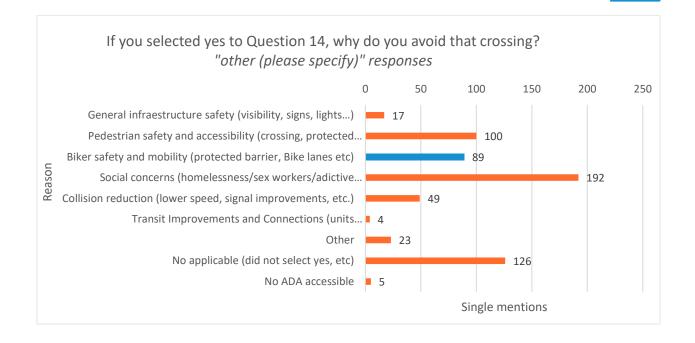


Exhibit B13-Q12: improve opportunities to cross Aurora Ave N/State Route 99 by bicycle

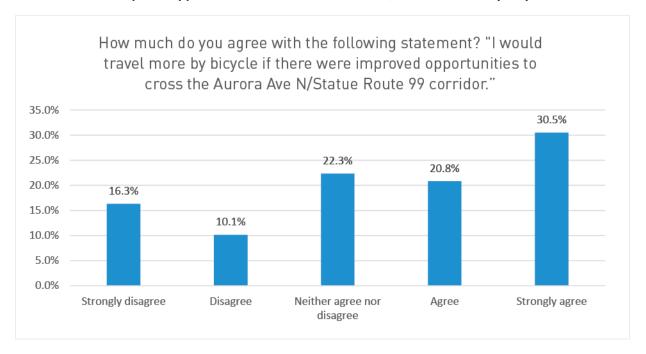
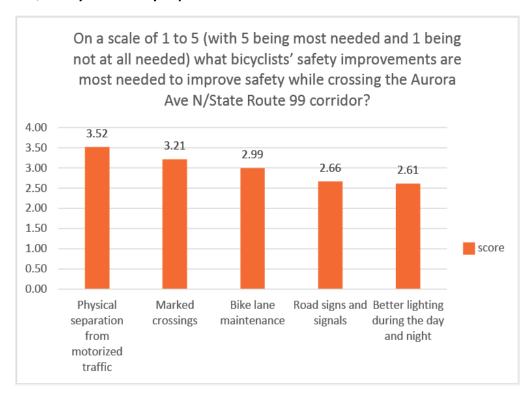


Exhibit B14-Q13: bicyclists' safety improvements in Aurora Ave



#### Safety improvements for people driving

**In short:** Most respondents identify Aurora Ave as unsafe and recognize that cars traveling at high speed is dangerous, potentially affecting drivers as well.

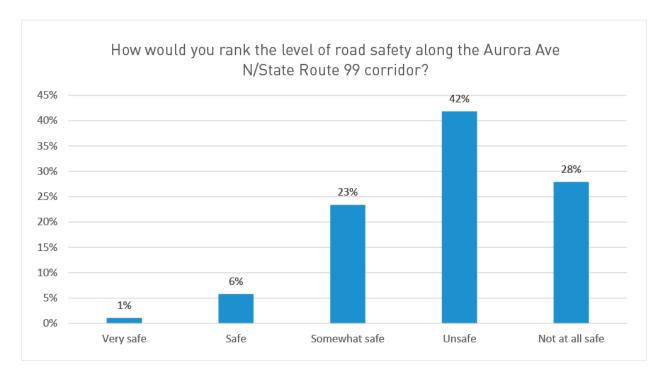
#### What they say:

"high speed traffic + lots of conflict (between cars entering & exiting plus people crossing) (sic)"

#### By the numbers:

- Road safety. Nearly 7 in 10 respondents ranked the level of safety in the Aurora Ave N/State Route 99 corridor as unsafe to some degree (Exhibit B15-Q18).
- **Speed:** as mentioned in the "overall safety improvements" section, survey respondents identified high speed traffic (63.23%), high traffic volume (54.18%), and road infrastructure (33.46%) as the greatest challenges to safety along Aurora Ave N/State Route 99 corridor. These responses are considered as safety improvements recognized as relevant for people driving (Exhibit B16-Q19).

#### Exhibit B15-Q18: Level of road safety ranked by respondents



## Identify potential transit service improvements and connections on Aurora Avenue

**In short:** Most respondents ride the E Line (59.2%). Nearly one-third ride it sporadically (27.9%) and 16.1% ride it frequently. Lack of connectivity and bus stop locations are the main transit service improvements identify by respondents.

#### What they say:

"gets stuck in traffic too much. should have a designated lane at all times transfers (sic)"

"Dangerous location, plus have other more convenient options (sic)"

#### By the numbers:

- **E Line Usage:** 35.7% of respondents do not use E Line, 27.9% ride it a few times per year and 16.1% ride it frequently (Exhibit B16-Q20).
- Transit Service Improvements\*4: Lack of connectivity (34%), bus stop locations (17%) and accessibility (14%), are the main reasons for not using it (Exhibit B17-Q21)
  - o 52% of respondents who selected "other" cited "social concerns" as a reason for not using the E Line. (B18-Q21.1).
  - If these issues were improved, 44% of respondents are somewhat likely to ride the E Line (Exhibit B19-Q22).
- E Line to Link Light Rail Connectivity: 35% of respondents are more likely to take the E Line if it connects to future Link Light Rail stations (Exhibit B20-Q23).
- RapidRide Features\*5: Most respondents (74.82%) recognize real-time arrival/departure information at the bus stop and tapping ORCA cards (75.60%) at the bus stop as features from RapidRide service (Exhibit B21-Q24).

 $<sup>^4</sup>$  Some questions allowed multiple responses and may sum to more than 100%. These are noted by  $^*$ .

<sup>&</sup>lt;sup>5</sup> Some questions allowed multiple responses and may sum to more than 100%. These are noted by \*.

Exhibit B16-Q20: E Line respondents ridership

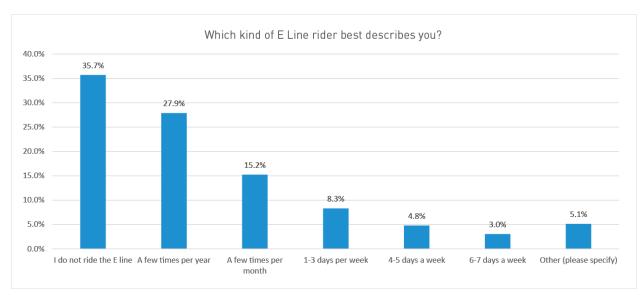


Exhibit B17-Q21: respondents reasoning for not riding the E Line

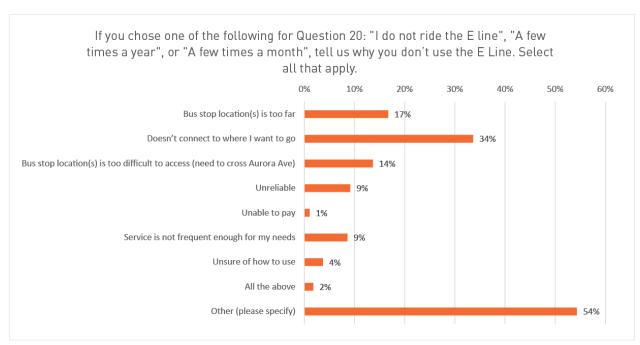


Exhibit B18-Q21.1: "other" reasons for respondents not riding the E Line

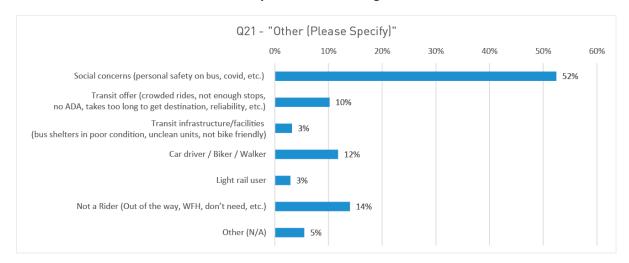


Exhibit B19-Q22: respondents likeliness on riding the E Line if changes were made

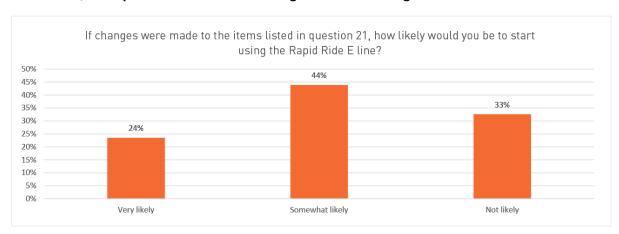


Exhibit B20-Q23: respondents likeliness on riding the E Line if more connections were available

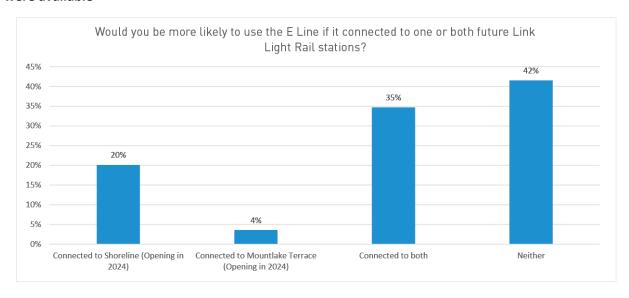
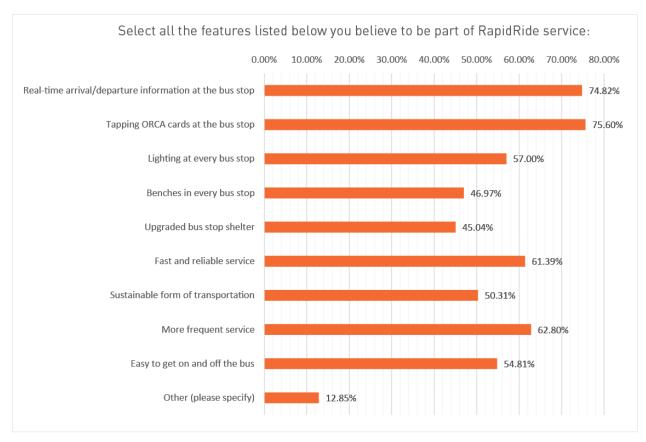


Exhibit B21-Q24: E Line features most identified by respondents



#### Identify key crossing locations on Aurora Ave N/State Route 99 corridor

- Most respondents<sup>6</sup> (61%) say they don't avoid any crossings on Aurora Ave. At the same time, nearly one-third of them identified a convenient crossing location that they avoid (Exhibit B22-Q14\*).
  - Among the most avoided crossing locations mentioned more than 40 times are: N 130th St (identified 43 times), 85<sup>th</sup> St (43 times) and N 125th St (identified 41 times. Table TX-Q14.
    - Table TX-Q14 only includes most avoided crossing locations mentioned 40 or more than 40 times.
    - For a complete list of all crossing locations within the project area avoided in Aurora Ave by respondents, see Appendix B.
  - Speeding vehicles nearby (50.7%), crossing distance too long (24%), and no marked crosswalk (21.6%) are the main reasons why respondents avoid crossing locations on Aurora (Exhibit B12-Q16)

 $<sup>^{6}</sup>$  Some questions allowed multiple responses and may sum to more than 100%. These are noted by  $^{st}$ .

- Respondents cross Aurora Ave mostly at N 130th St, 85<sup>th</sup> St, and N 100th St (Exhibit B24-Q15).
  - Exhibit B24-Q15 only includes most typically crossing locations mentioned 10 or more than 10 times.
  - For a complete list of most typically used crossing locations within the project area mentioned by respondents, see Appendix C.
- Among most mentioned locations where respondents would like to have a "new" crossing are N 130th St, N 85th St, and N 145th St, these locations already exist and are marked (Exhibit B25-Q17).
  - 30 locations were mentioned 10 or more times as locations where respondents would like to see a new crossing. 16 of these locations are already marked crossings. (Exhibit B25-Q17).
    - Exhibit B25-Q17 only includes locations mentioned 10 or more than 10 times.
    - For a complete list of all "new crossing" locations within the project area that respondents would like to see along Aurora Ave, see Appendix D.

Exhibit B22-Q14: Is there existing crossing locations on Aurora convenient for respondents but they avoid using?

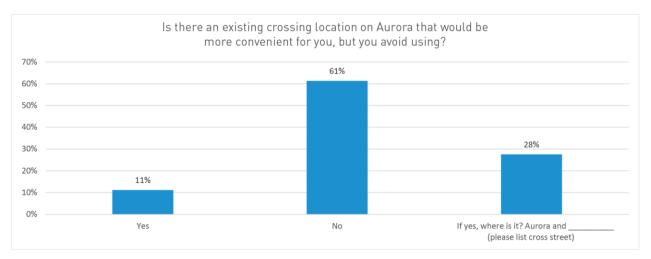


Table TX-Q14: respondents most avoided crossings on Aurora Ave

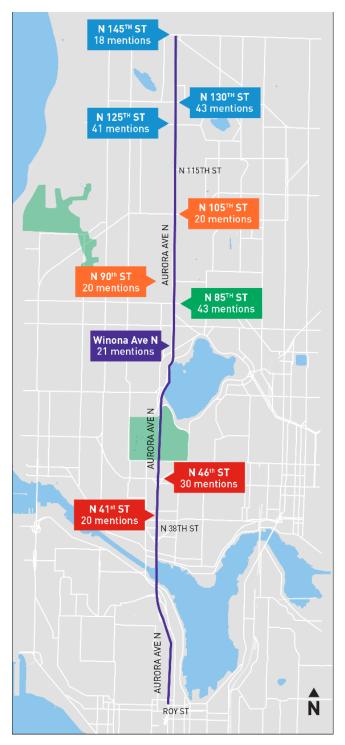
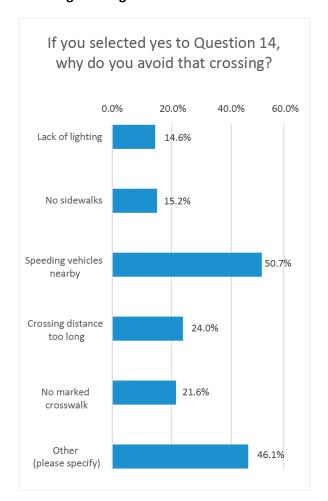


Exhibit B23-Q16: respondents' reasons for avoiding crossing locations on Aurora Ave



Social concerns account for 31% of the reasons expressed by respondents who selected "other (please specify)".

Exhibit B24-Q15: respondents typical crossing locations on Aurora Ave

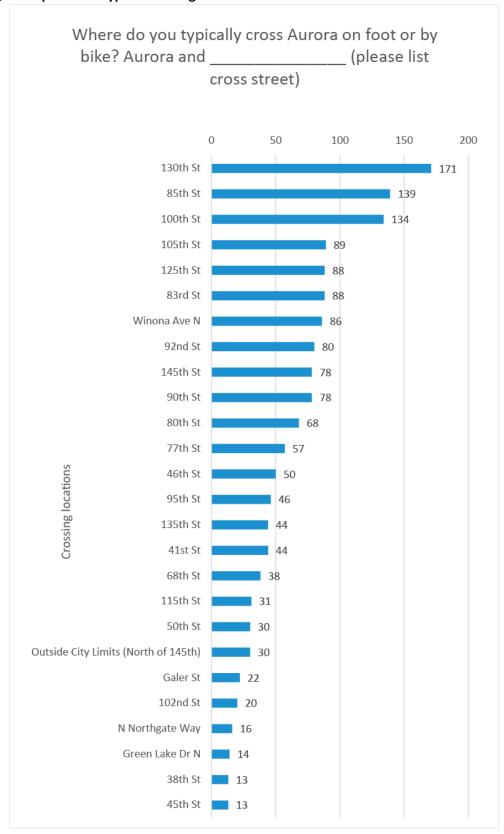
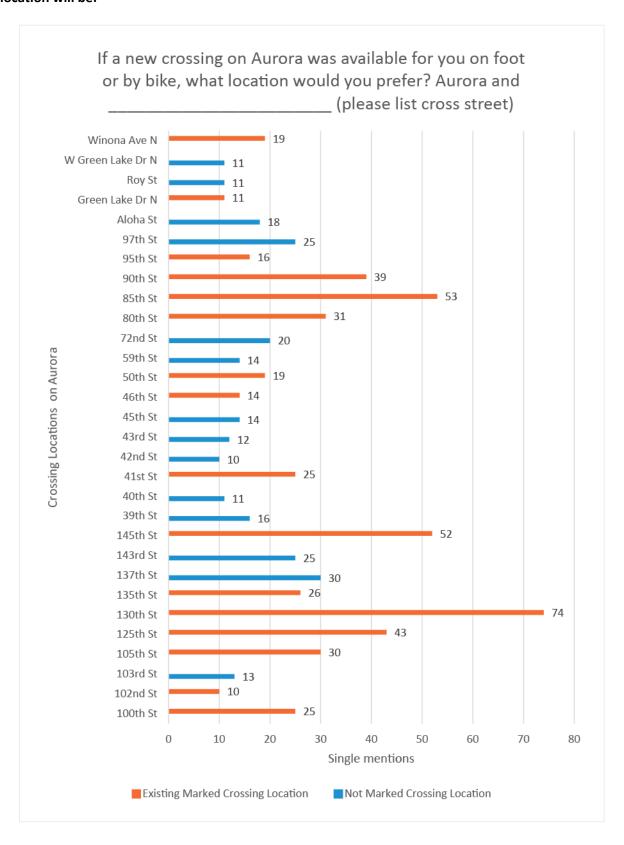


Exhibit B25-Q17: if a new crossing on Aurora was available for respondents on foot or by bike, this location will be:



#### Demographics – who did we talk to?

Participation is almost equal between men (46%) and women (47%). Most respondents identified their ethnicity as white, their age between 26 - 45 years old (56%), and themselves as with no disabilities (88%) as defined by the Americans with Disabilities Act.

Exhibit B26-Q30: respondents' ethnicity

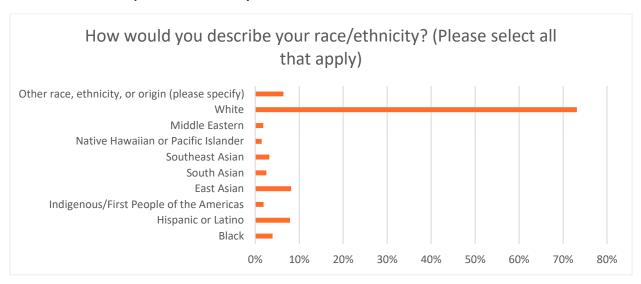


Exhibit B27-Q28: respondents' gender

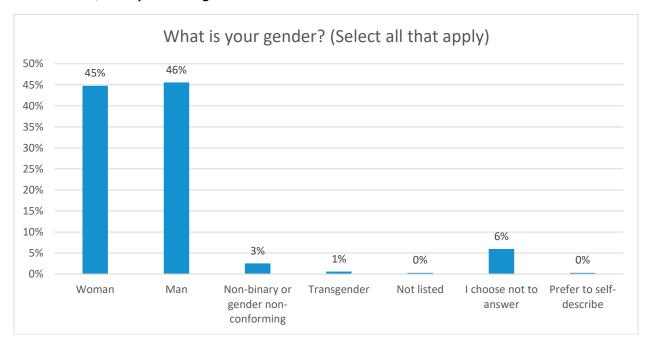


Exhibit B28-Q27: respondents 'age

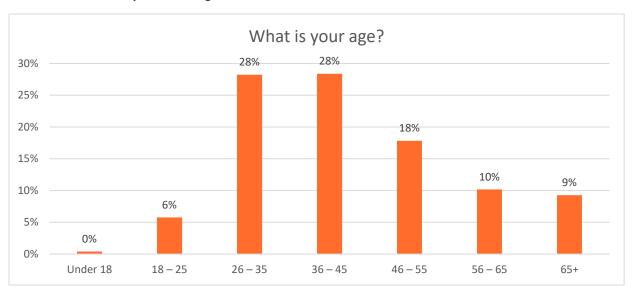
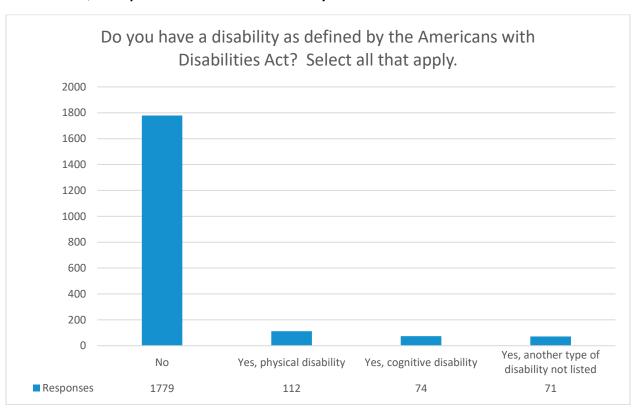


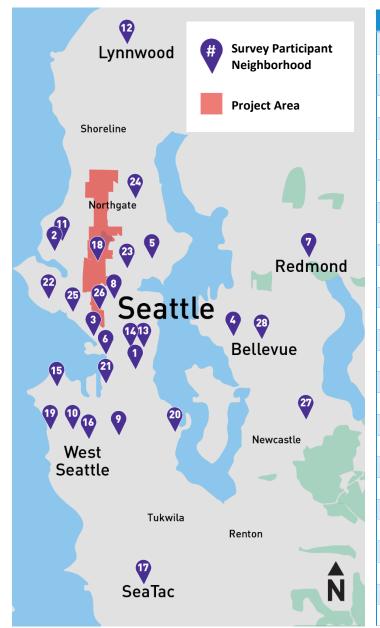
Exhibit B29-Q29: respondents' disabilities defined by the Americans with Disabilities Act



#### **Respondents Geography**

Nearly two-thirds of total 2082 survey participants live in the project area, specifically in Segment 1 (29.7%) and Segment 5 (27.1%) (Exhibit B30-Q26).

Exhibit B30-Q26: Neighborhood of Aurora Ave Project survey respondents



Number	Neighborhood	City	
1	Central Park Trail	Seattle	
_			
2	Ballard	Seattle	
3	Belltown	Seattle	
4	Bellevue Square	Bellevue	
5	Bryant	Seattle	
6	Downtown Seattle	Seattle	
7	Downtown	Redmond	
8	Eastlake	Seattle	
9	Georgetown	Seattle	
10	High Point	West Seattle	
11	Loyal Heights	Seattle	
12	Lynnwood	Lynnwood	
13	Mann	Seattle	
14	Minor	Seattle	
15	North Admiral	West Seattle	
16	Riverview	West Seattle	
17	SeaTac	Seattle	
18	Woodland Park	Seattle	
19	Seaview	West Seattle	
20	Seward Park	Seattle	
21	SODO	Seattle	
22	Southeast Magnolia	Seattle	
23	University District	Seattle	
24	Victory Heights	Seattle	
25	West Queen Anne	Seattle	
26	Westlake	Seattle	
27	Eaglesmere	Bellevue	
28	Wilburton	Bellevue	

• For a complete list of all respondents' zip codes, see Appendix E.

#### **Respondents Survey Engagement**

**In short:** Word of mouth was the most effective way to inform different populations.

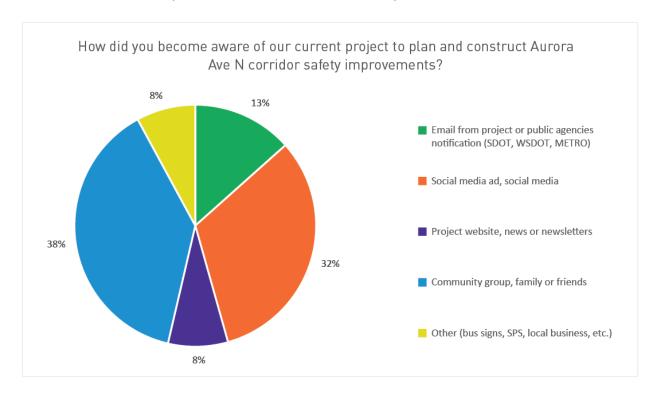
#### What they say:

"The link was shared with me by someone I trust (sic)"

"saw it on a friend's Facebook page (sic)"

#### By the numbers:

#### Exhibit B30-Q26: how respondents found out about the survey.

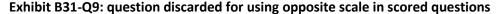


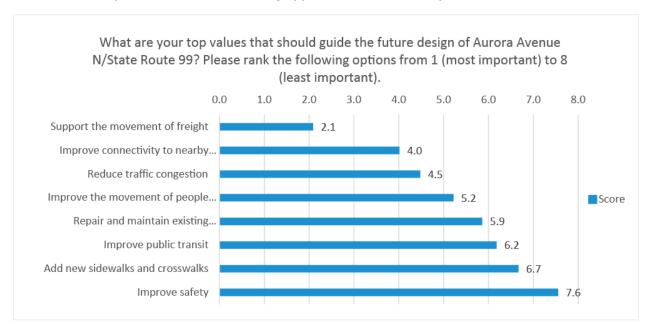
#### Lessons learned

We used opposite scales in question 9. The common scale in scored questions is to assign the number 1 to the least important option. However, in this question (Exhibit B31-Q9) we instructed to assign number 1 to the most important option. Methodologically speaking, we had two options to correct the error, 1) analyze the response trend of the rest of the questions and interpret how the respondents read the instruction or, 2) discard the question and the feedback.

Having no way of knowing who answered according to the instruction and who answered according to the traditional scale, we decided to choose option two.

We will be more careful in future occasions to avoid this situation.





To stay up to date on this project, sign up for email updates <u>here</u> and visit <u>our website</u>. If you have questions or comments, please contact us at (206) 905-3620 or <u>aurorastudy@seattle.gov</u>.



#### **Appendices**

#### Appendix A: Aurora Ave N Safety Planning Survey can be found here.



Aurora Ave N Safety Planning Survey

#### Privacy Notice

We need your help ensuring everyone in the community is being represented. Please fill out the following survey, including optional questions about zip code, race, and gender, so we can continue to improve our service to all members of the community. We use this information as part of <u>Title VI of the Civil Rights Act</u> and other federal reporting.

Information provided in this survey is considered a public record and may be subject to public disclosure. For more information, see the Public Records Act, <u>RCW Chapter 42.56</u>. To learn more about how we manage your information, see our <u>Privacy Statement</u>.

#### □ oк

We are conducting a survey to develop a plan for Aurora Ave N/State Route 99 corridor (from Harrison St to N145th St) focused on pedestrian and bicycle safety.



#### 1. How often do you travel along the Aurora Ave N/State Route 99 corridor?

- O More than once per day
- 1 to 2 times per week
- 3 to 5 times per week
- Once a month
- C Less than a month

### 2. How did you become aware of our current project to plan and construct Aurora Ave N corridor safety improvements?

- Email from project
- O Social media ad
- Project website

1

Appendix B: complete list of all crossing locations avoided within the project area in Aurora Ave by respondents

Crossing location	Mentions	Crossing location	Mentions
100th St	16	78th St	4
101st St	2	79th St	2
102nd St	13	80th St	16
103rd St	6	81st St	1
104th St	1	82nd St	1
105th St	20	83rd St	4
107th St	1	84th St	2
109th St	3	85th St	43
115th St	3	87th St	3
117th	3	88th St	3
125th St	41	89th St	1
127th St	1	90th St	20
128th St	6	91st St	2
130th St	43	92nd St	11
135th St	9	93rd St	4
137th St	8	95th St	11
143rd St	7	96th St	4
145th St	18	97th St	13
38th St	11	Aloha St	4
39th St	4	Bridge Way N	2
40th St	3	Comstock St	1
41st St	20	Dexter Way N	1
42nd St	1	Galer St	6
45th St	4	Green Lake Dr N	1
46th St	30	Halladay St	1
47th St	1	Highland Dr	3
50th St	7	N Northgate Way	7
59th St	4	Other	63
66th St	1	Outside City Limits (North of 145th)	5
67th St	1	Prospect St	2
68th St	1	Raye St	1
70th St	1	Roy St	1
72nd St	5	Valley St	1
73rd St	1	W Green Lake Dr N	2
75th St	5	W Green Lake Way N	2
76th St	7	Winona Ave N	21
77th St	8		

Appendix C: complete list of most typically used crossing locations within the project area by respondents

Crossing location	Mentions	Crossing location	Mentions
100th St	134	75th St	5
101st St	5	76th St	6
102nd St	20	77th St	57
103rd St	8	78th St	6
104th St	3	80th St	68
105th St	89	81st St	2
107th St	5	82nd St	2
109th St	1	83rd St	88
115th St	31	85th St	139
117th St	4	87th St	1
125th St	88	88th St	3
128th St	1	90th St	78
130th St	171	91st St	4
135th St	44	92nd St	80
137th St	8	93rd St	2
140th St	1	94th St	1
141st St	1	95th St	46
143rd St	7	96th St	3
145th St	78	97th St	4
38th St	13	98th St	3
39th St	3	Aloha St	3
40th St	3	Bridge Way N	5
41st St	44	Dexter Way N	4
42nd St	6	Galer St	22
43rd St	1	Green Lake Dr N	14
45th St	13	Halladay St	1
46th St	50	Lynn St	2
49th St	1	N Northgate Way	16
50th St	30	Other	145
59th St	1	Outside City Limits (North of 145th)	30
61st St	1	Raye St	1
66th St	2	Roosevelt Way N	1
67th St	3	Roy St	2
68th St	38	Valley St	1
70th St	5	W Green Lake Dr N	1
72nd St	3	W Green Lake Way N	2
73rd St	5	Winona Ave N	86

Appendix D: complete list of all "new crossing" locations within the project area that respondents would like to see along Aurora Ave

Crossing location	Mentions	Crossing location	Mentions
100th St	25	76th St	8
101st St	3	77th St	7
102nd St	10	78th St	2
103rd St	13	79th St	2
104th St	1	80th St	31
105th St	30	81st St	1
107th St	8	82nd St	2
109th St	9	83rd St	6
115th St	6	84th St	4
117th St	2	85th St	53
125th St	43	87th St	4
127th St	4	88th St	5
128th St	7	89th St	2
130th St	74	90th St	39
135th St	26	91st St	2
137th St	30	92nd St	6
138th St	1	93rd St	6
140th St	9	94th St	1
143rd St	25	95th St	16
145th St	52	96th St	6
38th St	7	97th St	25
39th St	16	98th St	4
40th St	11	Aloha St	18
41st St	25	Comstock St	1
42nd St	10	Dexter Way N	1
43rd St	12	Galer St	5
44th St	1	Green Lake Dr N	11
45th St	14	Halladay St	2
46th St	14	Highland Dr	7
47th St	1	Lynn St	1
48th St	2	N Motor Pl	10
49th St	3	N Northgate Way	3
50th St	19	Other	142
59th St	14	Outside City Limits (North of 145th)	3
60th St	3	Prospect St	4
66th St	9	Raye St	2
67th St	2	Roosevelt Way N	1
68th St	4	Roy St	11
70th St	6	Valley St	7
71st St	1	W Green Lake Dr N	11
72nd St	20	W Green Lake Way N	7
73rd St	6	Ward St	1
75th St	8	Winona Ave N	19

Appendix E: complete list of all respondents' zip codes.

What is your zip code?	Mentions	What is your zip code?	Mentions
98133	457	98003	2
98103	616	98370	1
98109	75	98034	1
99133	1	98108	11
98125	84	98124	2
98117	118	98005	1
98177	97	98116	9
98115	96	98112	10
98155	21	98004	2
98026	10	98290	1
98043	3	98028	3
98104	10	98178	1
98107	70	98056	3
98121	22	98372	1
98119	25	98037	1
98103-3519	1	97117	1
98133 and 98103	1	98136	5
98118	20	97133	1
98013	1	98260	1
98027	1	98168	2
98031	2	98006	2
98199	11	98270	1
98111	1	99324	1
98102	26	90103	1
98020	3	98103-8105	1
98113	1	98079	1
98144	20	98092	1
98105	37	99103	1
98101	22	98029	1
98148	1	98611	1
98126	6	98146	5
98106	10	98030	1
98188	1	98040	1
98122	28	98052	1
98055	3	98273	1
98204	1	98133-8741	1
98036	5		