

# University Bridge Planning Study

Outreach Summary Report

*September 2023*

## OVERVIEW

The University Bridge, originally constructed in 1919 with timber trestle approaches and replaced with current concrete and steel structures in the early 1930s, spans the western edge of Portage Bay and connects the University District to Eastlake, South Lake Union, and Downtown via Eastlake Ave E. The 1,575-foot bridge carries more than 24,000 vehicles per weekday across Portage Bay. The corridor is a critical connection for people walking and biking as well as for transit and freight.

We perform regular maintenance and frequent inspections on the bridge to ensure it is operational and safe for both road and marine traffic. With the steady increase in vehicle weight and traffic volumes, as the structure ages, more significant rehabilitation may be needed to sustain its current level of operation. Since the structure is still in fair condition without any major flaws, we have an opportunity to plan and look beyond just maintaining its current form and function. In 2022, we launched the University Bridge Planning Study to evaluate how to bring the north segment of the structure up to current transportation, functional, and engineering standards and better meet the multimodal needs of this corridor. The Planning Study, funded by the Levy to Move Seattle, explored feasible rehabilitation and replacement options for the long-term future of the north segment of the bridge.

## Project Area



We conducted a community online survey to better understand travel habits and preferences for the University Bridge and to hear thoughts, comments, or concerns about the future of the bridge. The survey was available from July 21 to August 18 and was marketed via SDOT Twitter, SDOT Facebook, project webpage banner, project listserv, and neighborhood A-frames, posters, and yard signs.

## KEY FINDINGS

Based on the community feedback, here are the major themes that emerged:

### 1. Traffic Flow and Commuter Needs:

- Many residents emphasize the importance of the bridge for commuters and connecting neighborhoods.
- They stress the need for quick opening and closing of the bridge to minimize traffic interruptions, especially when the Ship Canal Bridge experiences congestion.
- Some residents propose limiting bridge openings for recreational boats to minimize disruptions.

## 2. Infrastructure Maintenance and Improvement:

- Many community members advocate for repairing and maintaining the existing bridge structure to ensure its longevity and historic character.
- Suggestions include widening walking paths, improving bike lanes and separation from vehicle traffic, and addressing traffic congestion issues at key intersections like Fuhrman Ave.
- There's also an emphasis on seismic upgrades and making it more resilient to climate change.

## 3. Urban Design and Land Use:

- Community members mention removing highway-style interchanges north of the bridge and connecting bike lanes to the Burke-Gilman Trail to improve accessibility and overall urban design.
- They want to reclaim excess right-of-way north of the bridge for positive land use and urban design benefits.
- There's a suggestion to repurpose areas under the bridge for community use, such as a skatepark.

## SURVEY RESPONSE SUMMARY

We received 710 total responses with a 72% completion rate. Below, we've shared each question and how respondents answered as raw data and a percentage. For some questions, respondents could choose more than one response (questions noted below). Percentages for each question are based on the number of respondents who answered the question, not the total number of respondents who took the survey. Note that totals may not add up to 100%.

For open-ended questions, we've summarized what we heard by sharing popular and notable themes. The full questionnaire and all responses are available by request.

Question 1: Why do you travel across or under the University Bridge? (select all that apply, by mode)

	Commute - Work or School	Do My Job	Run Errands	Recreational Activities	Visit Friends/ Family	Other	N/A
Bike	247 (35%)	38 (5%)	328 (46%)	447 (63%)	304 (43%)	70 (10%)	219 (31%)
Boat	1 (<1%)	2 (<1%)	1 (<1%)	154 (22%)	12 (2%)	9 (1%)	553 (78%)
Bus	182 (26%)	25 (4%)	217 (31%)	219 (31%)	186 (26%)	44 (6%)	330 (47%)

	Commuter - Work or School	Do My Job	Run Errands	Recreational Activities	Visit Friends/ Family	Other	N/A
Car	210 (30%)	62 (9%)	477 (67%)	367 (52%)	370 (52%)	111 (16%)	138 (19%)
Freight	0	3 (<1%)	2 (<1%)	1 (<1%)	0	3 (<1%)	702 (99%)
Walking/ Mobility device	123 (17%)	31 (4%)	212 (30%)	406 (57%)	185 (26%)	69 (10%)	250 (35%)

Question 2: How often do you travel across or under the University Bridge? (select one per mode)

	At least once a day	At least once a week	At least once a month	Less than once a month	N/A
Bike	90 (13%)	196 (28%)	125 (18%)	83 (12%)	223 (31%)
Boat	3 (<1%)	31 (4%)	33 (5%)	99 (14%)	544 (78%)
Bus	40 (6%)	99 (14%)	113 (16%)	142 (20%)	322 (45%)
Car	135 (19%)	226 (32%)	139 (20%)	115 (16%)	138 (19%)
Freight	0	3 (<1%)	1 (<1%)	3 (<1%)	703 (99%)
Walking/ Mobility device	73 (10%)	134 (19%)	121 (17%)	143 (20%)	242 (34%)

Question 3: What time of day do you travel across or under the University Bridge? (select all that apply, by mode)

	Weekday Morning Peak (6am to 9am)	Weekday Evening Peak (4pm to 7pm)	Weekday Non-Peak Hours	Weekend	N/A
Bike	225 (32%)	307 (43%)	287 (40%)	381 (33%)	231 (33%)
Boat	16 (2%)	44 (6%)	58 (8%)	129 (18%)	552 (78%)
Bus	146 (21%)	203 (29%)	192 (27%)	222 (31%)	355 (50%)
Car	230 (32%)	341 (48%)	401 (57%)	457 (64%)	135 (19%)
Freight	2 (<1%)	2 (<1%)	2 (<1%)	3 (<1%)	703 (99%)

	Weekday Morning Peak (6am to 9am)	Weekday Evening Peak (4pm to 7pm)	Weekday Non-Peak Hours	Weekend	N/A
Walking/ Mobility device	150 (21%)	188 (27%)	273 (39%)	343 (48%)	261 (37%)

Question 4: What times of year do you travel across or under the University Bridge? (select one per mode)

	Year-round	School in Session (Fall - Spring)	Summer	Other (Seasonal Work, etc.)	N/A
Bike	391 (55%)	13 (2%)	91 (13%)	11 (2%)	229 (33%)
Boat	43 (6%)	44 (6%)	58 (8%)	129 (18%)	552 (78%)
Bus	146 (21%)	203 (29%)	192 (27%)	222 (31%)	355 (50%)
Car	230 (32%)	341 (48%)	401 (57%)	457 (64%)	135 (19%)
Freight	2 (<1%)	2 (<1%)	2 (<1%)	3 (<1%)	703 (99%)
Walking/ Mobility device	150 (21%)	188 (27%)	273 (39%)	343 (48%)	261 (37%)

Question 5: What types of improvements to the University Bridge would you like us to prioritize as part of the future rehabilitation or replacement project? (select up to 3)

- Make it better for people walking: 491 (71%)
- Make it better for people biking: 467 (67%)
- Make it better for people taking transit: 293 (42%)
- Make it better for people driving: 190 (27%)
- Make it better for freight: 4 (<1%)
- Make it better for boats: 9 (1%)
- Bridge aesthetics and/or retaining the historic character of the bridge
- Other: 44 (6%)
  - Prioritize the bridge for commuters and essential errands, not freight and recreational boats
  - Limit interruptions from pleasure boats by raising the bridge strategically.
  - Improve traffic and access from 40th onto the bridge southbound
  - Express concerns about southbound traffic backups on Fuhrman Ave

- Stress the need for protections for pedestrians and cyclists
- Preserve the bridge's historic character while ensuring seismic safety, longevity, and resilience of the bridge to withstand climate change and temperature increases.

**Question 6: What improvements would you like to see for your top priorities? (482 responses)**

**Bridge-specific**

- Wider paths for people who walk and bike
- More robust barrier between vehicle lanes and bike lanes for safety and so disabled cars can't park and block bike lane
- Longer left turn lane for southbound traffic onto Furman Ave E
- Improve travel lanes so buses keep moving without blocking traffic
- Retain historic bridge characteristics
- Add sign for cars to turn off engines while bridge is open

**In bridge vicinity**

- Replace "freeway-style" off-ramps north of the bridge to better connect the streets and Burke Gilman Trail, and improve safety for people walking and biking north of bridge
- Repurpose vacant parcels north of the bridge to better serve the community
- Remove cloverleaf and slip lanes and replace with signalized intersection with protected bike lanes
- Improve access to the Burke Gilman trail and intersection safety so people who bike can make turns in all directions easily around the bridge
- Slip lane at northeast area of bridge feels dangerous for people who bike because cars don't slow down before taking off-ramp
- Improve bridge accessibility for people with disabilities
- Improve safety and traffic conditions on NE 40th St for southbound access to the bridge
- Consolidate transit hub so transfers are as close and convenient as possible
- People walking north on the east side of the bridge have to make a long detour to get to the neighborhood around 9th Ave NE
- Provide a protected, direct, and clearly marked route to enter/exit the Burke Gilman trail from the bridge

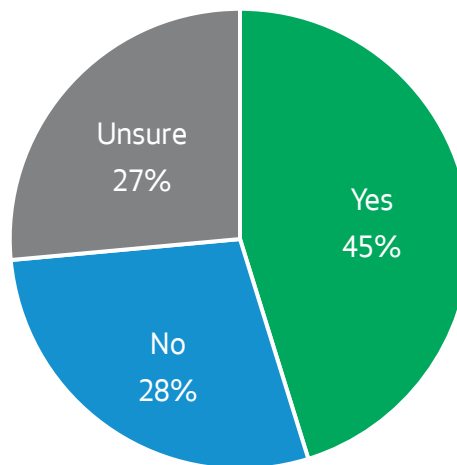
**Question 7: What would be most important to you during the construction phase of a future project on the University Bridge? (select up to 3)**

- Reducing detours/closures for people biking: 356 (52%)
- Reducing detours/closures for people walking: 348 (51%)
- Reducing detours/closures for people transit: 313 (45%)
- Reducing detours/closures for people driving: 238 (35%)

- Reducing construction duration: 206 (30%)
- Reducing impacts to shoreline and Lake Union: 167 (24%)
- Reducing noise and vibration: 66 (10%)
- Protecting/preserving the Wall of Death art installation: 38 (6%)
- Other: 40 (6%)
  - Prioritize accessibility for people with mobility devices.
  - Coordinate with other projects like the 520 Bridge to prevent traffic congestion
  - Prioritize pedestrians, cyclists, and transit over drivers.
  - Create clear and safe bike detour routes away from car traffic.
  - Minimize traffic delays in surrounding neighborhoods to avoid disruptions for transit riders and drivers.
  - Protect the environment and water from construction-related debris.
  - Keep the public informed in advance of closures and detours.
  - Emphasize green and pedestrian/cyclist-focused project elements.

Question 8: If your mode of travel on the University Bridge was impacted during construction, do you have another reasonable route you could take? (688 responses)

Question 8



- Yes: 311 (45%)
- No: 195 (28%)
- Unsure: 182 (26%)



### Question 9: Briefly explain the alternative route you would take? (314 responses)

The responses can be organized into three main route options based on the alternative routes people would take:

#### 1. **Montlake Bridge (or Montlake):**

- Many respondents mentioned they would use the Montlake Bridge for various modes of transportation (bike, car, walking).
- Some respondents mentioned walking or biking specifically through Montlake.

#### 2. **I-5 (or Interstate 5):**

- A number of respondents indicated they would use Interstate 5 for driving.
- Others mentioned using I-5 when no other reasonable alternatives are available.

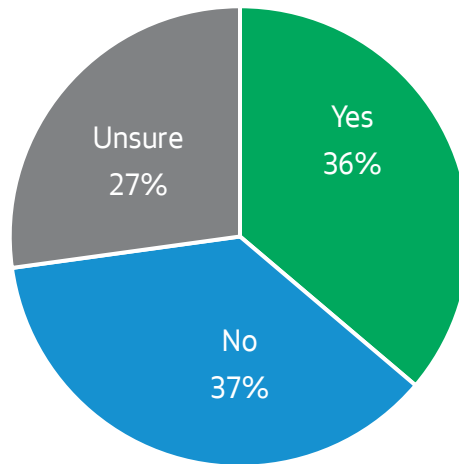
#### 3. **Other Routes or Modes:**

- Some respondents mentioned using alternative routes, such as the Fremont Bridge, Ballard Bridge, or routes around Lake Union.
- A few mentioned taking public transportation, such as the light rail or buses, as alternatives.
- A couple of respondents mentioned using the Burke-Gilman Trail or other streets depending on their destination.

Please note that some responses indicated different alternatives for different modes of transportation or destinations.

Question 10: Would a detour/closure during construction change your mode choice? (688 responses)

Question 10



- Yes: 249 (36%)
- No: 252 (37%)
- No sure: 187 (27%)

Question 11: Briefly explain how or why a detour/closure might change your mode choice? (248 responses)

Community members express concerns about alternative routes and modes of transportation, emphasizing the importance of maintaining accessibility and safety during the construction period.

**1. Mode Shifting Due to Accessibility Concerns:**

- Many residents rely on the University Bridge for their daily commutes, primarily walking or biking.
- The potential closure or detour of the bridge may force residents to shift to driving or taking public transit.
- Inconvenience and increased commuting time are primary concerns if alternative routes are less accessible.

**2. Impact on Biking Routes:**

- Closure of the University Bridge for biking could lead to longer and less safe commutes.
- Community members are worried about the lack of reasonable bike detours, potentially discouraging biking altogether.
- Alternative bridges, like Fremont Bridge, might require significant diversions, making biking less attractive.

### **3. Effect on Public Transit:**

- Closure or detour of the University Bridge would significantly impact bus routes (e.g., routes 49 and 70).
- Longer transit times and uncertain detour routes are a cause for concern among those who rely on public transportation.
- Potential increases in congestion on alternative routes might affect the reliability of bus services.

### **4. Increased Reliance on Cars:**

- For many, if the University Bridge is inaccessible, driving becomes the most practical option.
- Concerns about increased traffic congestion and the environmental impact of additional cars on the road are evident.
- People without cars may face challenges in accessing essential services and commuting.

### **5. Safety and Convenience Considerations:**

- Safety and convenience play a crucial role in transportation choices, especially for pedestrians and cyclists.
- Detours and alternative routes need to be carefully planned to ensure the safety of vulnerable road users.
- The potential for longer commutes or inconvenient detours might lead to changes in transportation habits, including opting for the fastest available mode.

The community's concerns revolve around maintaining accessibility, safety, and efficiency during the construction or closure of the University Bridge. Balancing the needs of various transportation modes and ensuring minimal disruption to daily life are essential considerations for the construction phase of a future project.

[Question 12: What else should we consider about the future of the University Bridge and the community that relies on it? \(341 responses\)](#)

These common themes reflect the community's varied concerns and preferences regarding the potential closure of the University Bridge during construction and its impact on various modes of transportation.

### **1. Mode of Commute and Reliance on Public Transit:**

- People consider alternative modes of commute if the bridge is closed, such as driving, biking, walking, or using public transit.
- The inconvenience of switching to a different mode of transportation is a concern.
- Many individuals would switch from walking and biking to transit or driving if the bridge is closed.
- Closure or detours would lead to increased reliance on single-occupancy vehicles (SOVs) for some trips.

### **2. Impact on Walking and Biking:**

- Closure of the bridge would deter walking and biking, as it would require longer routes and may not be safe due to detours.
- People emphasize the importance of the University Bridge for walking and biking.
- Closure or detours for bikes are a significant concern, as they may lead to longer and less safe routes.
- Some express discomfort with alternative biking routes, especially if they involve merging with car traffic.
- Limited public transportation options are available for some areas, making walking a crucial mode of commuting.

### **3. Use of Cars and Traffic Concerns:**

- Many individuals mention a preference for driving if the bridge is closed, citing practicality and convenience.
- Concerns about increased traffic and the need to rely more on cars are mentioned.
- If biking and walking options are hindered, some individuals mention that they may resort to using their cars, even if they prefer more sustainable modes of transportation.
- Traffic congestion and the inconvenience of using alternate routes are factors considered when contemplating car usage.

### **4. Access to Services and Inconvenience:**

- The closure of the bridge affects access to essential services like groceries, healthcare, and pharmacies for some residents.
- Lack of access to the bridge could force people to use cars for such errands.
- Longer commute times are a major factor influencing mode choice.
- People express a preference for faster options, such as light rail or buses, if available.

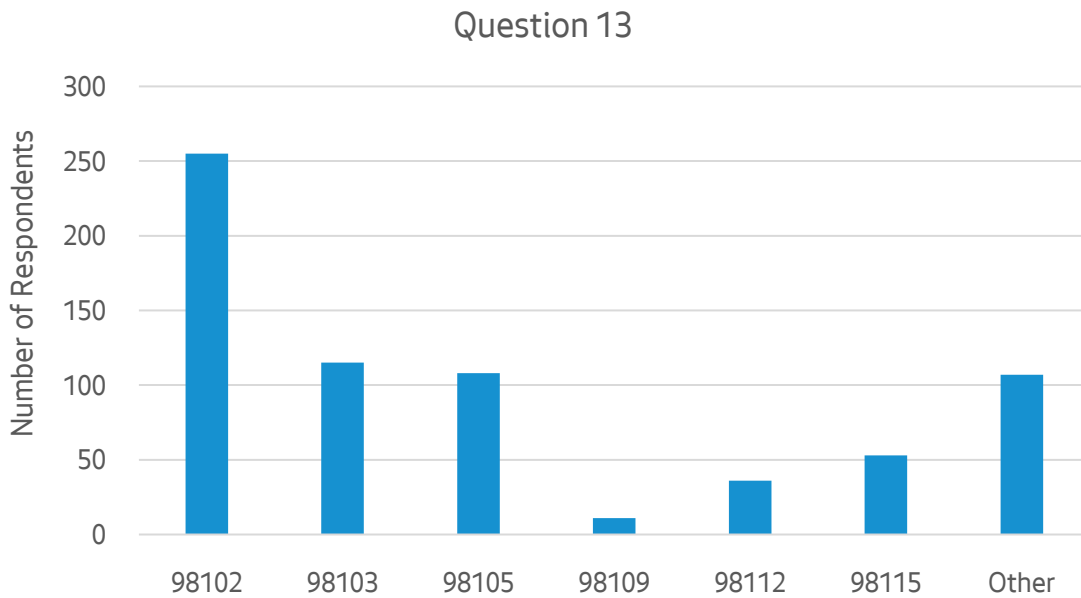
**5. Safety, Accessibility, Avoidance, and Limitation:**

- Safety concerns arise, especially for pedestrians and cyclists.
- Some individuals mention the need for improved bike facilities on alternative routes.
- Many would avoid the affected area entirely during construction or detours.
- Some may limit their trips or choose alternative modes to cope with the closure.

**6. Avoidance of Car Usage:**

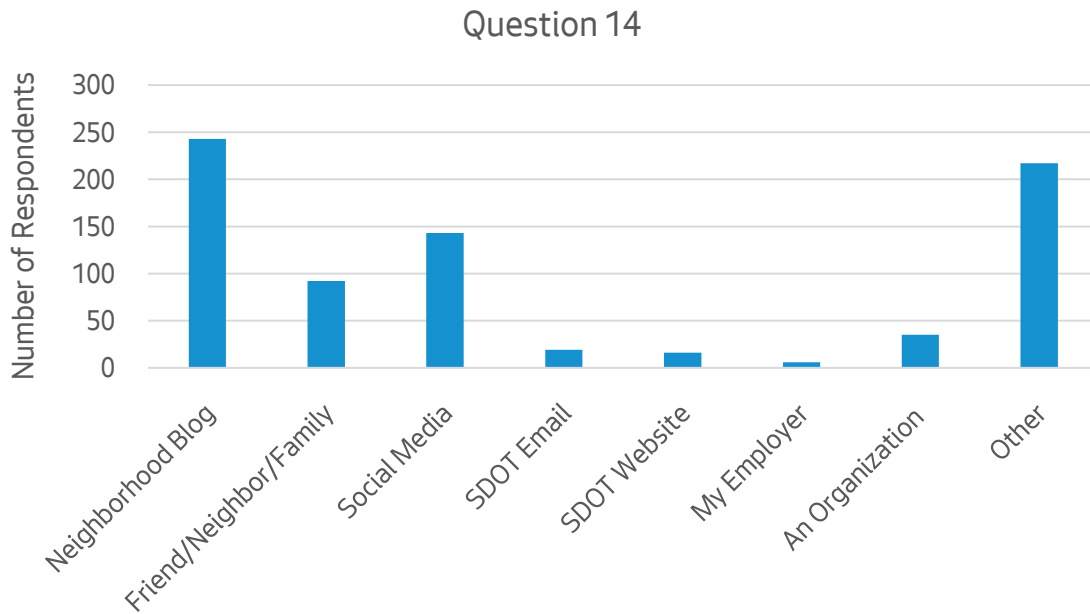
- In cases where the University Bridge is not accessible, some individuals express a preference for biking, walking, or using public transit to avoid driving, citing concerns about traffic and congestion during detours.

Question 13: What is your home zip code? (685 responses)



- 98102: 255 (37%)
- 98103: 115 (17%)
- 98105: 108 (16%)
- 98109: 11 (2%)
- 98112: 36 (5%)
- 98115: 53 (8%)
- Other: 107 (16%)
  - 98107 (15)
  - 98117 (8)
  - 98122 (8)
  - 98125 (6)

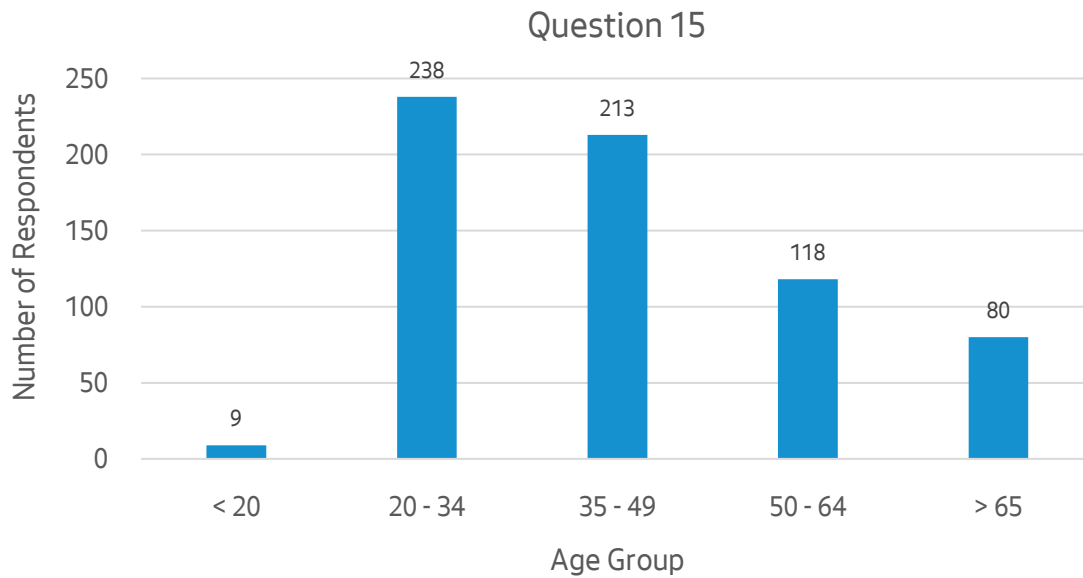
Question 14: How did you learn about this planning study? (685 responses)



- Neighborhood blog: 243 (35%)
- Friend, neighbor, family member: 92(13%)
- Social media (Twitter, Facebook, Instagram, NextDoor, etc.): 143 (21%)
- City of Seattle/SDOT mail: 7 (1%)
- City of Seattle/SDOT email: 19 (3%)
- City of Seattle/SDOT website: 16 (2%)
- My employer: 6 (1%)
- An organization I'm involved with: 35 (5%)
- Other: 217 (32%)
  - SDOT A-Frames, Posters and Yard signs
  - Seattle Bike Blog post

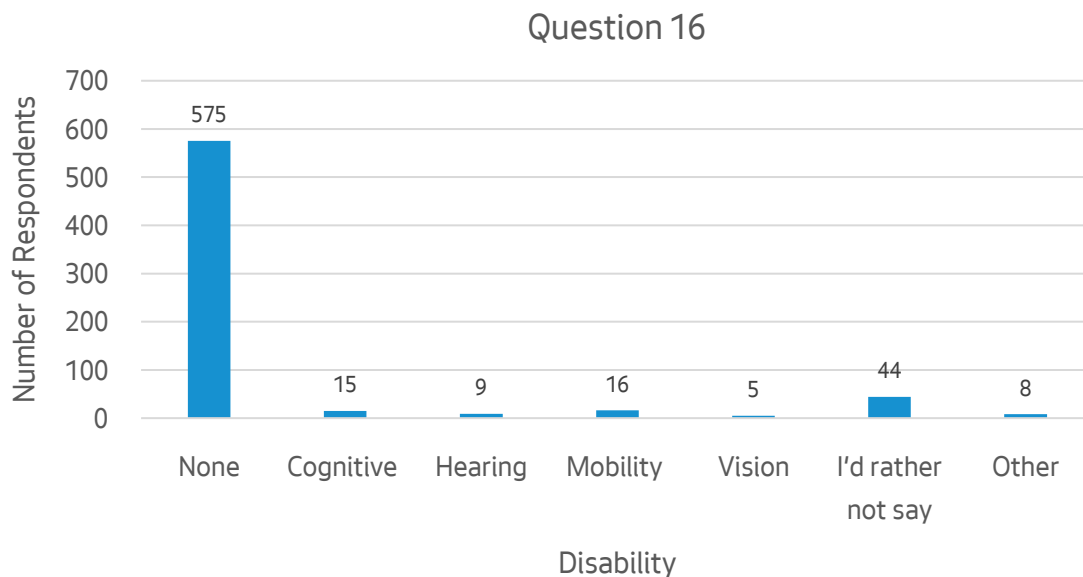
Question 15: What is your age? (679 responses)

- Less than 20 yrs old: 9 (1%)
- 20-34 years old: 238 (35%)
- 35-49 years old: 213 (31%)
- 50-64 years old: 118 (17%)
- 65 years of age or older: 80 (12%)
- I'd rather not say: 23 (3%)



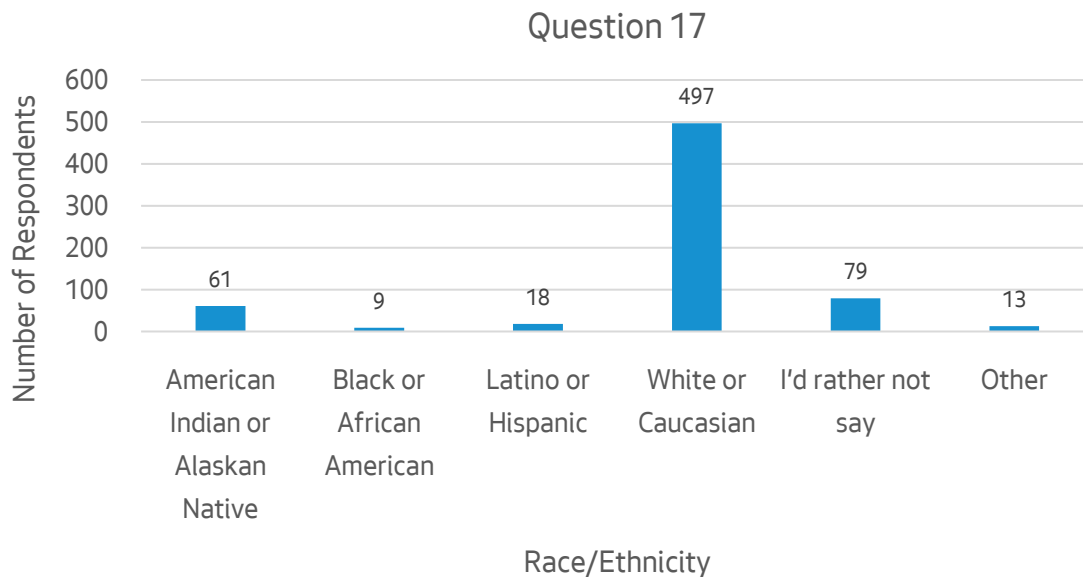
**Question 16: Do you have a disability? (666 responses)**

- None: 575 (86%)
- Cognitive: 15 (2%)
- Hearing: 9 (1%)
- Mobility: 16 (2%)
- Vision: 5 (1%)
- I'd rather not say: 44 (7%)
- Other: 8 (1%)



Question 17: What race/ethnicity best describes you? (666 responses)

- American Indian or Alaskan Native: 6 (1%)
- Asian or Pacific Islander: 61 (9%)
- Black or African American: 9 (1%)
- Latino or Hispanic: 18 (3%)
- White or Caucasian: 497 (75%)
- I'd rather not say: 79 (12%)
- Other: 13 (2%)



Question 18: What is your annual household income? (666 responses)

- \$15,000 or less: 12 (2%)
- \$15,001 to \$35,000: 19 (3%)
- \$35,001 to \$55,000: 35 (5%)
- \$55,001 to \$75,000: 56 (8%)
- \$75,001 to \$100,000: 65 (10%)
- \$100,001 to \$150,000: 96 (14%)
- \$150,001 to \$200,000: 87 (13%)
- More than \$200,000: 167 (25%)
- I'd rather not say: 131 (20%)



### Question 18

