BELLEVUE SAFE ACCESS FOR EVERYONE

Bellevue B-Safe Task #1 Technical Memo

RSA #1: 156th Avenue Northeast, Bel-Red Road, Northeast 20th Street, and Northeast 24th Street

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Acknowledgements

Authors and Contributors

Mackenzie Allan, City of Bellevue
Franz Loewenherz, City of Bellevue
Laura Milstead, City of Bellevue
Veronica Sullivan, DKS Associates
Caleb Trapp, DKS Associates
Tucker Mothersell, DKS Associates
Chris Breiland, Fehr and Peers
Taylor Whitaker, Fehr and Peers
Sydney Weisman, Fehr and Peers

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Notice and Disclaimer

The City of Bellevue adopted the Safe System approach to achieve the Vision Zero goal of zero fatalities and serious injuries on city streets by 2030. To systematically improve safety, staff follow a three-step process of identification, evaluation, and implementation. The high injury network (HIN) identifies streets that represent the majority of traffic related fatalities and serious injuries, and road safety audits evaluate the specific roadway contexts for potential safety improvements. The potential treatments provided in this report are preliminary suggestions and have not been evaluated for engineering feasibility. The inclusion of potential treatments in this report does not indicate that they will advance to implementation. All potential treatments are subject to feasibility evaluation, available funding, staff capacity, and city leadership direction.

Reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning safety enhancements under 23 U.S.C. § 148 are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in such reports, surveys, schedules, lists, or data. Further restrictions may apply under 23 U.S.C. § 407.

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1. Introduction

1.1 Grant Introduction

The City of Bellevue received Safe Streets and Roads for All (SS4A) federal grant funding to analyze and implement the citywide Vision Zero goal of eliminating traffic deaths and serious-injury collisions on city streets by 2030. An aspect of this grant is to conduct road safety assessments (RSA) in the project area that includes the Downtown, Wilburton, Bel-Red and Crossroads neighborhoods.

Most of Bellevue's fatal and serious-injury collisions occur on a relatively small number of city streets, known as the high injury network (HIN). The city focuses a variety of road safety efforts on these streets with an aim to make them safer for all users. One tactic is to conduct RSAs along those HINs. In total, the grant will fund seven RSAs on approximately 13.7 miles of the High Injury Network between 2025 and 2027.

1.2 What is an RSA: Purpose and Process

An RSA is a formal safety performance examination of a transportation system by an expert audit team. The purpose of an RSA is to provide an in-depth understanding of crash causes and the existing street environment prior to design or construction of potential improvements along a corridor. The RSA allows community members and agencies an opportunity to walk along the corridor and share their insights, experiences and ideas to help improve the safety of the corridor. This report summarizes the work completed for the RSA and provides data-informed suggested improvements.

Figure 1. The seven step process for Road Safety Assessments.

1.3 Corridor Study Area

This technical memo summarizes the study area and findings of the first road safety assessment (RSA) conducted in 2025. The RSA study area included three segments: 156th Avenue Northeast between Northeast 8th Street and Bel-Red Road, Northeast 24th Street between 156th Avenue Northeast and Bel-Red Road, and Bel-Red Road between 156th Avenue Northeast and Northeast 20th Street. This report was developed in accordance with the FHWA Road Safety Audit (RSA) guidelines and combines findings from crash data analysis, local input, and community walk audits.

From 2019-2023, there were 334 crashes on the RSA corridors, including two deaths and seven serious injuries. The most common crash type for all crashes was an opposite direction left turn (which also accounted for one death and one serious injury). Of the eight fatal and serious injury (FSI) collisions, the vehicle-turning-left-hits-pedestrian crash type accounted for one death and three serious injuries. Community and staff identified potential safety improvements along the corridor, such as facilities for people walking, biking or taking transit as well as improvements to make the corridor safer for people driving. These suggested improvements are included in Section 5 Potential Safety Treatments.

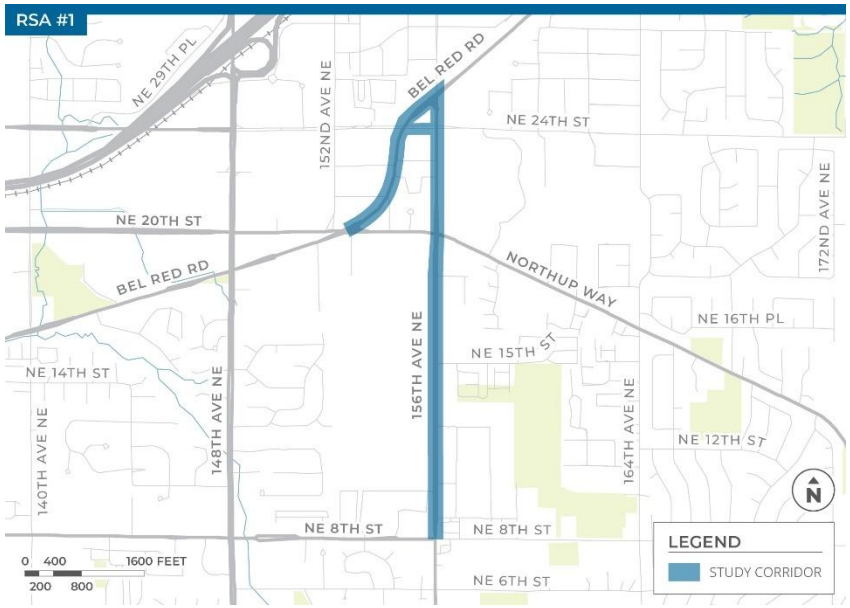


Figure 2. RSA #1 Study Area Map.

2. Corridor Background

2.1 Demographics

The City of Bellevue reviewed demographic data from ESRI and American Community Survey (ACS1) for the study area. The ESRI at-risk population profile for the study area (approximately 1.54 square miles) indicates 15 percent of households include at least one person with a disability, 12 percent do not have access to a personal vehicle, and 13 percent live below the poverty line. A summary of the ESRI data is available in **Appendix A PSA Packet**.

ACS data was collected for census blocks that are adjacent to the RSA corridors*. The following demographic information exceeded the Safe Harbor threshold of five percent or 1,000 individuals, whichever is less, in a block group area. For all block groups combined:

- Nearly 50 percent of the population identifies as Asian and almost ten percent identifies as Hispanic.
- Over half of households (58 percent) identify as having a person in the household (over the age of five) who speak, write, read, or understand English less than well or not at all.
- In addition to English, the top languages spoken include: Spanish, Russian, Telugu, Hindi, Amharic, Japanese, Arabic, Chinese-Mandarin, Chinese-Cantonese, Tamil, Vietnamese, and Marathi.
- Approximately ten percent of the population has a disability.
- Almost 15 percent of the population is comprised of older adults (65 years old or more).
- Around 14 percent of households do not have a vehicle.

* Block groups selected: 530330228032, 530330229011, 530330230003, 530330232011, 530330232012, 530330232013, 530330232014, 530330232021, 530330232022

[1] 2017-2021 American Community Survey (ACS) 5-Year Estimates

2.2 Collision History and Themes

From January 2019 to December 2023, 334 crashes occurred on the RSA #1 study corridors, including two deaths and seven serious injury crashes. The most common crash type for all crashes was an opposite direction left turn (which also accounted for one death and one serious injury). The vehicle turning left hits pedestrian crash type accounted for one death and three serious injuries. The top ten most common crash types are provided in Figure 3. For all crashes, the top two contributing factors were not granting right-of-way to vehicle and improper turn or merge movements (Figure 4). For fatal and serious injury crashes, the top contributing factor was not granting right-of-way to people walking. Additional crash trends, graphics and specific crash information for fatal and serious injury collisions are available in **Appendix A PSA Packet.**

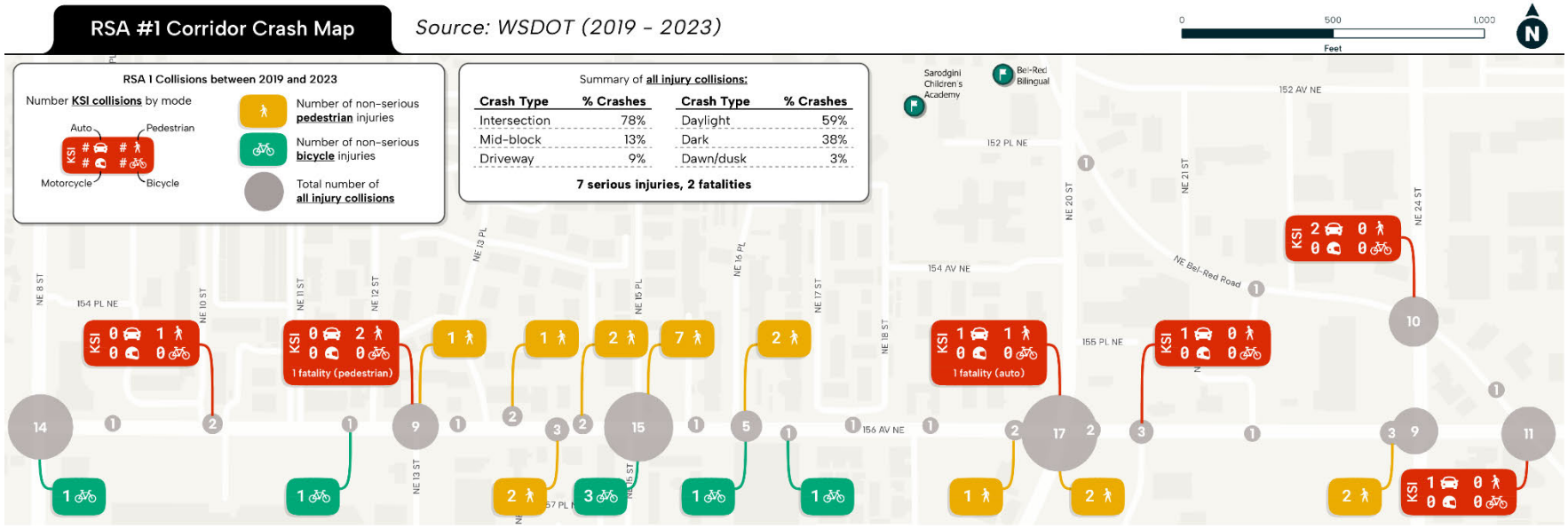


Figure 3. 2019 to 2023 Crash History for RSA #1 Study Area.

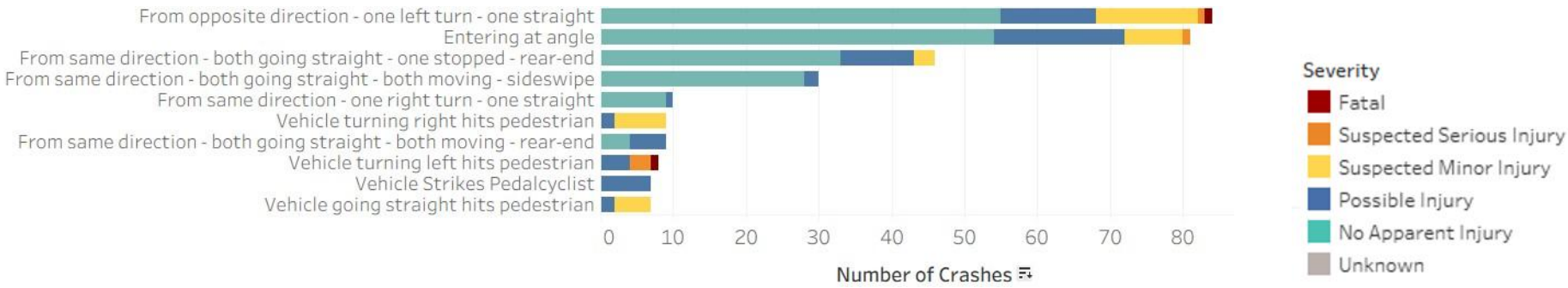


Figure 4. Top Ten Collision Types within the RSA #1 Study Area, 2019-2023.

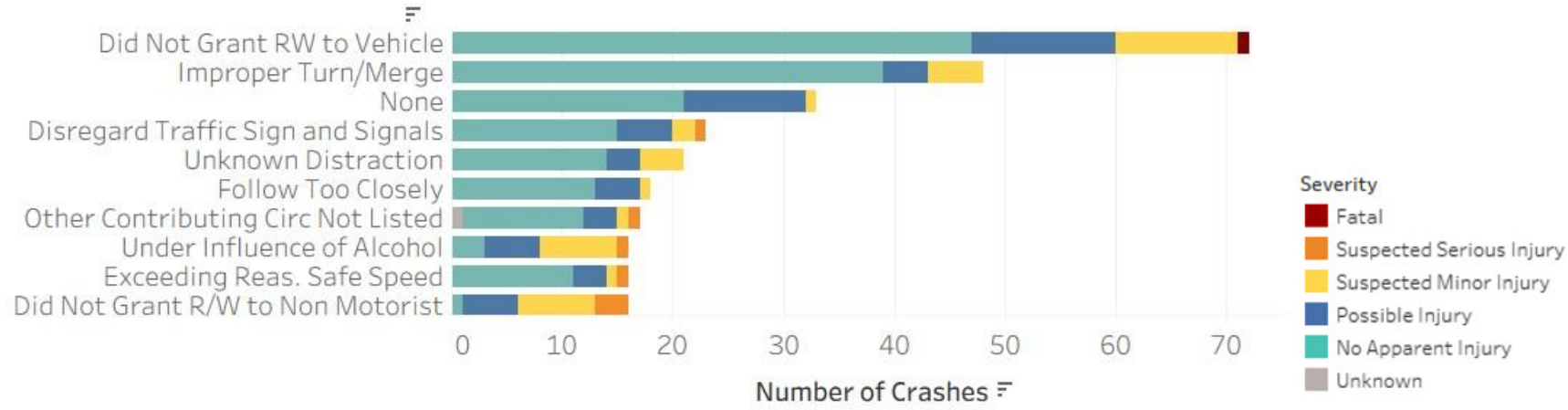


Figure 5. Top Contributing Circumstances and Severity for all Collisions within the RSA #1 Study Area, 2019-2023.

2.3 Speed Data

Table 1 below highlights the speed statistics for three locations along the study corridors. For most of the 156th Avenue Northeast corridor, the 85th percentile observed speed is higher than the posted speed limit of 30 mph. Along Bel-Red Road, the 85th percentile speed and average speed was reported approximately equal to or lower than the posted 35 mph.

Table 1. Summary Speed Statistics

Location	Year	Posted Speed Limit (mph)	Direction	50th Percentile [median] (mph)	85th Percentile (mph)	95th Percentile (mph)	Average Speed (mph)
156th Avenue Northeast, south of Northeast 22nd Place	2025	30 mph	Northbound	33.6	38.3	41.5	33.6
			Southbound	28.4	35.1	39.0	27.7
156th Avenue Northeast, south of Northeast 12th Street	2025	30 mph	Northbound	27.2	33.6	37.5	26.5
			Southbound	30.2	35.7	39.4	30.2
Bel-Red Road, between Northeast 24th Street and 156th Avenue Northeast	2025	35 mph	Northbound	26.5	31.3	34.7	26.5
			Southbound	25.9	30.6	33.8	25.4

3. Public Feedback

Outreach performed for the RSA process included the following:

- Launched a ten question survey and mapping tool on Engaging Bellevue platform to solicit public feedback. The mapping tool allowed community members to identify safety concerns and desired safety improvements.
- 39 responses were received on the online survey and seven responses on the interactive comment map. The online survey was translated into multiple languages, and both the survey and map were open from April 20th, 2025to June 30th, 2025. Results are shown in **Appendix B**.
- Conducted an in-person walking audit for two hours that involved 11 community members on Saturday, May 31st, 2025. Participants walked the study corridor alongside the consultants to share insights, stories, concerns, and ideas from local community members (see Figure 5).
- On June 9th, 2025, the City of Bellevue met with Transcend United, an older adults' group, at 156th Avenue Northeast and Northeast 10th Street to collect insights, stories, concerns and ideas from group members.

Figure 6. Photo from Community RSA #1 on May 31, 2025.

Online Survey

Online Comment Map

In-person Community RSA

In-person meeting with Transcend United

The following are some of the key findings from the public engagement effort:

KEY THEME	Improve bike facilities along 156th Avenue Northeast	Improve pedestrian facilities along corridor	Improve transit facilities	Improve signal timing
FEEDBACK RECEIVED	• "There is no place to bike safely through here. Too many driveway entrances, four lanes of traffic, [and] no bike lanes".	• Desire for a midblock crossing between Northup Way and Northeast 24th Street. • Some areas have too narrow sidewalks.	• Adding facilities to improve comfort, especially for seniors and those with limited mobility.	• Improve crossing times for people walking more slowly. • Concerns with long cycle lengths and people crossing intersections.
RELATED POTENTIAL IMPROVEMENTS	See: 1.AW.8 Consider adding bike facilities 1.AW.7 Consider installing wayfinding signage	See: 1.A1.2 Consider increasing the width of the crosswalk 1.A2.2 Evaluate adding a midblock crossing	See: 1.AW.9 Upgrade all non-ADA compliant transit stops 1.A7.10 Consider transit improvements (such as real-time display and/or seating areas)	See: 1.AW.15 Consider including first-come-first-served (FCFS) with ped minus 1.AW.10 Consider running a Flashing Yellow Arrow Analysis and evaluate the use of a pedestrian minus operation

4. Staff RSA

As part of the RSA process, on May 8, 2025, the Consultant facilitated a virtual RSA Kick-off Meeting with city staff from multiple departments to introduce the study location and the goals of the RSA process. On June 17, 2025, the Consultant conducted the in-person field visit with city staff to walk the full corridor, collect observations and brainstorm potential safety countermeasures (See Figure 7).

Following the in-person field visit, the consultant team hosted a one-day virtual workshop on June 26, 2025, to confirm identified safety concerns and brainstorm potential treatments.

During the workshop, staff identified a range of potential safety improvements to address facility gaps or facility target gaps, high vehicle speeds, minimum separation between people walking and moving vehicles, maintenance needs and more. These are summarized in Section 5 Potential Treatments, additional information on the walking audit and workshop are in **Appendix A PSA Packet**.

Figure 7. Photo from City Staff RSA on May 8, 2025 .

5. Potential Treatments

This section provides potential improvements specific to RSA 1, including infrastructure design, operations, and policy improvements. These potential improvements are based on observations made during the community walking audits, city field visit and team workshop, as well as the public feedback submitted on the Engaging Bellevue website. Potential improvements in this report were not evaluated for feasibility prior to inclusion, and do not account for available funding, staff capacity or direction from City Council and leadership. Refer to the 'Notice and Disclaimer' on page two for additional information on the potential safety improvements.

The table is separated by location and includes the potential treatment, timeframe, estimated cost range, crash modification factor (CMF) and improvement lead. A CMF is used to compute the expected number of crashes after implementing a countermeasure on a road or intersection. The following potential improvements require further engineering analysis of feasibility and design prior to implementation.

Table 2. Key for Time Frame, Estimated Implementation Cost, and Improvement Lead.

Time Frame		Estimated Implementation Cost		Improvement Lead	
Near-term	**≤ 2 years**	**$**	**≤ $25,000**	**CoB**	**City of Bellevue**
Medium-term	**2 – 5 years**	**$$**	**$25,000 - $75,000**	**BSD**	**Bellevue School District**
Long-term	**≥ 5 years**	**$$$**	**$75,000 - $150,000**	**KCM**	**King County Metro**
		$$$$	**≥ $150,000**	**PPO**	**Private property owner**
				CoR	**City of Redmond**

5.1 Area-Wide Potential Treatments

The City of Bellevue may consider the following potential treatments to improve safety for the entire RSA #1 study area. Note that these suggestions were not evaluated for feasibility prior to inclusion, and do not account for available funding, staff capacity or direction from City Council and leadership. Refer to the notice and disclaimer on page 2 for additional information on the potential safety improvements.

Table 2. Area-Wide Potential Improvements

Potential Improvements	Time Frame			Relative Cost	CMF	Lead
	Near	Medium	Long			
Pedestrian Facility Improvements						
AW.1.1 Consider upgrading the existing sidewalk facilities, and adding sidewalks for all sidewalk gaps, for all RSA corridors to meet ADA and Transportation Design Manual requirements. Utilize the ADA Self-Evaluation and Transition Plan for evaluation. For existing facilities, this may include upgrading the sidewalk and curb ramps to be ADA compliant, widening existing facilities, and providing the required planter strip. Where sidewalks are added or upgraded, construct driveways that are ADA compliant.			✓	$$$$		CoB
1.AW.2 Explore the addition of midblock crossings where identified in the MIP and where appropriate crossings can be designed.		✓		$$$$	0.66	CoB
1.AW.3 Consider reducing corner radii and exploring where truck aprons can be utilized at all existing intersections along the RSA corridors.			✓	$$$$		CoB

Potential Improvements	Time Frame			Relative Cost	CMF	Lead
	Near	Medium	Long			
1.AW.4 Consider adding wayfinding signage or markings to direct people walking to key destinations, transit service, connecting pedestrian facilities, and others as appropriate.	✓			$$		CoB
1.AW.5 Consider evaluating sidewalk replacement in areas that have been affected by tree root upheaval.			✓	$$$$	-	CoB
1. AW.6 Evaluate all utility lids on the sidewalk along the corridor for non-skid application.		✓		$-$$	-	CoB
Bicycle Facility Improvements						
1.AW.7 Consider installing wayfinding signage and pavement markings throughout this corridor to help direct people biking and rolling.	✓			$$	-	CoB
1.AW.8 Consider adding bike facilities along all bicycle network corridors (156th Avenue Northeast Bel-Red Road, Northeast 20th Street and Northeast 24th Street) to meet the bicycle Level of Traffic Stress (BLTS) target in the Mobility Implementation Plan (MIP). Where bike facilities are added or already exist, ensure that intersection facilities and signal operations are implemented to connect the facility achieve the MIP BLTS intersection target.			✓	$$$$	0.734 (install bicycle lanes)	CoB
Transit Facility Improvements						
1.AW.9 Upgrade all non-ADA compliant transit stops along this corridor to better households in this area. This should include a standard,			✓	$$-$$$$	-	CoB KCM

Potential Improvements	Time Frame			Relative Cost	CMF	Lead
	Near	Medium	Long			
accessible off-boarding clear space to allow passengers to get on and off the bus.						
1.AW.10 Consider transit upgrades along the 156th Avenue Northeast Frequent Transit Network corridor in coordination with KCM to achieve City of Bellevue MIP transit stop targets as well as KCM speed and reliability targets.		✓		$$$	-	KCM
1.AW.11 Assess the feasibility of operating the outside travel curb lanes as Business Access and Transit (BAT) lanes along the A/B segment.			✓	$$$$	-	CoB KCM
Speed Management Improvements						
1.AW.12 Evaluate all 30+mph streets through the Safe Speeds Bellevue program for potential speed limit reductions.	✓			$-$$		CoB
1.AW.13 Evaluate speed management countermeasures to reduce speeds along a corridor, including at approaches to intersections and midblock crossings, where there may be more people walking and biking. This may include vertical or horizontal deflection, lane narrowing, radar feedback signs, speed safety cameras or other measures identified in Bellevue's Residential Traffic Guidebook, Speed Management Plan or evolving best practices.		✓		$$$$	0.76 (lane narrowing) 0.95 (speed feedback signs) 0.46 (Automated Speed Camera)	CoB
Signalized Intersection Improvements						
1.AW.14 Evaluate adding left turn hardening at intersections, and for the intersections deemed		✓		$-$$	0.87	CoB

Potential Improvements	Time Frame			Relative Cost	CMF	Lead
	Near	Medium	Long			
appropriate, consider implementing left turn hardening.						
1.AW.15 For all signalized intersections, evaluate signal operations for adjustments that prioritize safety and reduce conflicts between vehicles and people walking or biking. This may include adding leading pedestrian intervals (LPIs), protected left turns, no right-turn-on-red (RTOR), pedestrian minus operation, first-come first-serve (FCFS), replacing flashing yellow arrows, increasing the pedestrian phase to accommodate people walking at a slower pace, and others as appropriate.[2]	✓			$-$$	0.77 (no RTOR) 0.45 (protected left)	CoB
1.AW.15 Consider adding retroreflective markings to signal head backplates at signalized intersections. Where wind load calculations meet the standard, retroreflective tape can be added to existing backplates. Where wind load calculations do not meet the standard, this would require replacing the signal pole(s), which may be outside the scope of RSA improvements.	✓		✓	$-$$$$	0.85	CoB
Other						
1.AW.16 Evaluate potential improvements to sight distance at intersections and driveways to		✓		$-$$$		CoB

[2] WSDOT awarded grant funding to the City of Bellevue to conduct a system-wide video analytics evaluation of 79 intersections. The findings from the upcoming report may support potential signal operations changes at RSA intersections.

Potential Improvements	Time Frame			Relative Cost	CMF	Lead
	Near	Medium	Long			
improve visibility of people walking and biking, as well as those driving.						
1.AW.17 Evaluate access management strategies to reduce crashes along the corridors.		✓		$$-$$$	Link to formula	CoB

5.2 Segment A: 156th Avenue Northeast from Northeast Eighth Street to Northeast 15th Street

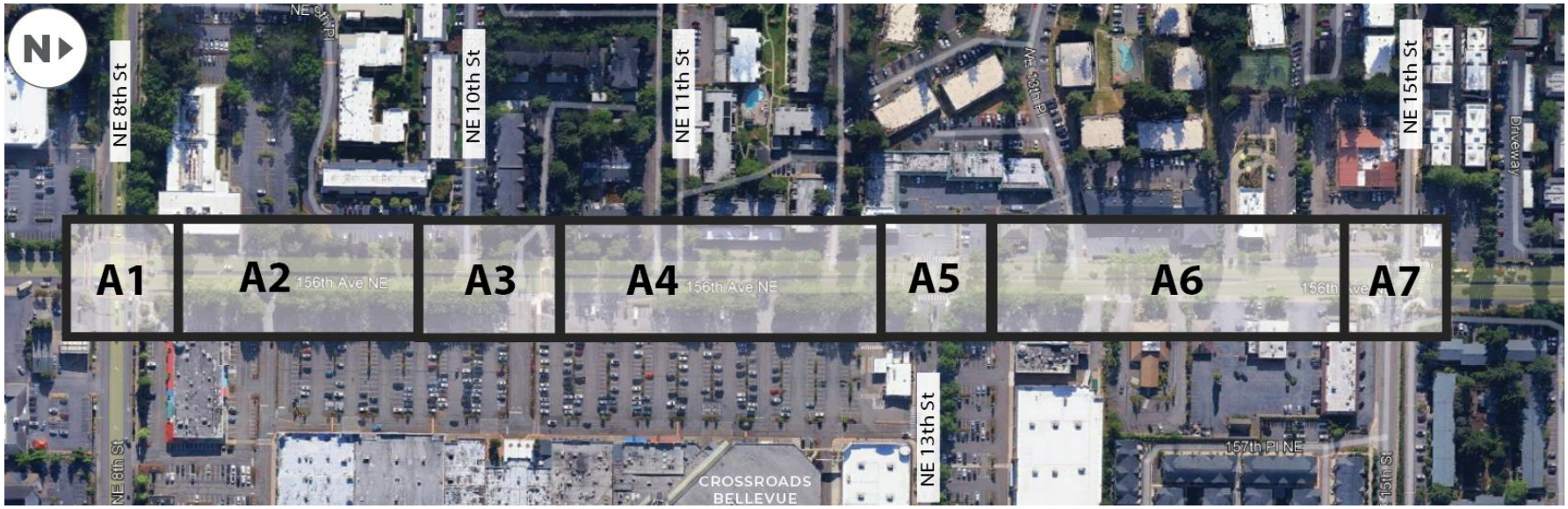


Figure 8. Segment A: 156th Avenue Northeast from Northeast Eighth Street to Northeast 15th Street.

Table 3. Segment A Potential Improvements

Location	Potential Improvements	Time Frame			Relative Cost	CMF	Lead
		Near	Med.	Long			
A1 Area: Northeast Eighth Street Intersection	1.A1.1 Once bike lanes have been added through the HSIP-funded Northeast Eighth Street corridor project, consider bike intersection facilities to enable connection with upcoming bike lanes on east leg of Northeast Eighth Street.			✓	$-$$$$	-	CoB
	1.A1.2 Consider increasing the width of crosswalks to better serve the quantity of pedestrian activity, update the stop bar and loop detector locations.			✓	$$-$$$$	-	CoB
	1.A1.3 Consider treatment to increase the visibility of the red brick crosswalks (e.g. adding continental bars in between existing parallel bar markings).	✓			$$	-	CoB
A2 Area	1.A2.1 Coordinate with the Crossroads mall and farmers market to ensure event signage does not intrude on the sidewalk.	✓			$	-	PPO
	1.A2.2 Evaluate adding a mid-block crossing between Northeast Eighth Street and Northeast 10th Street to provide better access to people trying to reach the bus stops. Evaluate the cost of this against relocating the bus stops closer to the signal.		✓		$$$$	0.66	CoB
A3 Area: Northeast 10th Street Intersection	1.A3.1 Consider adding a raised crosswalk on the east leg of the intersection.			✓	$$$$	0.7 (install raised pedestrian crosswalks)	CoB
	1.A3.2 Explore left turn hardening for both northbound and southbound directions.		✓		$	0.87	CoB

Location	Potential Improvements	Time Frame			Relative Cost	CMF	Lead
		Near	Med.	Long			
A4 Area	1.A4.1 Evaluate the existing U-turn in the northbound direction, just north of Northeast 10th Street, to determine if the turn space is sufficiently used.	✓			$	-	CoB
	1.A4.2 Consider moving the curb line out to the existing fog line given that it doesn't appear to be needed for U-turns (would likely require drainage improvements).			✓	$$$$	-	CoB
	1.A4.3 Evaluate potential speed management countermeasures to encourage compliance with the speed limit. Observed 85th percentile speeds exceed the speed limit south of Northeast 12th Street.		✓		$-$$$$	0.76 (lane narrowing) 0.95 (speed feedback signs) 0.46 (Automated Speed Camera)	CoB
A5 Area: Northeast 13th Street Intersection	1.A5.1 Consider adding a raised crosswalk on the east leg of the intersection.			✓	$$$$	0.7 (install raised pedestrian crosswalks)	CoB
	1.A5.2 Consider adding bulb outs or increasing the visibility of pedestrians through lighting, signage, or markings.		✓	✓	$$-$$$$	-	CoB
	1.A5.6			✓	$	-	CoB
A6 Area	See area wide potential improvements.						

Location	Potential Improvements	Time Frame			Relative Cost	CMF	Lead
		Near	Med.	Long			
A7 Area: Northeast 15th Street Intersection	1.A7.1 Evaluate reducing the southeast corner radii to reduce the pedestrian crossing distance and reduce turning speeds.		✓		$$	-	CoB

5.3 Segment B: 156th Avenue Northeast from Northeast 15th Street to Bel-Red Road

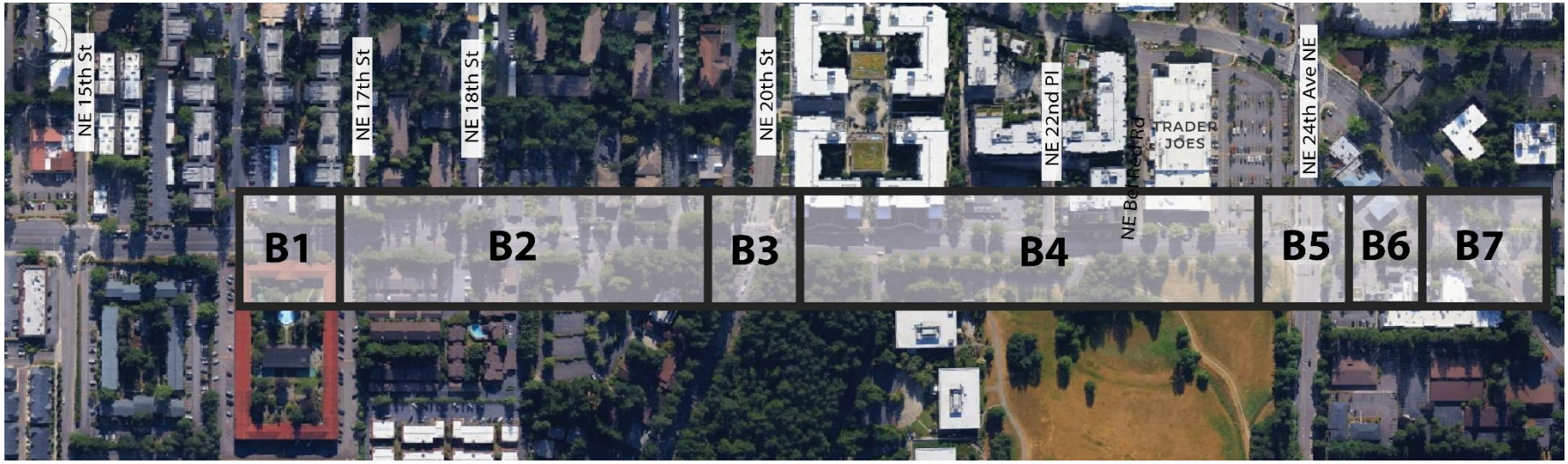


Figure 9. Segment B: 156th Avenue Northeast from Northeast 15th Street to Bel-Red Road.

Table 4. Segment B Potential Improvements

Location	Potential Improvements	Time Frame			Relative Cost	CMF	Improve. Lead
		Near	Int.	Long			
B1 Area: Midblock RRFB Location	1.B1.1 Consider modifying the pedestrian phase to add additional time for people walking at a slower pace.	✓			$	0.49	CoB
	1.B1.2 Trim the bushes on the pedestrian island to allow for better visibility for children and people in wheelchairs crossing through the island.		✓		$	-	CoB
	1.B1.3 Consider adding a vertical element on the lane line leading up to the crosswalk to encourage lower speeds.	✓			$	-	CoB
B2 Area	1.B2.1 Evaluate adding a signalized mid-block crossing between Northeast 17th Street and Northup Way/Northeast 20th Street to achieve the MIP crossing distance target. Coordinate with Metro to move the bus stop pairing closer to the new crosswalk if installed.			✓	$$$$	0.66	CoB KCM
	1.B2.2 Trim overgrown branches on both sides of 156th Avenue Northeast to improve visibility from north of the RRFB crossing to Northeast 20th Street.	✓			$	-	CoB PPO
	1.B2.3 Replace no left turn R3-2 sign post with taller post to prevent pedestrian conflicts.	✓			$	-	CoB
B3 Area: NE 20th St Intersection	1.B3.1 Evaluate the expanding the use of the eastbound no right-turn blank out sign to any time the ped phase is activated.	✓			$	-	CoB
	1.B3.2 Trim tree and vegetation growth on the northeast corner to improve lighting conditions and improve pedestrian visibility in this area.	✓			$	-	CoB

Location	Potential Improvements	Time Frame			Relative Cost	CMF	Improve. Lead
		Near	Int.	Long			
	1.B3.3 Consider adding speed management countermeasures on the east leg of the intersection to reduce the speeds of vehicles approaching the intersection.		✓		$$	0.76 (lane narrowing) 0.95 (speed feedback signs) 0.46 (Automated Speed Camera)	CoB
B4 Area	1.B4.1 Evaluate adding two mid-block pedestrian crossings across 156th Avenue between Northup Way/Northeast 20th Street and Northeast 24th Street to meet MIP spacing performance targets (including one between the large residential building on the west side and the bus stop on the east side).			✓	$$$$	0.66	CoB
	1.B4.2 Replace the damaged freeway sign facing northbound, located approximately 130 feet south of Northeast 24th Avenue.	✓			$	-	CoB
	1.B4.3 Evaluate adding speed management countermeasures to encourage compliance with the speed limit. Observed 85th percentile speeds exceed the speed limit south of Northeast 22nd Place. This may be paired with any new midblock crossings to ensure that vehicles are driving at appropriate speeds when approaching the crossings.		✓		$	0.76 (lane narrowing) 0.95 (speed feedback signs) 0.46 (Automated Speed Camera)	CoB

Location	Potential Improvements	Time Frame			Relative Cost	CMF	Improve. Lead
		Near	Int.	Long			
B3 Area: NE 24th St Intersection	1.B5.1 Consider repainting the high visibility crosswalk markings that are fading.	✓			$	-	CoB
	1.B5.2 Based on the Transportation Design Manual, a minor arterial would require a minimum of eight feet width with a five-foot landscape planter. Evaluate opportunities to widen the west sidewalk along Trader Joe's and adding a planter strip where feasible.			✓	$$$$	-	CoB
	1.B5.3 Evaluate signal infrastructure and operations for potential improvements to prevent opposite direction left turn crashes at the intersection.		✓		$-$$$	-	CoB
B6 Area	See area wide potential improvements.						
B7 Area: Bel-Red Road Intersection	1.B7.1 Evaluate the existing bicycle facility transition at the intersection and identify if there are any signage or infrastructure improvements to improve the transition from bicycle facility to crosswalk.	✓			$-$$$	-	CoB
	1.B7.2 Consider signal improvements to reduce conflicts for people driving and walking, which may include increasing the pedestrian signal time at this intersection.	✓			$	-	CoB

5.4 Segment C: Northeast Bel-Red Road from Northeast 20th Street to 156th Avenue Northeast and Northeast 24th Street from Bel-Red Road to 156th Avenue Northeast

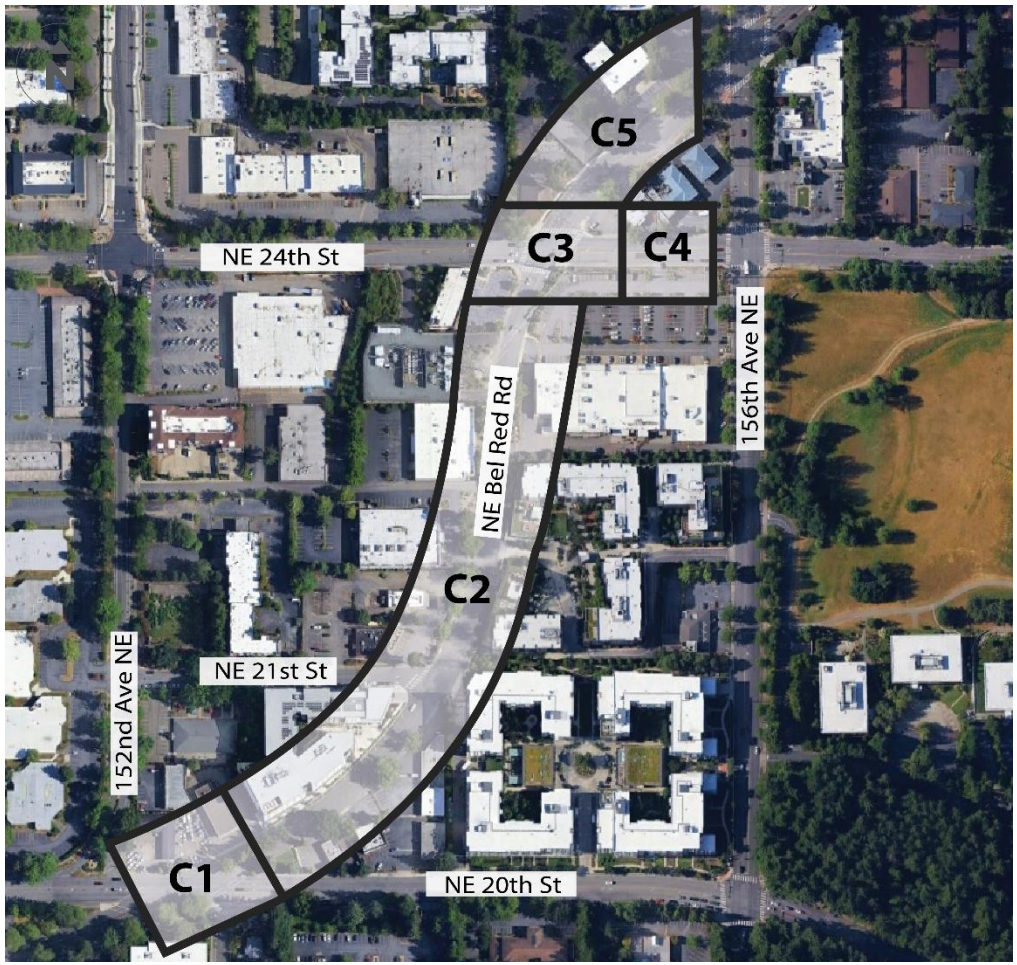


Figure 10. Segment C: Northeast Bel Red Road from Northeast 20th Street to 156th Avenue Northeast.

Table 5. Segment C Potential Improvements

Location	Potential Improvements	Time Frame			Relative Cost	CMF	Improve. Lead
		Near	Int.	Long			
C1 Area: Northeast 20th Street / Northeast Bel Red Road / 152nd Avenue Northeast intersection	1.C1.1 Consider updating the pedestrian signals to countdown heads.	✓			$	0.81	CoB
	1.C1.2 Consider adding a mid-block crossing around Northeast 21st Street to enable people walking to safely cross Northeast Bel-Red Road.			✓	$$$$	0.66	CoB CoR BSD
	1.C1.3 Consider replacing the existing sidewalk that has been damaged from tree root overgrowth to meet ADA requirements on east leg of intersection.			✓	$$$$	-	CoB
	1.C1.4 Consider regrading the splitter island to be less than 2 percent to make it ADA compliant.		✓		$$$	-	CoB
C2 Area	1.C2.1 Consider coordinating with Redmond to evaluate adding two signalized mid-block crossings to meet MIP spacing performance targets.			✓	$$$$	0.66	CoB, CoR
	1.C2.2 Consider adding speed management countermeasures along the corridor, such as speed feedback signs.	✓			$$	0.95	CoB
	1.C2.3 Evaluate adding additional speed management countermeasures to increase safety of the narrow sidewalk.		✓		$$	0.76 (lane narrowing) 0.95 (speed feedback signs) 0.46 (Automated Speed Camera)	CoR

Location	Potential Improvements	Time Frame			Relative Cost	CMF	Improve. Lead
		Near	Int.	Long			
C3 Area: NE Bel Red Road and Northeast 24th Street intersection	1.C3.1 Consider reducing travel lane widths to reduce speeds approaching the intersection, given the existing wide lanes at the intersection.		✓		$	0.85 (Conver 12-foot lanes to 11-foot lanes)	CoB
	1.C3.2 Replace static no left turn sign with a blank out.	✓			$	-	CoB
	1.C3.3 Repair the handrail on the southeast corner of the intersection.	✓			$	-	CoB
	1.C3.4 Evaluate left turn lane hardening on approaching legs at this intersection.	✓			$	0.87	CoB
	1.C3.5 Coordinate with the private property owner at the southeast corner to trim overgrowth and improve visibility.	✓			$	-	PPO
	1.C3.6 Consider ways to reduce the crossing distance for people walking, such as adding painted bulb-outs to the southeast and northeast corners.		✓		$	-	CoB
	1.C3.7 Consider adding a southbound No-Right-Turn-on-Red (NTOR) blank out sign to be activated during the ped signal phase.	✓			$	-	CoB
C4 Area	See area wide potential improvements.						
C5 Area: NE Bel Red Road and 156th Ave Northeast intersection	1.C5.1 Evaluate opportunities to fill the sidewalk gap on the east side of Northeast Bel-Red Road between Northeast 24th Street and 156th Avenue Northeast.			✓	$$$$		CoB

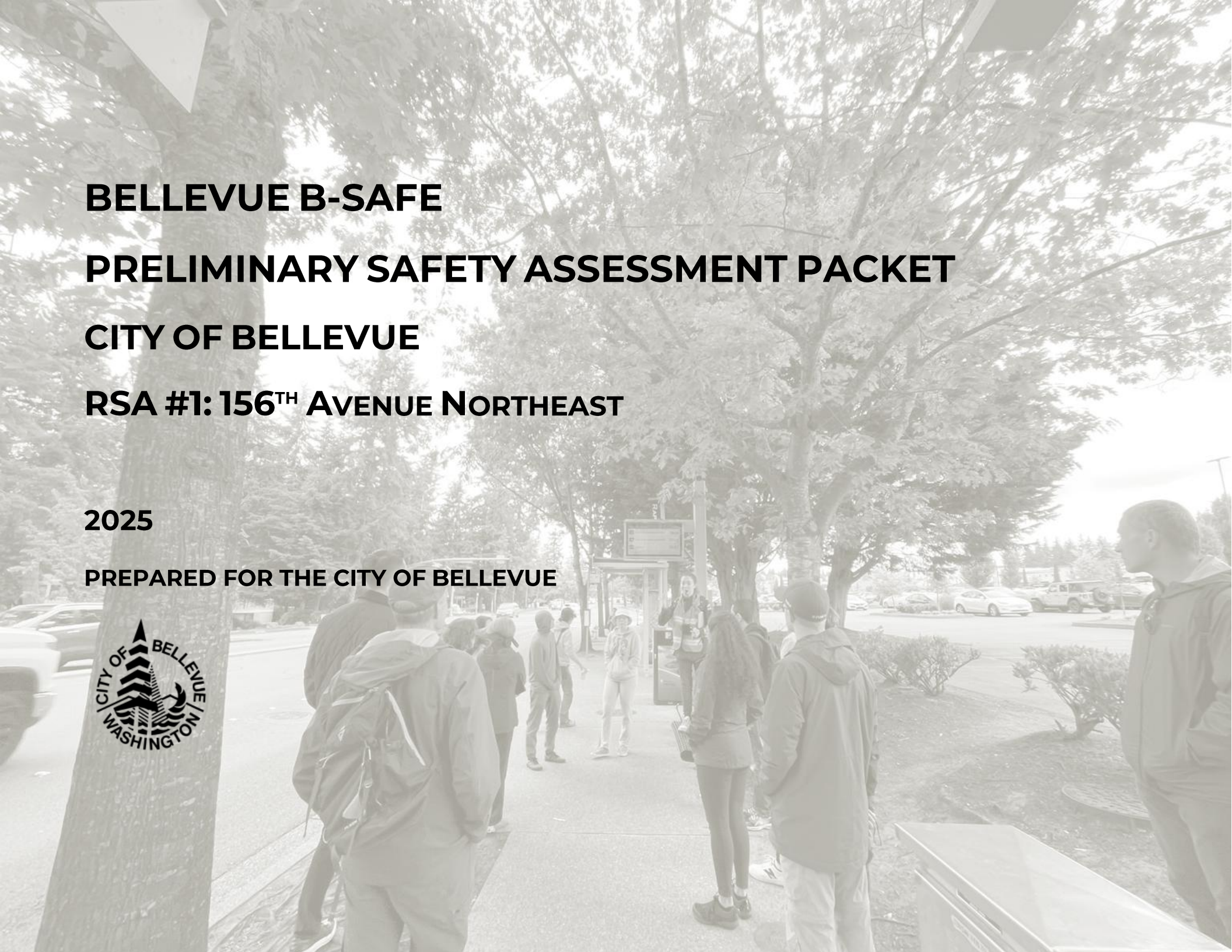
Location	Potential Improvements	Time Frame			Relative Cost	CMF	Improve. Lead
		Near	Int.	Long			
	1.C5.2 Evaluate potential changes to the intersection to reduce conflicts between vehicles and people walking, such as analyzing the use of the right-turn slip lane at 156th Avenue Northeast and Bel-Red Road.			✓	$$$$		CoB
	1.C5.3 Consider adding access management along Bel-Red Road between Northeast 24th Street and 156th Avenue Northeast where gaps exist.		✓		$$-$$$$		CoB

6. Next Steps

The city should consider evaluating and implementing the short-term / rapid-build safety treatments deemed feasible and highest priority along the RSA corridors. The city may track the effectiveness of those treatments and replicate those that provide the most benefit at additional locations throughout the city. City staff can prioritize and evaluate the feasibility of all short-term, intermediate, and long-term suggested improvements provided in this technical memorandum and identify funding sources for those deemed feasible. This may include pursuing state and federal grant funding for safety improvements, alongside available local funding. The city will continue to update the Road Safety Assessments and Safe Street Corridor Studies webpages with findings and next steps from the completed RSAs.

7. Appendices

Appendix A. PSA PACKET



BELLEVUE B-SAFE

PRELIMINARY SAFETY ASSESSMENT PACKET

CITY OF BELLEVUE

RSA #1: 156TH AVENUE NORTHEAST

2025

PREPARED FOR THE CITY OF BELLEVUE

ACKNOWLEDGMENTS

Mackenzie Allan

Franz Loewenherz

Laura Milstead

Veronica Sullivan

Caleb Trapp

Brian Chandler

Chris Breiland

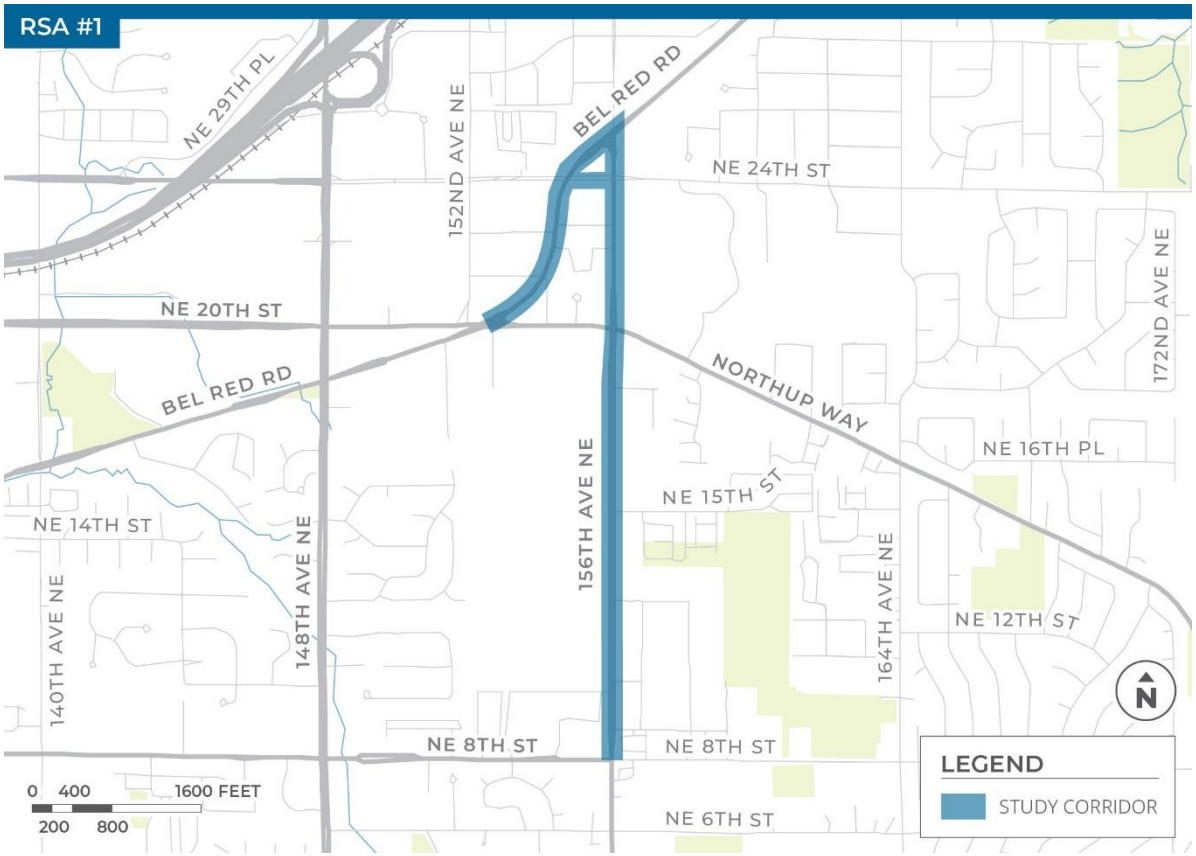
Taylor Whitaker

Sydney Weisman

Table of Contents

1.0 INTRODUCTION

The purpose of this study is to conduct a road safety assessment (RSA) for a study area that includes three segments and its intersections: 156th Avenue Northeast between Northeast 8th Steet and Bel-Red Road, Northeast 24th Steet between 156th Avenue Northeast and Bel-Red Road, and Bel-Red Road between 156th Avenue Northeast and Northeast 20th Street. This report was developed in accordance with the FHWA Road Safety Audit (RSA) guidelines and combines findings from crash data analysis, local input, and community walk audits.



WHAT IS A ROAD SAFETY ASSESSMENT?

PURPOSE

An RSA is a formal safety performance examination of a transportation system near a school by an expert audit team. The purpose of an RSA is to provide an in-depth understanding of crash causes and countermeasures prior to design or construction of potential mitigations. The RSA allows community members and agencies to proactively engage in conversation about road safety with the leadership of an independent party. This report will identify potential road safety issues and opportunities for improvements in safety.

PROCESS

2.0 STUDY AREA

The study area for this RSA is under the jurisdiction of the City of Bellevue. It includes four segments and their intersections as shown in Figure 2.1 and described in Table 2.1 below.

Table 2.1. RSA Study Area Segments

Segment	WSDOT Functional Classification[1]	Bellevue Arterial Classification[2]	Length	Speed Limit	Annual Average Weekday Traffic
156th Avenue Northeast between Northeast 8th Street and Bel-Red Road	Urban Minor Arterial	Minor Arterial	1.09 miles	30 mph	19700 (2024)
Northeast 24th Street between 156th Avenue Northeast and Bel-Red Road	Urban Minor Arterial	Minor Arterial	0.08 miles	30 mph	(not available)
Bel-Red Road between 156th Avenue Northeast and Northeast 20th Street	Urban Other Principal Arterial	Major Arterial	0.42 miles	35 mph	(not available)

[1] WSDOT Functional Classification Map: https://www.wsdot.wa.gov/data/tools/geoportal/?config=FunctionalClass
[2] Bellevue Arterial Classifications Map: http://apps.bellevuewa.gov/gisdownload/PDF/Transportation/arterials_11x17.pdf

Figure 2.1 displays the zoning based on the City of Bellevue Comprehensive Plan, pedestrian facilities, bike lanes and transit facilities within the study area.

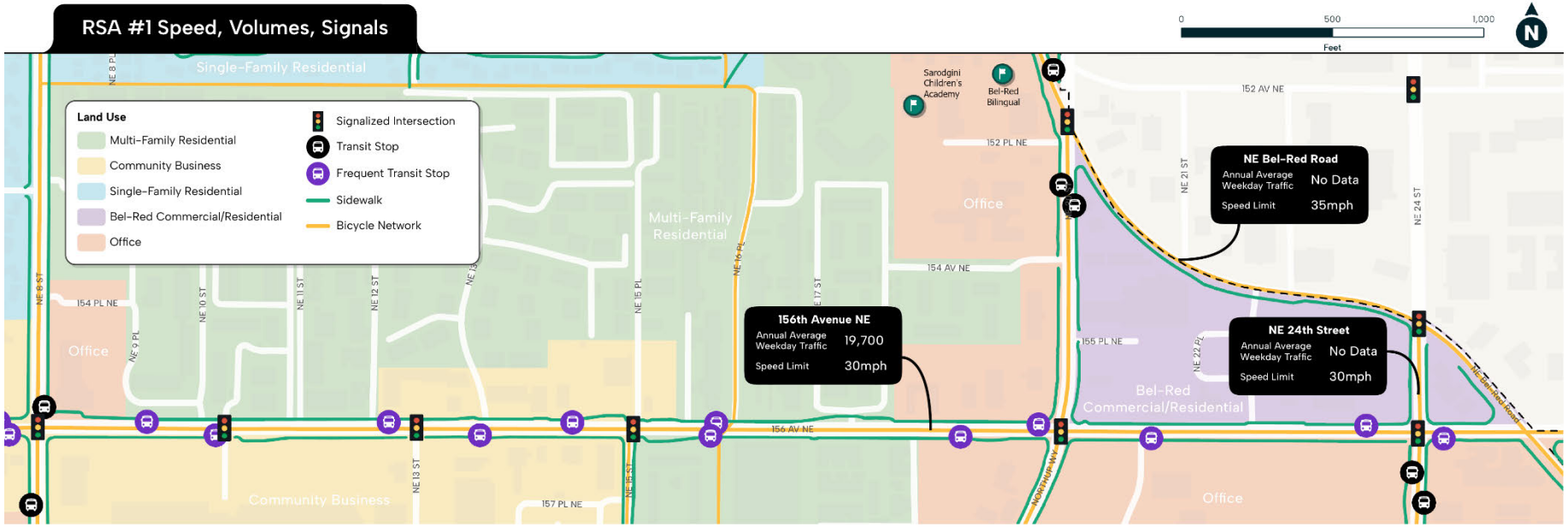


Figure 2.1. Zoning, Pedestrian Facilities, Bike Facilities, and Bus Stops Surrounding RSA #1 Study Area

Figures 2.2 to 2.4 show cross sections that are representative of each of the corridors in the study area.

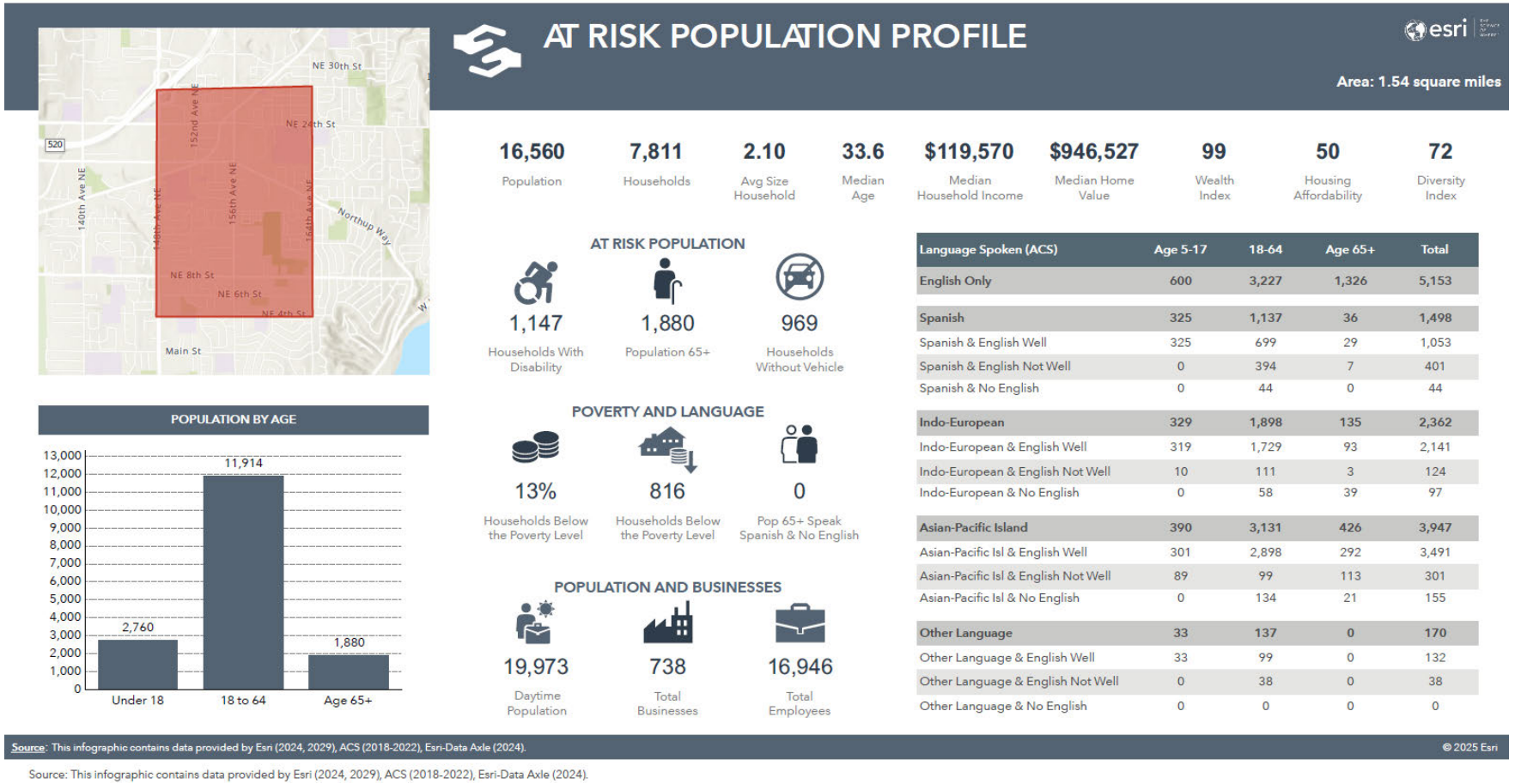
Figure 2.2. Typical Cross Section of 156th Ave NE (facing southbound near NE 13st St)

Figure 2.3. Typical Cross Section of NE 24th St (facing westbound near 156th Ave NE)

Figure 2.4. Typical Cross Section of Bel-Red Rd (facing southbound near NE 22 Pl)

ESRI DEMOGRAPHIC DATA

The following infographics were obtained from ESRI Business Analytics to provide additional data regarding the population within the RSA #1 study area.



Language Spoken (ACS)	Age 5-17	18-64	Age 65+	Total
English Only	600	3,227	1,326	5,153
Spanish	325	1,137	36	1,498
Spanish & English Well	325	699	29	1,053
Spanish & English Not Well	0	394	7	401
Spanish & No English	0	44	0	44
Indo-European	329	1,898	135	2,362
Indo-European & English Well	319	1,729	93	2,141
Indo-European & English Not Well	10	111	3	124
Indo-European & No English	0	58	39	97
Asian-Pacific Island	390	3,131	426	3,947
Asian-Pacific Isl & English Well	301	2,898	292	3,491
Asian-Pacific Isl & English Not Well	89	99	113	301
Asian-Pacific Isl & No English	0	134	21	155
Other Language	33	137	0	170
Other Language & English Well	33	99	0	132
Other Language & English Not Well	0	38	0	38
Other Language & No English	0	0	0	0

Source: This infographic contains data provided by Esri (2024, 2029), ACS (2018-2022), Esri-Data Axle (2024).

3.0 SIGNAL TIMING

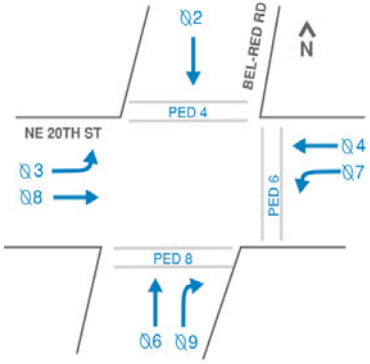
The following section provides the signal timing for intersections listed below:

- Bel-Red Road and Northeast 20th Street
- Bel-Red Road and Northeast 24th Steet
- 156th Avenue Northeast and Bel-Red Road
- 156th Avenue Northeast and Northeast 24th Steet
- 156th Avenue Northeast and Northeast 20th Steet (Northup)
- 156th Avenue Northeast and Northeast 15th Steet
- 156th Avenue Northeast and Northeast 13th Steet
- 156th Avenue Northeast and Northeast 10th Steet
- 156th Avenue Northeast and Northeast 8th St ; Left turns: Prot+perm, protected lefts; LPI, bike phase, Identify by approach.

Abbreviations:

- FYA P- = Protected-permissive with Flashing Yellow Arrow; (Ped Minus) Pedestrian phase not used during conflicting permissive phase
- Pro = Protected left turn phasing

Table 3.1. Signal Timing

<table>
<tr><th>Signal Phases</th><th>Signal Timing</th><th>Additional Notes</th></tr>
<tr>
<td>Bel-Red Road and Northeast 20th Street
 
</td>
<td>Bel-Red Road and Northeast 20th Street
<table>
<tr><th>Signal Phase</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th></tr>
<tr><td>Green Min</td><td>-</td><td>7</td><td>5</td><td>5</td><td>-</td><td>7</td><td>5</td><td>5</td></tr>
<tr><td>Yellow</td><td>-</td><td>3.6</td><td>3.6</td><td>3.6</td><td>-</td><td>3.6</td><td>3.6</td><td>3.6</td></tr>
<tr><td>Red</td><td>-</td><td>2.4</td><td>2.4</td><td>2.4</td><td>-</td><td>2.4</td><td>2.4</td><td>2.4</td></tr>
<tr><td>Average Split PM</td><td>-</td><td>40</td><td>16</td><td>34</td><td>-</td><td>40</td><td>19</td><td>31</td></tr>
<tr><td>Left Turn</td><td>-</td><td>-</td><td>Pro</td><td>-</td><td>-</td><td>-</td><td>Pro</td><td>-</td></tr>
<tr><td>Lead or Lag</td><td>-</td><td>-</td><td>lag</td><td>-</td><td>-</td><td>-</td><td>lead</td><td>-</td></tr>
</table>
<table>
<tr><th>Pedestrian Phase</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th></tr>
<tr><td>LPI</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Walk</td><td>-</td><td>-</td><td>-</td><td>9</td><td>-</td><td>8</td><td>-</td><td>7</td></tr>
<tr><td>Flash Don't Walk</td><td>-</td><td>-</td><td>-</td><td>13</td><td>-</td><td>26</td><td>-</td><td>23</td></tr>
</table></td>
<td>Cycle Length
Min = 80
Max = 125
Note:
Northbound right turn is protect with No Right Turn on Red
No left turns allowed for Bel-Red Road</td>
</tr>
<tr>
<td>Bel-Red Road and Northeast 24th Street
 
</td>
<td>Bel-Red Road and Northeast 24th Street
<table>
<tr><th>Signal Phase</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th></tr>
<tr><td>Green Min</td><td>5</td><td>7</td><td>-</td><td>5</td><td>5</td><td>7</td><td>-</td><td>5</td></tr>
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<tr><td>Red</td><td>1</td><td>1</td><td>-</td><td>1</td><td>1</td><td>1</td><td>-</td><td>1</td></tr>
<tr><td>Average Split PM</td><td>12</td><td>53</td><td>-</td><td>55</td><td>16</td><td>49</td><td>-</td><td>55</td></tr>
<tr><td>Left Turn</td><td>FYA</td><td>-</td><td>-</td><td>Perm</td><td>Pro</td><td>-</td><td>-</td><td>Perm</td></tr>
<tr><td>Lead or Lag</td><td>lag</td><td>-</td><td>-</td><td>-</td><td>lead</td><td>-</td><td>-</td><td>-</td></tr>
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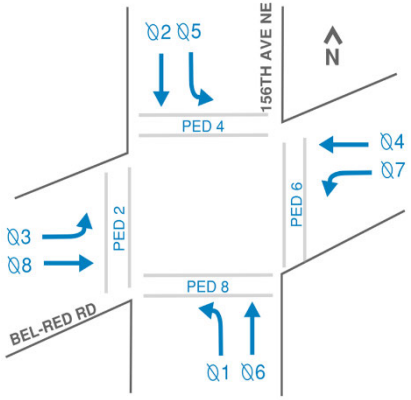
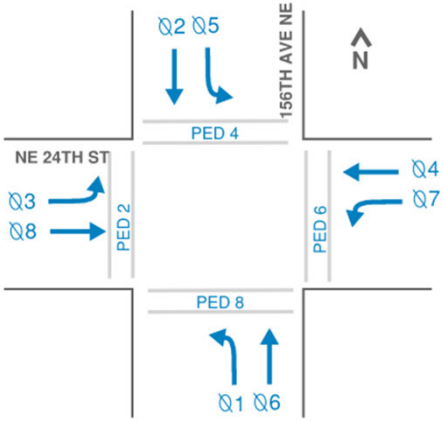
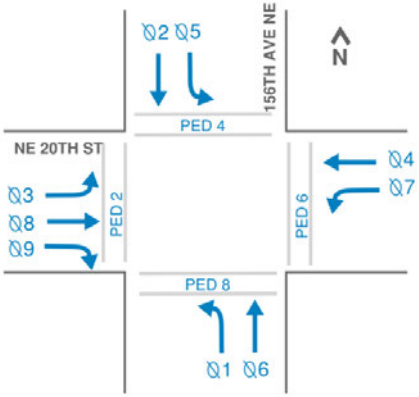
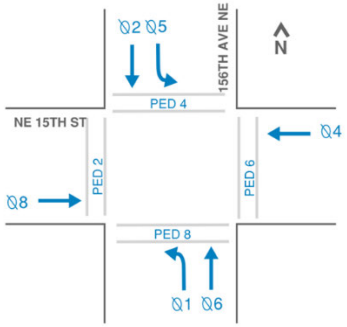
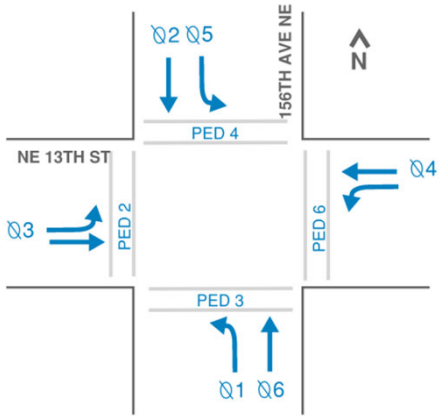
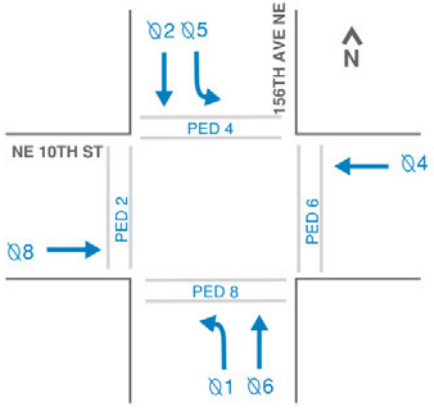
<table>
<tr><th>Pedestrian Phase</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th></tr>
<tr><td>LPI</td><td>-</td><td>5</td><td>-</td><td>5</td><td>-</td><td>5</td><td>-</td><td>5</td></tr>
<tr><td>Walk</td><td>-</td><td>7</td><td>-</td><td>7</td><td>-</td><td>7</td><td>-</td><td>7</td></tr>
<tr><td>Flash Don't Walk</td><td>-</td><td>22</td><td>-</td><td>20</td><td>-</td><td>15</td><td>-</td><td>18</td></tr>
</table></td>
<td>Cycle Length
Min = 80
Max = 125
Note:
Northbound left turn restricted from 4 to 6 pm</td>
</tr>
</table>

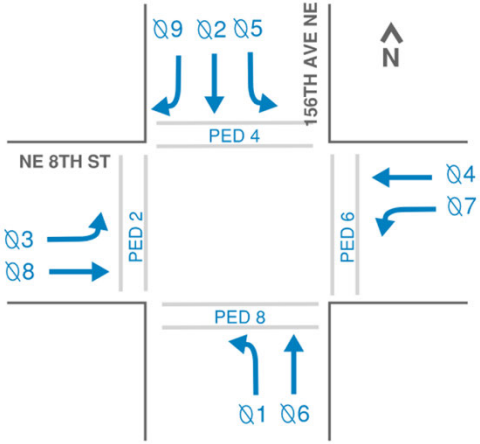
Signal Phases	Signal Timing	Additional Notes
156th Avenue Northeast and Bel-Red Road  	156th Avenue Northeast and Bel-Red Road **Signal Phase** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** Green Min | 5 | 7 | 5 | 7 | 5 | 7 | 5 | 7 Yellow | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 Red | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 Average Split PM | 12 | 57 | 15 | 36 | 14 | 55 | 16 | 35 Left Turn | FYA | - | FYA | - | FYA | - | FYA | - Lead or Lag | lag | - | lead | - | lead | - | lag | - **Pedestrian Phase** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** LPI | - | - | - | - | - | - | - | - Walk | - | 7 | - | 8 | - | 7 | - | 9 Flash Don't Walk | - | 18 | - | 19 | - | 18 | - | 19	Cycle Length Min = 80 Max = 125
156th Avenue Northeast and Northeast 24th Street  	156th Avenue Northeast and Northeast 24th Street **Signal Phase** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** Green Min | 5 | 7 | 5 | 5 | 5 | 7 | 5 | 5 Yellow | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 Red | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 Average Split PM | 17 | 52 | 13 | 38 | 15 | 54 | 13 | 38 Left Turn | FYA | - | FYA | - | FYA | - | FYA | - Lead or Lag | lag | - | lead | - | lead | - | lead | - **Pedestrian Phase** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** LPI | - | - | - | - | - | - | - | - Walk | - | 7 | - | 7 | - | 7 | - | 7 Flash Don't Walk | - | 14 | - | 14 | - | 16 | - | 15	Cycle Length Min = 80 Max = 125

Signal Phases	Signal Timing	Additional Notes
156th Avenue Northeast and Northeast 20th Street (Northup) 	156th Avenue Northeast and Northeast 20th Street (Northup) **Signal Phase** 1 2 3 4 5 6 7 8 Green Min 5 7 5 5 5 7 5 5 Yellow 4 4 4 4 4 4 4 4 Red 1 1 1 1 1 1 1 1 Average Split PM 19 60 13 28 24 55 13 28 Left Turn FYA - FYA - FYA - FYA - Lead or Lag lead - lead - lag - lead - **Pedestrian Phase** 1 2 3 4 5 6 7 8 LPI - 5 - 5 - 5 - 5 Walk - 7 - 7 - 7 - 7 Flash Don't Walk - 16 - 13 - 17 - 14	Cycle Length Min = 80 Max = 125 Notes: • Runs protected only during PM peak
156th Avenue Northeast and Northeast 15th Street 	156th Avenue Northeast and Northeast 15th Street **Signal Phase** 1 2 3 4 5 6 7 8 Green Min 5 7 - 5 5 7 - 5 Yellow 4 4 - 4 4 4 - 4 Red 1 1 - 1 1 1 - 1 Average Split PM 15 76 - 29 18 73 - 29 Left Turn FYA - - Perm FYA - - Perm Lead or Lag lag - - - lead - - - **Pedestrian Phase** 1 2 3 4 5 6 7 8 LPI - 5 - 5 - 5 - 5 Walk - 7 - 7 - 7 - 7 Flash Don't Walk - 7 - 13 - 11 - 17	Cycle Length Min = 80 Max = 125

Signal Phases	Signal Timing	Additional Notes
156th Avenue Northeast and Northeast 13th Street  	156th Avenue Northeast and Northeast 13th Street **Signal Phase** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** Green Min | 5 | 7 | 5 | 5 | 5 | 7 | - | - Yellow | 4 | 4 | 3.5 | 3.5 | 4 | 4 | - | - Red | 1 | 1 | 1 | 1 | 1 | 1 | - | - Average Split PM | 12 | 64 | 24 | 20 | 20 | 56 | - | - Left Turn | FYA | - | Split | Split | FYA | - | - | - Lead or Lag | lag | - | - | - | lead | - | - | - **Pedestrian Phase** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** LPI | - | 5 | 5 | 5 | - | 5 | - | - Walk | - | 7 | 7 | 7 | - | 7 | - | - Flash Don't Walk | - | 10 | 15 | 16 | - | 14 | - | -	Cycle Length Min = 90 Max = 125
156th Avenue Northeast and Northeast 10th Street  	156th Avenue Northeast and Northeast 10th Street **Signal Phase** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** Green Min | 5 | 7 | - | 5 | 5 | 7 | - | 5 Yellow | 4 | 4 | - | 3.5 | 4 | 4 | - | 3.5 Red | 1 | 1 | - | 1 | 1 | 1 | - | 1 Average Split PM | 15 | 80 | - | 25 | 15 | 80 | - | 25 Left Turn | FYA | - | - | Perm | FYA | - | - | Perm Lead or Lag | lead | - | - | - | lag | - | - | - **Pedestrian Phase** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** LPI | - | 5 | - | 5 | - | 5 | - | 5 Walk | - | 7 | - | 8 | - | 7 | - | 7 Flash Don't Walk | - | 7 | - | 13 | - | 10 | - | 13	Cycle Length Min = 80 Max = 125

Signal Phases

156th Avenue Northeast and Northeast 8th Street



Signal Timing

156th Avenue Northeast and Northeast 8th Street

Signal Phase	1	2	3	4	5	6	7	8
Green Min	5	7	5	5	5	7	5	5
Yellow	4	4	4	4	4	4	4	4
Red	1	1	1	1	1	1	1	1
Average Split PM	13	63	19	25	15	61	19	25
Left Turn	FYA	-	FYA	-	FYA	-	FYA	-
Lead or Lag	lag	-	lag	-	lead	-	lead	-
Pedestrian Phase	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
LPI	-	5	-	5	-	5	-	5
Walk	-	8	-	7	-	7	-	8
Flash Don't Walk	-	13	-	16	-	15	-	14

Additional Notes

Cycle Length

Min = 80

Max = 125

Notes:

- Phase 9 is right turn overlap phase

4.0 COLLISION HISTORY

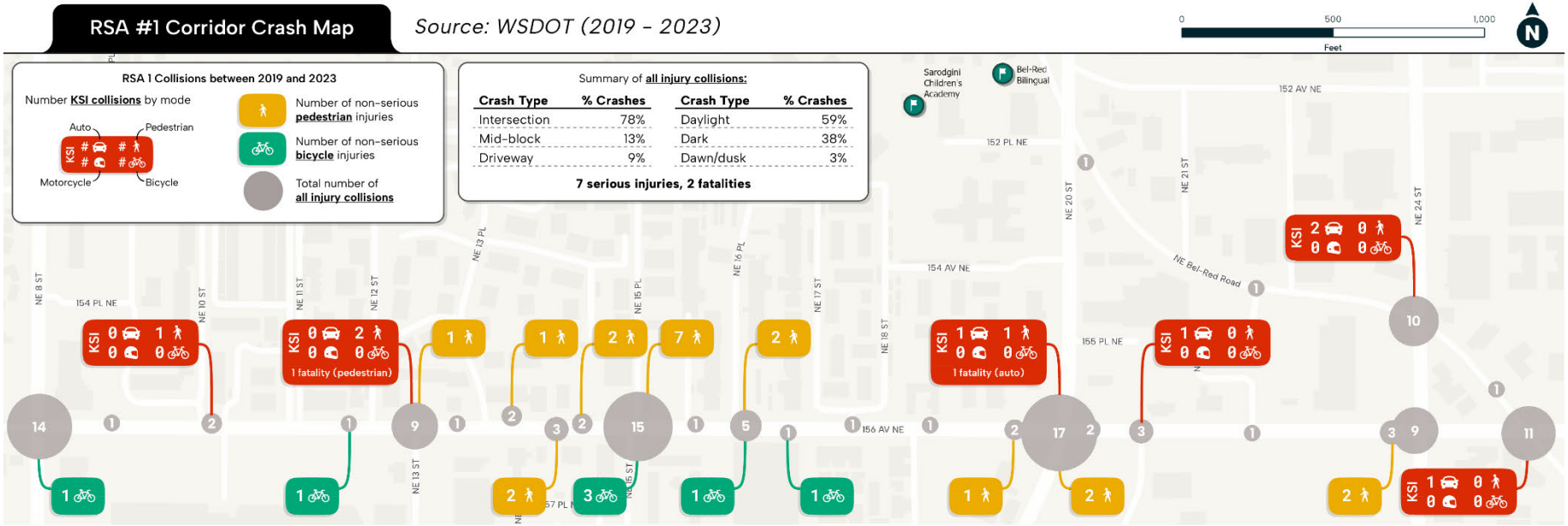


Figure 4.1. 2019 to 2023 Crash History for RSA #1 Study Area

5.0 COLLISION THEMES CORRIDOR-WIDE

Collision data records were evaluated for incidents occurring within the study area during the most recent five years of available data. The study team acquired crash data from the WSDOT Public Disclosure Request Center database between January 2019 to December 2024 (preliminary). During this time period, 334 crashes occurred within the RSA #1 study area, including two fatal and seven suspected serious injury crashes. As illustrated in Figure 5.1, over the past five years, the number of crashes fluctuated, with the highest number of crashes in 2022. Figure 5.2 displays the crash type by severity, revealing that the highest proportion of crashes involved an opposite direction left turn collisions.

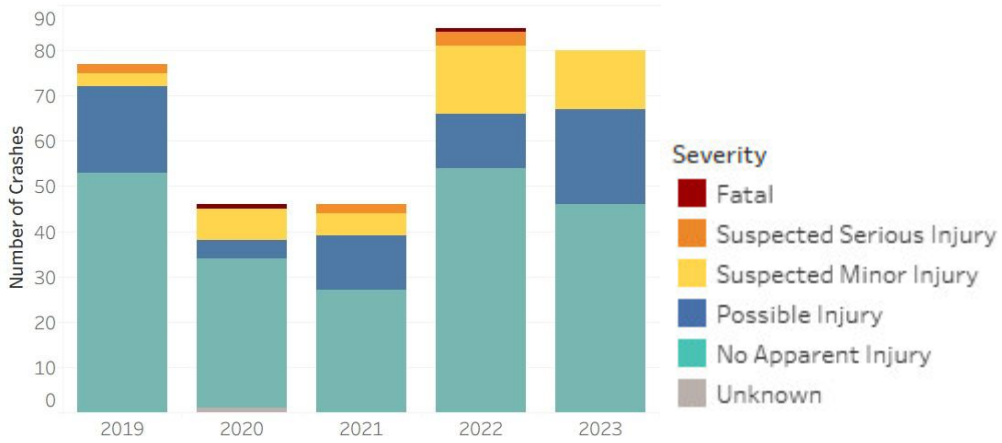


Figure 5.1. Number of Crashes by Severity for RSA #1 Study Area, 2019-2023

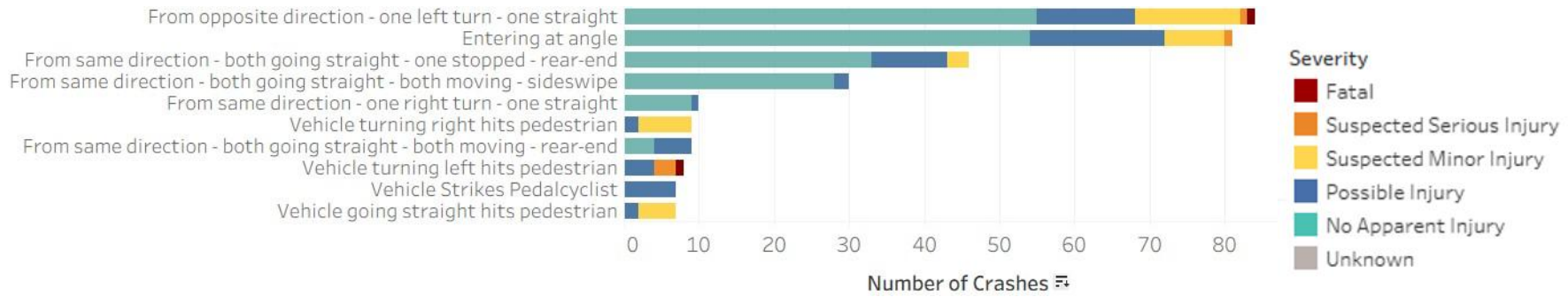


Figure 5.2. Top Ten Collision Types within the RSA #1 Study Area, 2019-2023

Figure 5.3 shows the number of collisions by contributing circumstance and severity. Figure 5.4 provides a crash tree of collisions by severity and type of location (intersection or non-intersection).

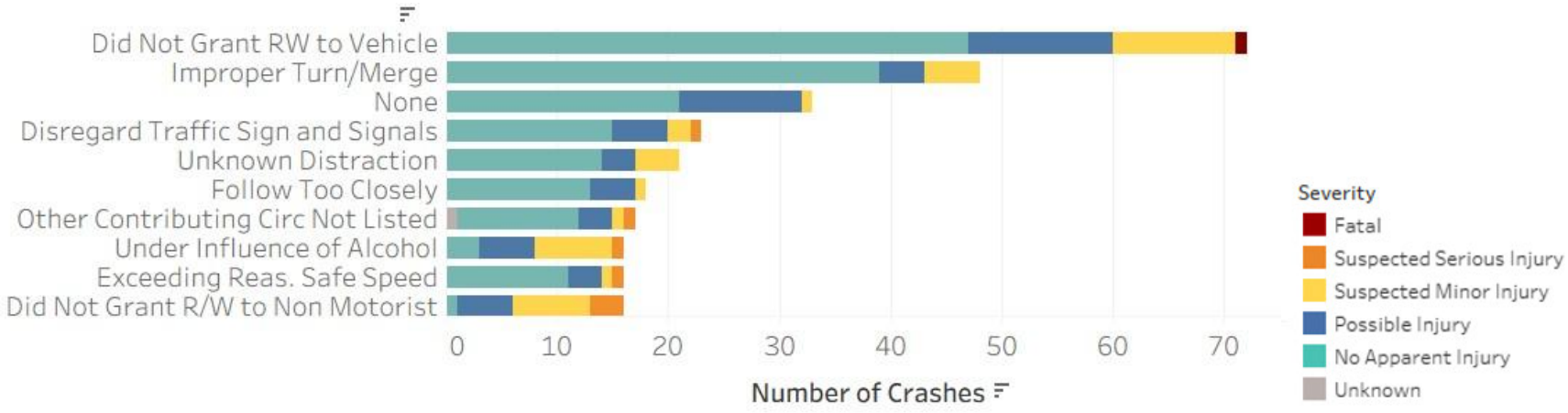


Figure 5.3. Top Contributing Circumstances for all Collisions within the RSA #1 Study Area, 2019-2023

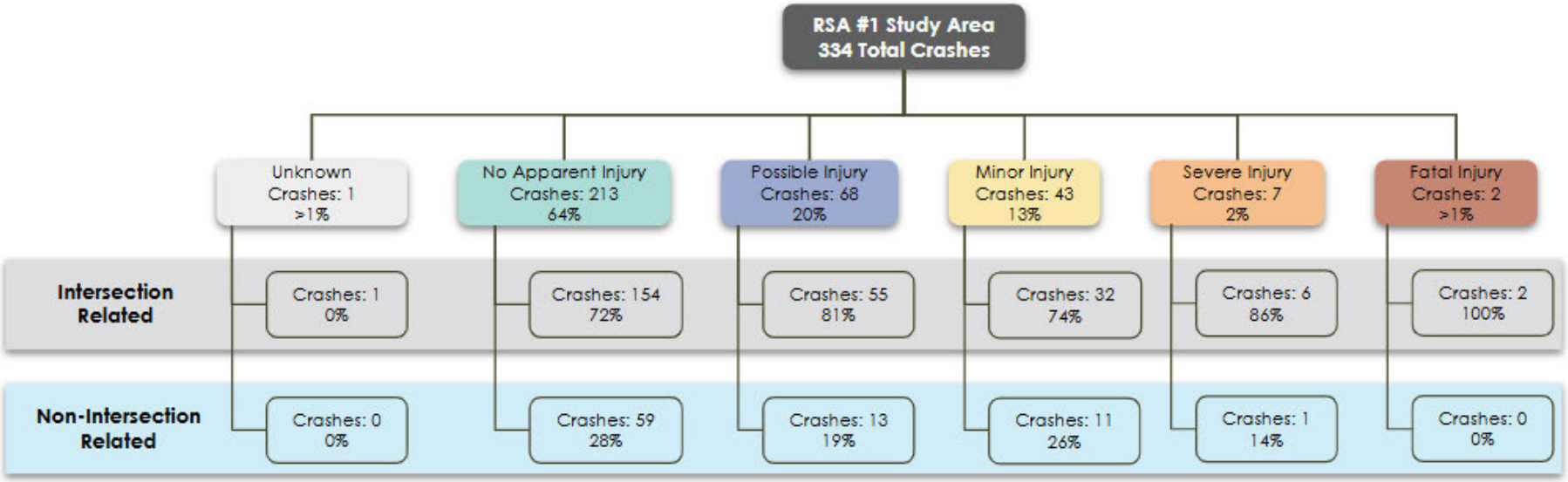


Figure 5.4. Crash Tree of Collision Severity by Location Type

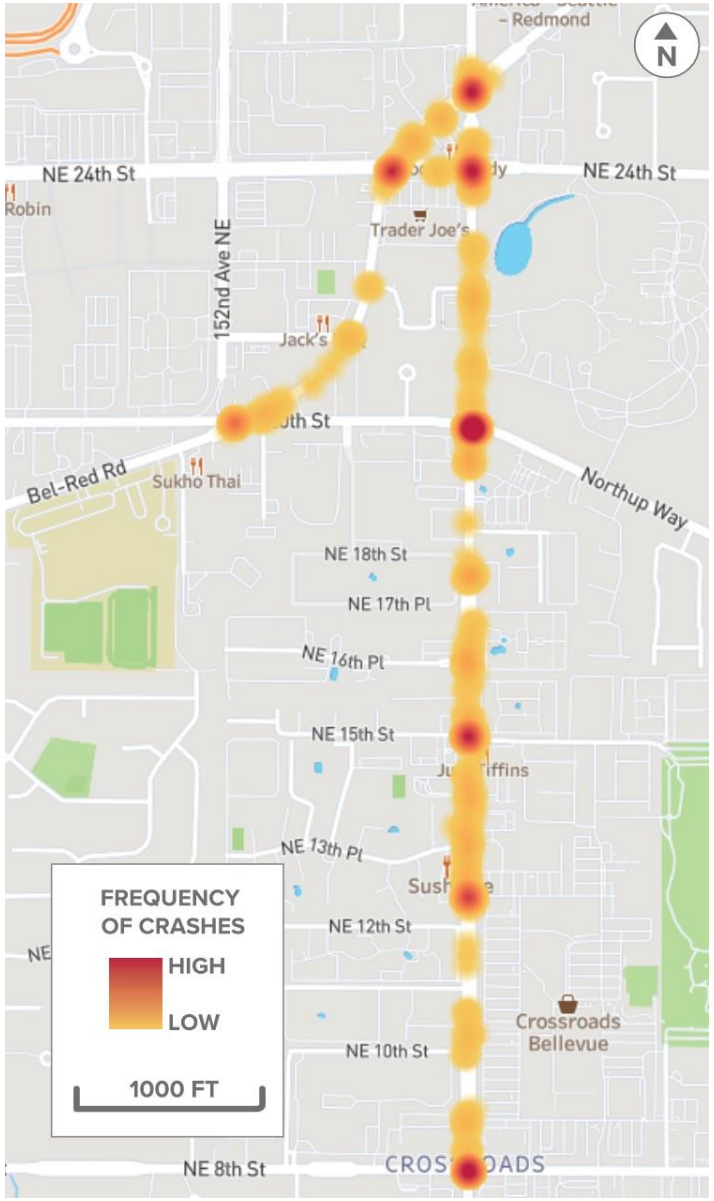


Figure 5.5. Heat Map of all Collisions for RSA #1

Table 5.1. Fatal and Serious Injury Collisions for RSA 1

Location	Report Number	Date	Time	Injury Severity (Fatal or Serious)	Ped or Bike or Neither	Surface Condition	Lighting Condition	Vehicle 1 Movement	Contributing Circumstance
Northeast 24th Street and Bel-Red Road	EC67495	JULY 22, 2022	23:31	Serious Injury	Neither	Dry	Dark-Street Lights on	Entering at Angle	Disregard Traffic Signal
Northeast 24th Street and Bel-Red Road	EB57049	AUG 9, 2021	10:16	Serious Injury	Neither	Dry	Daylight	From Opposite Direction (One-left turn and one straight)	Not listed
158th Court Northeast and 156th Ave Northeast	EC83558	SEPT 11, 2022	02:05	Serious Injury	Neither	Dry	Dark-Street Lights on	Hit Metal Sign Post	Under Influence of Alcohol
Northup Way and 156th Avenue Northeast	EC67143	AUG 15, 2022	08:00	Fatal	Neither	Dry	Daylight	From Opposite Direction (One-left turn and one straight)	Did not grant ROW to vehicle
Northup Way and 156th Avenue Northeast	EC00462	DEC 10, 2021	12:39	Serious Injury	1 Ped	Wet	Daylight	Vehicle turning left hits ped	Did not grant ROW to ped

Location	Report Number	Date	Time	Injury Severity (Fatal or Serious)	Ped or Bike or Neither	Surface Condition	Lighting Condition	Vehicle 1 Movement	Contributing Circumstance
Northeast 13th Avenue and 156th Avenue Northeast	EC94362	OCT 14, 2022	06:54	Serious Injury	2 Ped	Dry	Dark-Street Lights on	Vehicle turning left hits ped	Did not grant ROW to ped
Northeast 13th Avenue and 156th Avenue Northeast	EA22336	MARCH 6, 2020	20:25	Fatal	1 Ped	Dry	Dark-Street Lights on	Vehicle turning left hits ped	Distracted Driver
Northeast 10th Avenue and 156th Avenue Northeast	E986725	NOV 18, 2019	19:21	Serious Injury	1 Ped	Wet	Dark-Street Lights on	Vehicle turning left hits ped	Did not grant ROW to ped
Bel Red Road and 156th Avenue Northeast	E966643	SEPT 29, 2019	4:20	Serious Injury	Neither	Wet	Dark- No Street Lights	Tree or Stump (stationary)	Exceeding Reas. Safe Speed

Source: Fehr & Peers, City of Bellevue, WSDOT (2019-2023)

6.0 SPEED PROFILES

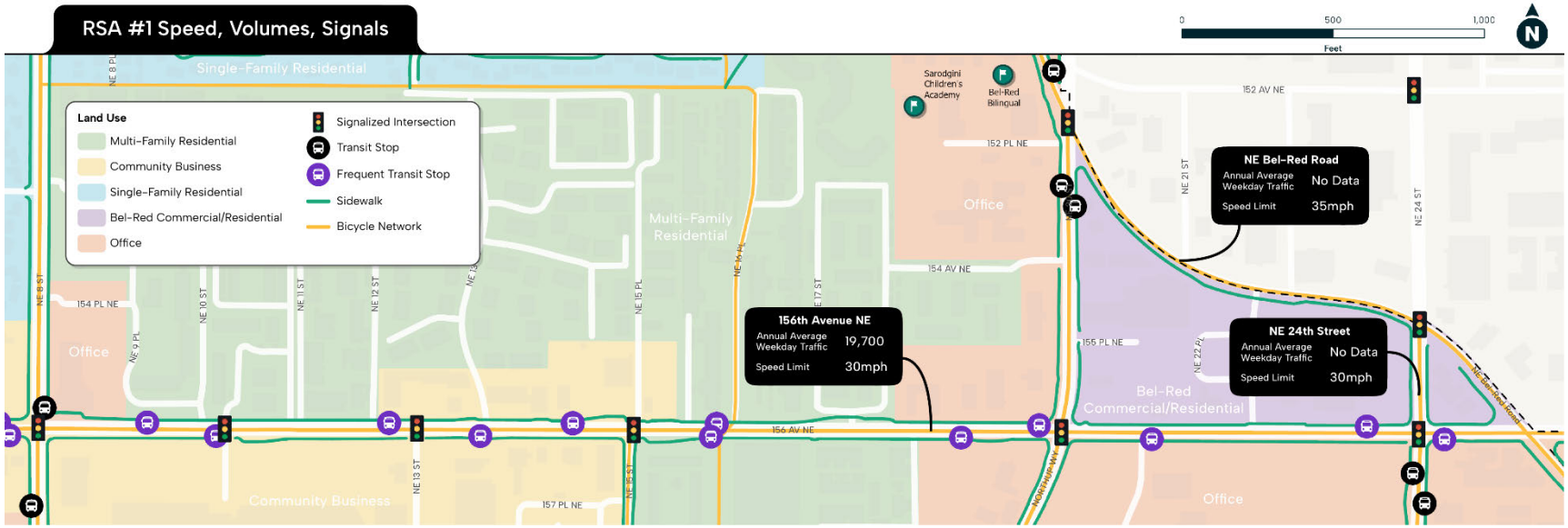


Figure 6.1. Location of Speed Studies in the RSA #1 Study Area

The City of Bellevue collected speed data at one location within the RSA #1 study area, as detailed in the table below.

Table 6.1. Summary Speed Statistics

Location	Posted Speed Limit (mph)	Direction	50th Percentile [median] (mph)	85th Percentile (mph)	95th Percentile (mph)	Average Speed (mph)
156th Avenue Northeast south of Northeast 24th Street	30 mph	Northbound	33.9	38.8	42.4	34.0
		Southbound	30.9	37.7	41.5	29.2

Target Speeds

The City of Bellevue is completing a comprehensive evaluation of speed limits for all streets in the city that currently have a posted speed limit of 30 mph or more. The primary purpose of this citywide evaluation is to improve the safety for all people on Bellevue streets. For each street, the city is collecting speed study data, and developing a target speed based on the Target Speeds Framework. The framework looks at two factors to determine speed limits: conflict density and activity level.

- Conflict Density is how frequently potential conflicts arise between different road users. It is split into two categories:
    - Modal Mixing looks at how people using different travel modes interact with each other. How much separation is there between people walking and rolling, cycling and driving?
    - Crossing Point Density measures how many opportunities there are for people to cross or enter the street where people are driving?
- Activity Level describes how active a street is now or is expected to be in the near future. It considers how many people are walking and rolling, what sort of public spaces are next to the road, current or future bike routes, transit usage, and curbside demand (ex. parking, delivery drivers).

2025 - RSA #1 (Bel-Red Road, Northeast 24th Street, 156th Avenue Northeast)

Bel-Red Road

This segment of Bel-Red Road is a major arterial with a posted speed limit of 35 mph. Based on the following observations the anticipated target speed is 25 mph. Target speeds are expected to be confirmed in 2026.

- Modal Mixing: High
- Crossing Point Density: High
- Activity Level: High

Northeast 24th Street

This segment of NE 24th Street is a minor arterial with a posted speed limit of 30 mph. Based on the following observations the anticipated target speed is 25 mph. Target speeds are expected to be confirmed in 2026.

- Modal Mixing: High
- Crossing Point Density: Moderate
- Activity Level: Moderate

156th Avenue Northeast

This segment of 156th Avenue Northeast is a minor arterial with a posted speed limit of 30 mph. Based on the following observations the anticipated target speed is 25 mph. Target speeds are expected to be confirmed in 2026.

- Modal Mixing: High
- Crossing Point Density: High
- Activity Level: High

7.0 OTHER PROJECTS

The City of Bellevue has several future projects planned within the study area. The following section provides descriptions and concept plans for future projects.

CROSSROADS CONDOS WATER MAIN REPLACEMENT

This project will replace the existing 8" AC mains and services pipe withing the condo complex. Construction is planned for late spring or early fall 2025. The project area of the water main replacement project is shown in Figure 7.1.

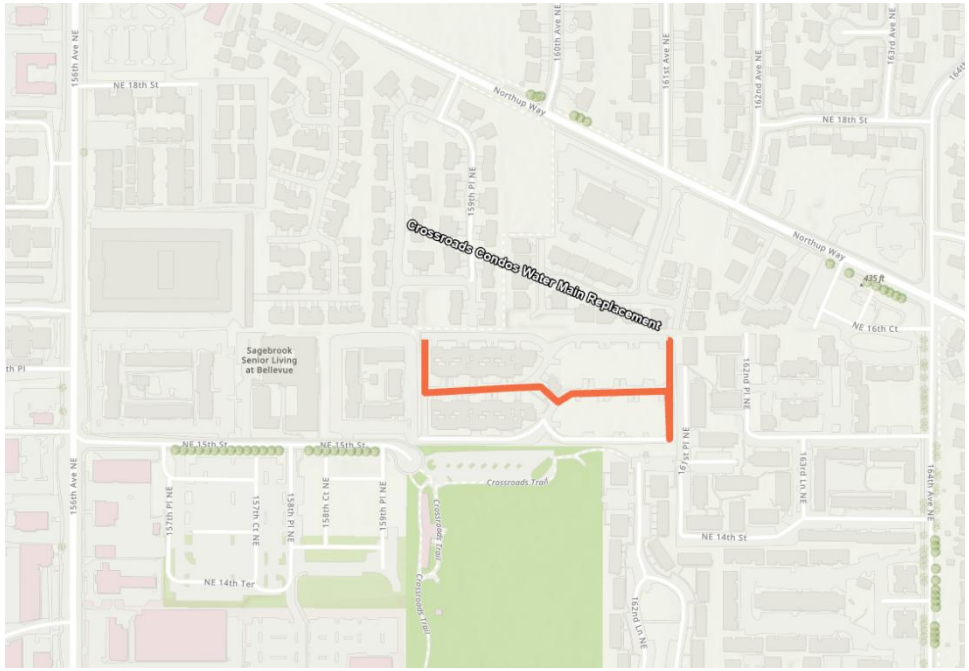


Figure 7.1. Project Area of Water Main Replacement Project

8.0 PUBLIC FEEDBACK: COMMUNITY WALK AUDITS

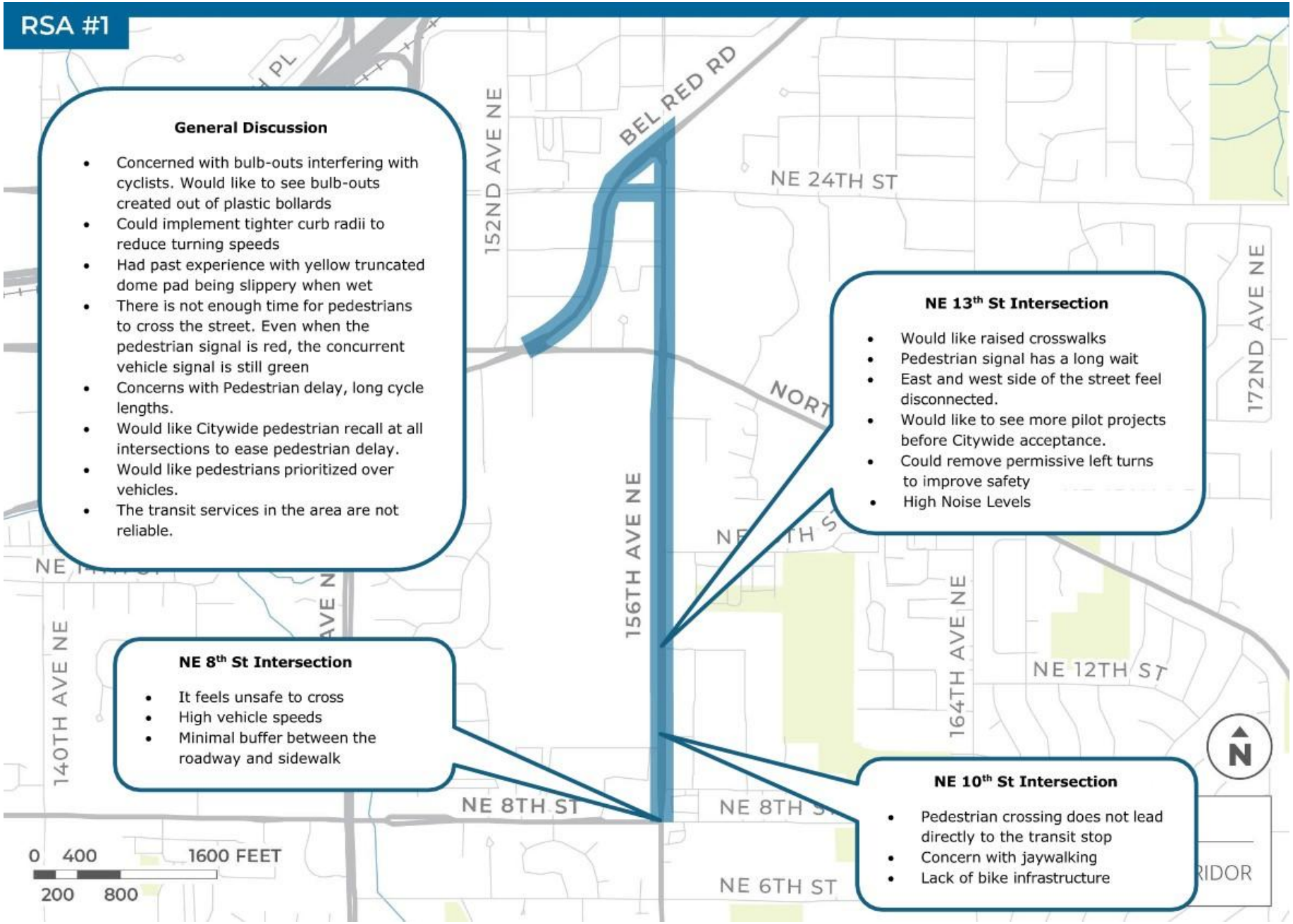
The study team conducted extensive field work with community members and City of Bellevue staff to collect information and insights regarding the study for RSA #1. The following section will summarize the findings from the field visit.

COMMUNITY WALKING AUDITS

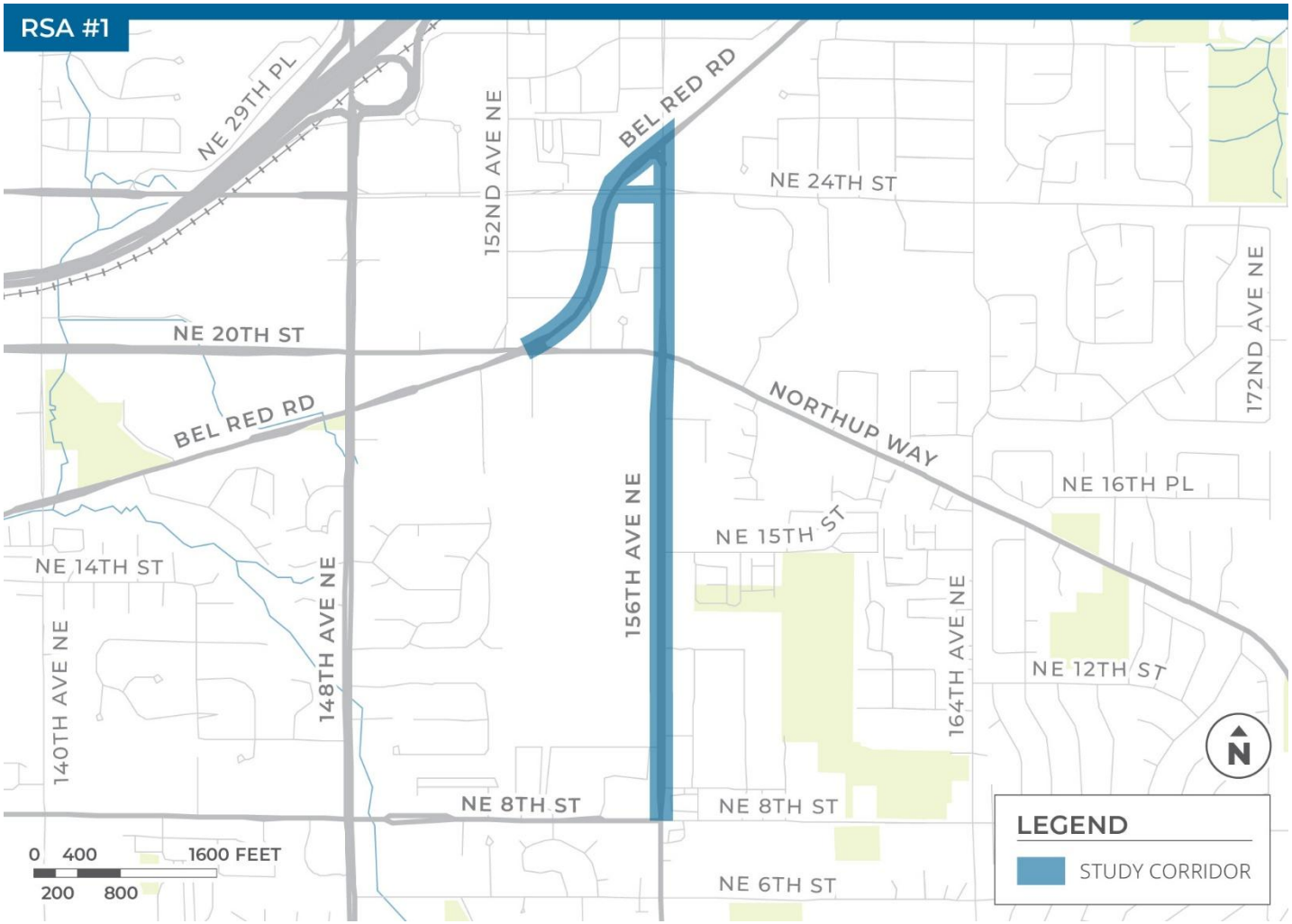
After extensive public outreach effort by City staff, the consultant team conducted a community walking audit on May 31st, 2025, to visit the site and gather feedback from the public. During the community walking audit, the study team was able to collect valuable insights, stories, concerns, and ideas from local community members who live within the study area.

COMMUNITY WALKING AUDIT FEEDBACK

The following comments were collected from the May 31st, 2025, community walking audit:


RSA #1
General Discussion
Concerned with bulb-outs interfering with cyclists. Would like to see bulb-outs created out of plastic bollards
Could implement tighter curb radii to reduce turning speeds
Had past experience with yellow truncated dome pad being slippery when wet
There is not enough time for pedestrians to cross the street. Even when the pedestrian signal is red, the concurrent vehicle signal is still green
Concerns with Pedestrian delay, long cycle lengths.
Would like Citywide pedestrian recall at all intersections to ease pedestrian delay.
Would like pedestrians prioritized over vehicles.
The transit services in the area are not reliable.
NE 13th St Intersection
Would like raised crosswalks
Pedestrian signal has a long wait
East and west side of the street feel disconnected.
Would like to see more pilot projects before Citywide acceptance.
Could remove permissive left turns to improve safety
High Noise Levels
NE 8th St Intersection
It feels unsafe to cross
High vehicle speeds
Minimal buffer between the roadway and sidewalk
NE 10th St Intersection
Pedestrian crossing does not lead directly to the transit stop
Concern with jaywalking
Lack of bike infrastructure
BEL RED RD
152ND AVE NE
156TH AVE NE
164TH AVE NE
172ND AVE NE
140TH AVE NE
NE 24TH ST
NE 12TH ST
NE 8TH ST
NE 6TH ST
0 400 1600 FEET
200 800
N

MAP FOR FIELD NOTES



Appendix B. Survey Results

Project Report

15 November 2018 - 25 August 2025

Engaging Bellevue

2025 Road Safety Assessments

GRANICUS

Visitors Summary

Pageviews Visitors

Highlights

TOTAL VISITS
238

MAX VISITORS PER DAY
27

NEW REGISTRATIONS
0

ENGAGED VISITORS
41

INFORMED VISITORS
91

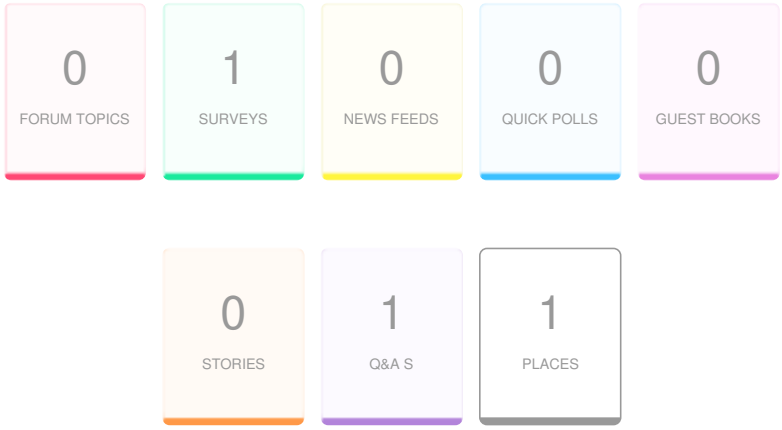
AWARE VISITORS
168

Aware Participants	168
Aware Actions Performed	**Participants**
Visited a Project or Tool Page	168

Informed Participants	91
Informed Actions Performed	**Participants**
Viewed a video	0
Viewed a photo	0
Downloaded a document	0
Visited the Key Dates page	6
Visited an FAQ list Page	0
Visited Instagram Page	0
Visited Multiple Project Pages	44
Contributed to a tool (engaged)	41

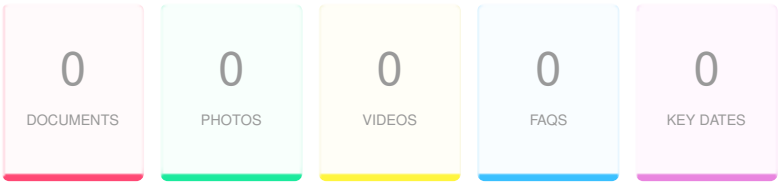
Engaged Participants	41		
Engaged Actions Performed	**Registered**	**Unverified**	**Anonymous**
Contributed on Forums	0	0	0
Participated in Surveys	3	11	25
Contributed to Newsfeeds	0	0	0
Participated in Quick Polls	0	0	0
Posted on Guestbooks	0	0	0
Contributed to Stories	0	0	0
Asked Questions	0	0	0
Placed Pins on Places	3	1	0
Contributed to Ideas	0	0	0

ENGAGEMENT TOOLS SUMMARY



Tool Type	Engagement Tool Name	Tool Status	Visitors	Contributors		
				Registered	Unverified	Anonymous
Qanda	Ask a Question	Published	3	0	0	0
Place	Interactive Map	Published	26	3	1	0
Survey Tool	Questionnaire	Archived	78	3	11	25

INFORMATION WIDGET SUMMARY



Widget Type	Engagement Tool Name	Visitors	Views/Downloads
Key Dates	Key Date	6	6

ENGAGEMENT TOOL: PLACE

Interactive Map

Visitors 26	Contributors 4	CONTRIBUTIONS 13

2025-05-15 21:11:53 -0700
[redacted]

CATEGORY
Biking Comment
VOTES
0

bike lane abruptly ends before steep hill. When heading East, cars do not always see me clearly over the crest of the hill when they need to slow down behind me in the shar ed lane. Heading West, I obstruct traffic or deal with uneven sidewalks climbing the hill.
Address: 1-55 108th Ave NE, Bellevue, WA, 98004, USA

http://www.engagingbellevue.com/2025-rsa/places/interactive-map?marker=128652

2025-05-15 21:15:02 -0700
[redacted]

CATEGORY
Walking Comment
VOTES
1

Drivers in this intersection at rush hour can be very aggravated, which is when I have e xperienced a few reckless turns into pedestrian crossings.
Address: 1-17 Bellevue Way NE, Bellevue, WA, 98004, USA

http://www.engagingbellevue.com/2025-rsa/places/interactive-map?marker=128653

2025-05-15 21:19:05 -0700
[redacted]

CATEGORY
Biking Comment
VOTES
0

I will occasionally ride west down this street toward the Safeway, and find the road mar kings on the right side to be confusing. I want to get out of traffic, and there seems to b e space outside the driving lane, but then I reach the intersection at 106th and need to merge with the lane to continue.
Address: 202 106th Pl NE, Bellevue, WA, 98004, USA

http://www.engagingbellevue.com/2025-rsa/places/interactive-map?marker=128654

2025-05-16 10:54:27 -0700
[redacted]

CATEGORY
Biking Comment
VOTES
1

This corridor needs to connect to the bike path in Redmond (Microsoft)
Address: 156th Ave NE, Bellevue, WA, 98008, USA

http://www.engagingbellevue.com/2025-rsa/places/interactive-map?marker=128656

2025-05-18 11:27:41 -0700
[redacted]

CATEGORY
Biking Comment
VOTES
0

Starting from the overlake village station. I bike / walk down this corridor every day to g et to work. I wish it fully connected to the bike path. A fair amount of people walk aroun d this corridor. But the sidewalks on some parts are far to narrow. I've had to dismount a lot out of courtesy for pedestrians. I've seen cars eager to turn right almost hit pedest rians various times now. In particular the high schools students down the road. Further more, on the exact intersection I've located the signal to start walking doesn't make a s ound on all of them. So it would be nice to see that fixed. Would be a nice quality of life fix.
Address: 156th Ave NE, Bellevue, WA, 98008, USA

http://www.engagingbellevue.com/2025-rsa/places/interactive-map?marker=128716

ENGAGEMENT TOOL: PLACE

Interactive Map

2025-05-18 11:33:25 -0700

[redacted]

CATEGORY

Biking Comment

VOTES

0

I work at the Bellevue Technology Center and I wish it was easier to bike to Crossroads Bellevue for lunch. But I generally don't bother since it's not a pleasant journey. The sid ewalk is far too narrow for biking. Walking would take too much time.
Address: 156th Ave NE, Bellevue, WA, 98008, USA

http://www.engagingbellevue.com/2025-rsa/places/interactive-map?marker=128717

2025-05-18 11:35:50 -0700

[redacted]

CATEGORY

Biking Comment

VOTES

0

This intersection in particular is very awkward for biking. Everyday I slightly traverse int o the car lanes for a smooth journey. It's designed in a way that's only friendly toward p edestrians. Ideally it would be great for both pedestrians and bikers.
Address: Bel Red Rd, Bellevue, WA, 98007, USA

http://www.engagingbellevue.com/2025-rsa/places/interactive-map?marker=128718

2025-05-18 11:40:09 -0700

[redacted]

CATEGORY

Biking Comment

VOTES

0

From the Overlake Village Station this is by far the best way to connect to the corridor i n question if you are biking.
Address: Graham Ave NE, Redmond, WA, 98052, USA

http://www.engagingbellevue.com/2025-rsa/places/interactive-map?marker=128719

2025-05-18 11:45:25 -0700

[redacted]

CATEGORY

Walking Comment

VOTES

0

Wish there was a midpoint to cross the road. Instead of having to walk all the way from one direction to the other. Would also help discourage all the cars speeding down the r oad.
Address: 2211-2211 156th Ave NE, Bellevue, WA, 98007, USA

http://www.engagingbellevue.com/2025-rsa/places/interactive-map?marker=128720

2025-05-26 18:38:30 -0700

[redacted]

CATEGORY

Biking Comment

VOTES

0

Main should have bike lanes from Bellevue Way west to 100th. It would connect the bik e lanes striped and marked on Main east of Bellevue Way to the bike friendly Lake Was hington Blvd west of 100th
Address: EV Charging Station, 2663 106Th Avenue Northeast, Bellevue, WA, 98004, USA

http://www.engagingbellevue.com/2025-rsa/places/interactive-map?marker=128894

ENGAGEMENT TOOL: PLACE

Interactive Map

2025-05-26 18:41:36 -0700

[redacted]

CATEGORY

Biking Comment

VOTES

0

There is no place to bike safely through here. Too many driveway entrances, 4 lanes of traffic, no bike lanes.
Address: Us Bank N A, 1128 156Th Avenue Northeast, Bellevue, WA, 98007, USA

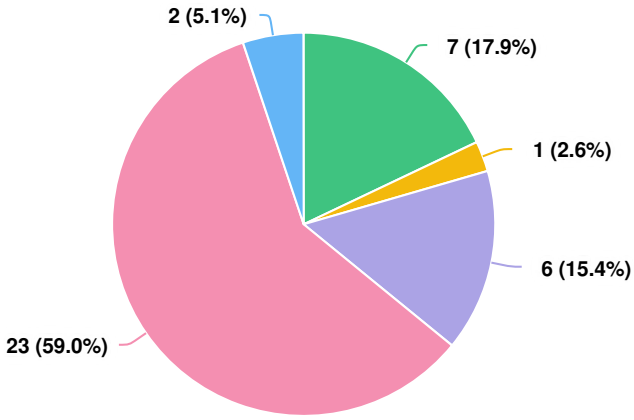
http://www.engagingbellevue.com/2025-rsa/places/interactive-map?marker=128895

ENGAGEMENT TOOL: SURVEY TOOL

Questionnaire

Visitors 78	Contributors 39	CONTRIBUTIONS 39

What is the most common way you travel within Bellevue? (Select one)



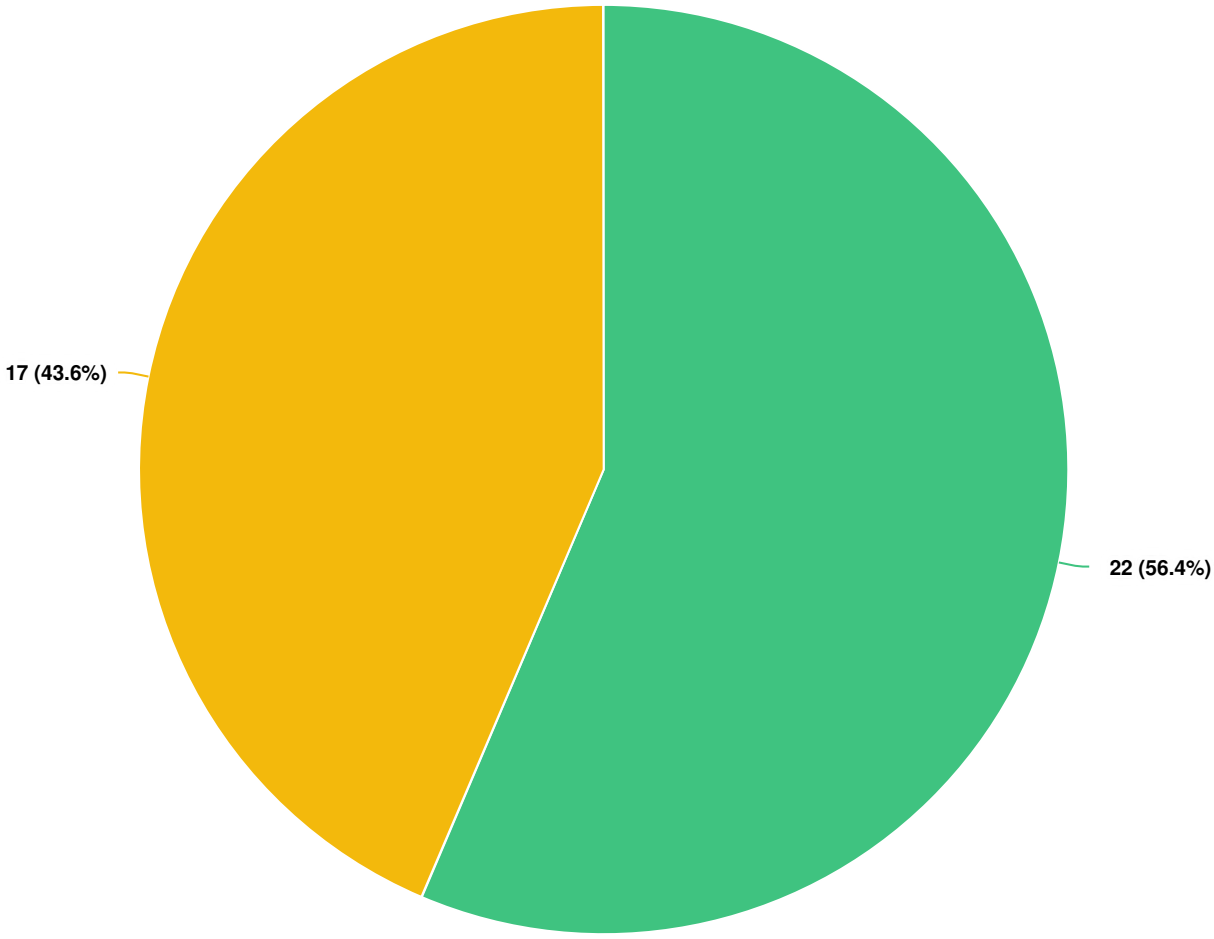
Question options

Walking | Using a wheelchair or mobility device | Biking | Driving | Taking transit (e.g. bus)

Optional question (39 response(s), 0 skipped)

Question type: Radio Button Question

Do you walk or use a wheelchair/mobility device along any of the streets highlighted in the study areas?



Question options

Yes No

Optional question (39 response(s), 0 skipped)

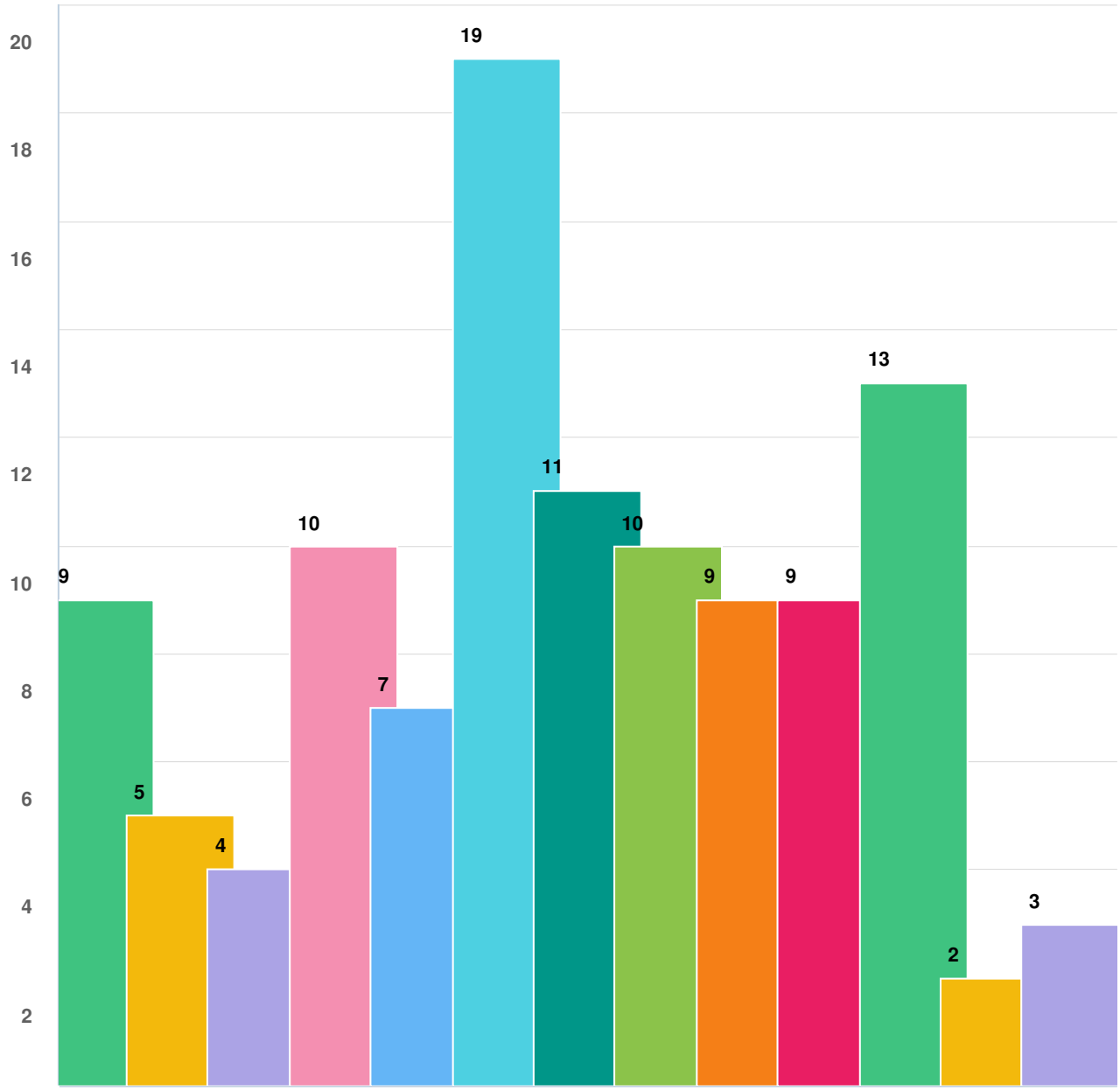
Question type: Radio Button Question

For streets within the study areas that you walk or roll along, please indicate how safe and comfortable you feel while walking or rolling:

Optional question (37 response(s), 2 skipped)

Question type: Likert Question

If you do not walk or feel unsafe/uncomfortable walking or rolling along any of the streets in the study areas, please help us understand why. Mark all selections below that apply. (Note: You will have the opportunity to specify locations on the in...



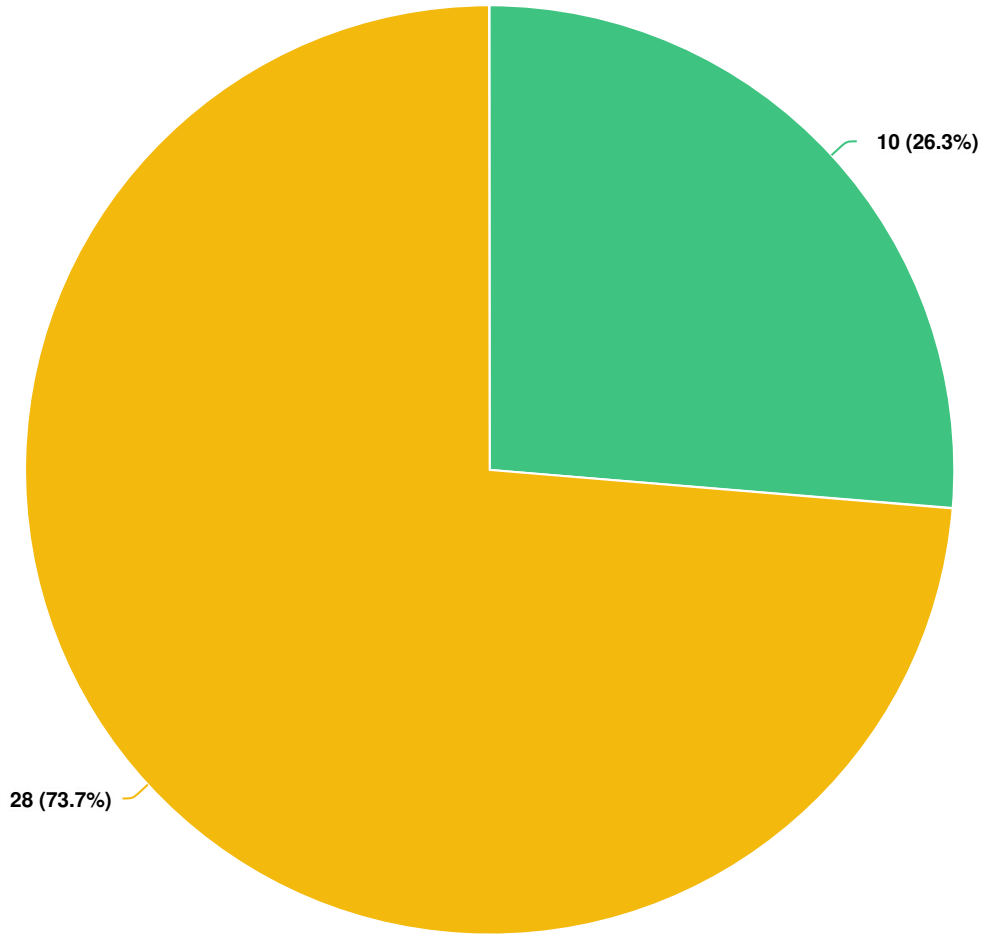
Question options

- Other (please specify)
- I don't know/I have no opinion
- I feel there isn't enough separation between me and traffic
- I feel people run red lights or stop signs
- I feel people don't see me
- I feel there are not enough safe opportunities to cross
- I feel there is too much traffic
- I feel people are driving too fast
- I feel there are barriers that prevent me from walking (e.g., tripping hazards, blocking objects, etc.)
- I feel people who are driving do not yield to me
- I don't walk here because there's not enough space for me
- I don't walk here because there's not a continuous route to my destination
- I don't walk here because it's not a convenient route for me

Optional question (34 response(s), 5 skipped)

Question type: Checkbox Question

Do you bike along any of the streets highlighted in the study areas?



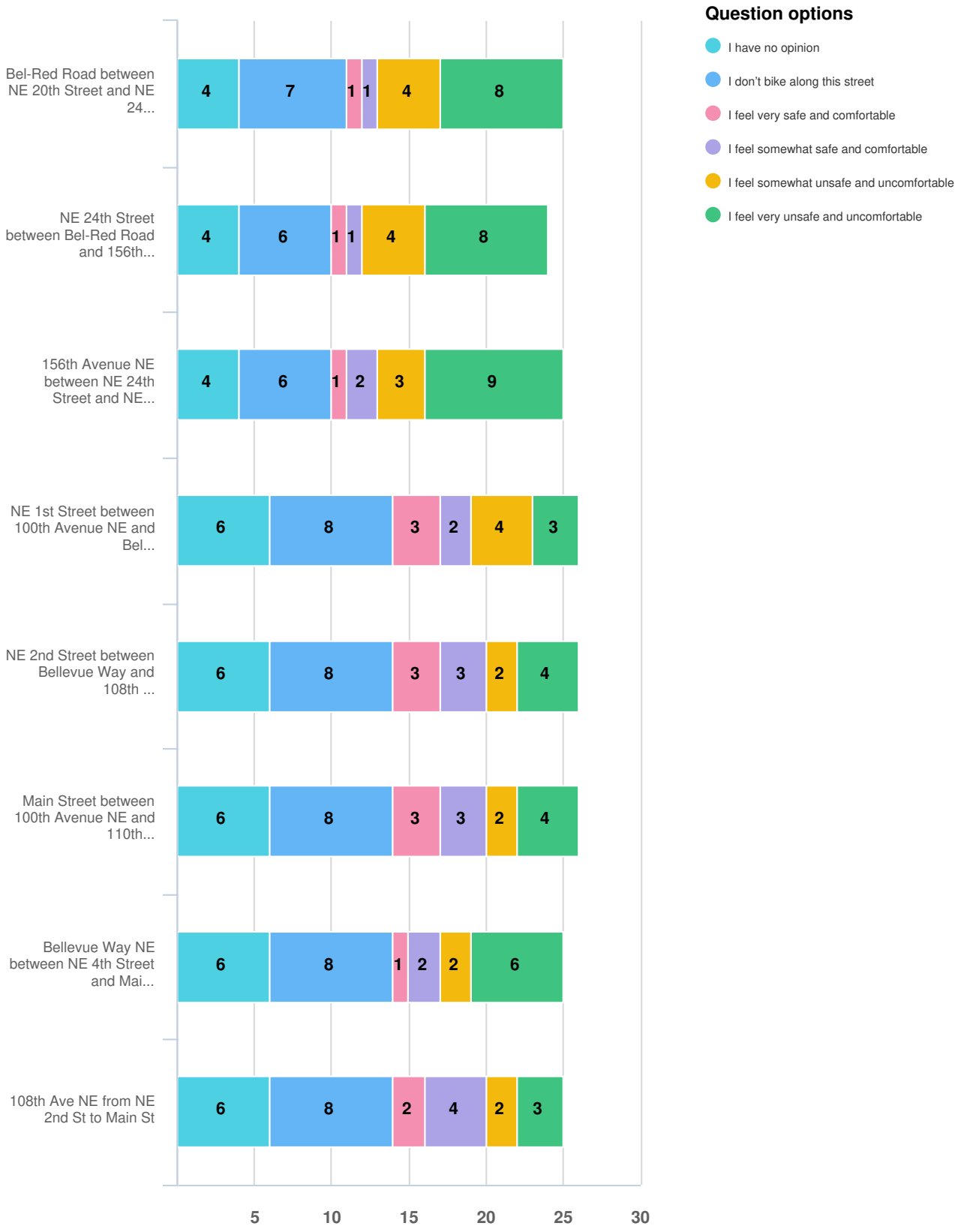
Question options

No Yes

Optional question (38 response(s), 1 skipped)

Question type: Radio Button Question

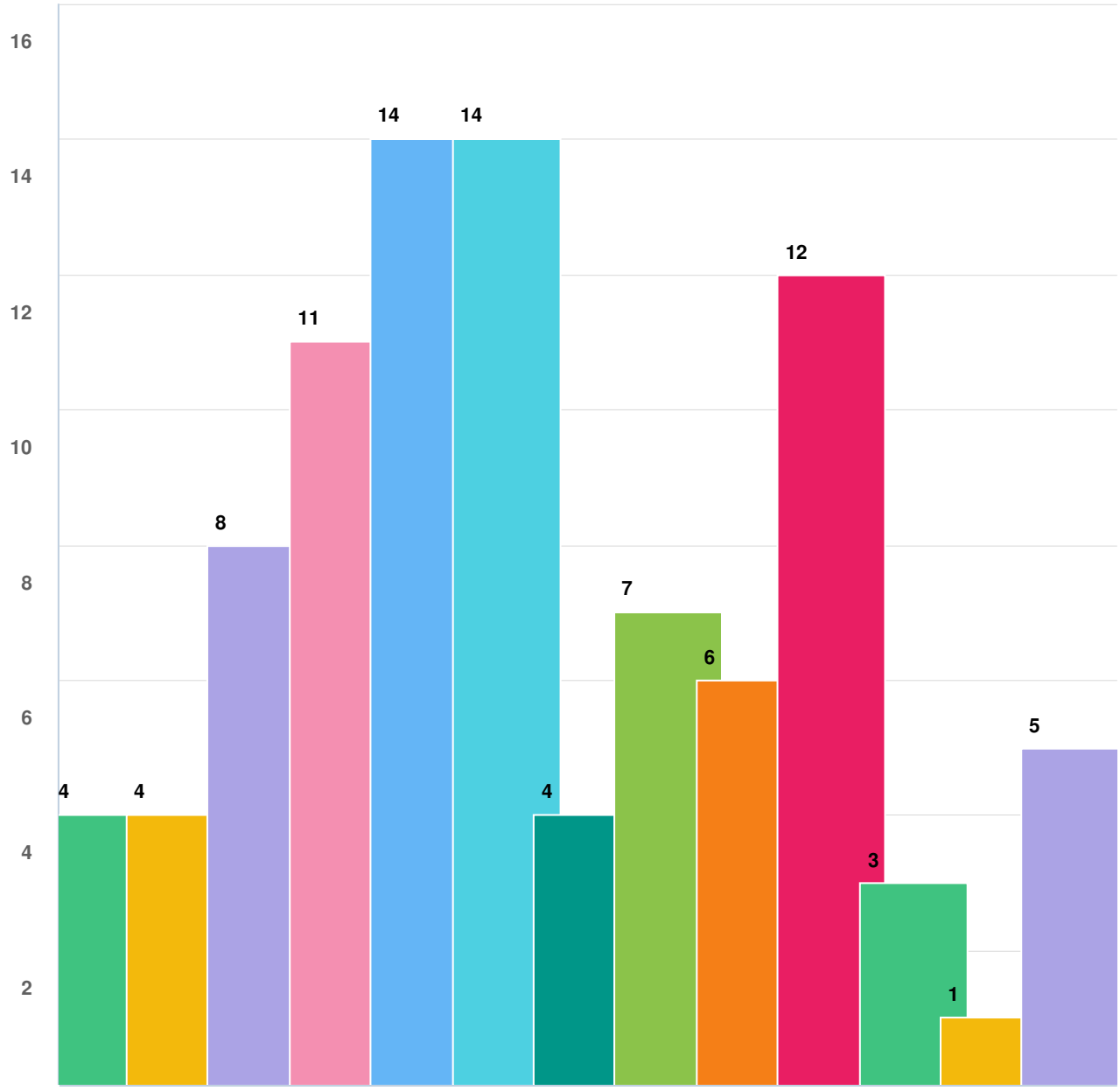
For streets within the study areas that you bike along, please indicate how safe and comfortable you feel while biking along them:



Optional question (26 response(s), 13 skipped)

Question type: Likert Question

If you do not bike or feel unsafe/uncomfortable biking along any of the streets in the study areas, please help us understand why. Mark all selections below that apply. (Note: you will have the opportunity to specify locations on the interactive map)



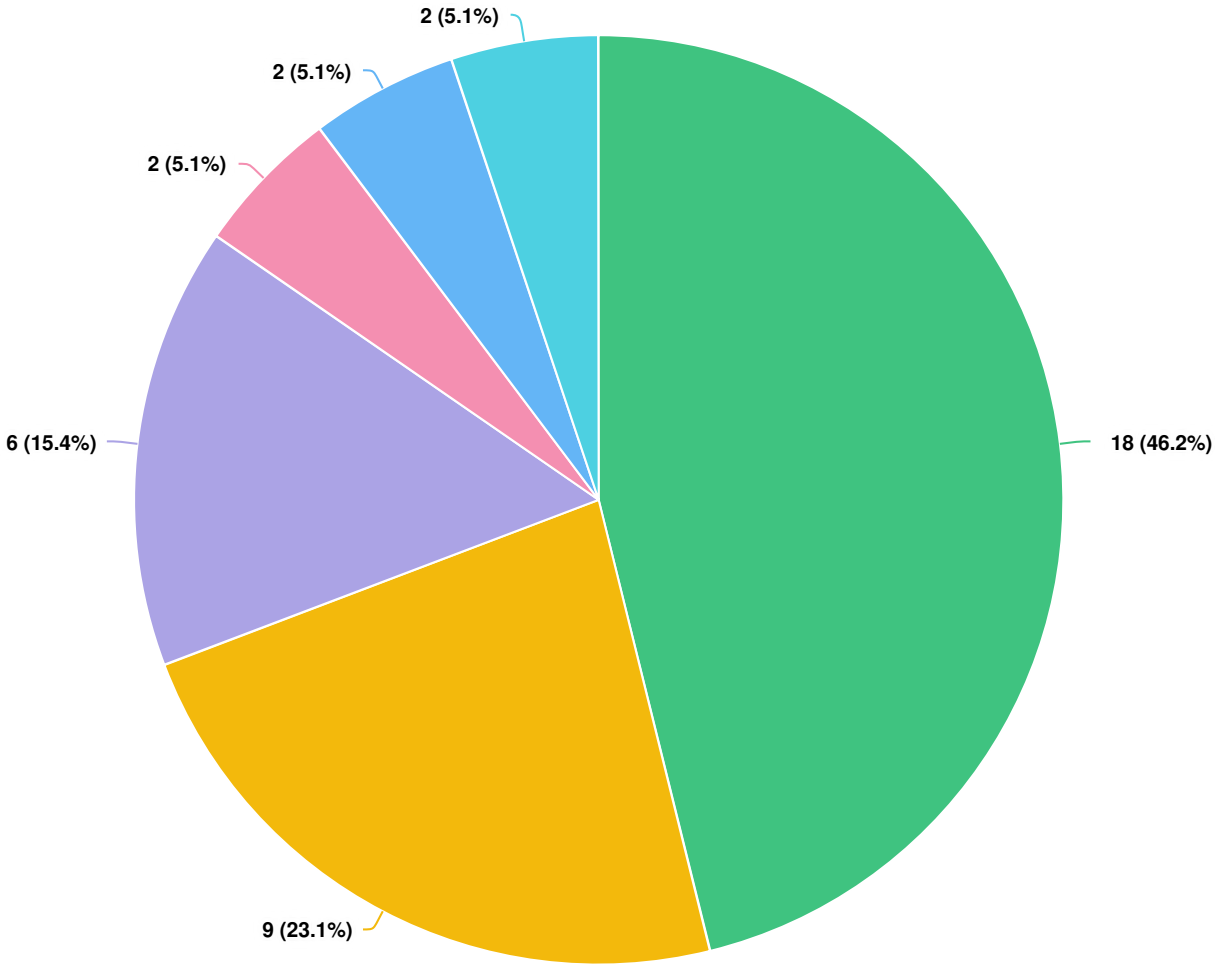
Question options

- Other (please specify)
- I don't know
- I feel I encounter objects and/or vehicles blocking my route
- I feel there is not enough separation between me and traffic
- I feel people run red lights or stop signs
- I feel people don't see me
- I feel there are not enough safe opportunities to cross
- I feel there is too much traffic
- I feel people are driving too fast
- I feel people who are driving do not yield to me
- I don't bike here because there is not enough space for me
- I don't bike here because there is not a continuous route to my destination
- I don't bike here because it is not a convenient route for me

Optional question (29 response(s), 10 skipped)

Question type: Checkbox Question

What is your association to the study areas?



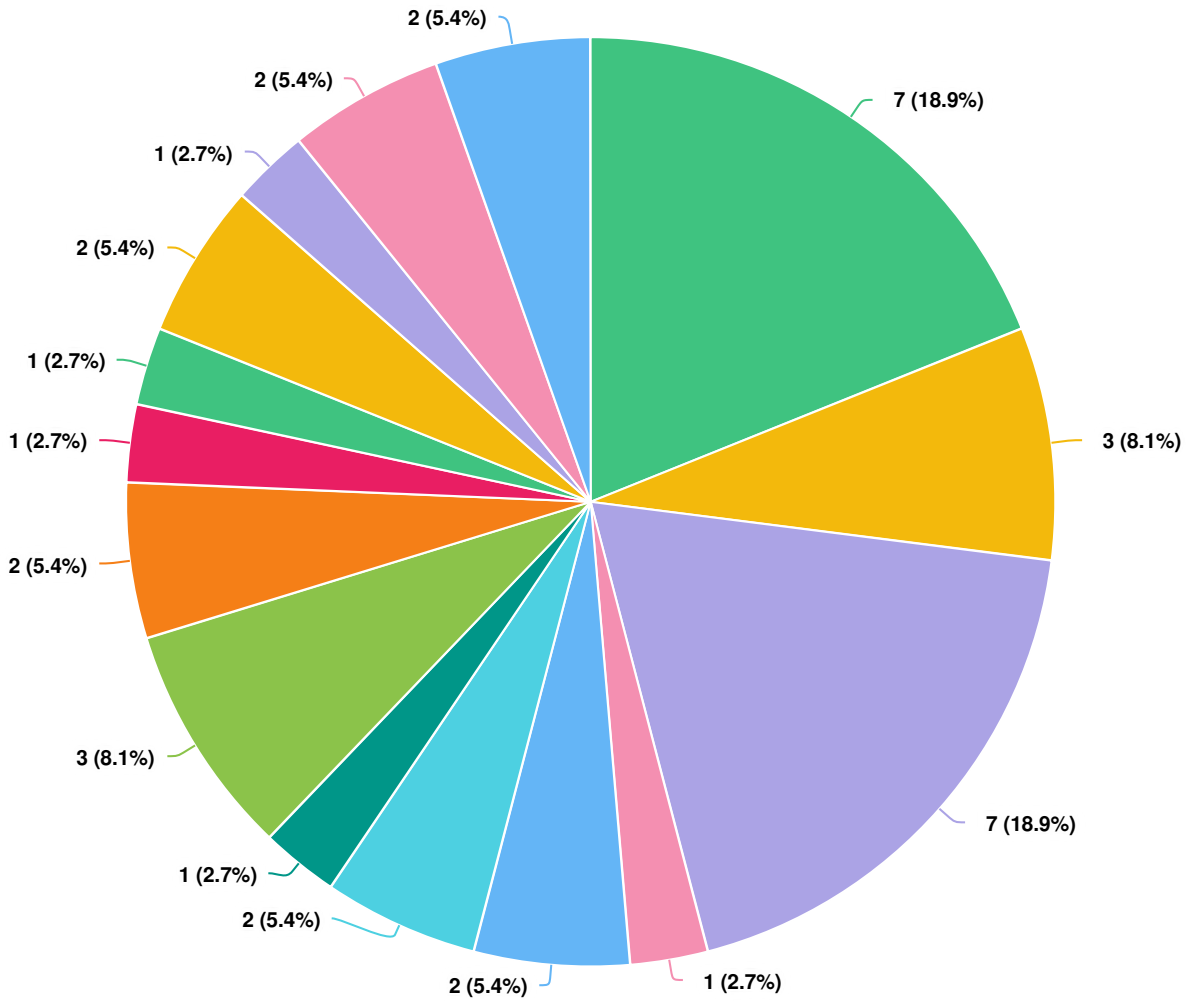
Question options

Other (please specify) | I do not frequently travel through the study areas | I attend appointments in the study areas | I dine and shop in the study areas | I work near the study areas | I live near the study areas

Optional question (39 response(s), 0 skipped)

Question type: Radio Button Question

What Bellevue Neighborhood do you live in? (See Neighborhood Area Map)



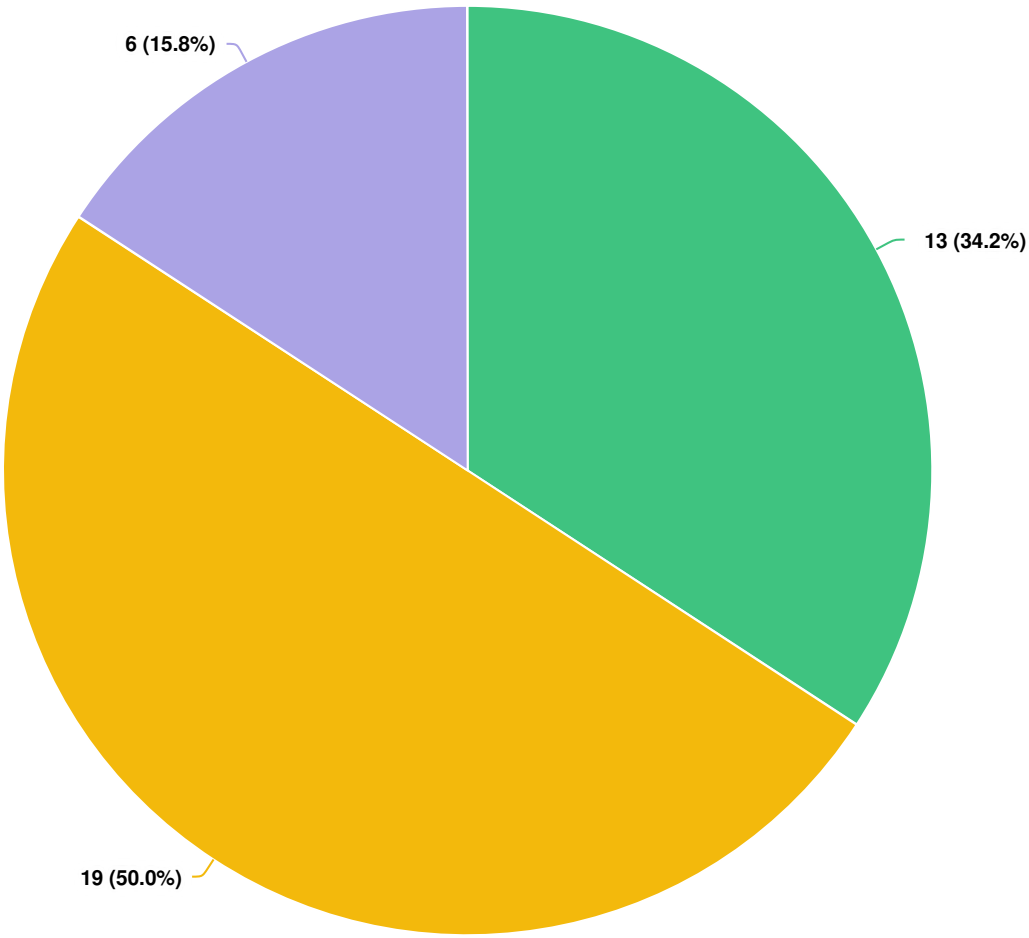
Question options

I do not live in Bellevue, but I work or study in Bellevue
Wilburton
West Lake Sammamish
West Bellevue
Northwest Bellevue
Somerset
Northwest Bellevue
Northeast Bellevue
Lake Hills
Eastgate
Downtown
Cougar Mountain/Lakemont
Crossroads
Bridle Trails
BelRed

Optional question (37 response(s), 2 skipped)

Question type: Dropdown Question

Gender (Select one)



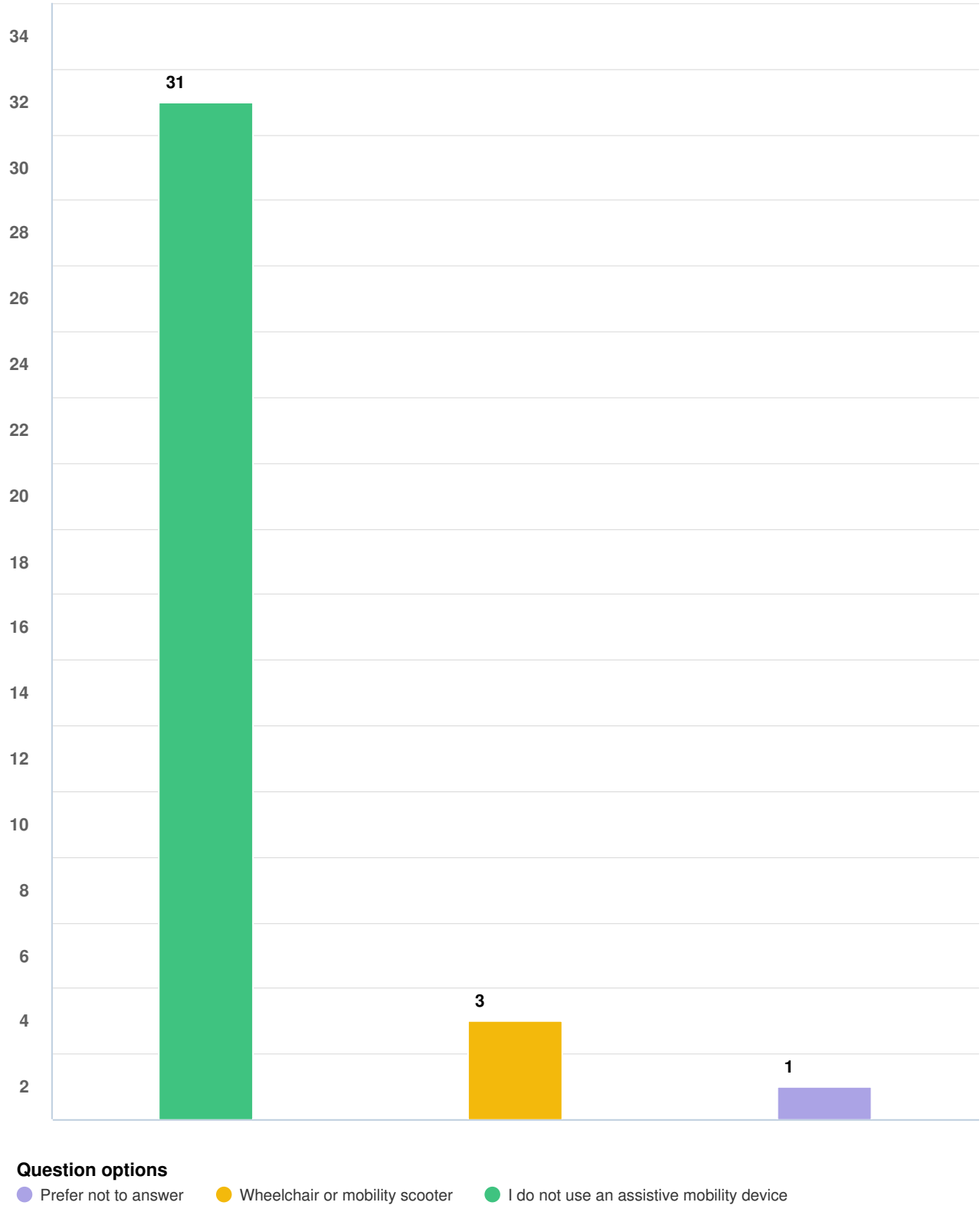
Question options

Prefer not to answer Female Male

Optional question (38 response(s), 1 skipped)

Question type: Radio Button Question

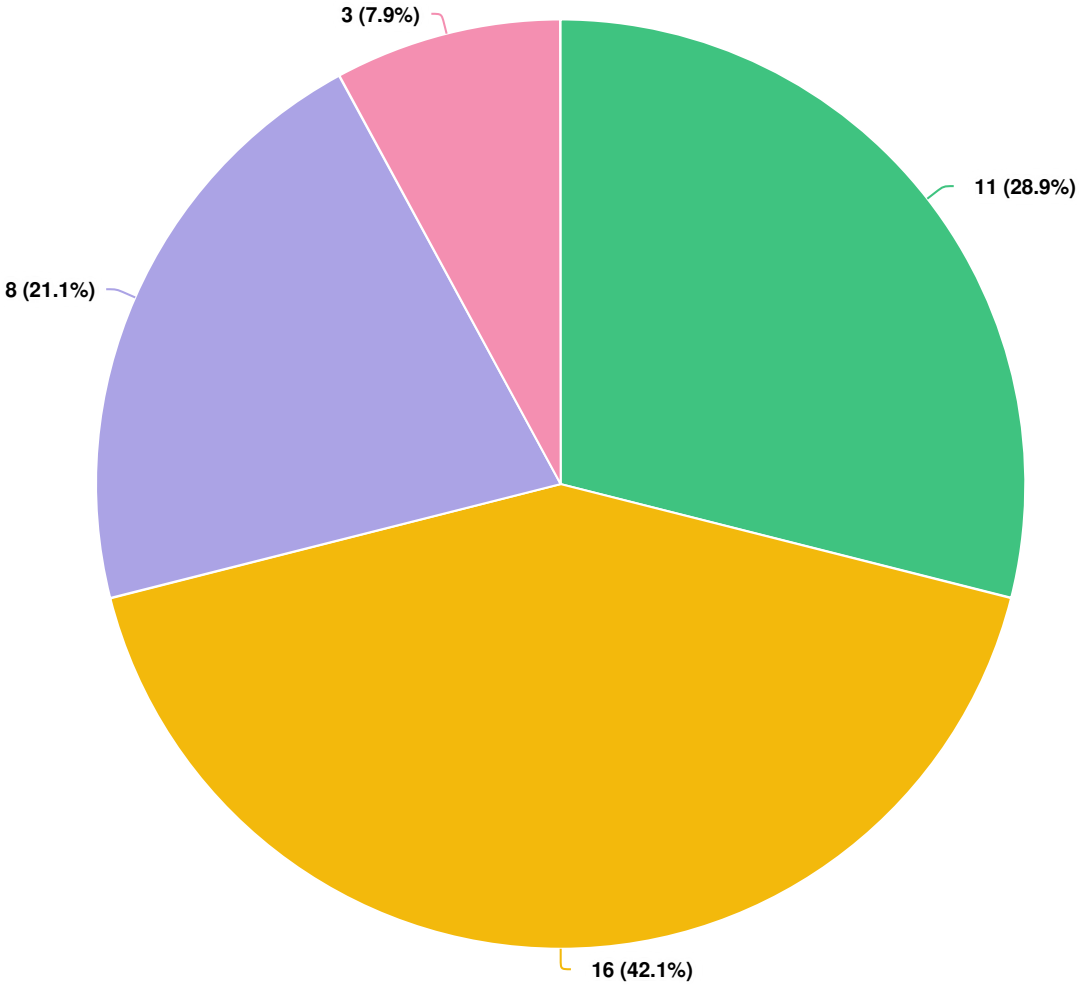
Do you use an assistive mobility device? If yes, select what type. Select all that apply.



Optional question (35 response(s), 4 skipped)

Question type: Checkbox Question

How old are you? (Select one)



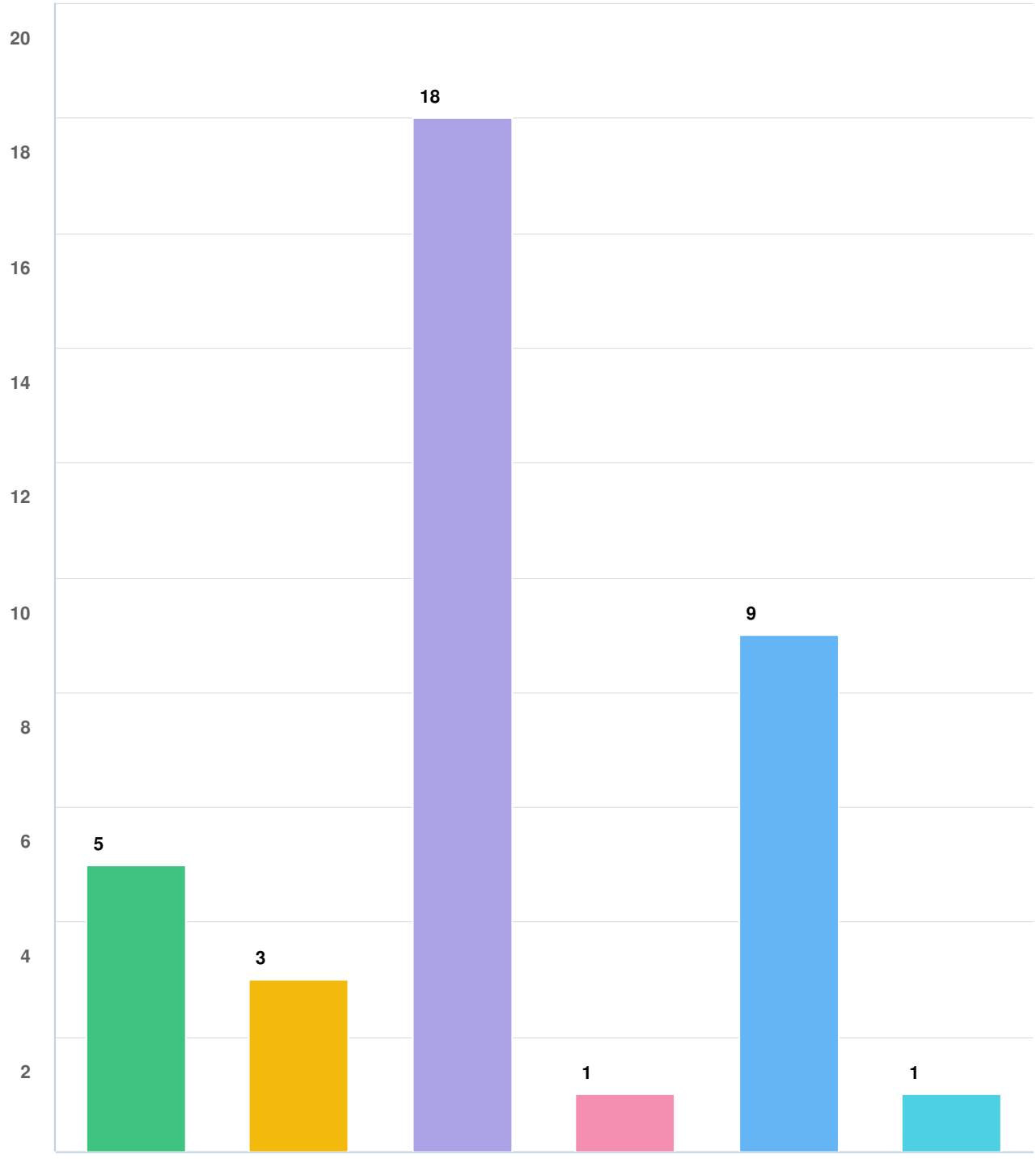
Question options

Prefer not to answer | 65 years or older | 45-64 years old | 18-44 years old

Optional question (38 response(s), 1 skipped)

Question type: Radio Button Question

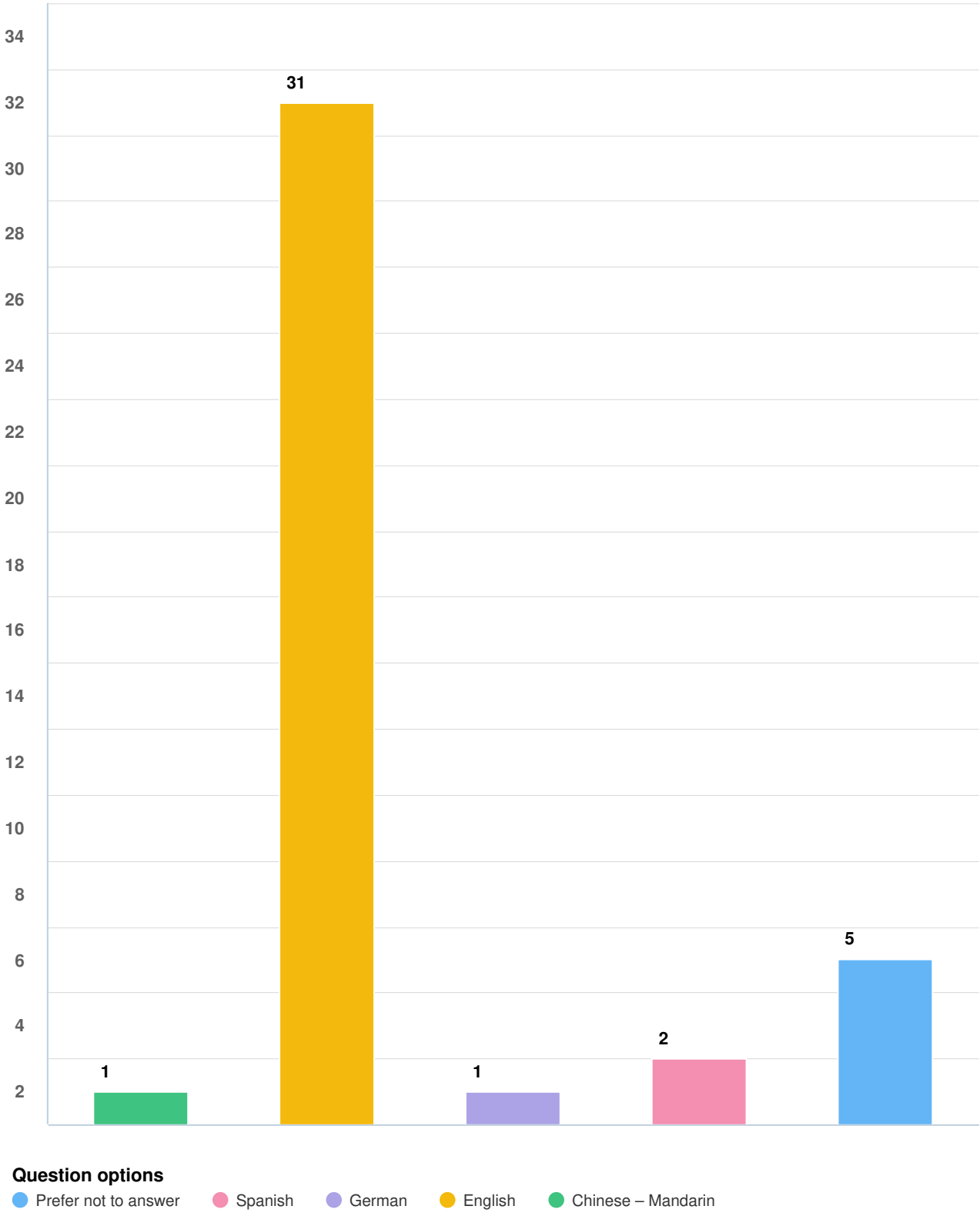
What is your race/ethnicity? (Choose all that apply)



Optional question (37 response(s), 2 skipped)

Question type: Checkbox Question

What languages do you speak at home? (Choose all that apply)



Optional question (36 response(s), 3 skipped)

Question type: Checkbox Question