



Bellevue Downtown Association Downtown Bike Series

Meeting 2

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Andreas Piller

Kyle Potuzak

Chris Long

October 26, 2017



BELLEVUE
**PEDESTRIAN
& BICYCLE**
IMPLEMENTATION INITIATIVE

Today's Agenda:

- 1) *Meeting Purpose*
- 2) *9/28 Meeting Recap*
- 3) *Candidate Demo Corridors*
- 4) *Bike Share*

The BDA has asked the Bellevue Transportation Department to engage in a timely discussion about how to make Downtown a comfortable, safe, and attractive place for people to bike.

9/28/17
Committee

10/26/17
Committee

11/16/17
Committee

12/19/17
Board

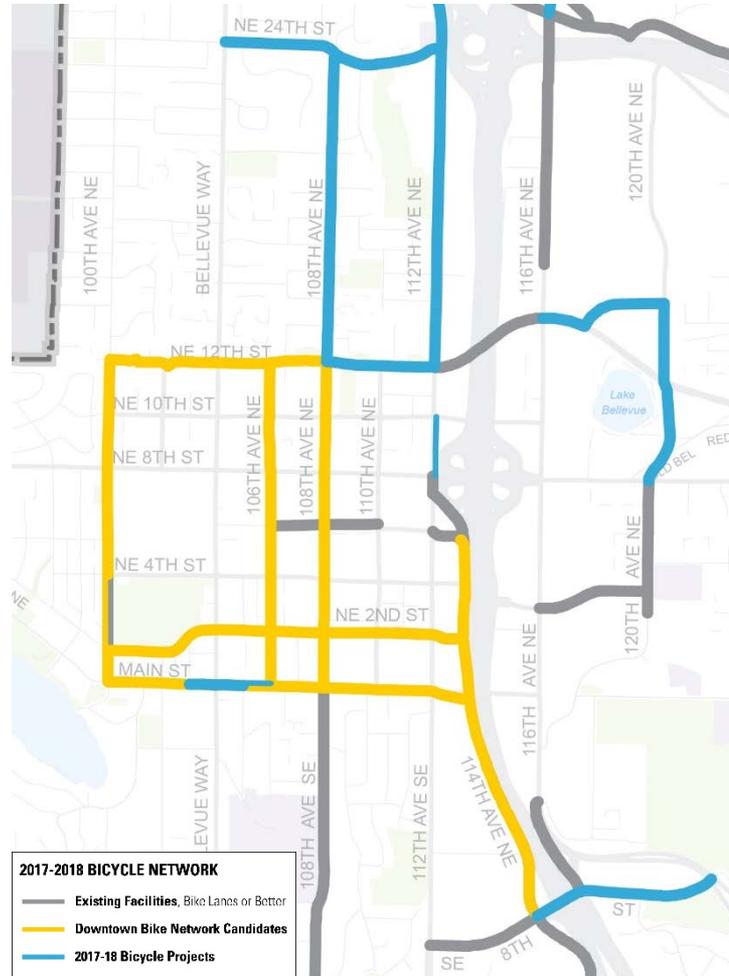
- **BDA Transportation Committee will conduct an internal review and discussion, followed by driving consensus on a recommendation.**
- **The recommendation will be presented to the BDA Board of Directors (12/19).**
- **The Board will vote on a position that will be communicated to the Bellevue Transportation Commission.**



More transportation choices means a better transportation network

- Helps manage future traffic congestion
- Creates a Downtown that's accessible to more people
- Provides an option to leave the car at home
- Provides an affordable and healthy travel option





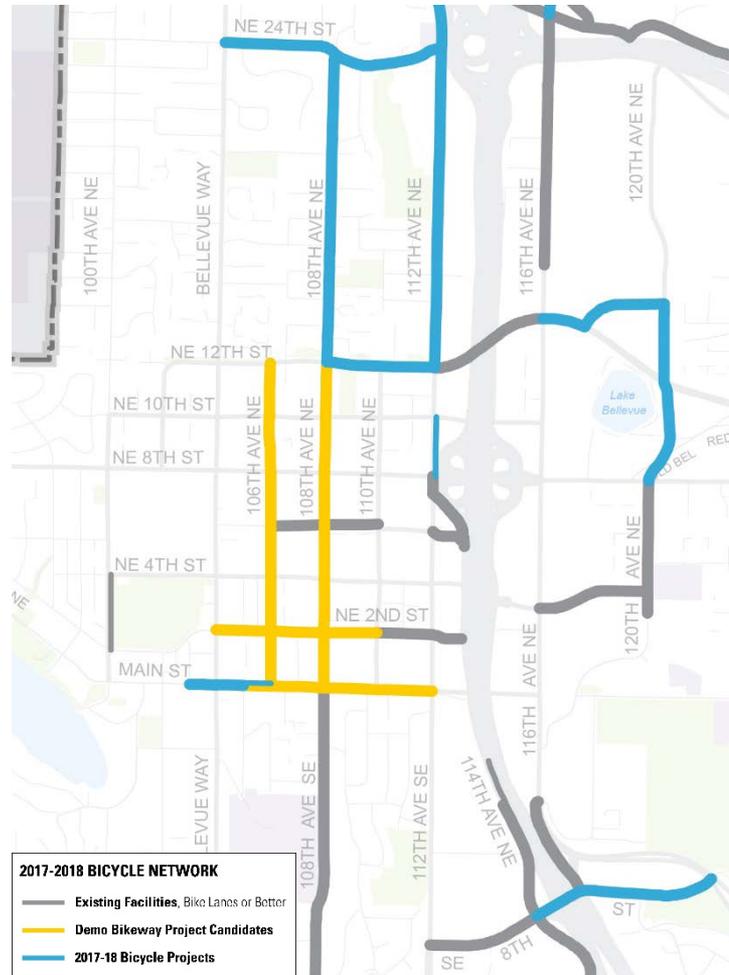
Downtown Bicycle Network Candidate Corridors:

North-South

- 100th Ave NE
- 106th Ave NE
- 108th Ave NE
- 114th Ave

East-West

- Main St
- NE 2nd St
- NE 12th St



Demonstration Bikeway Project Candidate Corridors:

- **108th Ave NE**
Main St to NE 12th St
- **Main St**
105th Ave to 112th Ave
- **NE 2nd St**
Bellevue Way NE to 110th Ave NE
- **106th Ave NE**
Main St to NE 12th St



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**Bellevue Downtown Association
Downtown Bike Infrastructure
Improvement Series**

Briefing Book
October 26, 2017

- **Candidate Demo Corridors**
- **Corridor Overviews**
- **Preliminary Design Concepts**
- **Evaluation Criteria**



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Briefing Book

When we last met...

Bicycle Improvements

- Existing bike network connections
- High comfort bikeway
- Consistency with community feedback

Street Use Impacts

- Travel lanes repurposed
- Turn lanes repurposed
- Changes to on-street parking
- Transit operation challenges

Land Use

- Construction activity
- Driveways

Safety

- Collisions (2010-2016)
- Wikimap Safety Issues

Bicycle Environment

- Existing Bike Network Connections
- Bike Facility Comfort
- Construction Activity

Auto Environment

- Travel Lanes Repurposed
- Turn Lanes Repurposed

Curbside Environment

- Changes to On-Street Parking
- Loading/Unloading

Transit Environment

- Bus Operations
- Transit Access



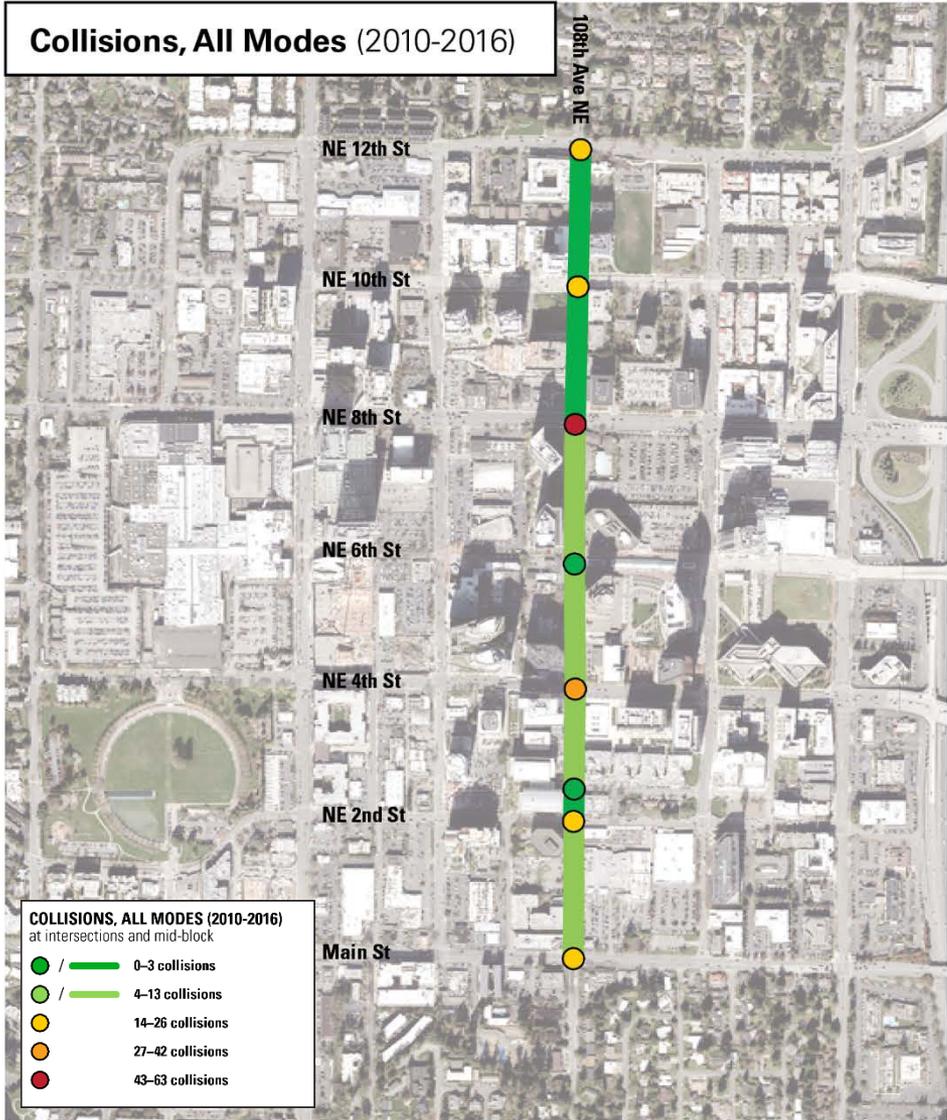
| Category | Criteria | 108th Ave | Main St | NE 2nd St | 106th Ave |
|----------------------|------------------------------|-----------|---------|-----------|-----------|
| Safety | Collisions (2010-2016) | | | | |
| | Wikimap Safety Issues | | | | |
| Bicycle Environment | Bike Network Connectivity | | | | |
| | Bike Facility Comfort | | | | |
| | Construction Activity | | | | |
| Auto Environment | Travel Lanes Repurposed | | | | |
| | Turn Lanes Repurposed | | | | |
| Curbside Environment | Changes to On-Street Parking | | | | |
| | Loading/Unloading Access | | | | |
| Transit Environment | Bus Operations | | | | |
| | Transit Access | | | | |



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| | Transit Access | | | | |



Collisions, All Modes (2010-2016)

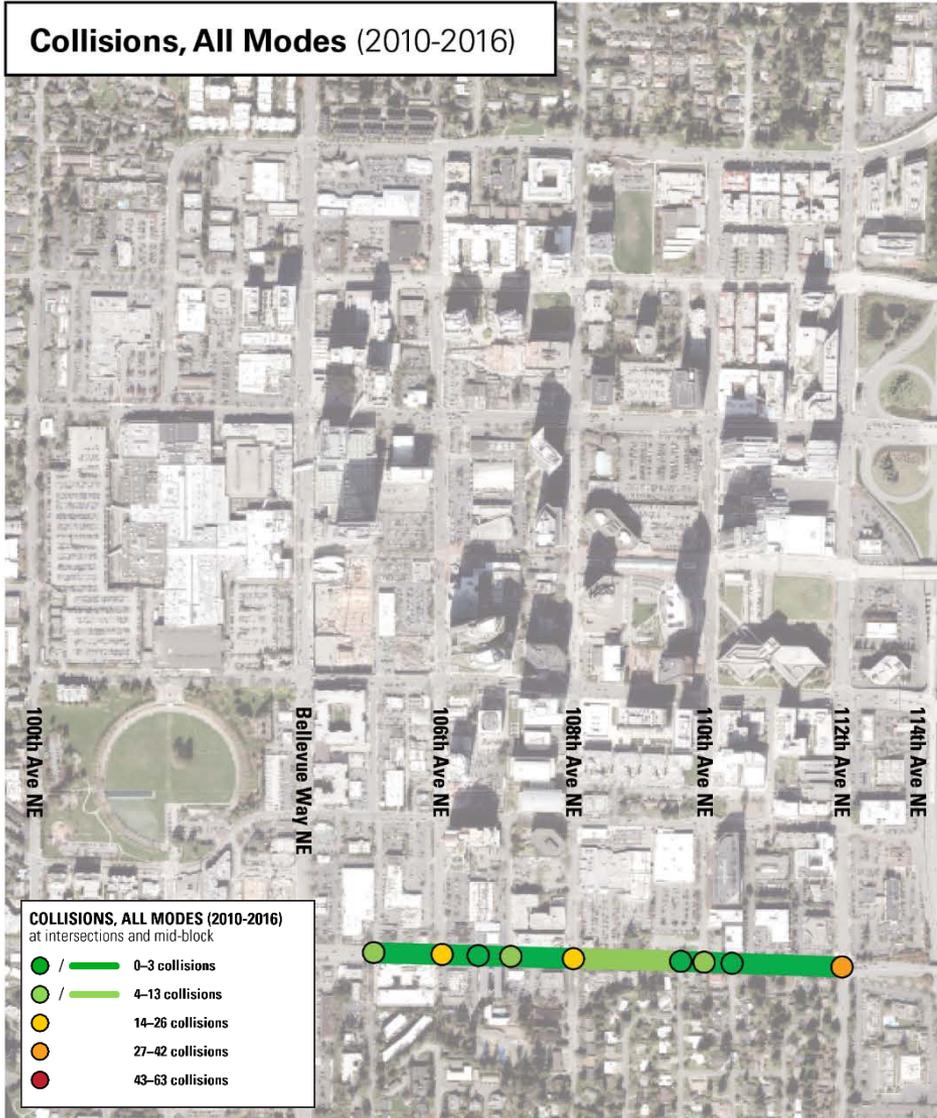


| Safety | |
|------------------------|-----------------------|
| Collisions (2010-2016) | Wikimap Safety Issues |
| | |

Number of Collisions

- Total: 232
- Involving a Person Bicycling: 4
- Involving a Person Walking: 10

Collisions, All Modes (2010-2016)

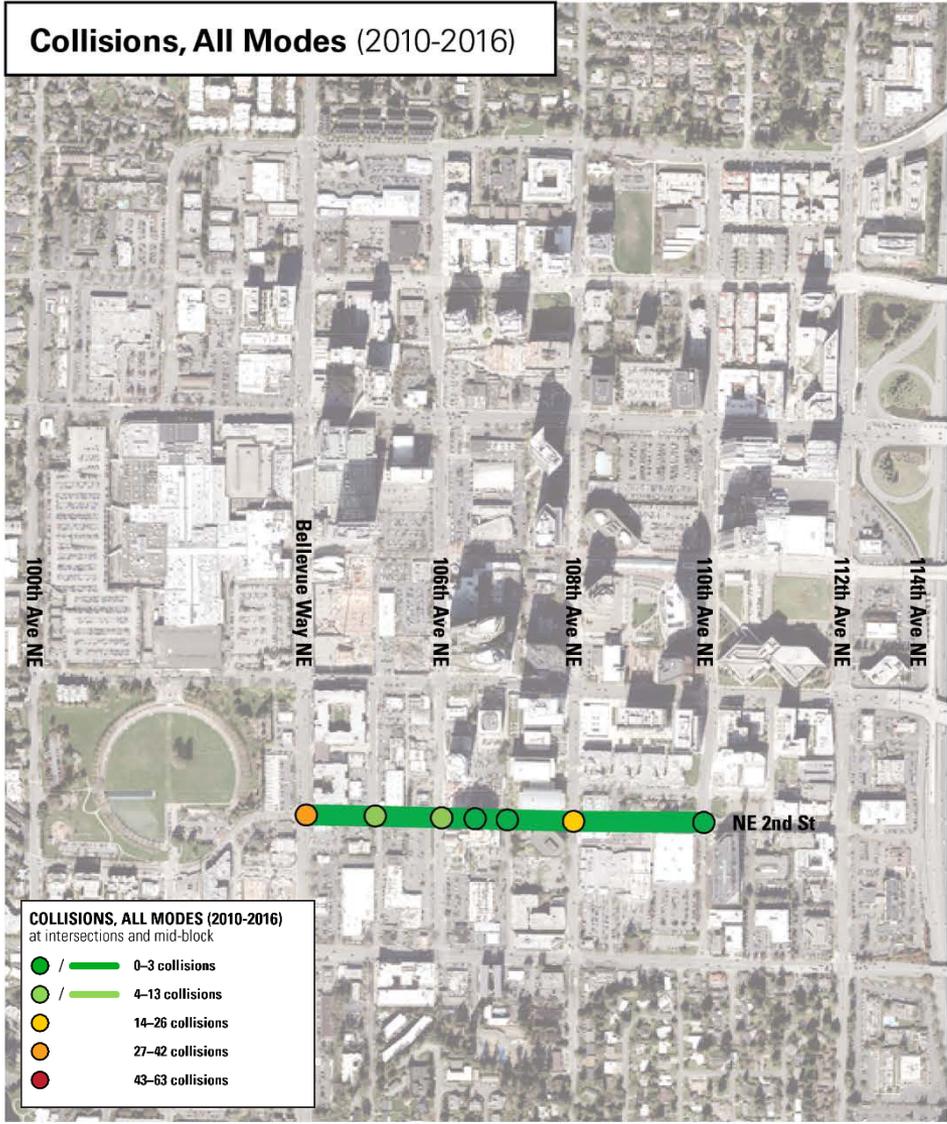


| Safety | |
|------------------------|-----------------------|
| Collisions (2010-2016) | Wikimap Safety Issues |
| | |

Number of Collisions

- Total: 136
- Involving a Person Bicycling: 0
- Involving a Person Walking: 3

Collisions, All Modes (2010-2016)

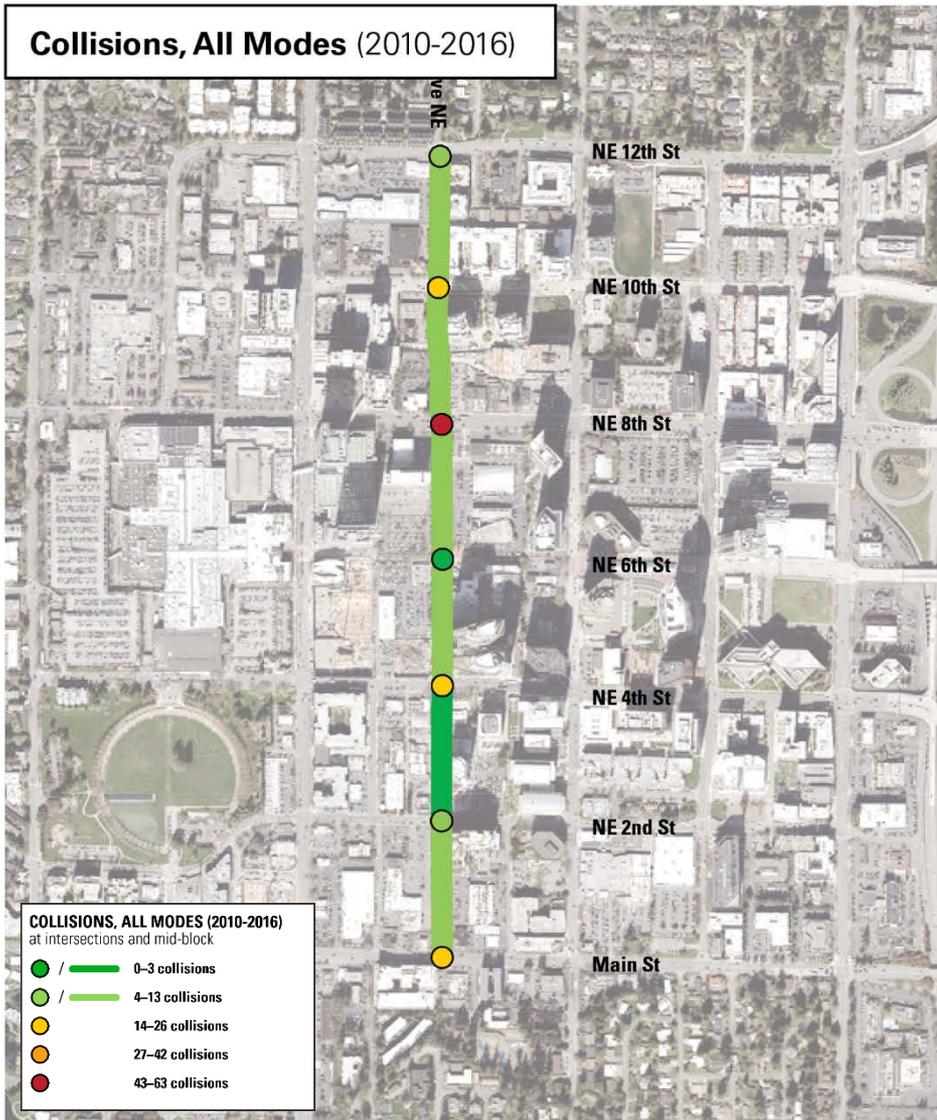


| Safety | |
|------------------------|-----------------------|
| Collisions (2010-2016) | Wikimap Safety Issues |
| | |

Number of Collisions

- Total: 114
- Involving a Person Bicycling: 1
- Involving a Person Walking: 10

Collisions, All Modes (2010-2016)



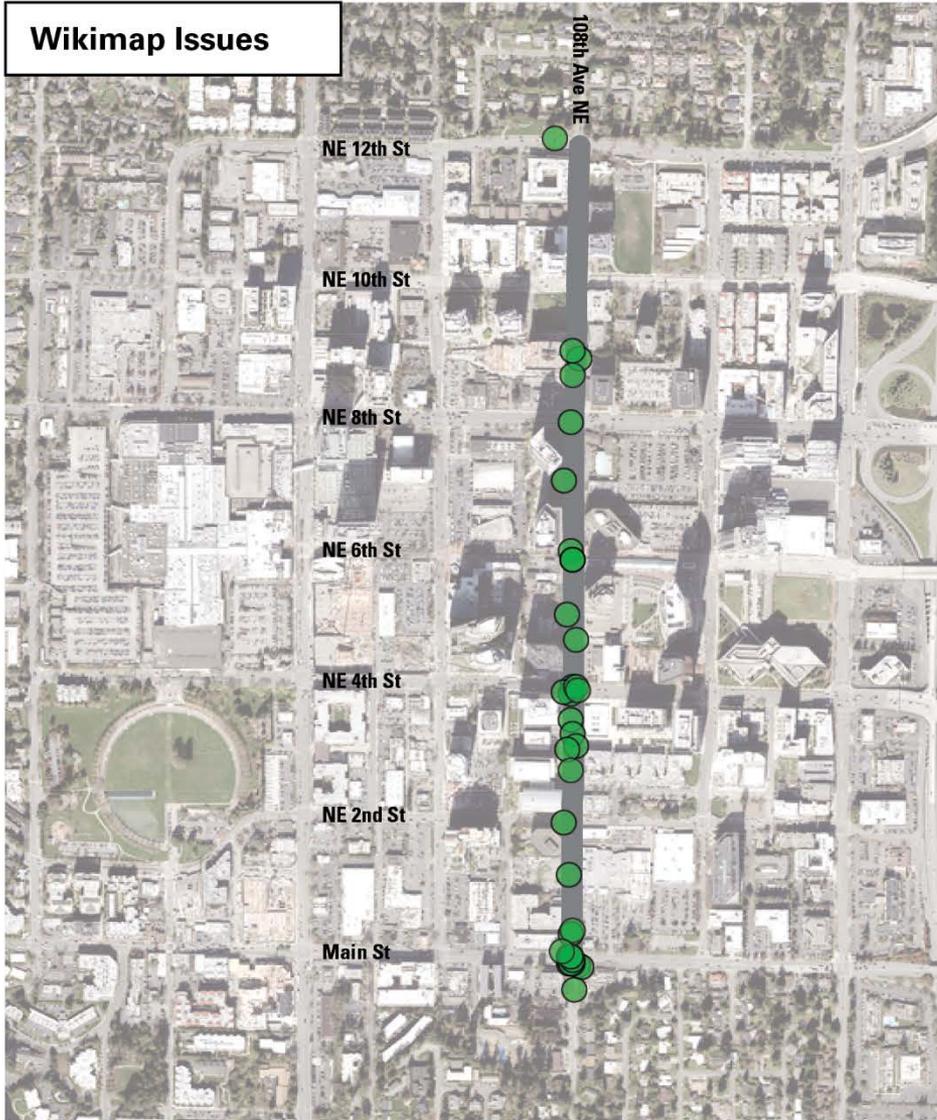
| Safety | |
|------------------------|-----------------------|
| Collisions (2010-2016) | Wikimap Safety Issues |
| | |

Number of Collisions

- Total: 196
- Involving a Person Bicycling: 4
- Involving a Person Walking: 11



Wikimap Issues



Safety

Collisions
(2010-2016)

Wikimap
Safety Issues

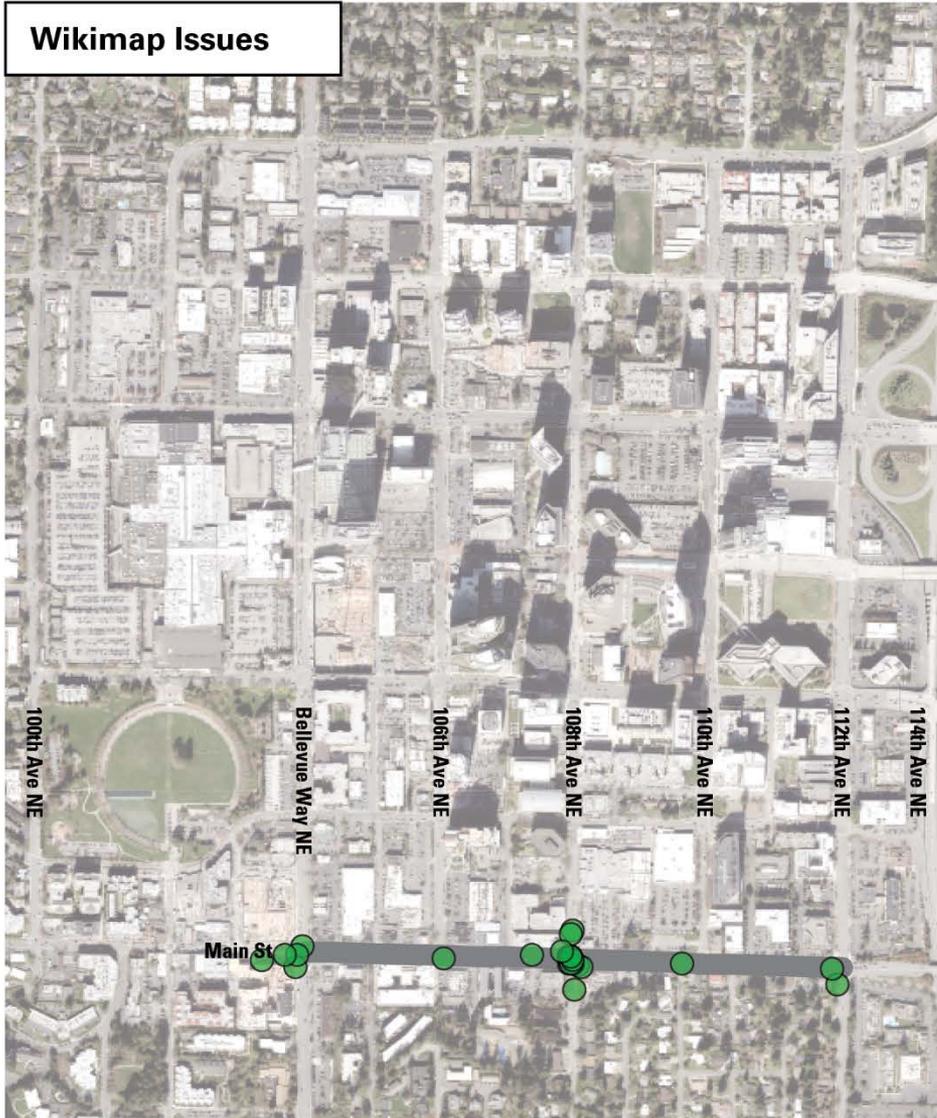
- Total Comments: 44
- Unsafe bicycle accommodations: 7
- Unsafe behaviors...
 - by people driving: 33
 - by people bicycling: 3
 - by people walking: 1



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108th Ave | Wikimap

Wikimap Issues



Safety

| Collisions (2010-2016) | Wikimap Safety Issues |
|---------------------------|--------------------------|
| | |

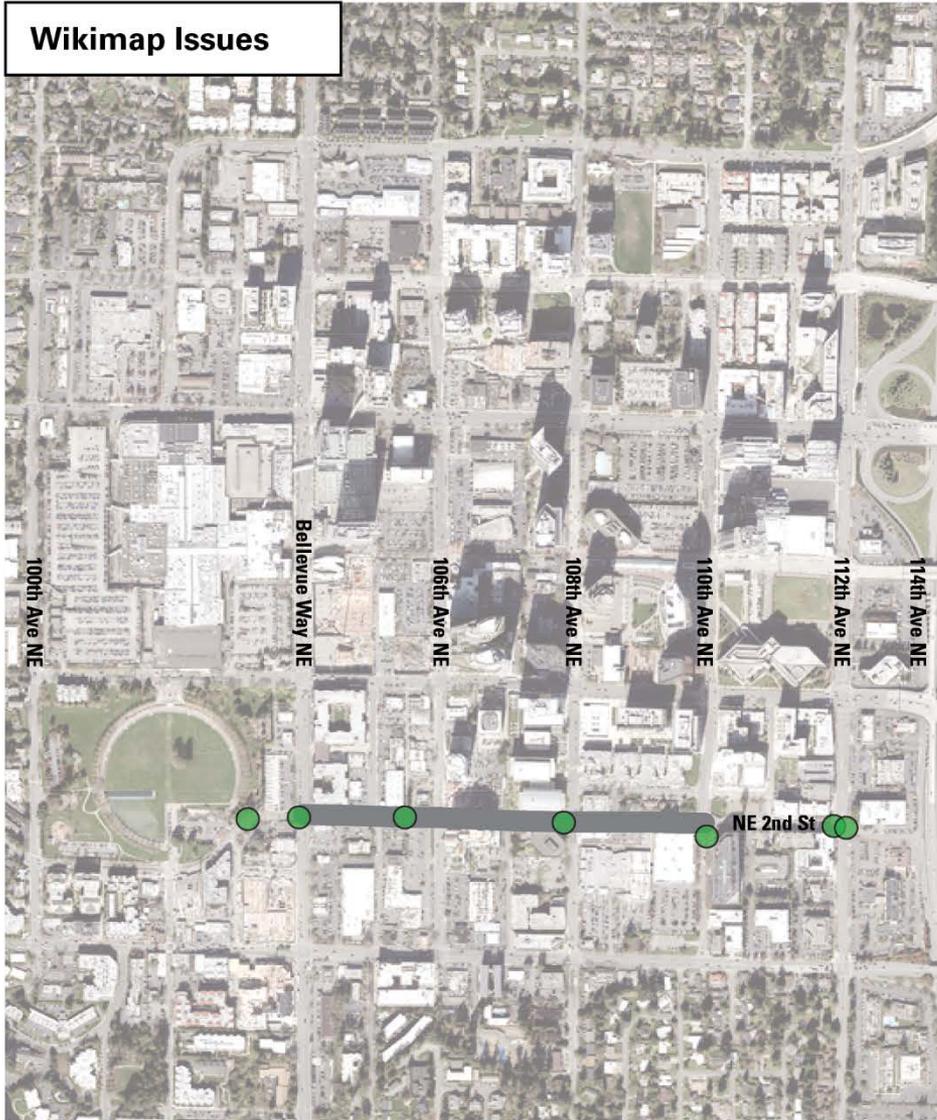
- Total Comments: 33
- Unsafe bicycle accommodations: 9
- Unsafe behaviors...
 - by people driving: 22
 - by people bicycling: 1
 - by people walking: 1



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Main St | Wikimap

Wikimap Issues



Safety

| Collisions (2010-2016) | Wikimap Safety Issues |
|---------------------------|--------------------------|
| | |

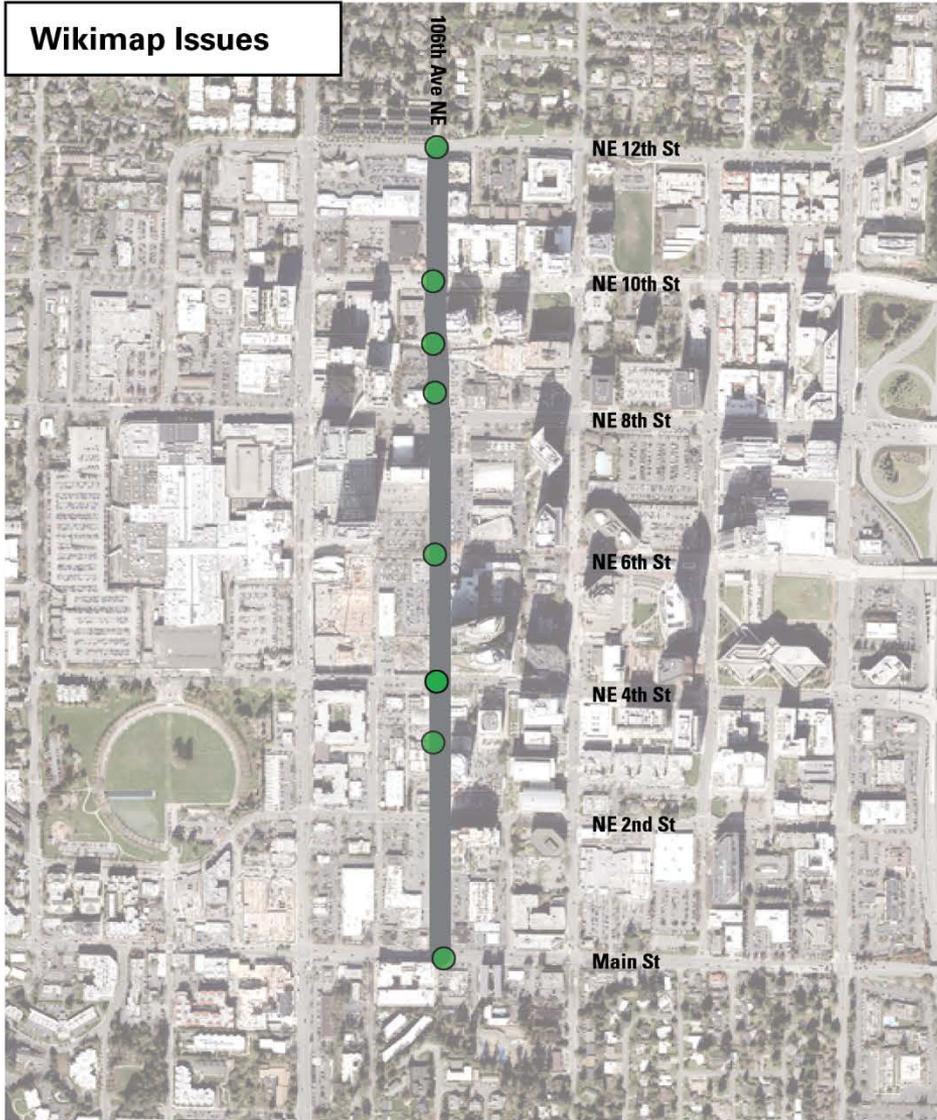
- Total Comments: 7
- Unsafe bicycle accommodations: 3
- Unsafe behaviors by people driving: 4



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NE 2nd St | Wikimap

Wikimap Issues



Safety

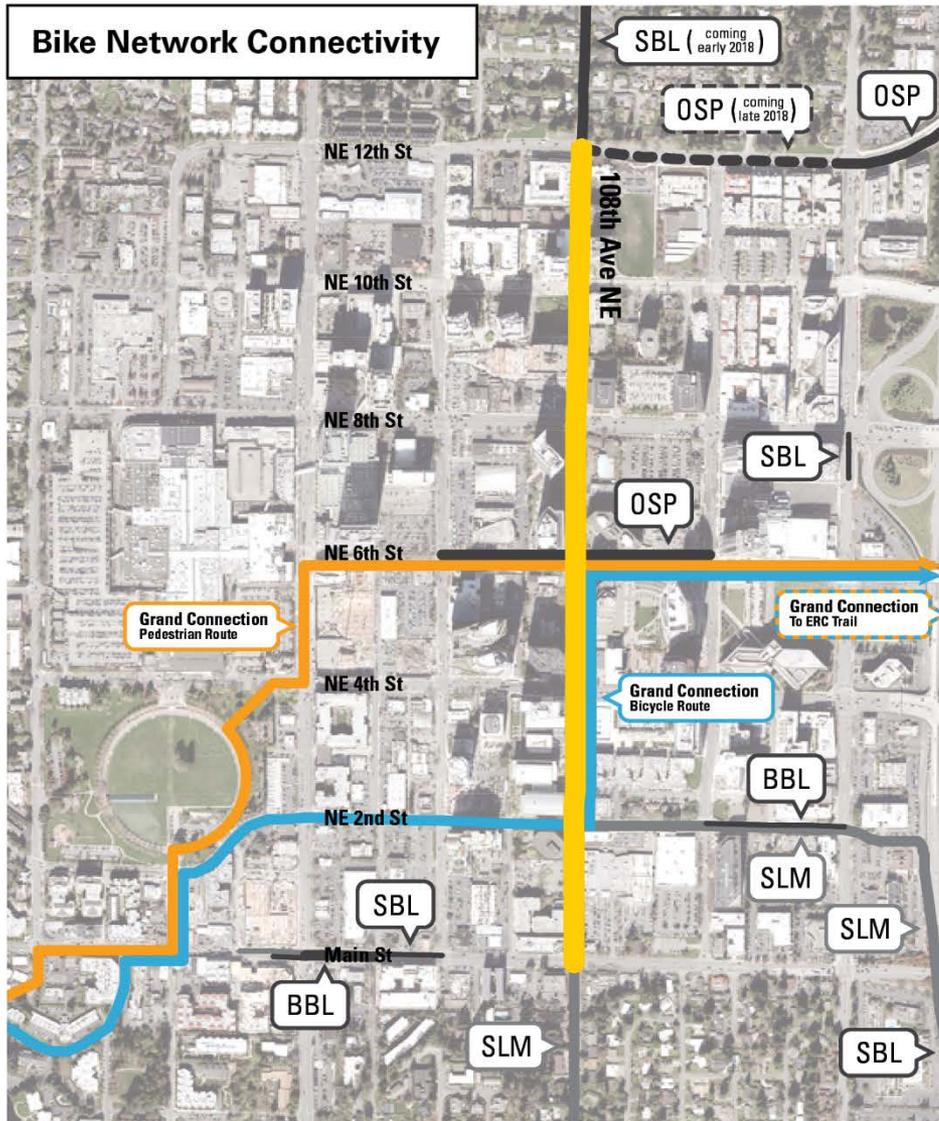
| Collisions (2010-2016) | Wikimap Safety Issues |
|---------------------------|--------------------------|
| | |

- Total Comments: 9
- Unsafe bicycle accommodations: 1
- Unsafe behaviors...
 - by people driving: 7
 - by people walking: 1



| Category | Criteria | 108th Ave | Main St | NE 2nd St | 106th Ave |
|----------------------|------------------------------|-----------|---------|-----------|-----------|
| Safety | Collisions (2010-2016) | | | | |
| | Wikimap Safety Issues | | | | |
| Bicycle Environment | Bike Network Connectivity | | | | |
| | Bike Facility Comfort | | | | |
| | Construction Activity | | | | |
| Auto Environment | Travel Lanes Repurposed | | | | |
| | Turn Lanes Repurposed | | | | |
| Curbside Environment | Changes to On-Street Parking | | | | |
| | Loading/Unloading Access | | | | |
| Transit Environment | Bus Operations | | | | |
| | Transit Access | | | | |





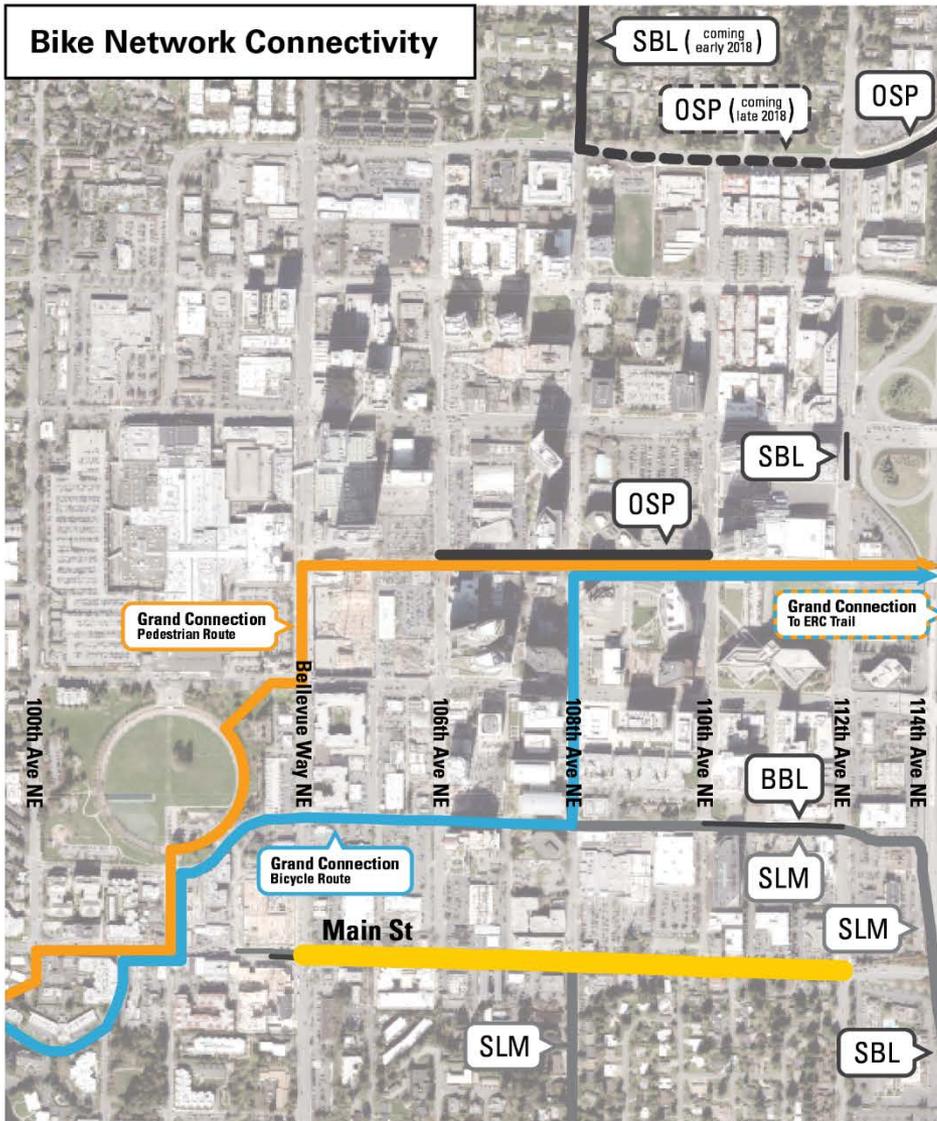
| Bicycle Environment | | |
|---------------------------|-----------------------|-----------------------|
| Bike Network Connectivity | Bike Facility Comfort | Construction Activity |
| | | |

Number of Intersecting Links: 6

- 108th Ave SE (south)
- NE 2nd St (east)
- NE 6th St (east/west)
- NE 12th St (east)
- 108th Ave NE (north)

Relationship to long-term projects: Part of the Grand Connection bicycle route

Access to destinations: Very high



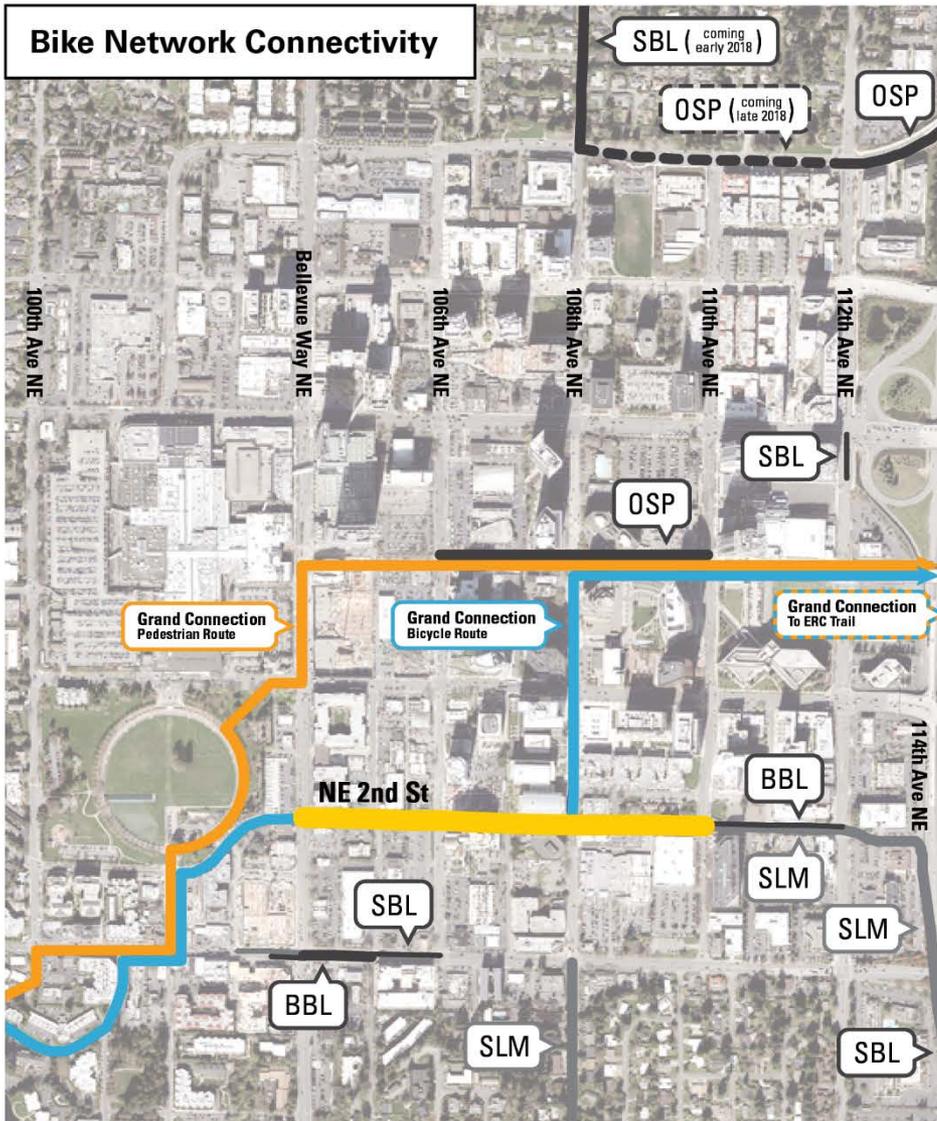
| Bicycle Environment | | |
|---------------------------|-----------------------|-----------------------|
| Bike Network Connectivity | Bike Facility Comfort | Construction Activity |
| | | |

Number of Intersecting Links: 2

- 108th Ave SE (south)
- Main St (west)

Relationship to long-term projects: Connects to future East Link station area and offstreet path

Access to destinations: Medium



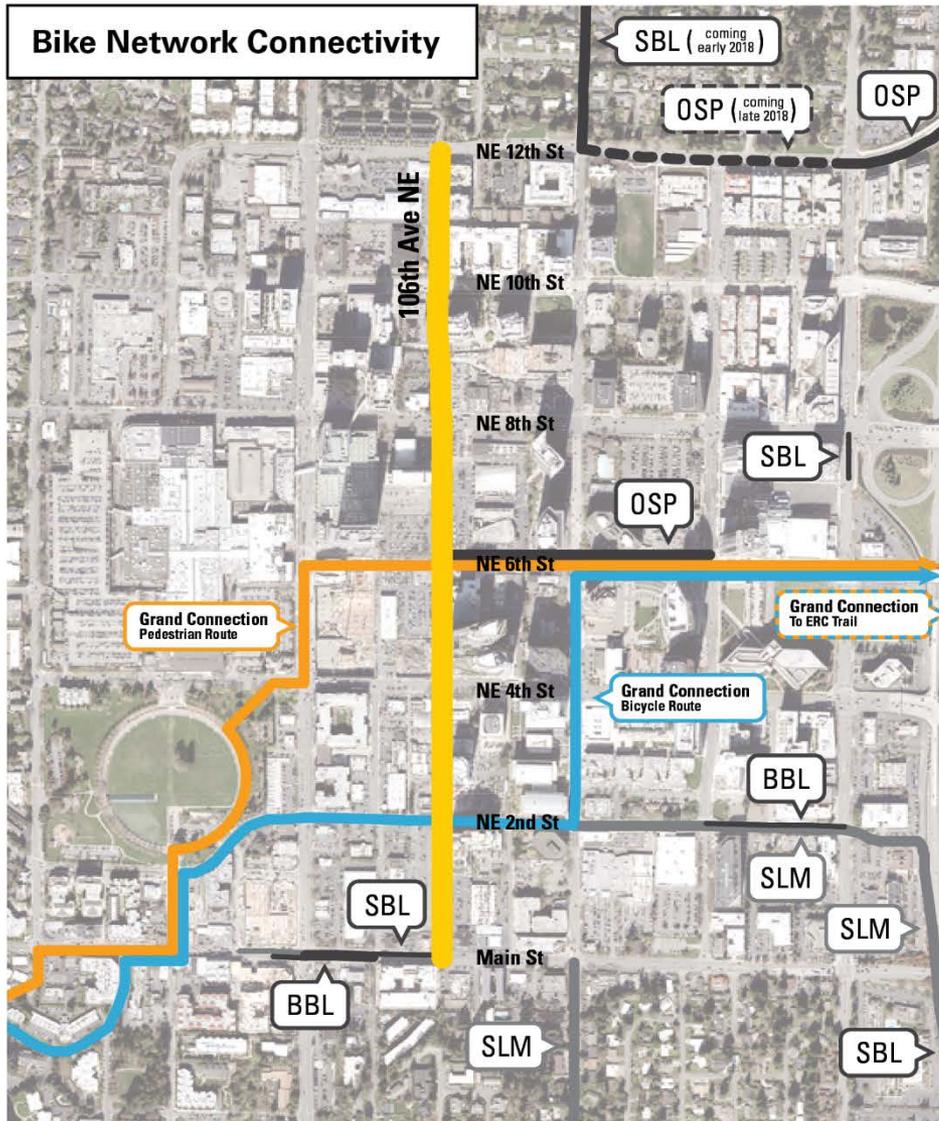
| Bicycle Environment | | |
|---------------------------|-----------------------|-----------------------|
| Bike Network Connectivity | Bike Facility Comfort | Construction Activity |
| | | |

Number of Intersecting Links: 1

- NE 2nd St (east)

Relationship to long-term projects: Part of the Grand Connection bicycle route

Access to destinations: Low



| Bicycle Environment | | |
|---------------------------|-----------------------|-----------------------|
| Bike Network Connectivity | Bike Facility Comfort | Construction Activity |
| | | |

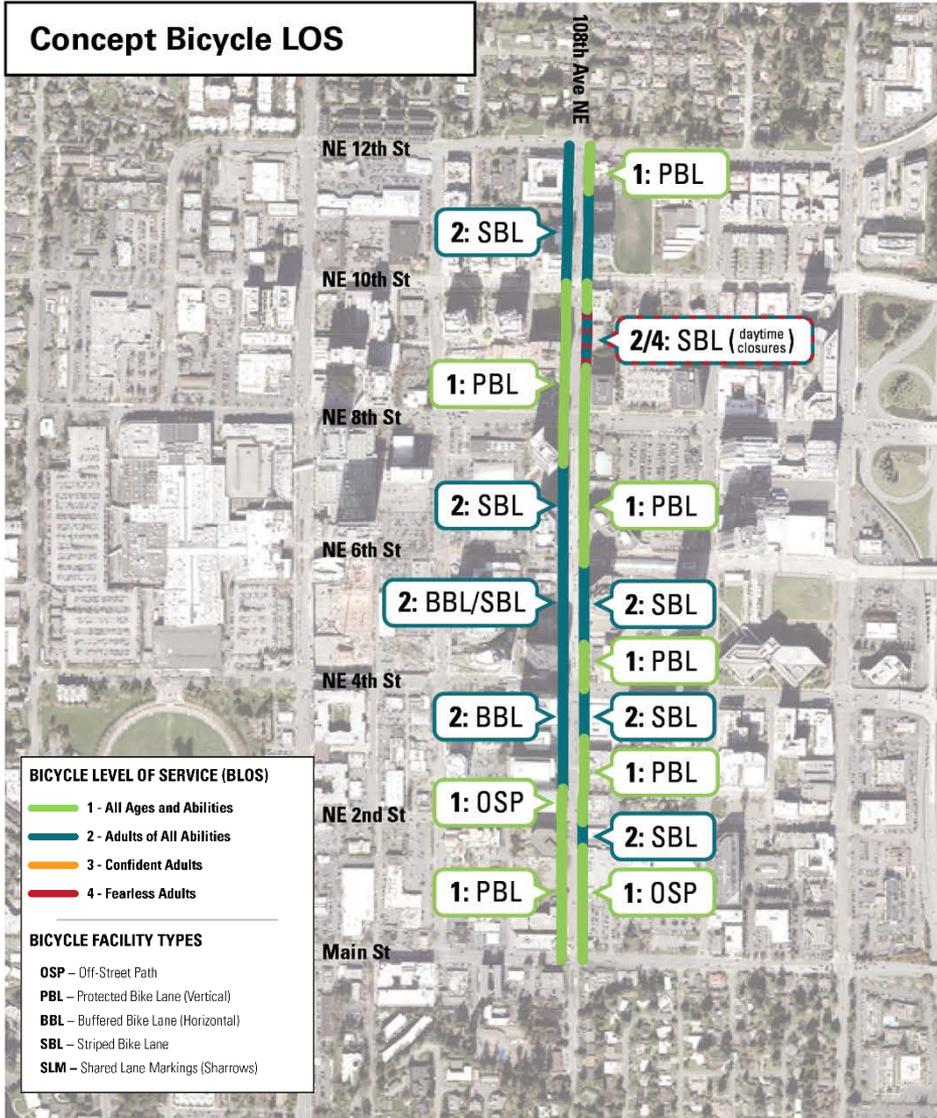
Number of Intersecting Links: 2

- Main St (west)
- NE 6th St (east)

Relationship to long-term projects: Intersects both Grand Connection routes—pedestrian and bicycle

Access to destinations: High

Concept Bicycle LOS

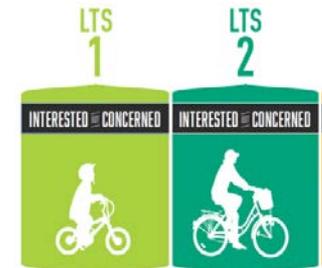


Bicycle Environment

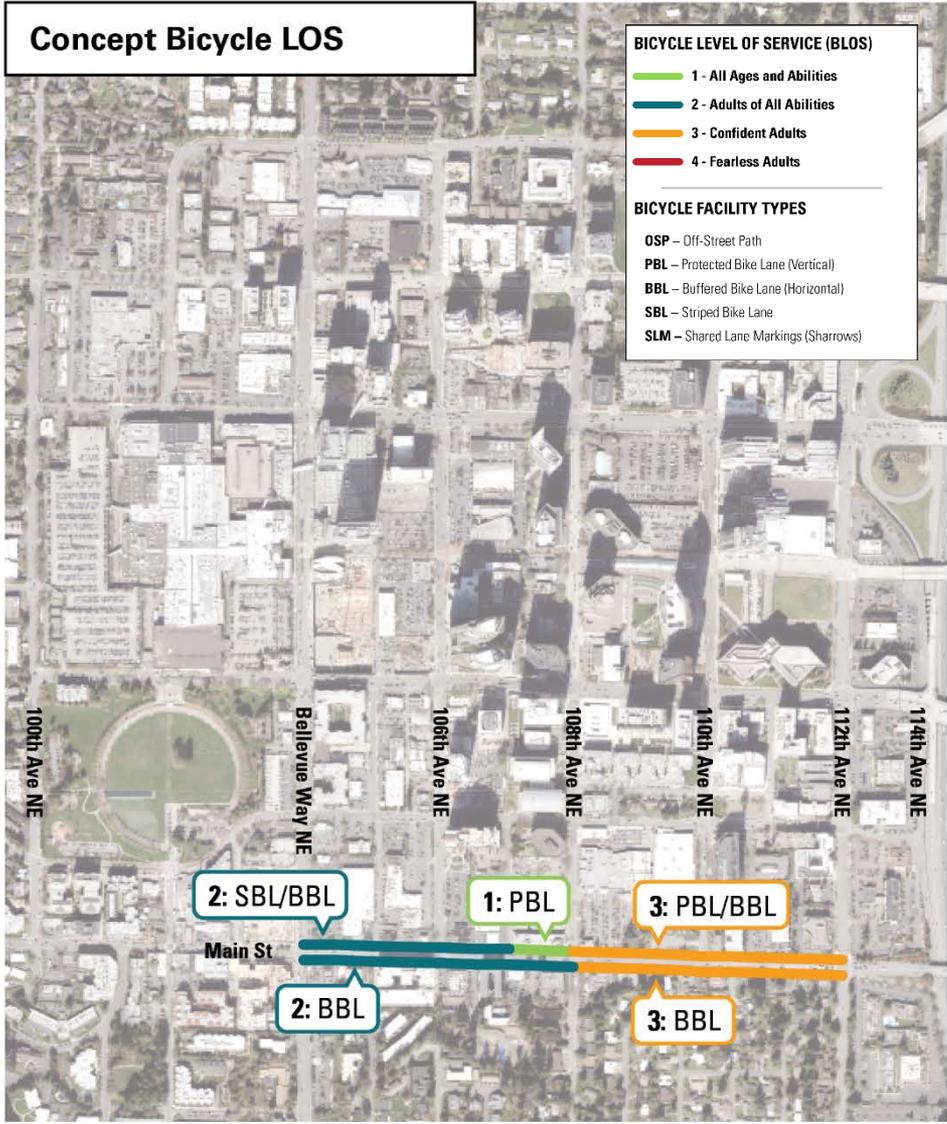
| Bike Network Connectivity | Bike Facility Comfort | Construction Activity |
|---------------------------|-----------------------|-----------------------|
| | | |

Prevailing Bicycle LOS: 2 and 1

Suitable for Interested But Concerned Riders, incl. portions for All Ages and Abilities



Concept Bicycle LOS



Bicycle Environment

| Bike Network Connectivity | Bike Facility Comfort | Construction Activity |
|---------------------------|-----------------------|-----------------------|
| | | |

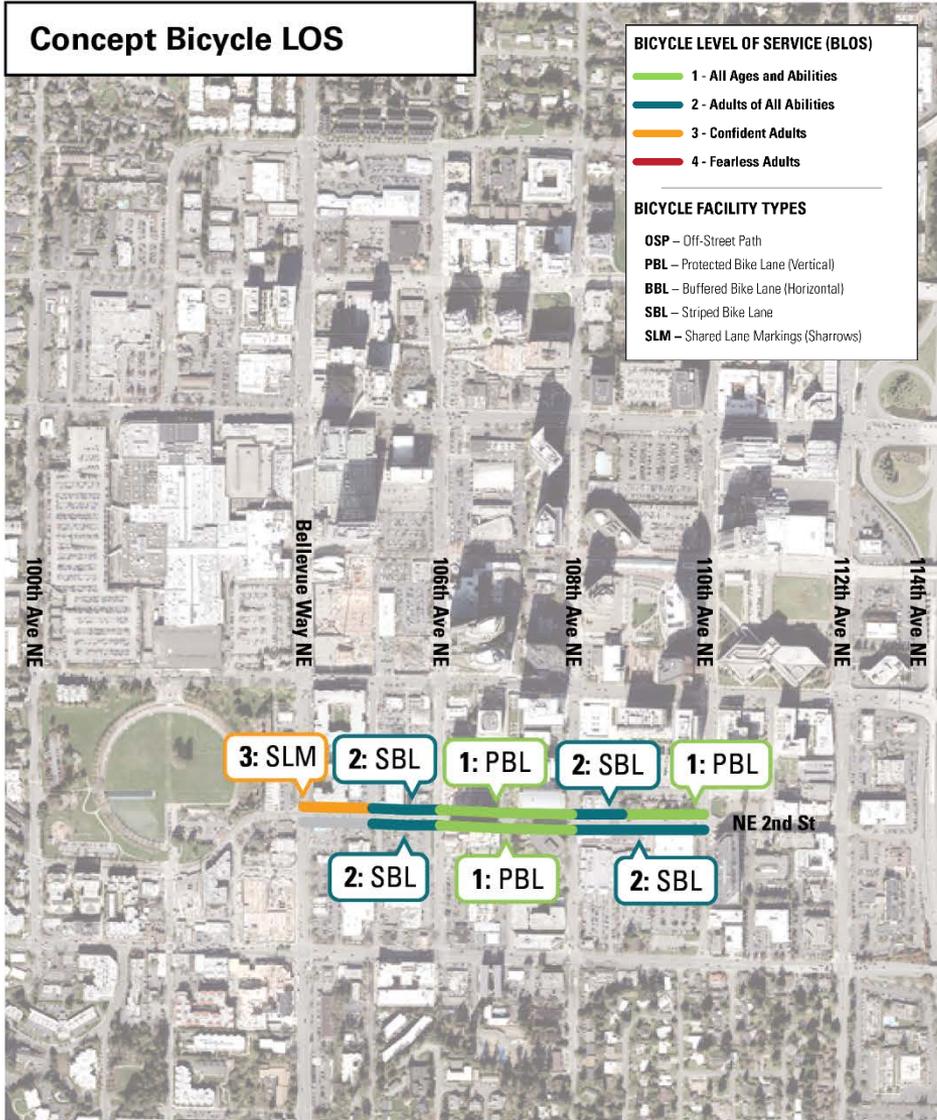
Prevailing Bicycle LOS: 3 and 2

Suitable for
Enthusied and Confident riders,
 west segment for
Interested But Concerned



Moderate to steep grades

Concept Bicycle LOS

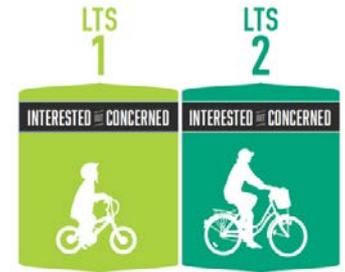


Bicycle Environment

| Bike Network Connectivity | Bike Facility Comfort | Construction Activity |
|---------------------------|-----------------------|-----------------------|
| | | |

Prevailing Bicycle LOS: 2 and 1

Suitable for
Interested But
Concerned Riders,
incl. portions for
All Ages and Abilities



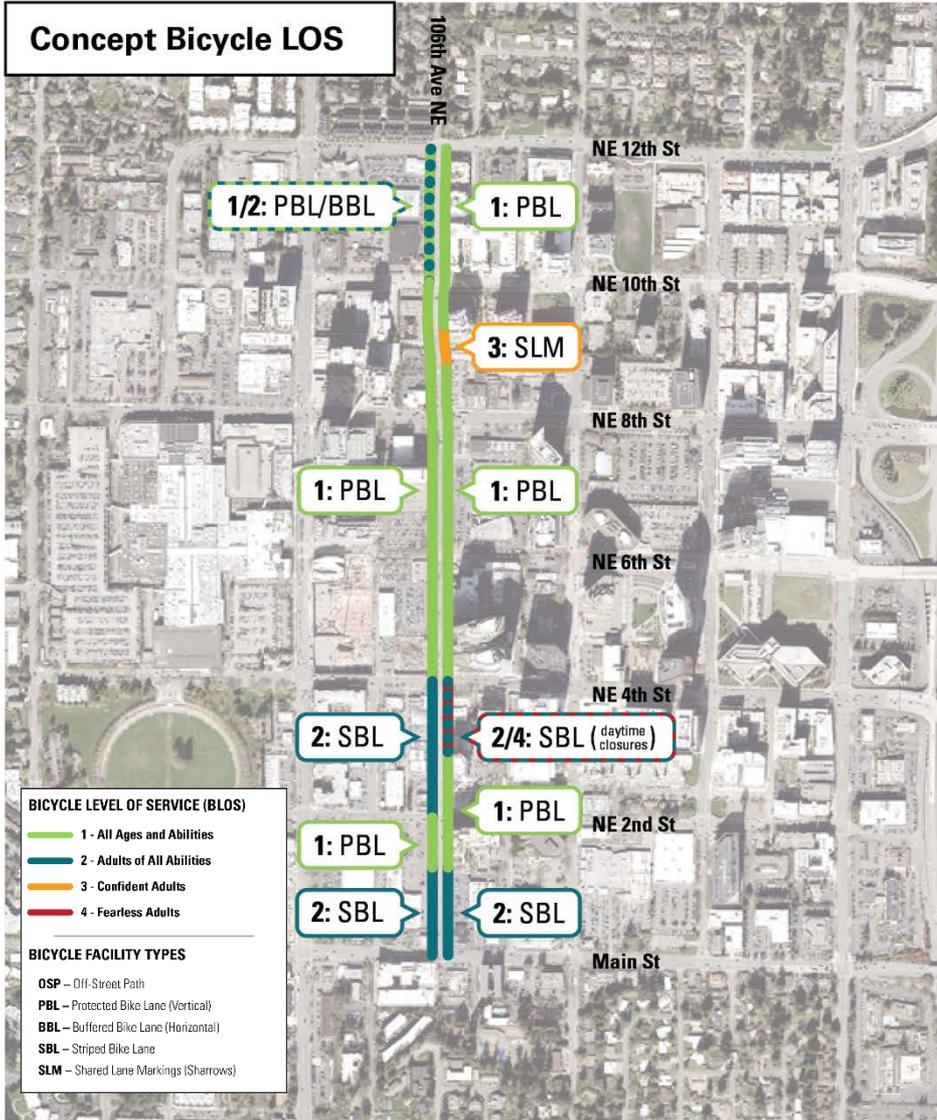
Steep grades between 106th Ave
and 108th Ave



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NE 2nd St | Bicycle Environment

Concept Bicycle LOS

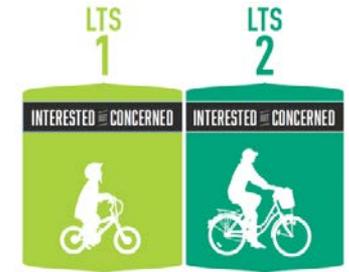


Bicycle Environment

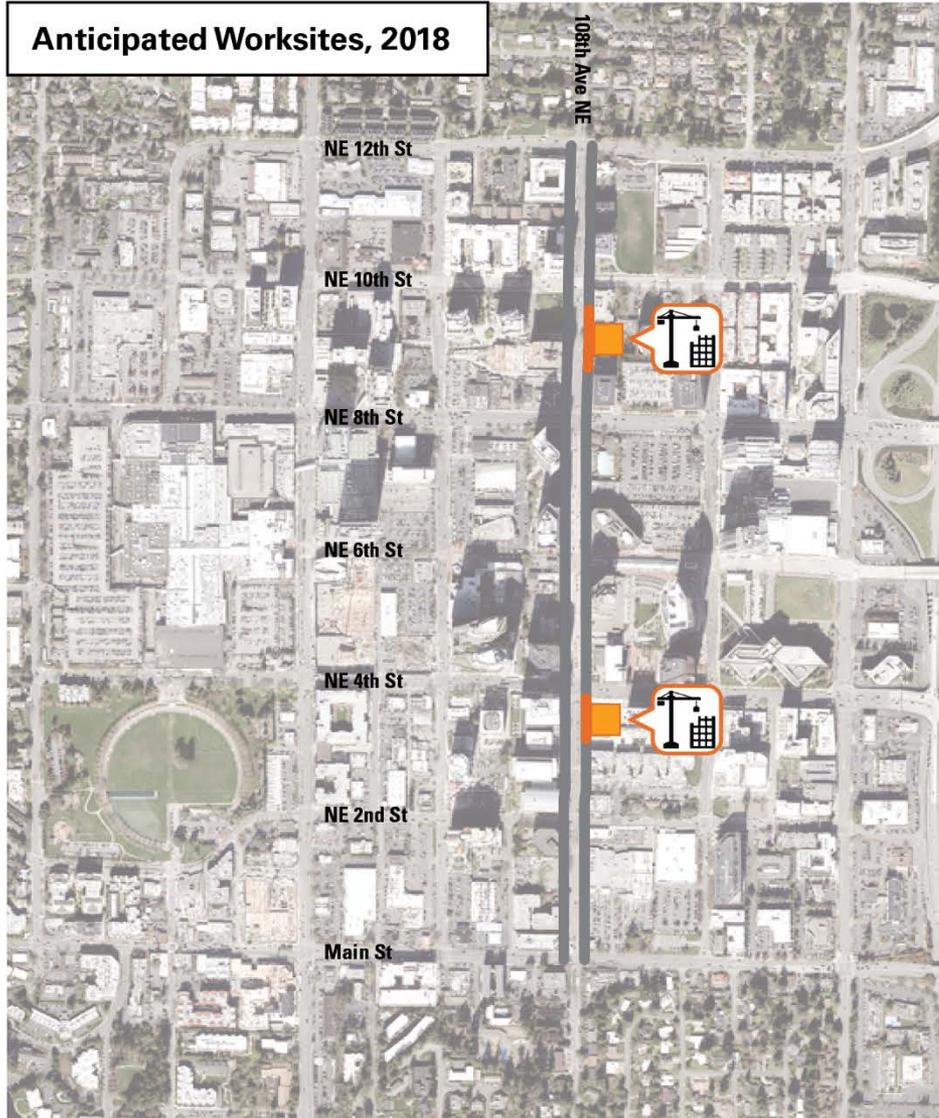
| Bike Network Connectivity | Bike Facility Comfort | Construction Activity |
|---------------------------|-----------------------|-----------------------|
| | | |

Prevailing Bicycle LOS: 1 and 2

Substantially suitable for All Ages and Abilities, with some portions for Interested But Concerned riders



Anticipated Worksites, 2018



Bicycle Environment

| Bike Network Connectivity | Bike Facility Comfort | Construction Activity |
|---------------------------|-----------------------|-----------------------|
| | | |

Private developments are anticipated to be under construction in 2018 at...

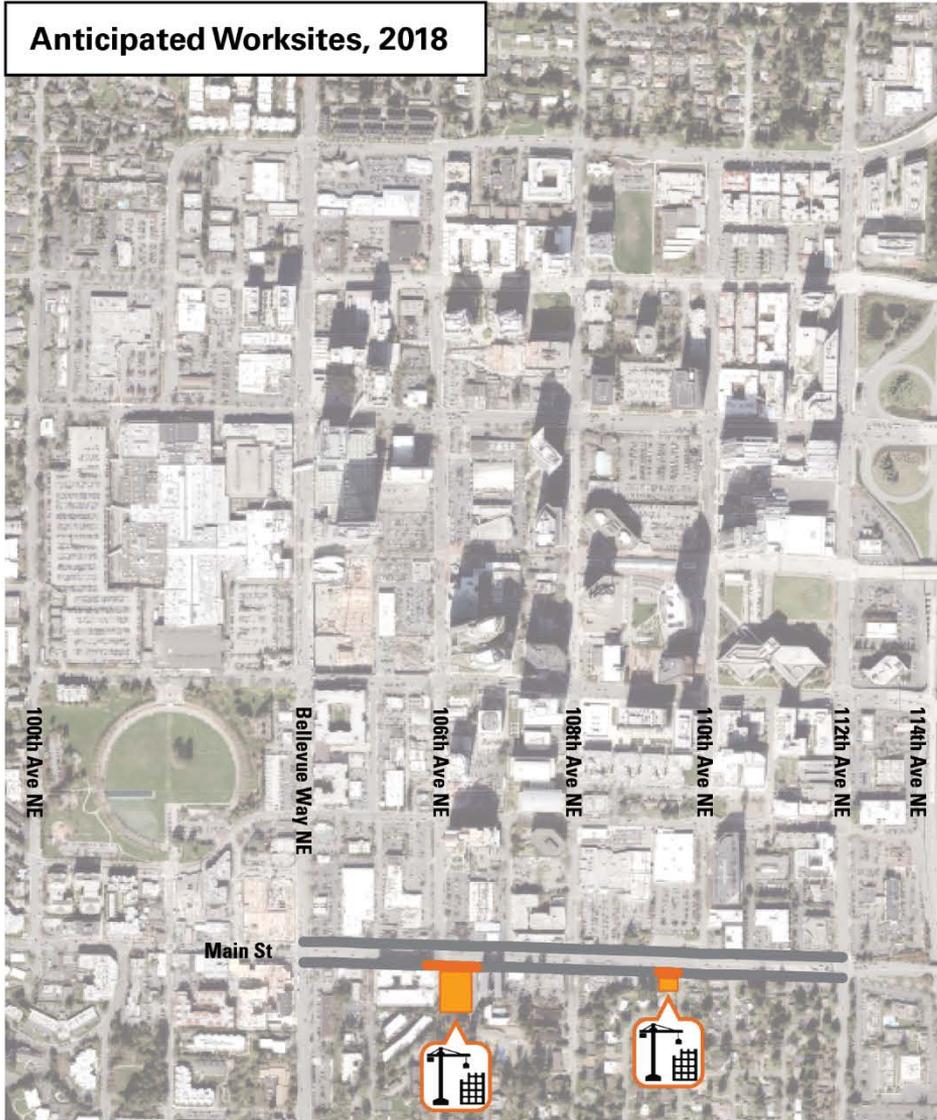
- Southeast corner of NE 4th St
(any associated lane closures not expected to impact existing bike lane at NE 4th St)
- East side mid-block between NE 8th St and NE 10th St
(daytime lane closures anticipated)



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108th Ave | Bicycle Environment

Anticipated Worksites, 2018



Bicycle Environment

| Bike Network Connectivity | Bike Facility Comfort | Construction Activity |
|---------------------------|-----------------------|-----------------------|
| | | |

Private developments are anticipated to be under construction in 2018 at...

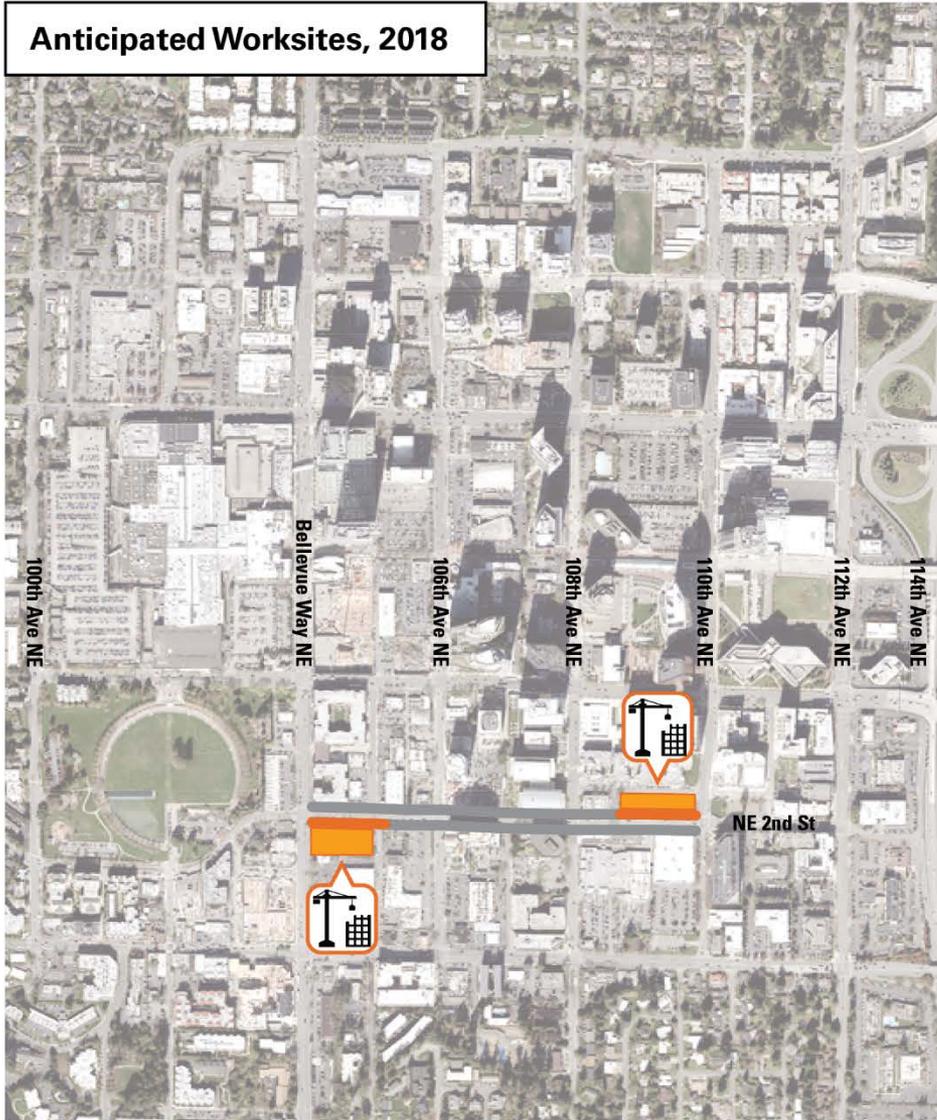
- Southeast corner of 106th Ave
(daytime lane closures anticipated)
- Southwest corner of 110th Ave



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Main St | Bicycle Environment

Anticipated Worksites, 2018



Bicycle Environment

| Bike Network Connectivity | Bike Facility Comfort | Construction Activity |
|---------------------------|-----------------------|-----------------------|
| | | |

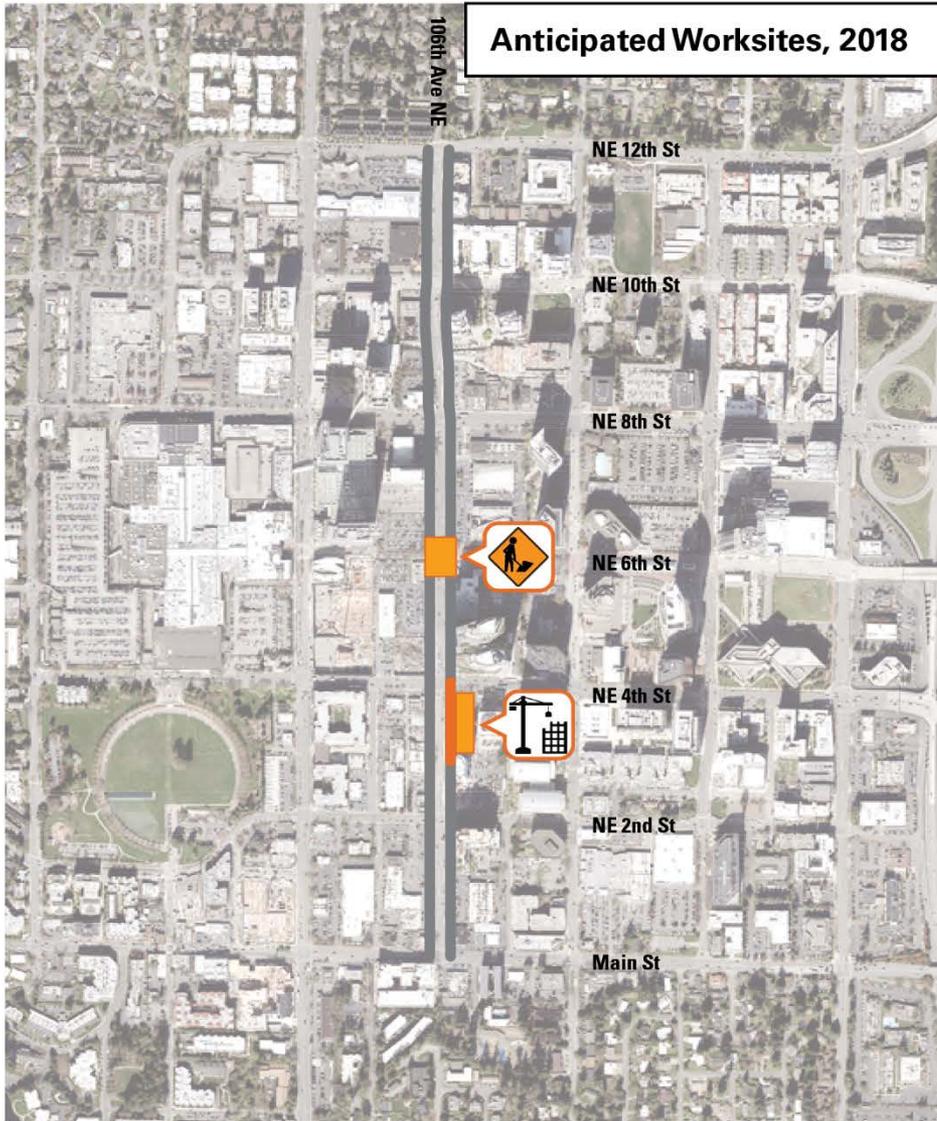
Private developments are anticipated to be under construction in 2018 at...

- Southeast corner of Bellevue Way NE (*ongoing daytime lane closures*)
- North block face west of 110th Ave NE (*developer utilizing existing on-street parking lane for equipment staging*)



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NE 2nd St | Bicycle Environment



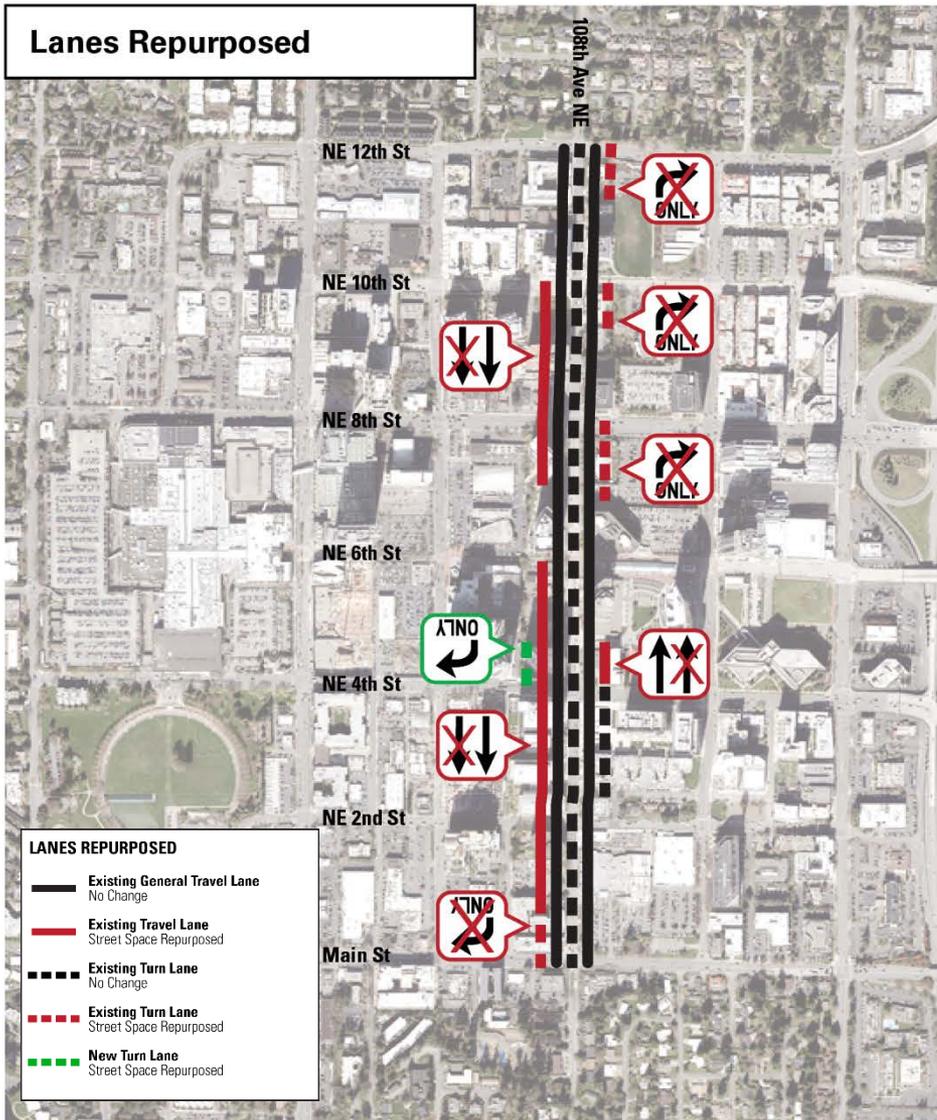
| Bicycle Environment | | |
|---------------------------|-----------------------|-----------------------|
| Bike Network Connectivity | Bike Facility Comfort | Construction Activity |
| | | |

Private developments are anticipated to be under construction in 2018 at...

- Southeast corner of NE 4th St
(potentially delayed until late 2018 or 2019)
- NE 6th St intersection improvement project
(half-street closures anticipated)

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| Curbside Environment | Changes to On-Street Parking | | | | |
| | Loading/Unloading Access | | | | |
| Transit Environment | Bus Operations | | | | |
| | Transit Access | | | | |





| Auto Environment | |
|-------------------------|-----------------------|
| Travel Lanes Repurposed | Turn Lanes Repurposed |
| | |

Travel Lanes Repurposed:

Second southbound curb lane

Right Turn Lanes Repurposed at:

- Main St (SB)
- NE 8th St, NE 10th St, and NE 12th St (NB)

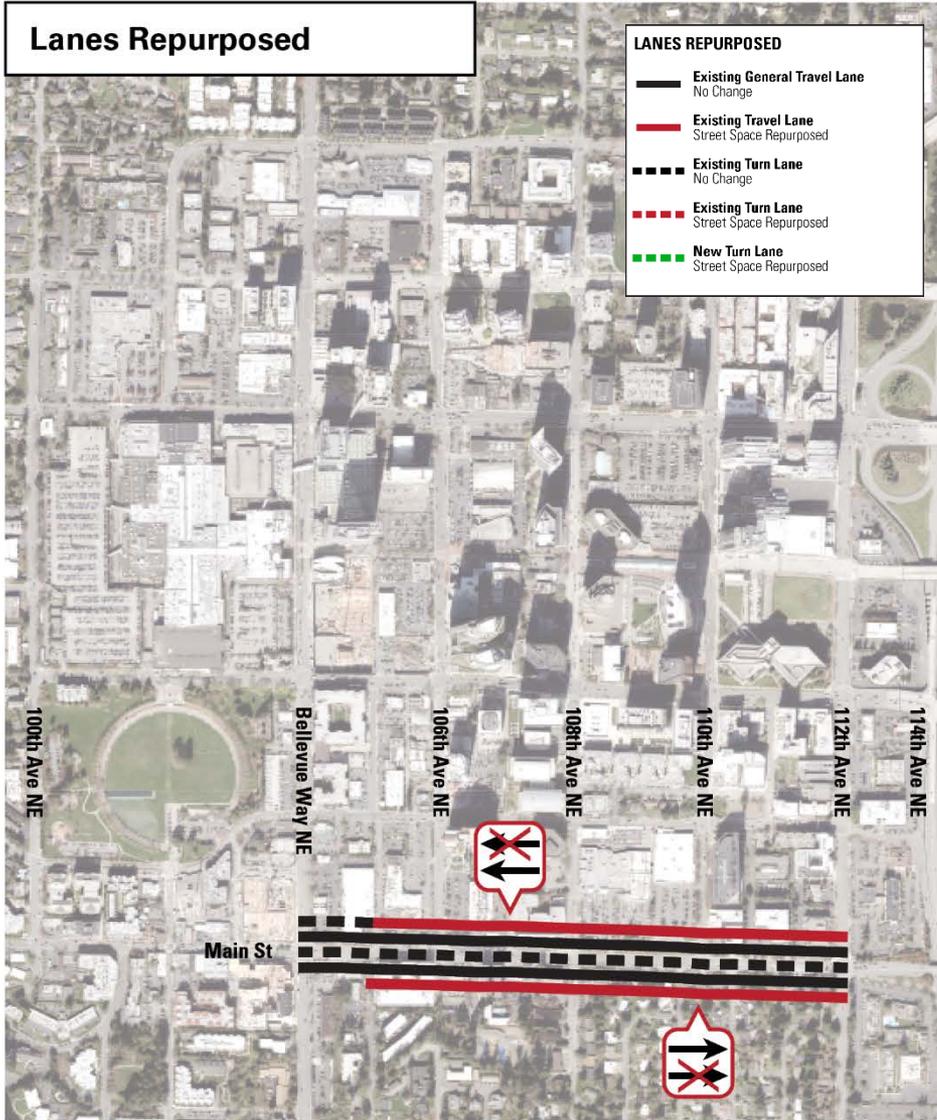
Right Turn Lane Created at:

- NE 4th St (SB)

Lane Reduction Suitability: Good

Based on FHWA guidance and average daily traffic volumes (6,200–11,400). Intersection analysis and signal retiming recommended.

Lanes Repurposed



Auto Environment

| Travel Lanes Repurposed | Turn Lanes Repurposed |
|-------------------------|-----------------------|
| | |

Travel Lanes Repurposed:

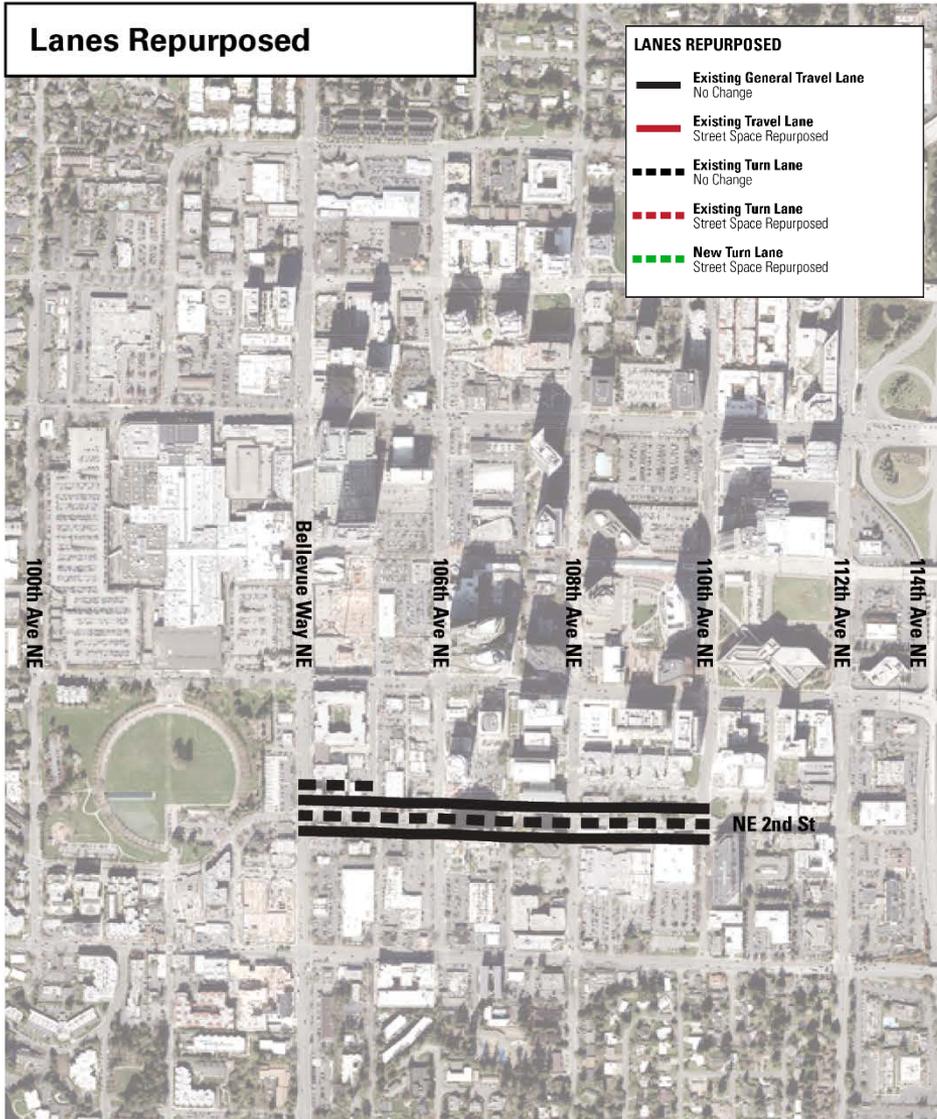
Eastbound and westbound curb lanes

Westbound right turn lane at Bellevue Way retained

Lane Reduction Suitability: Good

Based on FHWA guidance and average daily traffic volumes (14,300-18,400). Capacity may be impacted; a corridor analysis is recommended.

Lanes Repurposed



Auto Environment

Travel Lanes Repurposed

Turn Lanes Repurposed

All existing travel and turn lanes retained without impact.

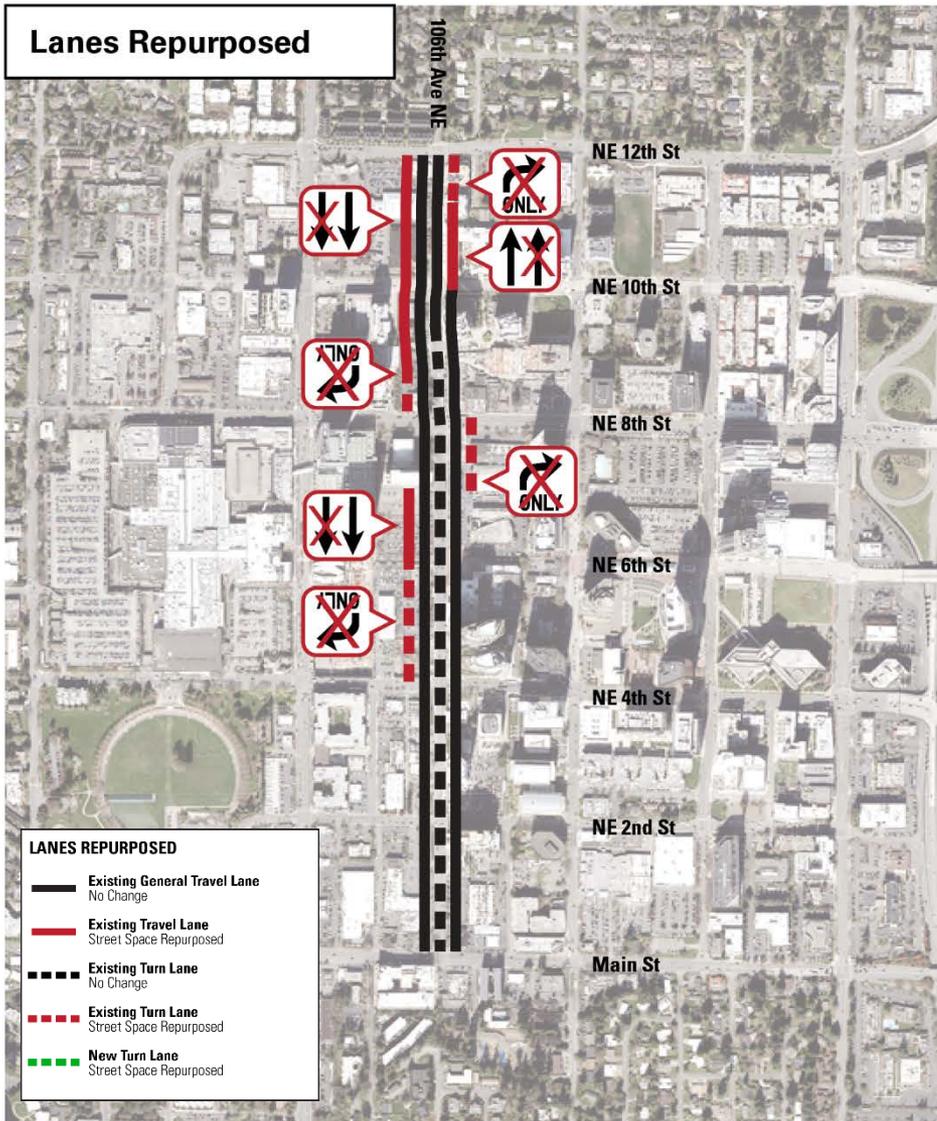
3-Lane Configuration Suitability: Great

Based on FHWA guidance and current average daily traffic volumes (8,200-8,400).



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NE 2nd St | Auto Environment



| Auto Environment | |
|-------------------------|-----------------------|
| Travel Lanes Repurposed | Turn Lanes Repurposed |
| | |

Travel Lanes Repurposed:

- Second southbound lane between NE 8th and 12th St and south of NE 6th St
- Second northbound lane between NE 10th and 12th St

Right Turn Lanes Repurposed at:

- NE 4th St (SB)
- NE 8th St (NB and SB)
- NE 12th St (NB)

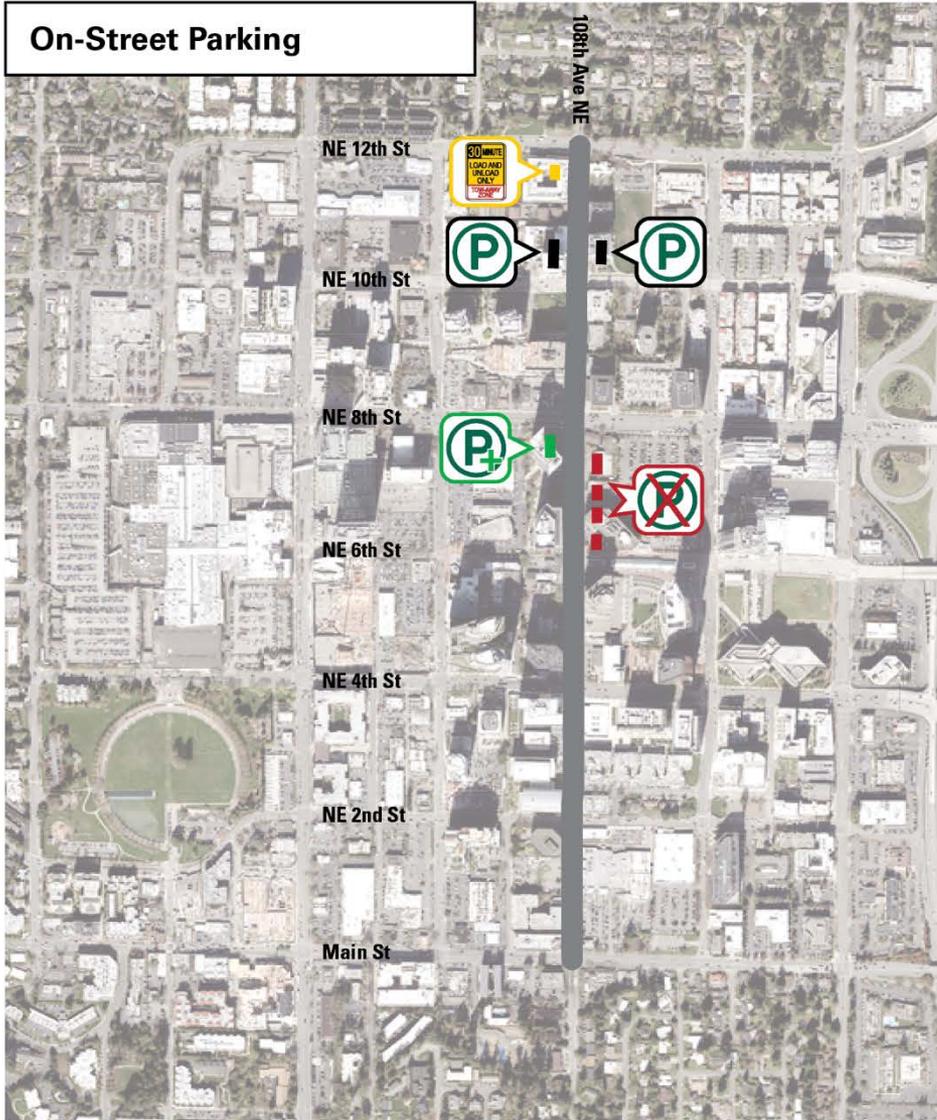
Lane Reduction Suitability: Great

Based on FHWA guidance and average daily traffic volumes (6,300–9,800).

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| Curbside Environment | Changes to On-Street Parking | | | | |
| | Loading/Unloading Access | | | | |
| Transit Environment | Bus Operations | | | | |
| | Transit Access | | | | |



On-Street Parking



Curbside Environment

| Changes to On-Street Parking | Loading/Unloading |
|------------------------------|-------------------|
| | |

On-Street Parking Repurposed:

- Off-peak spaces on east side of block, NE 6th St to NE 8th St;
- Partially offset by new load/unload spaces on west side south of NE 8th St

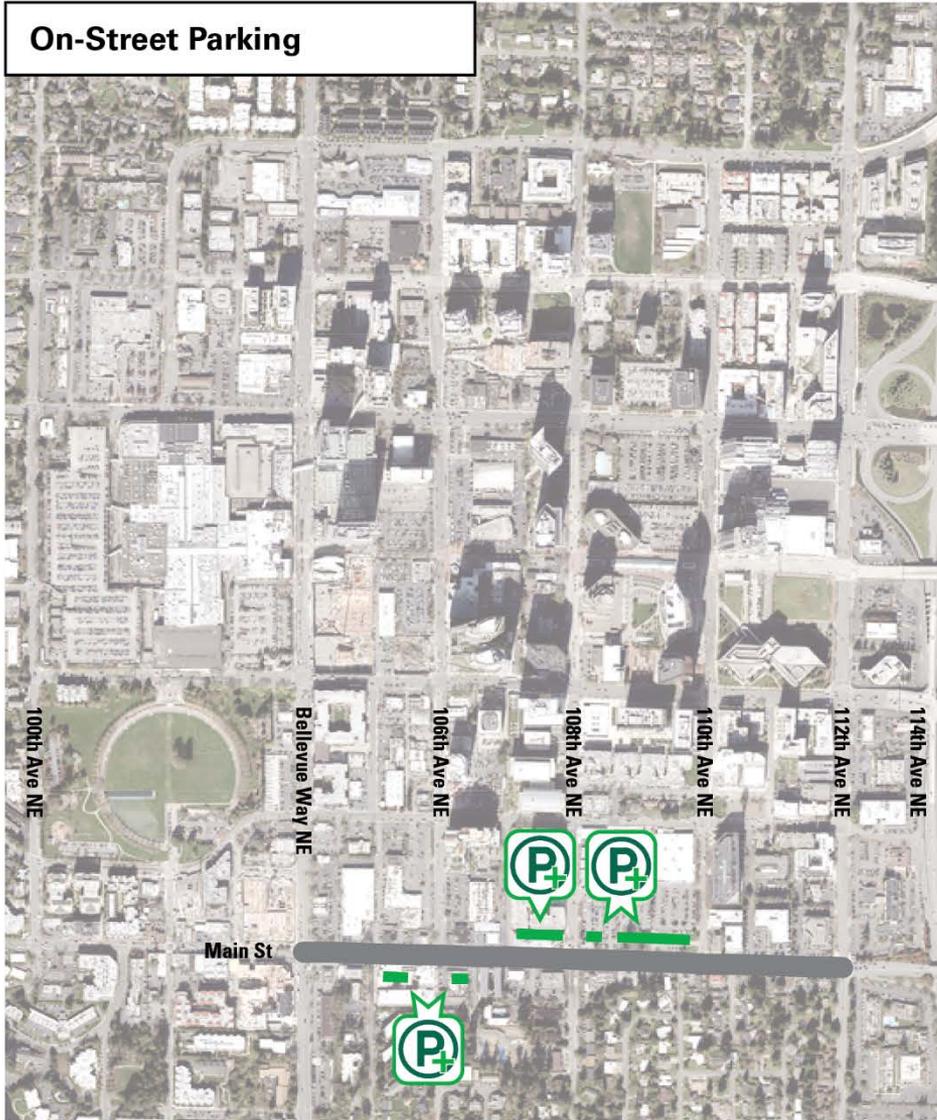
Other existing parking and loading spaces retained.



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108th Ave | Curbside Environment

On-Street Parking



Curbside Environment

Changes to
On-Street
Parking

Loading/
Unloading

Opportunity for significant new on-street parking supply:

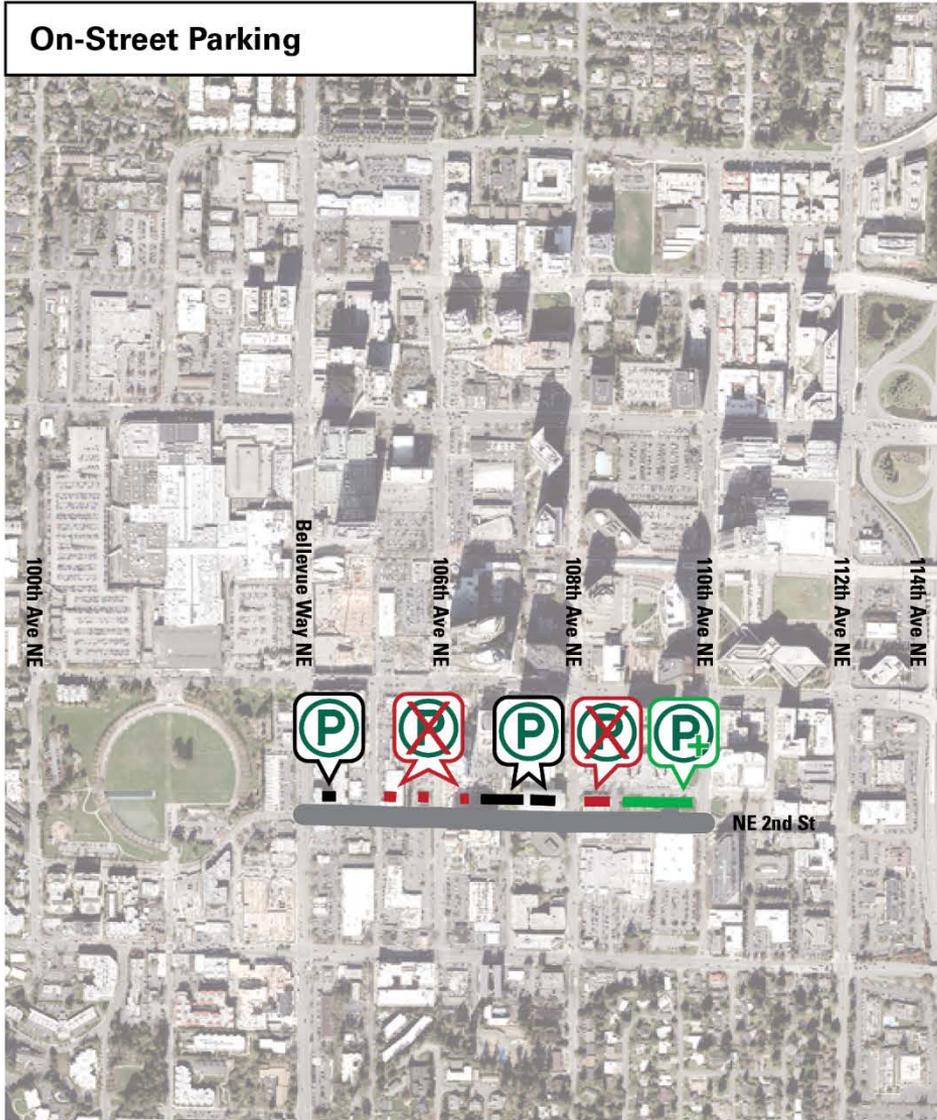
- South side between 105th Ave and 107th Ave
- North side between 107th Ave and 110th Ave
- Potential to designate some as loading spaces as needed



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Main St | Curbside Environment

On-Street Parking



Curbside Environment

| Changes to On-Street Parking | Loading/Unloading |
|------------------------------|-------------------|
| | |

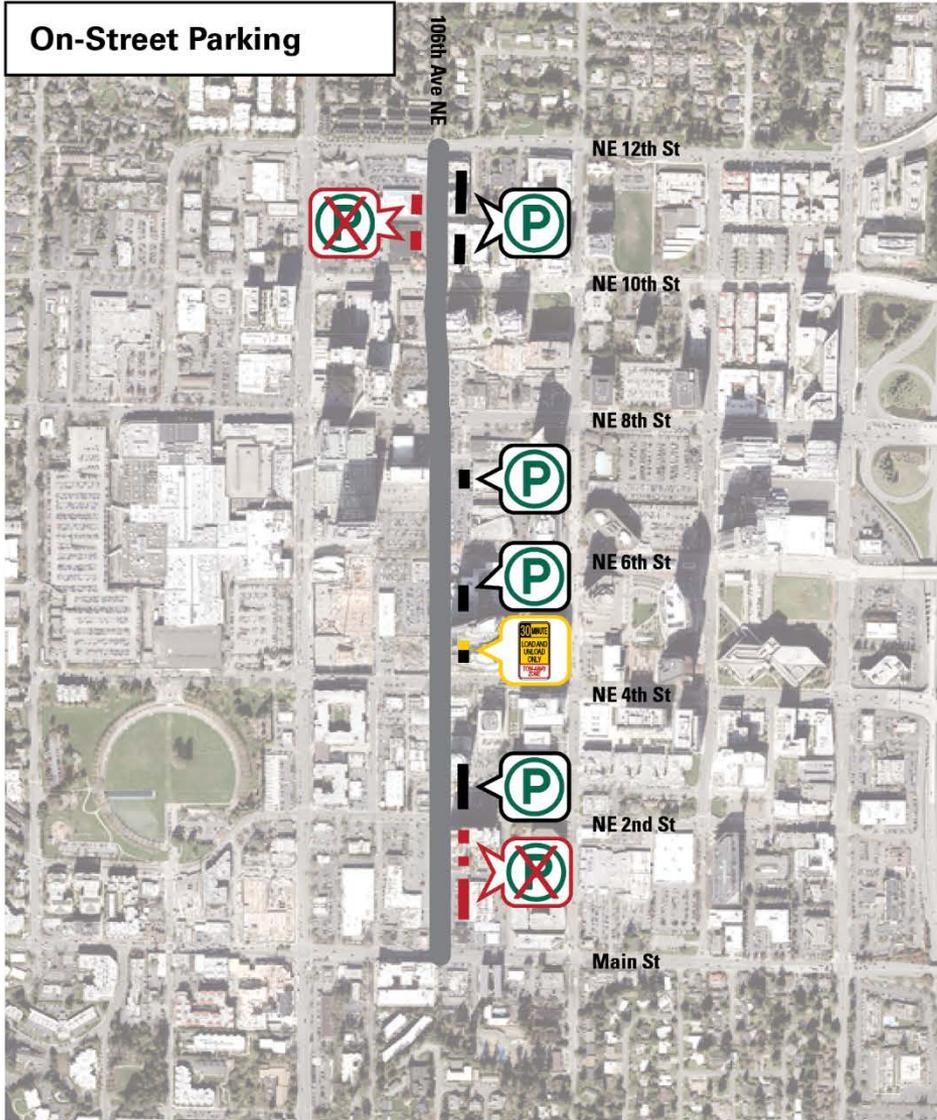
On-Street Parking Repurposed:

- North side of block, east of 108th Ave NE;
- North side of block, 105th Ave NE to east of 106th Ave NE

Other existing parking and loading spaces retained.

New spaces reintroduced on north side of block, west of 110th Ave NE, following completion of private construction

On-Street Parking



Curbside Environment

| Changes to On-Street Parking | Loading/Unloading |
|------------------------------|-------------------|
| | |

On-Street Parking Repurposed:

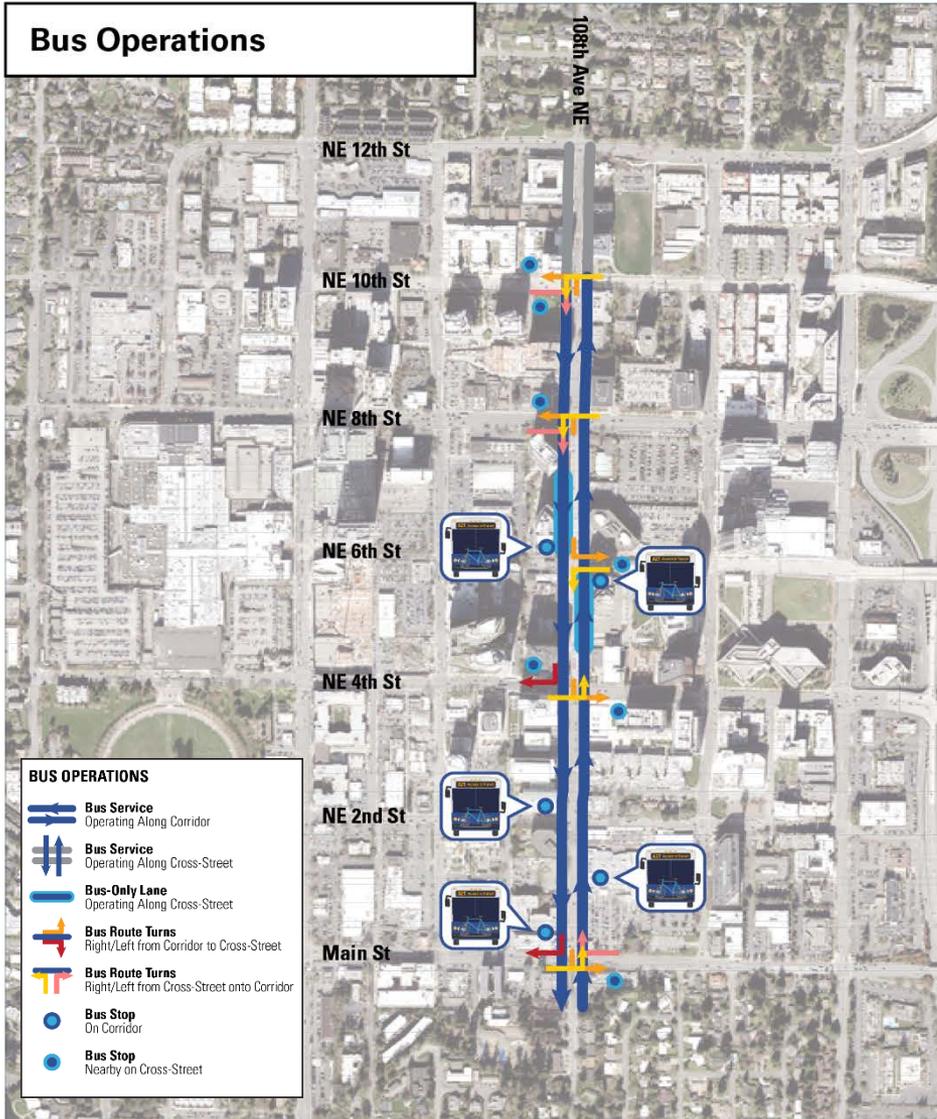
- West side of block, NE 10th St to south of NE 12th St;
- East side of block, Main St to NE 2nd St

All other existing parking and loading spaces retained.

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| | Loading/Unloading Access | | | | |
| Transit Environment | Bus Operations | | | | |
| | Transit Access | | | | |



Bus Operations



Transit Environment

| Bus Operations | Transit Access |
|----------------|----------------|
| | |

Designated a priority transit corridor

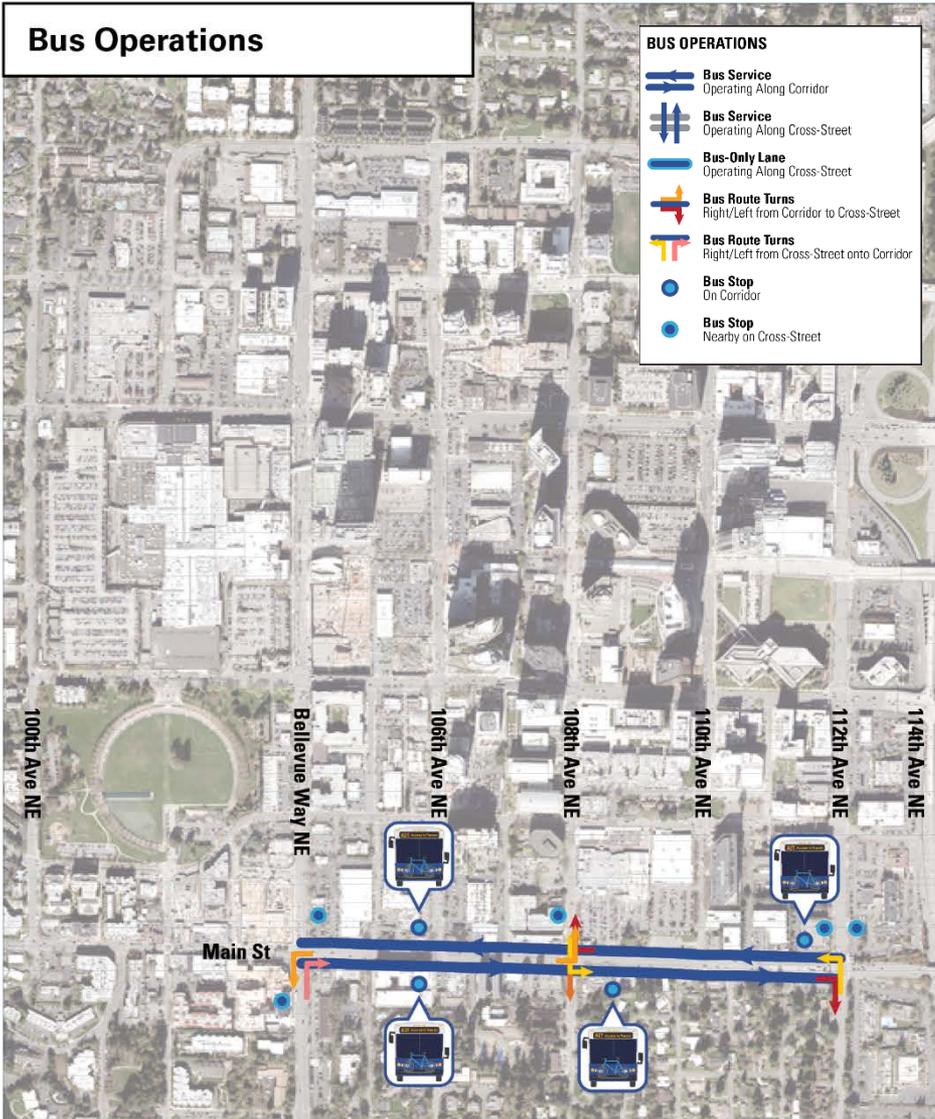
Frequent service

High bus volumes

Transit access:

- 5 stops along corridor
- 6 stops nearby on cross-streets
- Bellevue Transit Center at NE 6th St

Bus Operations



Transit Environment

| Bus Operations | Transit Access |
|----------------|----------------|
| | |

Variable frequent service

(sometimes served by ST Route 550)

Designated as a future Frequent Transit Network (FTN) corridor

Moderate bus volumes

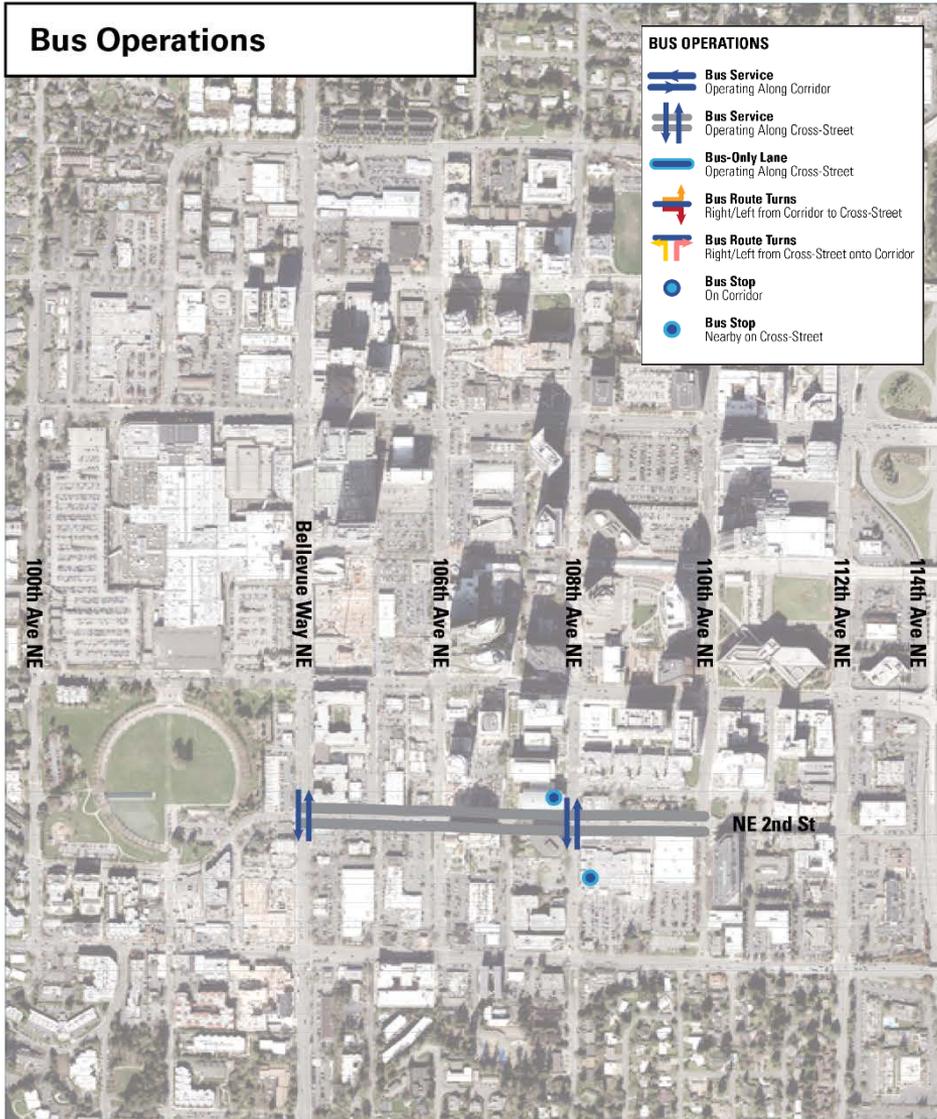
Transit access:

- 4 stops along corridor
- 5 stops nearby on cross-streets

Bus Operations

BUS OPERATIONS

-  **Bus Service**
Operating Along Corridor
-  **Bus Service**
Operating Along Cross-Street
-  **Bus-Only Lane**
Operating Along Cross-Street
-  **Bus Route Turns**
Right/Left from Corridor to Cross-Street
-  **Bus Route Turns**
Right/Left from Cross-Street onto Corridor
-  **Bus Stop**
On Corridor
-  **Bus Stop**
Nearby on Cross-Street



Transit Environment

| Bus Operations | Transit Access |
|----------------|----------------|
| | |

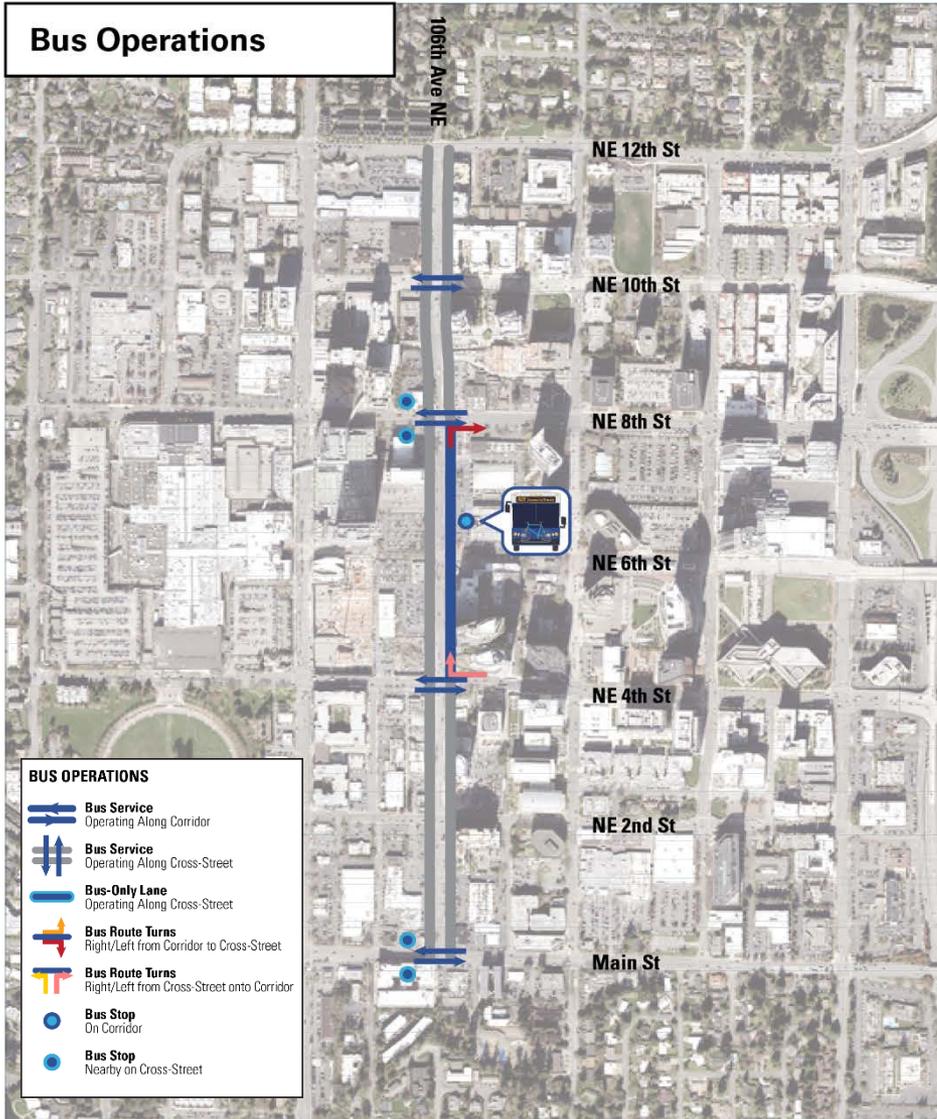
No transit service along corridor

High bus volumes on cross-streets
(Bellevue Way NE; 108th Ave NE)

Transit access:

- 2 stops nearby on cross-streets

Bus Operations



Transit Environment

| Bus Operations | Transit Access |
|----------------|----------------|
| | |

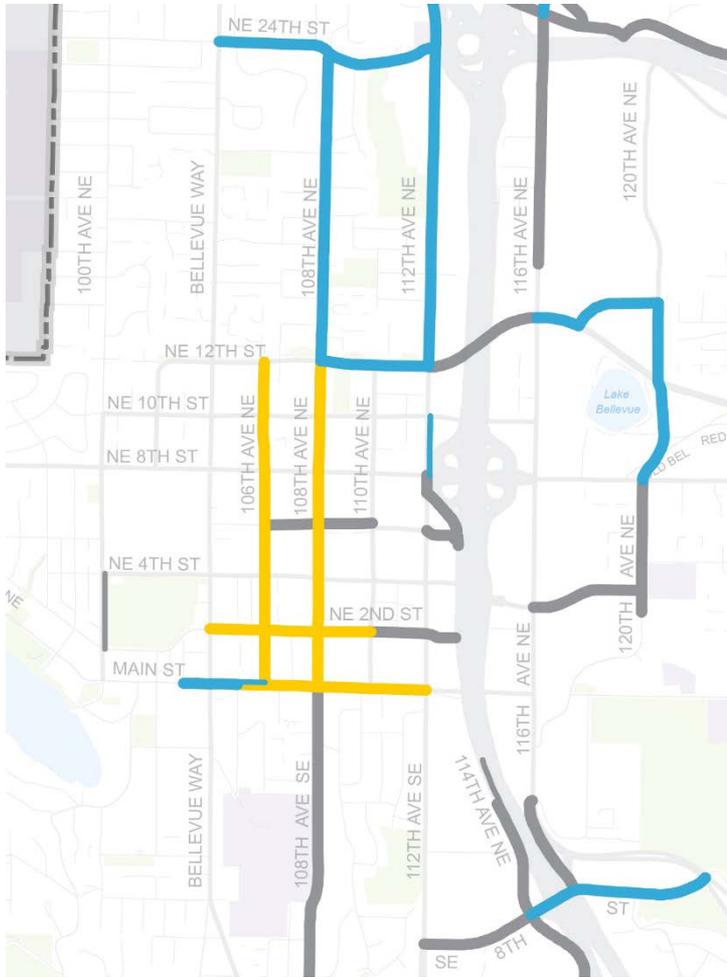
Minimal transit service along corridor (Metro Route 240 only)

High bus volumes on cross-streets

Potential impact to existing bus layover space between NE 6th St and NE 8th St

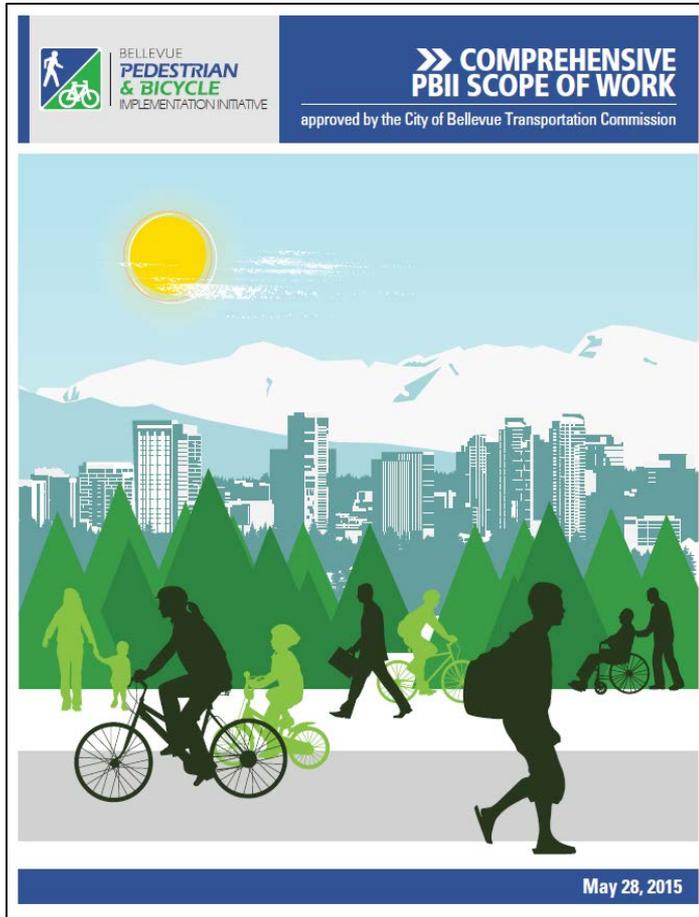
Transit access:

- 1 stop along corridor
- 4 stops nearby on cross-streets



Initial Feedback?

1. Questions/concerns?
2. On which corridor should we advance a demonstration bikeway project in 2018?
3. Are there any factors missing from this assessment that would help to inform #2?



“Provide people in Bellevue access to a bicycle when they want one, without having to worry about storage, security, and maintenance.”

- PBII Scope of Work



BELLEVUE
PEDESTRIAN
& BICYCLE
IMPLEMENTATION INITIATIVE

Bicycling and Bike Share in Bellevue

9. If a bike share service was available in Bellevue today, would you use bike share in Bellevue? 

- Yes, I would use bike share in Bellevue
- No, I would not use bike share
- I don't know

Please explain why or why not.

10. If a bike share service was available in Bellevue today, in which parts of the city would you use bike share? 

- Downtown Bellevue



BELLEVUE
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Bicycling and Bike Share Survey

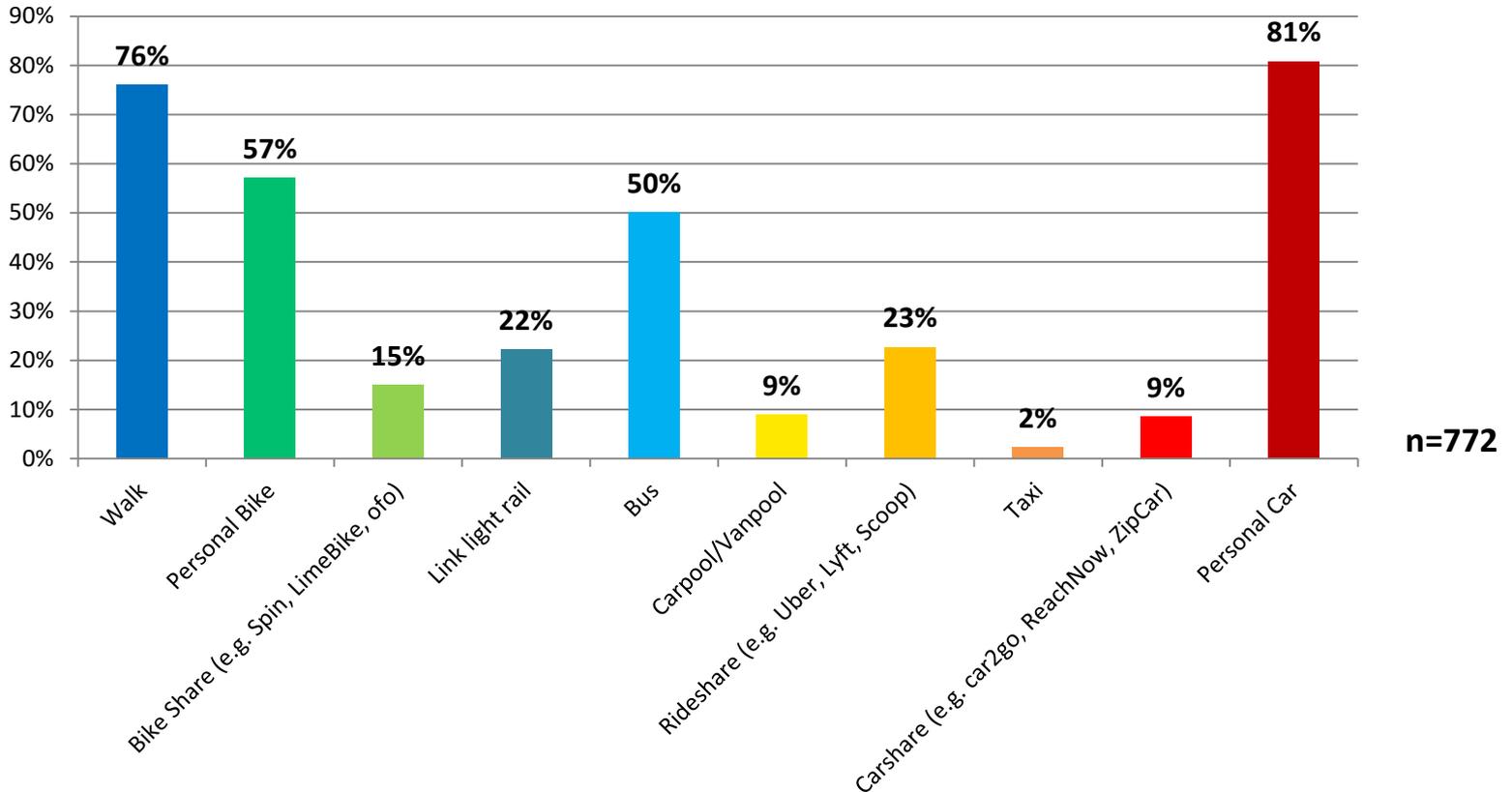


Total Respondents: 773

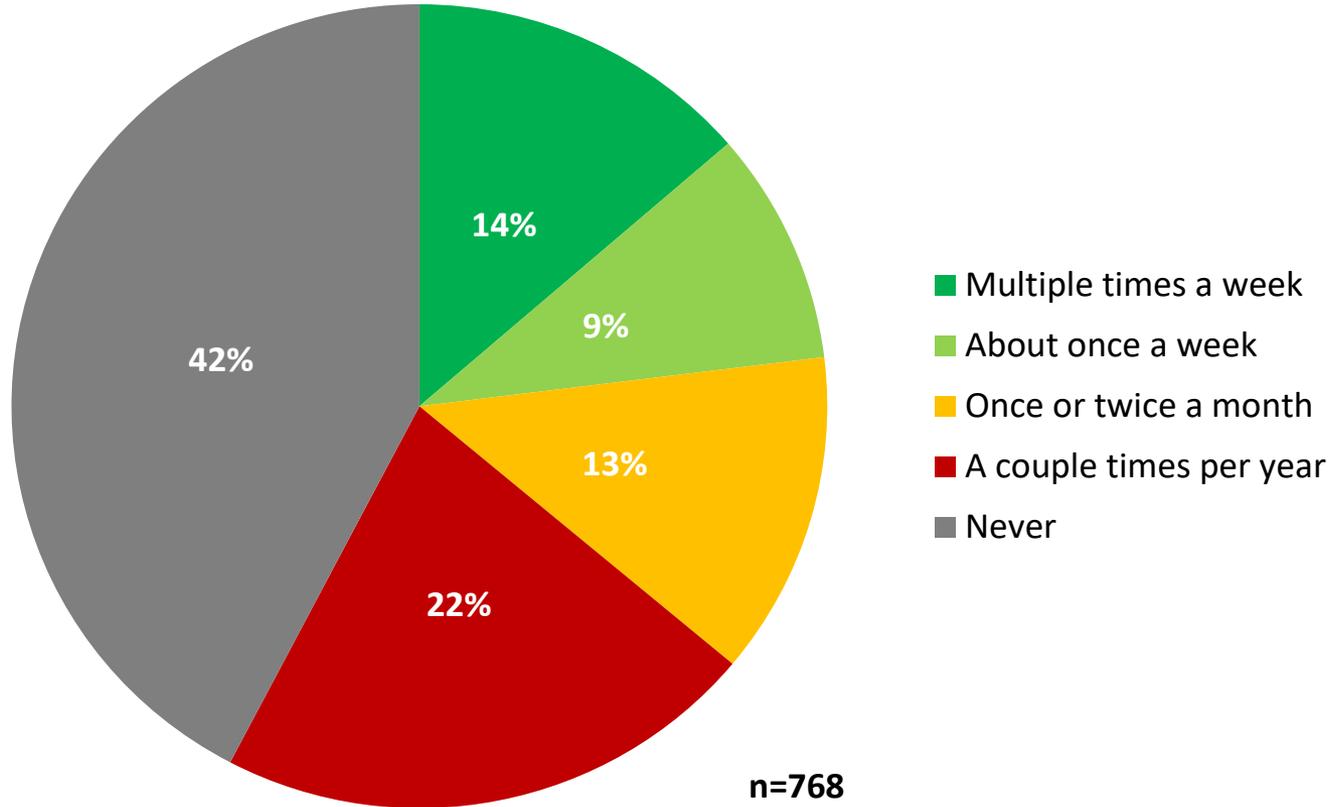
- 52% are Bellevue residents
- 33% work in Downtown Bellevue
- 20% work in Seattle
- 18% work in other Eastside communities



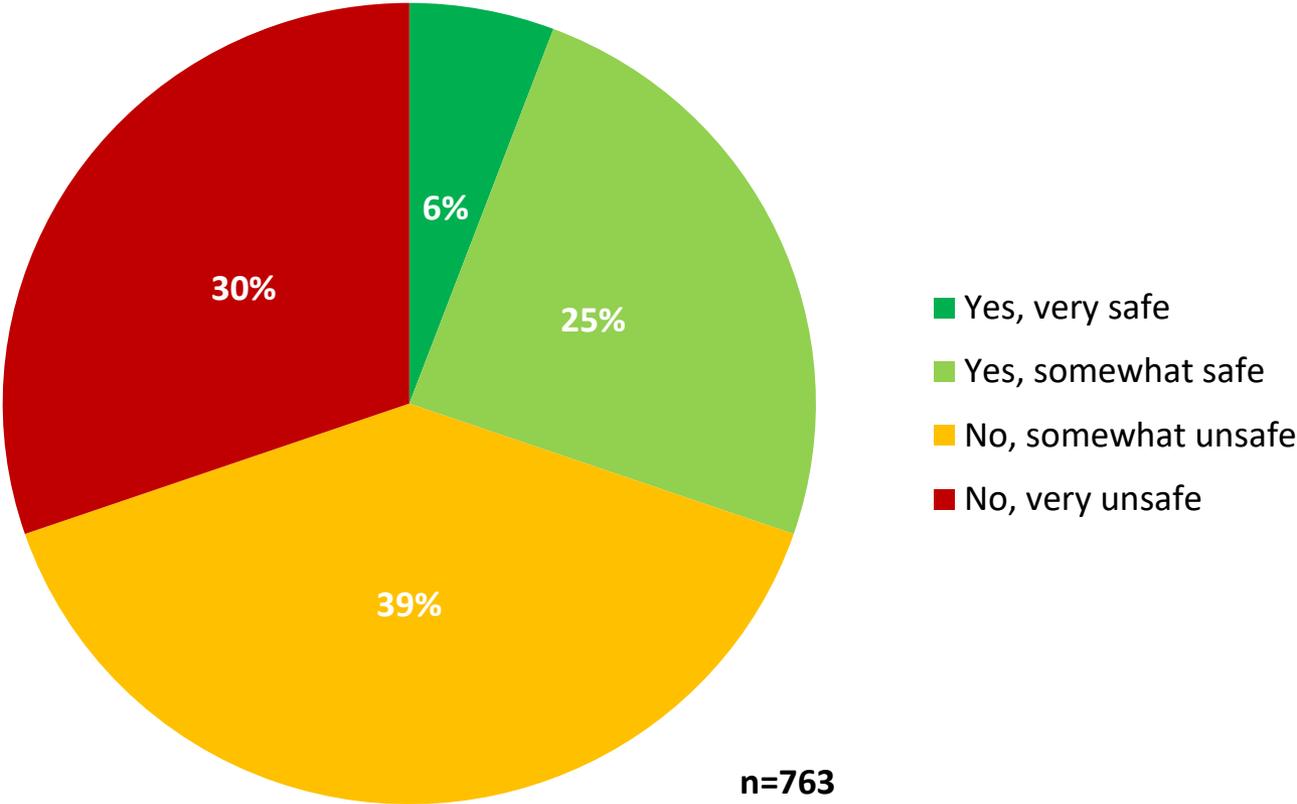
Q1: How do you get around on a regular basis? Select all the different transportation modes you use frequently.



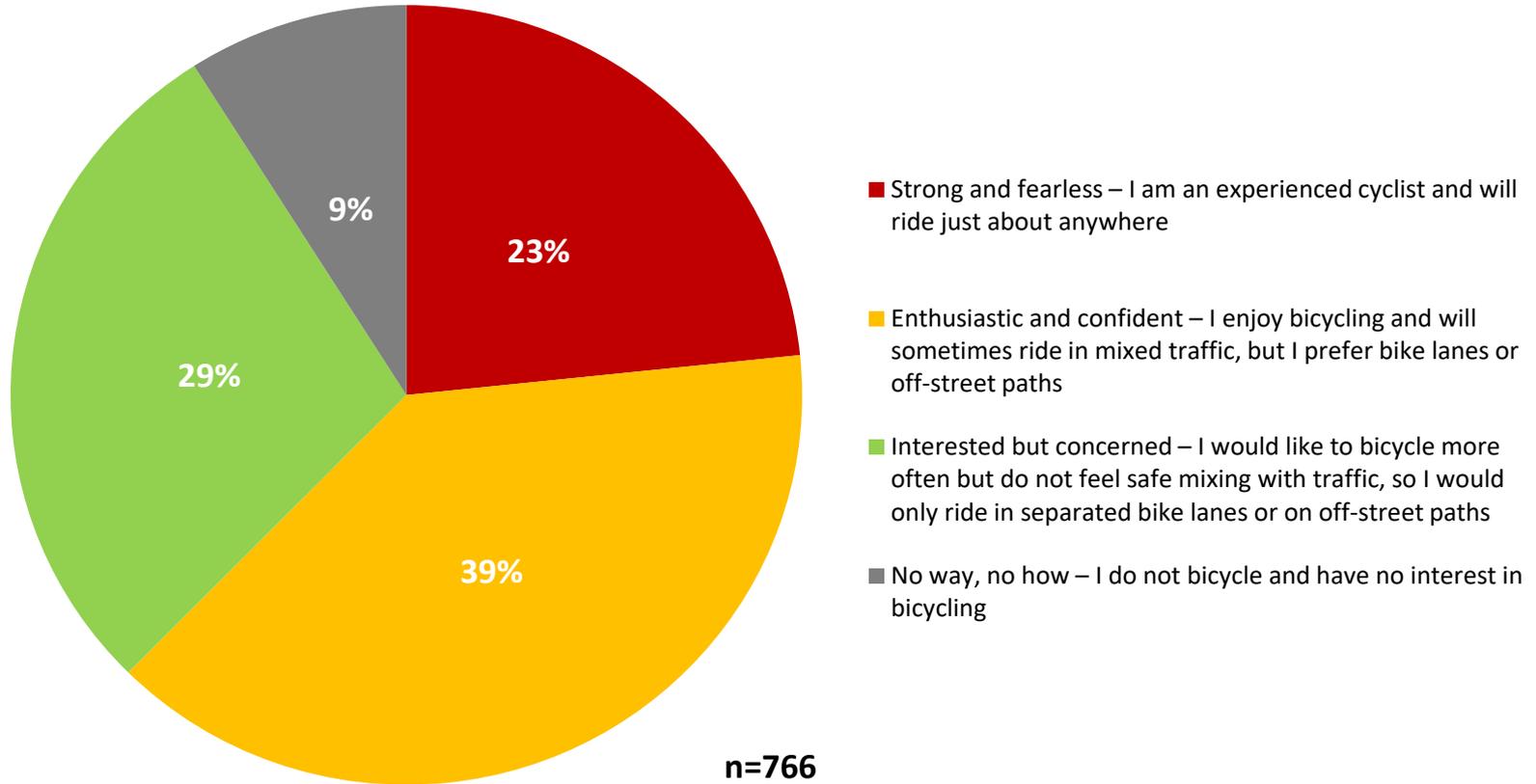
Q2: How often do you typically ride a bike in Downtown Bellevue?



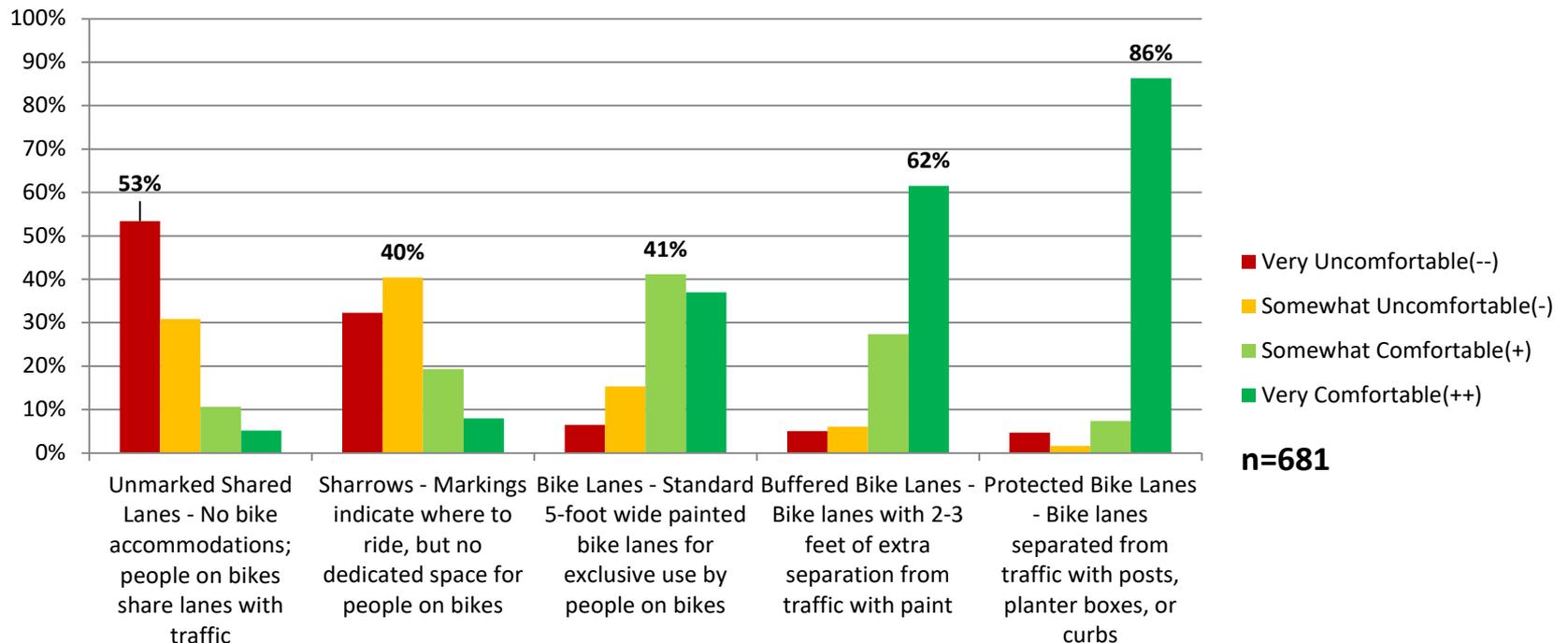
Q4: Do you feel that Downtown Bellevue is a safe place to ride a bike today?



Q5: Which of the following do you feel best describes your relationship to bicycling?

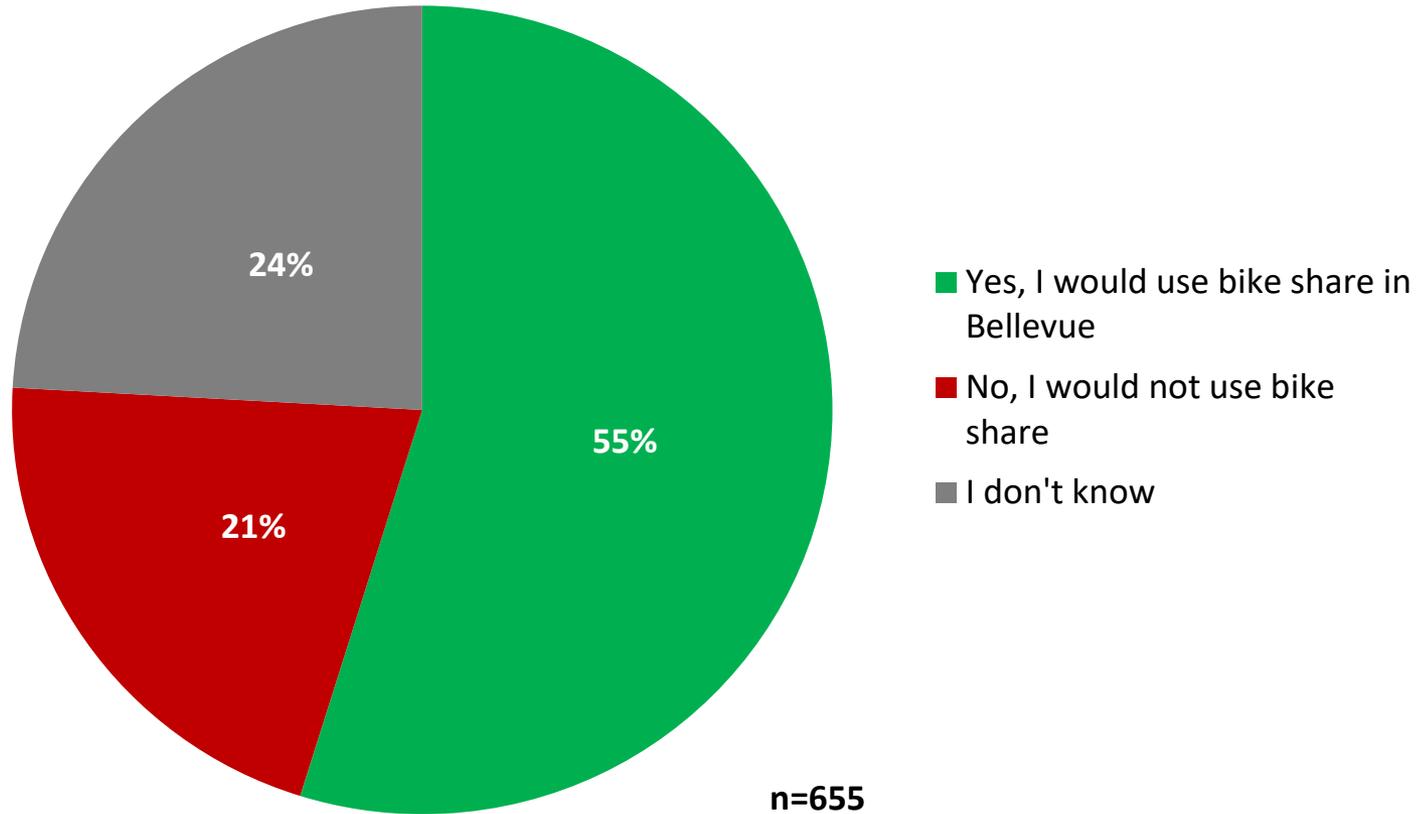


Q6: On a typical street in Downtown Bellevue, what would be your level of comfort with riding on each of the following types of bike facilities?

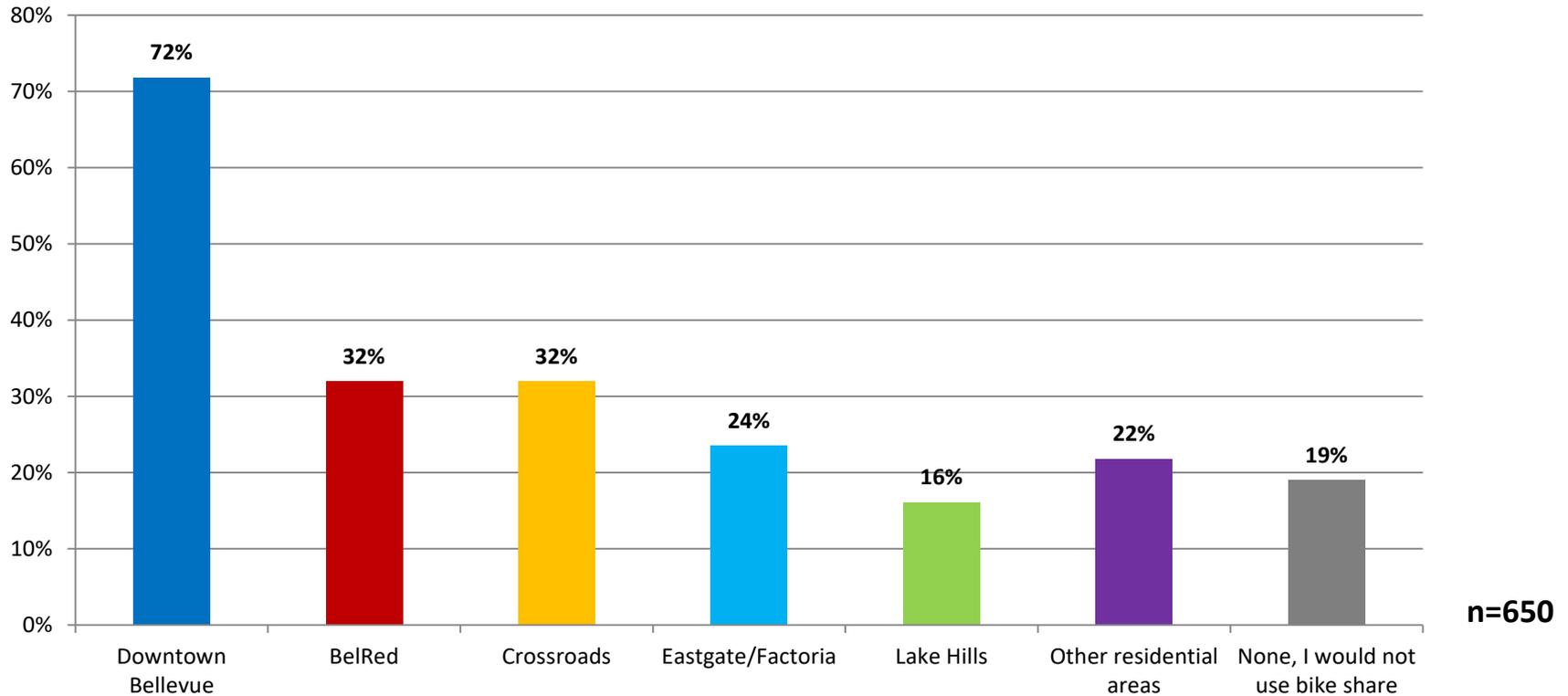


n=681

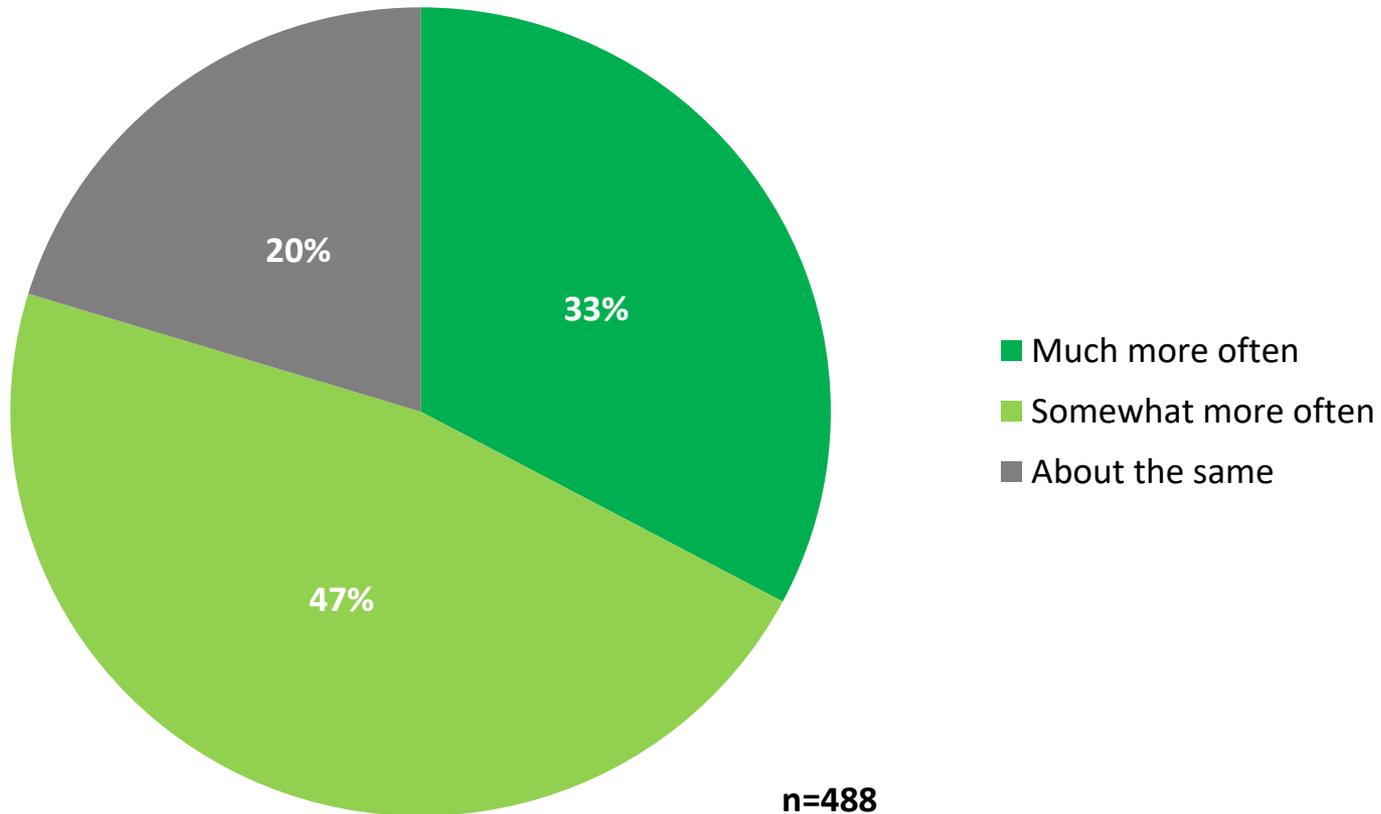
Q9: If a bike share service was available in Bellevue today, would you use bike share in Bellevue?



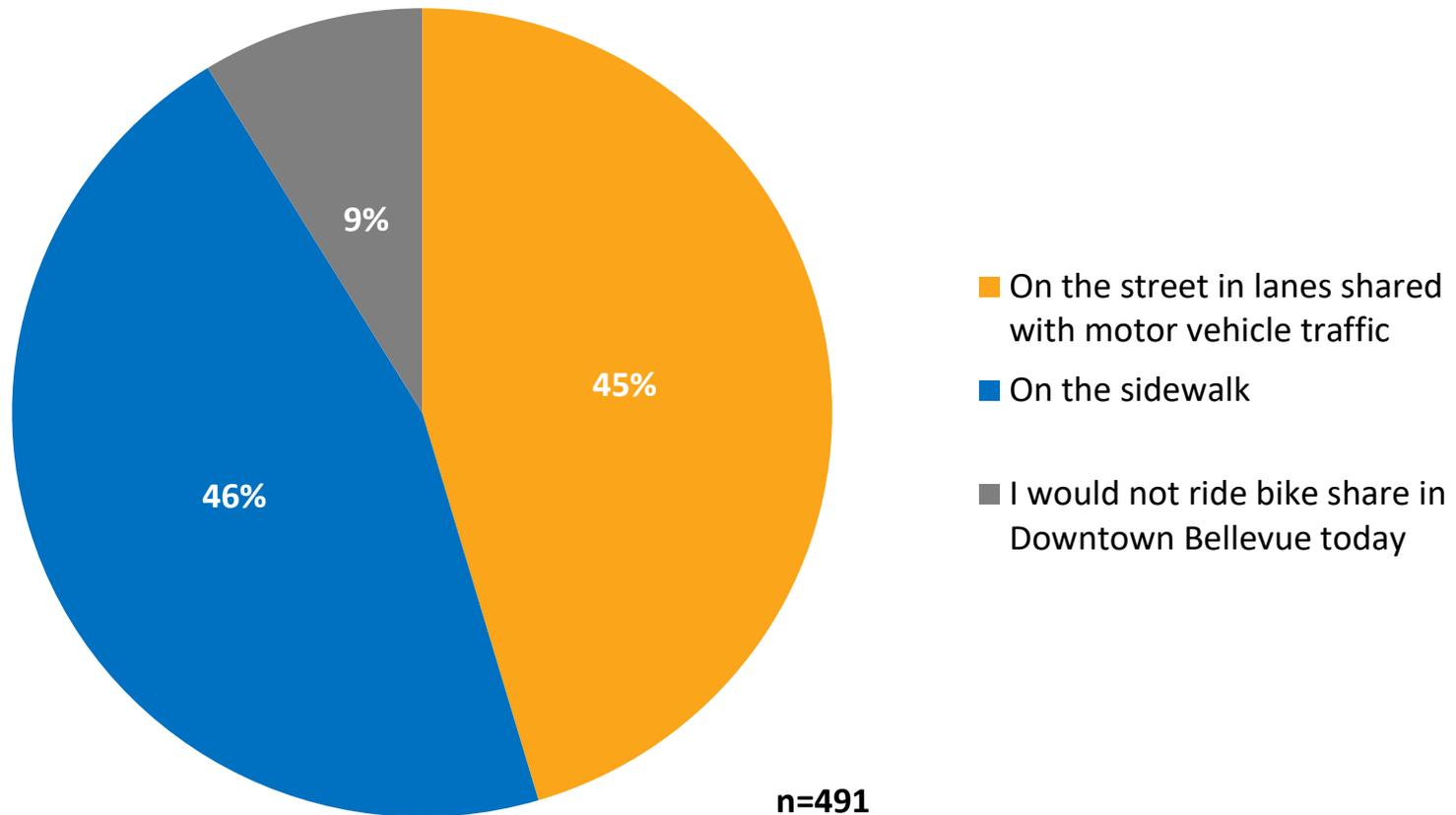
Q10: If a bike share service was available in Bellevue today, in which parts of the city would you use bike share?



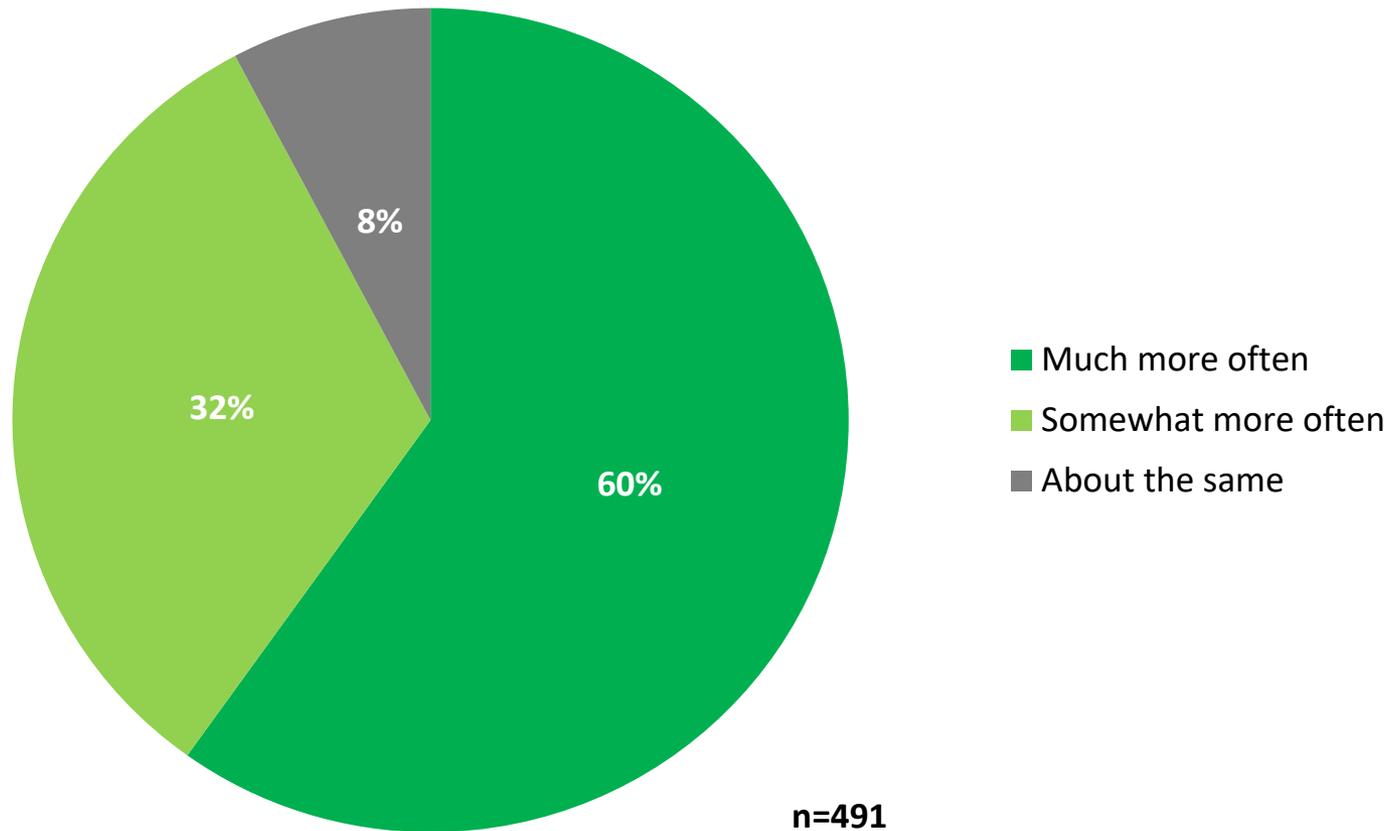
Q11: If a bike share service was available in Downtown Bellevue today, how much more often would you ride a bike in Downtown Bellevue than you do now?



Q12: If a bike share service was available in Downtown Bellevue today, where would you typically ride?



Q13: If a network of comfortable and safe bicycle facilities were available in Downtown Bellevue, how much more often would you ride a bike (your own or bike share) in Downtown Bellevue than you do now?





Initial Feedback?

1. Questions/concerns?
2. Should we permit private companies to operate bike share in Bellevue in 2018?





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For More Information