Downtown Demonstration Bikeway Project and Citywide Bike Share Program

Franz Loewenherz
Principal Transportation Planner

Chris Long
Traffic Engineering Manager

Kevin McDonald
Principal Transportation Planner

Andreas Piller
Associate Transportation Planner

Transportation Commission
January 11, 2018
1. Staff seeks a Commission recommendation to the Bellevue City Council on the scope and timing of implementing a Downtown demonstration bikeway project and a citywide bike share pilot program.

2. In accordance with its Bylaws approved on 12/14/17, the Commission must also authorize a person to represent the transmittal of the recommendation to Council.
• PBII Overview
• BRIP Overview
• 2017-18 BRIP Progress Report
• DBRIP Levy Placeholder
• Downtown Outreach Process
  – Bike Share Program
  – Demonstration Corridor

Background | 9/28 TC Meeting
Status report on outreach:
• Briefings: BDA, Chamber of Commerce, Transit Agencies
• Online surveys: bike share program, demonstration bikeway project
• Events:
  – bike share open house (Sep. 27)
  – demo bikeway open house (Nov. 30)
  – “pop-up” events (Nov. 15, 21, 28)

Transportation modelling results for 108th Ave NE

Background | 11/9 TC Meeting
• BDA Transportation Committee conducted an internal review, discussion, and drove consensus on a recommendation.

• The BDA Board of Directors concurred on a position of support for both a demo bike lane project on 108th Ave NE between Main St and NE 12th Street and permitting free-floating bike share within the City of Bellevue.
Letters of Support
Three pop-up events were held on 11/15, 11/21, and 11/28 to solicit feedback from people who live, work or visit downtown.
On which street would you prefer to see a demonstration bikeway installed in 2018?

<table>
<thead>
<tr>
<th>Street</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>106th Ave NE - Main St to NE 12th St</td>
<td>3%</td>
</tr>
<tr>
<td>108th Ave NE - Main St to NE 12th St</td>
<td>61%</td>
</tr>
<tr>
<td>Main St - Bellevue Way to 112th Ave</td>
<td>10%</td>
</tr>
<tr>
<td>NE 2nd St - Bellevue Way to 112th Ave</td>
<td>5%</td>
</tr>
<tr>
<td>Some other corridor</td>
<td>3%</td>
</tr>
<tr>
<td>None of the above</td>
<td>5%</td>
</tr>
<tr>
<td>No preference/I don't know</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
</tr>
</tbody>
</table>

Bikeway Open House (11/30/17)
Tell us what you think:
On which street would you prefer to see a demonstration bikeway installed in 2018? (Multiple choice)
- 106th Ave NE
- 108th Ave NE
- Main St
- NE 2nd St
- None

If funding is available to install improvements along a second corridor in 2018, which should it be? (Multiple choice)
- 106th Ave NE
- 108th Ave NE
- Main St
- NE 2nd St
- None

Do you have any comments or concerns you would like to share about the potential Downtown demonstration bikeway project?

Tell us what you think:
On which street would you prefer to see a demonstration bikeway installed in 2018? (Multiple choice)
- 106th Ave NE - Main St to NE 12th St
- 108th Ave NE - Main St to NE 12th St
- Main St - Bellevue Way to 112th Ave
- NE 2nd St - Bellevue Way to 112th Ave
- None of the above
- All Four Candidates
- No Response

Percent Count

First Choice
Second Choice

Percent Count

Bikeway Open House (11/30/17)
The Transportation Department is working to make Downtown Bellevue a safe and comfortable place for people to bike. The City Council envisions a well-connected network of bicycle facilities in Bellevue that enhance livability, support economic vitality, and serve the mobility needs of people of all ages and abilities. Investments in bicycle facilities will help make Downtown a more attractive and accessible place for people to live, work, and visit.

With this vision in mind, we are exploring the possibility of installing the first high-comfort bikeway in Downtown as a pilot project in 2018. Using flexible and low-cost treatments, this demonstration would provide a real-world opportunity to evaluate how the latest bikeway design concepts function in Bellevue. Four streets are candidates for the pilot project: 108th Ave NE, 106th Ave NE, Main St, and NE 2nd St.

We want your help to select the preferred street and develop a design that balances community priorities. Each candidate bikeway project offers its own set of benefits and challenges. We recognize that introducing a new bicycle facility on any of the candidate streets will involve tradeoffs.

The demonstration is expected to be in place for several months or more, from mid-2018 through at least December. A before-and-after study will be done to assess how the project affects travel for all road users. Outcomes will be monitored and adjustments could be made after installation as needed to improve operations. The pilot project will ultimately help inform how to invest in a network of downtown bicycle improvements in the future.

This survey should take about 10 minutes to complete. If you are interested in learning more about individual project concepts, you can choose to answer additional questions that should take about 10 additional minutes to complete.

Click "Next" below to get started! For more information about the potential demonstration bikeway project, visit the Downtown Demonstration Bikeway webpage.

Next
With current conditions, how safe do you feel riding a bicycle in Downtown Bellevue?

- Very safe: 3%
- Somewhat safe: 15%
- Somewhat unsafe: 25%
- Very unsafe: 29%
- I do not bicycle in Downtown Bellevue: 28%

n=1,137
With current conditions, how comfortable do you feel driving next to people bicycling in Downtown Bellevue?

- Very comfortable: 10%
- Somewhat comfortable: 21%
- Somewhat uncomfortable: 26%
- Very uncomfortable: 37%
- I do not drive in Downtown Bellevue: 6%

n=1,137
Where do you think that people bicycling in Downtown Bellevue should ride?

- On-street in a designated bike lane: 69%
- On-street in travel lanes shared with motor vehicles: 13%
- On the sidewalk sharing space with people walking: 17%

n=1,084
On which street would you prefer to see a demonstration bikeway installed in 2018?

- **38%** 108th Ave NE – Main St to NE 12th St
- **23%** 106th Ave NE – Main St to NE 12th St
- **8%** Main St – Bellevue Way to 112th Ave
- **7%** NE 2nd St – Bellevue Way to 112th Ave
- **3%** Some Other Corridor
- **10%** None of the Above
- **11%** No Preference / I don’t know

n=1,030
At NE 6th St (Bellevue Transit Center)

EXISTING

CONCEPT

108th Ave NE | Concept
<table>
<thead>
<tr>
<th>Mode</th>
<th>Land Use Context</th>
<th>Greater Modal Priority</th>
<th>Less Modal Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vehicle</strong></td>
<td>Rest of City</td>
<td>Crossroads, Eastgate, Wilburton</td>
<td>BelRed, Northup, <strong>Downtown</strong>, and Factoria</td>
</tr>
<tr>
<td><strong>Pedestrian</strong></td>
<td><strong>Downtown/Activity Center</strong></td>
<td>Neighborhood Shopping Center</td>
<td>Pedestrian Destination/Rest of City</td>
</tr>
<tr>
<td><strong>Bicycle</strong></td>
<td><strong>Priority Corridor</strong></td>
<td>On Network</td>
<td>Not on Network/Exempt</td>
</tr>
<tr>
<td><strong>Transit</strong></td>
<td><strong>RapidRide/Light Rail</strong></td>
<td>Frequent Service</td>
<td>Local</td>
</tr>
</tbody>
</table>
### Level-of-Service in Bellevue

*Toward a Multimodal Approach to Mobility*

## MMLOS Tradeoffs

<table>
<thead>
<tr>
<th>Mode LOS To Be Improved</th>
<th>Project Description</th>
<th>Auto-Intersection V/C</th>
<th>Auto-Corridor Speed</th>
<th>Ped-Sidewalk Width</th>
<th>Ped-Crosswalks Crossing type and spacing</th>
<th>Bicycle Corridor and intersection</th>
<th>Transit Stop Passenger amenities</th>
<th>Transit FTN Speed*</th>
<th>ROW/ Land Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycle</td>
<td>Add various bike facilities Main St – NE 12th St.</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>++</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Transit Speed applicable only to Frequent Transit Network corridors (RapidRide B, 234/235, 271, 550)*

---

**108th Ave NE | MMLOS**

---
Existing Conditions

- 30 MPH
- 7,000 to 12,000 ADT
- LTS=3 due to low traffic volumes and 30 mph speed limit
  - Exception is LTS=2 NB from half block south of NE 4th due to Bike Lane
Bikeway Improvements & LOS

- Adding sharrows, bike lanes, and buffered bike lanes
- LTS=3 in sharrow areas near Main Street
- LTS=2 in bike lane and buffered bike lanes
Intersection Treatments & LOS

- Main, 2nd, 4th, 8th, 10th, and 12th have skip striping through intersection
- 6th is not an arterial
Existing conditions

**Alternative 1:** Extend eastbound buffered bike lane from 105th to 108th, drop westbound curb lane at 108th and construct westbound buffered bike lane from 108th to the existing bike facility at Bellevue Way. Option for parking protection is shown between 107th and 108th, street-grade walkway is shown between 106th and 107th to fill a gap in the pedestrian facility. Construct bike box NB @ 108th to facilitate bike turning at 108th/Main.

**Alternative 2:** Extend eastbound buffered bike lane from 105th to 108th. Install standard bike lane between 108th – keep 2 westbound lanes, no pedestrian facility. Construct bike box NB @ 108th to facilitate bike turning at 108th/Main.
Existing conditions

Alternative 1: Extend eastbound buffered bike lane from 105<sup>th</sup> to 108<sup>th</sup>, drop westbound curb lane at 108<sup>th</sup> and construct westbound buffered bike lane from 108<sup>th</sup> to the existing bike facility at Bellevue Way. Option for parking protection is shown between 107<sup>th</sup> and 108<sup>th</sup>, street-grade walkway is shown between 106<sup>th</sup> and 107<sup>th</sup> to fill a gap in the pedestrian facility. Construct bike box NB @ 108<sup>th</sup> to facilitate bike turning at 108<sup>th</sup>/Main.

Alternative 2: Extend eastbound buffered bike lane from 105<sup>th</sup> to 108<sup>th</sup>. Install standard bike lane between 108<sup>th</sup> – keep 2 westbound lanes, no pedestrian facility. Construct bike box NB @ 108<sup>th</sup> to facilitate bike turning at 108<sup>th</sup>/Main.
Alternative 1: Extend eastbound buffered bike lane from 105<sup>th</sup> to 108<sup>th</sup>, drop westbound curb lane at 108<sup>th</sup> and construct westbound buffered bike lane from 108<sup>th</sup> to the existing bike facility at Bellevue Way. Option for parking protection is shown between 107<sup>th</sup> and 108<sup>th</sup>, street-grade walkway is shown between 106<sup>th</sup> and 107<sup>th</sup> to fill a gap in the pedestrian facility. Construct bike box NB @ 108<sup>th</sup> to facilitate bike turning at 108<sup>th</sup>/Main.

Alternative 2: Extend eastbound buffered bike lane from 105<sup>th</sup> to 108<sup>th</sup>. Install standard bike lane between 108<sup>th</sup> – keep 2 westbound lanes, no pedestrian facility. Construct bike box NB @ 108<sup>th</sup> to facilitate bike turning at 108<sup>th</sup>/Main.
• Draft recommendation is to implement “high-comfort” demonstration bikeway on 108th Ave NE
• Revisions/additions?
• The design discussed is in progress and subject to change as engineering work is completed.
Bike Share in Bellevue
Eastside Bike Share Fair (9/27/17)
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
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: 55%
- No, I would not use bike share: 24%
- I don't know: 22%

n=691

Bike Share Survey Results
Do you have any comments or concerns you would like to share about the possibility of bike share coming to Bellevue?

<table>
<thead>
<tr>
<th>Response Themes</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generally Positive</td>
<td>91</td>
</tr>
<tr>
<td>Install More Bike Lanes (Any Type)</td>
<td>82</td>
</tr>
<tr>
<td>Improve Safety (General)</td>
<td>77</td>
</tr>
<tr>
<td>Biking in Bellevue is Dangerous (General)</td>
<td>54</td>
</tr>
<tr>
<td>Install Separated Bike Lanes</td>
<td>53</td>
</tr>
<tr>
<td>No City Funding of Bike Share</td>
<td>44</td>
</tr>
<tr>
<td>Bike Clutter</td>
<td>36</td>
</tr>
<tr>
<td>Drivers Are Dangerous/Aggressive</td>
<td>35</td>
</tr>
<tr>
<td>Improve Infrastructure First</td>
<td>30</td>
</tr>
<tr>
<td>Pedestrian Safety from Bikes on Sidewalks</td>
<td>24</td>
</tr>
<tr>
<td>Helmet Use / Helmet Law</td>
<td>24</td>
</tr>
<tr>
<td>Improve Sidewalks/Crosswalks</td>
<td>24</td>
</tr>
</tbody>
</table>

n=465

“I think it would be awesome! There are so many times that I want to run an errand in downtown Bellevue that is slightly too far for me to walk, but it's a pain to use my car all the time. It would be easier if there was a bike option.”

“Please make it happen! With all the congestion and lack of parking, a bike share system would be such an awesome alternative for getting around. I would shop and go out to eat in downtown Bellevue more often if I could bike instead of drive.”

“Bike share in Bellevue would be great. Then I could bus from Seattle and ride a bike to work from the transit center instead of having three bus transfers.”

Do you have any comments or concerns you would like to share about the possibility of bike share coming to Bellevue?

<table>
<thead>
<tr>
<th>Response Themes</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generally Positive</td>
<td>91</td>
</tr>
<tr>
<td>Install More Bike Lanes (Any Type)</td>
<td>82</td>
</tr>
<tr>
<td>Improve Safety (General)</td>
<td>77</td>
</tr>
<tr>
<td>Biking in Bellevue is Dangerous (General)</td>
<td>54</td>
</tr>
<tr>
<td>Install Separated Bike Lanes</td>
<td>53</td>
</tr>
<tr>
<td>No City Funding of Bike Share</td>
<td>44</td>
</tr>
<tr>
<td>Bike Clutter</td>
<td>36</td>
</tr>
<tr>
<td>Drivers Are Dangerous/Aggressive</td>
<td>35</td>
</tr>
<tr>
<td>Improve Infrastructure First</td>
<td>30</td>
</tr>
<tr>
<td>Pedestrian Safety from Bikes on Sidewalks</td>
<td>24</td>
</tr>
<tr>
<td>Helmet Use / Helmet Law</td>
<td>24</td>
</tr>
<tr>
<td>Improve Sidewalks/Crosswalks</td>
<td>24</td>
</tr>
</tbody>
</table>

n=465

“My only concern is based on my experience with the bike shares in Seattle, which is that people leave the bikes anywhere. It results in a lot of clutter and blocking of sidewalks and bike paths.”

“I would love to see bike share in Bellevue—but I think it’s feasibility is limited until a real connected network of bike routes exists in downtown Bellevue.”

“I think Bellevue has the opportunity to beat Seattle to having a connected network of protected bike lanes, and this could have profound positive impacts on public health, livability, and desirability, even for those who currently do not bike. If you build it, they will come!”
Bike Share Permit Goals and Requirements:

- Pilot
- Safety
- Parking
- Operations
- Data
- Enforcement
- Fees
• Draft recommendation is to implement a pilot permit valid for up to one year
• Compliance with requirements will be monitored and enforced
• Data will be collected from operators and via community engagement, informing evaluation
Will Commission make a recommendation to Council regarding the Downtown demonstration bikeway project and/or the citywide bike share pilot program?

- **Yes** – Commission will make a recommendation on one or both items. (Motion required)
  - Motions may subsequently be made to amend the draft transmittal letter prior to the vote to approve the letter.

- **No** – A transmittal letter with recommendations will not be approved at this time.

---

**TC Recommendation | Letter**

**Will Commission make a recommendation to Council regarding the Downtown demonstration bikeway project and/or the citywide bike share pilot program?**

- **Yes** – Commission will make a recommendation on one or both items. (Motion required)
  - Motions may subsequently be made to amend the draft transmittal letter prior to the vote to approve the letter.

- **No** – A transmittal letter with recommendations will not be approved at this time.

---

**TC Recommendation | Letter**

**Will Commission make a recommendation to Council regarding the Downtown demonstration bikeway project and/or the citywide bike share pilot program?**

- **Yes** – Commission will make a recommendation on one or both items. (Motion required)
  - Motions may subsequently be made to amend the draft transmittal letter prior to the vote to approve the letter.

- **No** – A transmittal letter with recommendations will not be approved at this time.
In accordance with its Bylaws approved on 12/14/17, the Commission must also authorize a person to represent the transmittal of the recommendation to Council.
January: Transportation Commission Recommendation

February: City Council Direction

March: Demonstration Bikeway Design Finalized
       Bike Share Pilot Permit Requirements Approved by Director

April: Demonstration Bikeway Construction
       Bike Share Pilot Permit Available for Applications

May: Demonstration Bikeway Opening Event

August: 3-Month Status Update to Transportation Commission

2019

February: Final Evaluation and Staff Recommendation to TC for Action

March: City Council Direction on Next Steps for Bikeway and Bike Share