



Downtown Demonstration Bikeway Project and Citywide Bike Share Program

Franz Loewenherz
Principal Transportation Planner

Chris Long
Traffic Engineering Manager

Kevin McDonald
Principal Transportation Planner

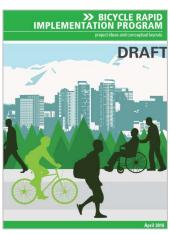
Andreas Piller Associate Transportation Planner

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.



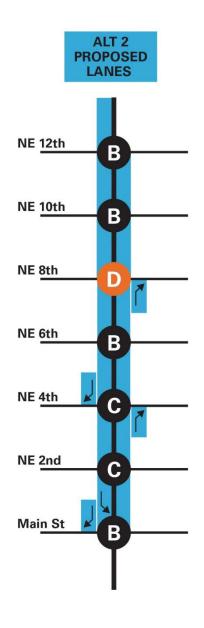






- PBII Overview
- BRIP Overview
- 2017-18 BRIP Progress Report
- DBRIP Levy Placeholder
- Downtown Outreach Process
 - Bike Share Program
 - Demonstration Corridor





Status report on outreach:

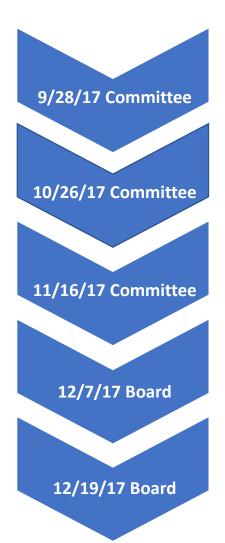
- Briefings: BDA, Chamber of Commerce, Transit Agencies
- Online surveys: bike share program, demonstration bikeway project
- Events:
 - bike share open house (Sep. 27)
 - demo bikeway open house (Nov. 30)
 - "pop-up" events (Nov. 15, 21, 28)

Transportation modelling results for 108th Ave NE



2018						2019		
January	February	March	April	May	August	February	March	
Transportation Commission Recommendation	on City Council	Demonstration Bikeway Design Finalized	Demonstration Bikeway Construction	Demonstration Bikeway Opening Event	3-Month Status Update	Final Evaluation and Staff	City Council Direction on	
	Direction	Bike Share Pilot Permit Requirements Approved by Director	Bike Share Pilot Permit Available for Applications	Bike Share Pilot Program Launch	to Transportation Commission	Recommendation to TC for Action	Next Steps f Bikeway an Bike Share	





- 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 freefloating bike share within the City of Bellevue.

















Su Development















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	Responses			
demonstration bikeway installed in 2018?	Percent	Count		
106th Ave NE - Main St to NE 12th St	3%	1		
108th Ave NE - Main St to NE 12th St	61%	24		
Main St - Bellevue Way to 112th Ave	10%	4		
NE 2nd St - Bellevue Way to 112th Ave	5%	2		
Some other corridor	3%	1		
None of the above	5%	2		
No preference/I don't know	13%	5		
Total		39		



Tell us what you think:	Tell us what you think:	Tell us what you think:
On which street would you prefer to see a demonstration bikeway	On which street would you prefer to see a demonstration bikeway installed in 2018? select only made	On which street would you prefer to see a demonstration bikeway installed in 2018? Isslert only one)
stalled in 2018? [select only one] 106th Ave NE 108th Ave NE Main St NE 2nd St None	106th Ave NE 108th Ave NE Main St NE 2nd St None	O 106th Ave NE 108th Ave NE Main St NE 2nd St N
funding is available to install improvements along a second corridor	If funding is available to install improvements along a second corridor in 2018, which should it be? intercontract	If funding is available to install improvements along a second corri in 2018, which should it be? (select only one)
2018, which should it be? (select only one) 106th Ave NE	106th Ave NE 108th Ave NE Main St NE 2nd St None	106th Ave NE 0 108th Ave NE 0 Main St @ NE 2nd St
ou have any comments or concerns you would like to share about otential Downtown demonstration bikeway project?	Tell us what you think: On which street would you prefer to see a demonstration bikeway installed in 2018? select only med 106th Ave NE 108th Ave NE Mein St NE 2nd St None If funding is available to install improvements along a second corridor in 2018, which should it be? select only med. 106th Ave NE 108th Ave NE Mein St NE 2nd St None Do you have any comments or concerns you would like to share about the potential Downtown demonstration bikeway project?	Do you have any comments or concerns you would like to share a the potential Downtown demonstration bikeway project?
Line it! 109th has best connectivity to destination; Open mark asign conflicts Facilitate left fund to them belongs	De empowered to be told! Change and ODY MANUAL Crogless are Coming. Embrace it!	Tell us what you think: On which street would you prefer to see a demonstration bikeway installed in 2018? Installed winds. On which street would you prefer to see a demonstration bikeway installed in 2018? Installed winds. On which street would you prefer to see a demonstration bikeway installed in 2018? Installed winds. On which street would you prefer to see a demonstration bikeway installed in 2018; Installed winds. If funding is available to install improvements along a second corn in 2018, which should it be? Installed winds. On which street would you prefer to see a demonstration bikeway installed winds. If funding is available to install improvements along a second corn in 2018, which should it be? Installed winds. On which street would you prefer to see a demonstration bikeway installed winds. If funding is available to install improvements along a second corn in 2018, which should it be? Installed winds. On which street would you prefer to see a demonstration bikeway installed in 2018; Installed winds. On which street would you prefer to see a demonstration bikeway installed in 2018; Installed winds. On which street would you prefer to see a demonstration bikeway installed in 2018; Installed winds. On which street would you prefer to see a demonstration bikeway installed in 2018; Installed winds. On which street would you prefer to see a demonstration bikeway installed in 2018; Installed winds. On which street would you prefer to see a demonstration bikeway installed in 2018; Installed winds. On which street would you prefer to see a demonstration bikeway installed in 2018; Installed winds. On which street would you prefer to see a demonstration bikeway installed in 2018; Installed winds. On which street would you prefer to see a demonstration bikeway installed winds. On which street would you prefer to see a demonstration bikeway project. On which street would you prefer to see a demonstration bikeway project. On which street would you prefer to see a demonstration bikeway projec
pase leave completed comment cords at the welcome table on your way out. Thank you!	Please leave completed comment cards at the wolcome table on your way out. Thank you!	YEID ME act out of downtown Sattly. Please leave completed comment cards at the welcome table on your way out. 17
Fall we substance thinks	Tell us what you think:	7 7.11
The state of the s	Tell us what you think:	Tell us what you think:
which street would you prefer to see a demonstration bikeway talled in 2018? [sect only one]	Tell us what you think: On which street would you prefer to see a demonstration bikeway installed in 2018? [weed only one) [Cagginya word]	Tell us what you think: On which street would you prefer to see a demonstration bikeway installed in 2018? (pleast only one)
which street would you prefer to see a demonstration bikeway talled in 2018? (select only orci.) 106th Ave NE 106th Ave NE 106th Ave NE NE 2nd St None	Tell us what you think: On which street would you prefer to see a demonstration bikeway installed in 2018? (Medically and Chaussing And Chaus	Tell us what you think: On which street would you prefer to see a demonstration bikeway installed in 2018? (select only and) 106th Ave NE 108th Ave NE Main St NE 2nd St
which street would you prefer to see a demonstration bikeway alled in 2018? (select only orc) 106th Ave NE 108th Ave NE Main St NE 2nd St None	Tell us what you think: On which street would you prefer to see a demonstration bikeway installed in 2018? (seed only one) O 106th Ave NE O 108th Ave NE O Main St NE 2nd St None If funding is available to install improvements along a second corridor in 2018, which should it be? (select only use)	Tell us what you think: On which street would you prefer to see a demonstration bikeway installed in 2018? [select only onc] On 108th Ave NE On 108th Ave NE Main St Ne 2nd St On 108th Ave NE Ne 2nd S
which street would you prefer to see a demonstration bikeway alled in 2018? (seect only ord) 106th Ave NE 106th Ave NE Ne Main St NE 2nd St None nding is available to install improvements along a second corridor 118, which should it be? [select only one]	Tell us what you think: On which street would you prefer to see a demonstration bikeway installed in 2018? (seed only one) 108th Ave NE 108th Ave NE 8 Main St NE 2nd St None If funding is available to install improvements along a second corridor in 2018, which should it be? (selet only one) 108th Ave NE 8 108th Ave NE Main St NE 2nd St None	Tell us what you think: On which street would you prefer to see a demonstration bikeway installed in 2018? [select only and] 108th Ave NE 108th Ave NE Main St NE 2nd St In 2018, which should it be? Island 2019 and [see 2019] and
which street would you prefer to see a demonstration bikeway lod in 2018?	Tell us what you think: On which street would you prefer to see a demonstration bikeway installed in 2018? (weed only one) 106th Ave NE 106th 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? (selectorly ore) 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 20187 (select only and) 106th Ave NE 108th Ave NE Main St NE 2nd St 1078, which should it be? Indeed soly only 108th Ave NE 108th Ave NE Main St NE 2nd St 109th Ave NE 108th Ave NE Main St NE 2nd St 109th Ave NE 108th Ave NE Main St NE 2nd St 109th Ave NE 108th Ave NE Main St NE 2nd St 109th Ave NE 108th Ave NE Main St NE 2nd St 109th Ave NE 108th Ave NE Main St NE 2nd St 109th Ave NE 108th Ave NE Main St NE 2nd St 109th Ave NE 108th Ave NE Main St NE 2nd St 109th Ave NE 108th Ave NE Main St NE 2nd St 109th Ave NE 108th Ave NE 108th Ave NE 109th
which street would you prefer to see a demonstration bikeway talled in 2018? (select sely one) 106th Ave NE	Tell us what you think: On which street would you prefer to see a demonstration bikeway installed in 2018? (wheat only one) On thich Ave NE One of the 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? (whet only one) One of the Ave NE New One 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? It was the see Believe grown a test of the Aventure of the potential Downtown demonstration bikeway project.	Tell us what you think: On which street would you prefer to see a demonstration bikeway installed in 20187 (select coly) and 108th Ave NE Main St NE 2nd St 108th Ave Ne 2nd St 108th
ell us what you think: In which street would you prefer to see a demonstration bikeway stailed in 2018? *	Tell us what you think: On which street would you prefer to see a demonstration bikeway installed in 2018?	On which street would you prefer to see a demonstration bikeway installed in 2018? (seet only and) 106th Ave NE 108th Ave NE Main St NE 2nd St 1 106th Ave NE 108th Ave NE Main St NE 2nd St 1 106th Ave NE 108th Ave NE Main St NE 2nd St 1 106th Ave NE 108th Ave NE Main St NE 2nd St Do you have any comments or concerns you would like to share a the potential Downtown demonstration bikeway project?

On which street would you prefer to see a	First Choice		Second	Choice
demonstration bikeway installed in 2018?	Percent	Count	Percent	Count
106th Ave NE - Main St to NE 12th St	6%	2	8%	3
108th Ave NE - Main St to NE 12th St	69%	25	11%	4
Main St - Bellevue Way to 112th Ave	14%	5	36%	13
NE 2nd St - Bellevue Way to 112th Ave	3%	1	31%	11
None of the above	0%	0	3%	1
All Four Candidates	3%	1	3%	1
No Response	6%	2	8%	3
Total		36		36





Downtown Demonstration Bikeway Project Survey

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.

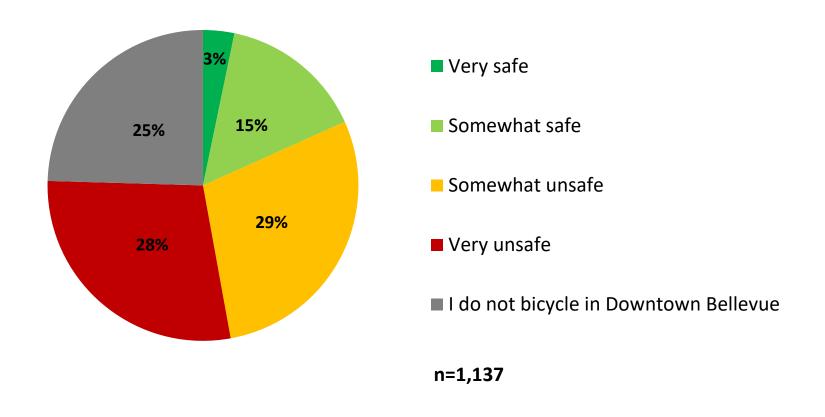
This survey should take about 10 minutes to complete. If you are interested in learning more about individual project concepts, <u>you can choose</u> to answer additional questions that should take about 10 additional minutes to complete.

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

Next

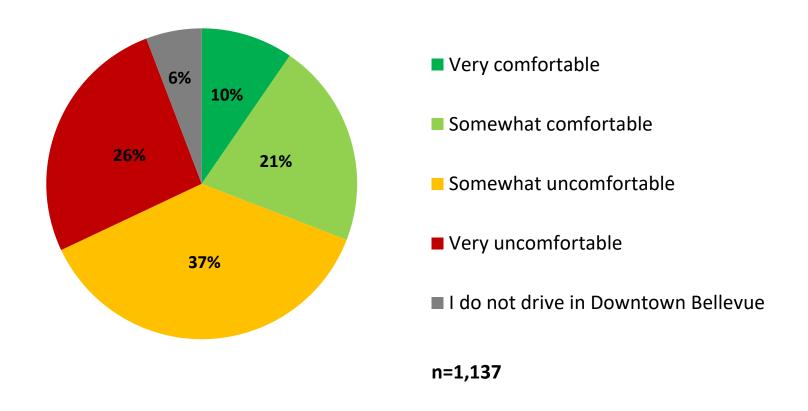


With current conditions, how safe do you feel riding a bicycle in Downtown Bellevue?



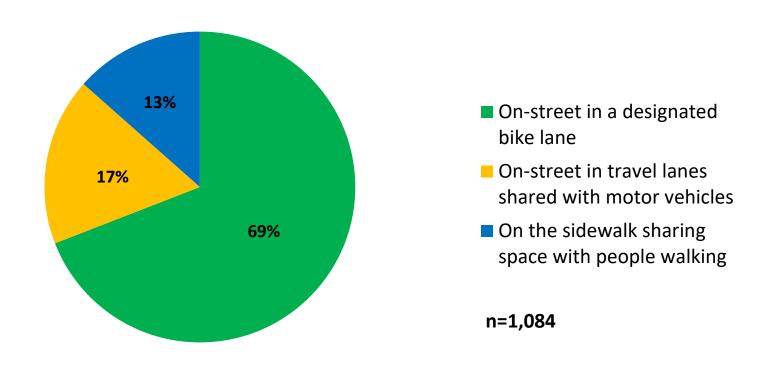


With current conditions, how comfortable do you feel driving next to people bicycling in Downtown Bellevue?



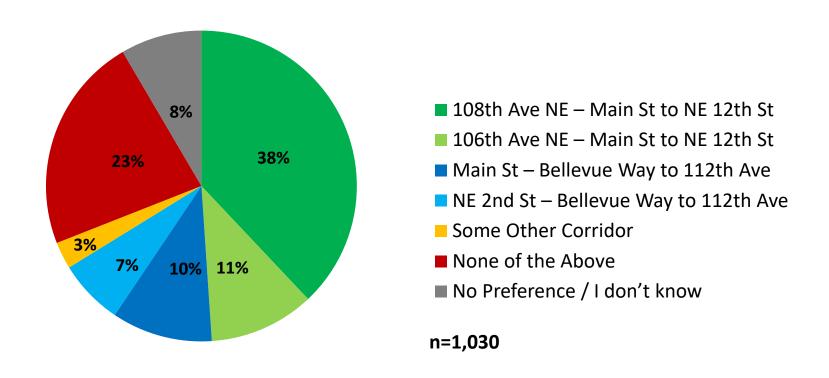


Where do you think that people bicycling in Downtown Bellevue should ride?

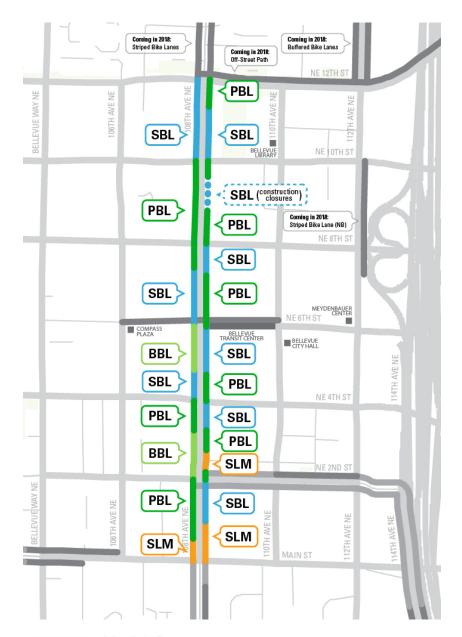




On which street would you prefer to see a demonstration bikeway installed in 2018?













108th Ave NE | Concept



Project Context

Mode	Land Use Context Greater Modal Priority → Less Modal Priority					
Vehicle	Rest of City	Crossroads, Eastgate, Wilburton	BelRed, Northup, Downtown, and Factoria Pedestrian Destination/Rest of City			
Pedestrian	Downtown/ Activity Center	Neighborhood Shopping Center				
Bicycle	Priority Corridor	On Network	Not on Network/Exempt			
Transit	RapidRide/ Light Rail	Frequent Service	Local			





MMLOS Tradeoffs

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

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





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



Outside Lines – Facility Type

Sharrow

Bike Lane

Buffered Bike Lane

Inside Lines – LTS

LTS 1

LTS 2

LTS 4

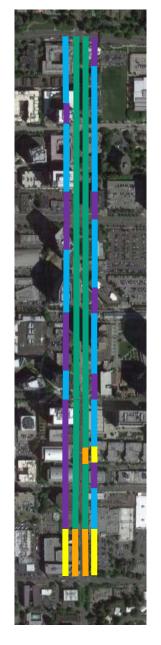


108th Ave NE | MMLOS



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



Outside Lines – Facility Type

Sharrow
Bike Lane

Buffered Bike Lane

Inside Lines – LTS

LTS 1

LTS 3

LTS 4



108th Ave NE | MMLOS



Intersection Treatments & LOS

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



Lines/Squares – LTS

LTS 1

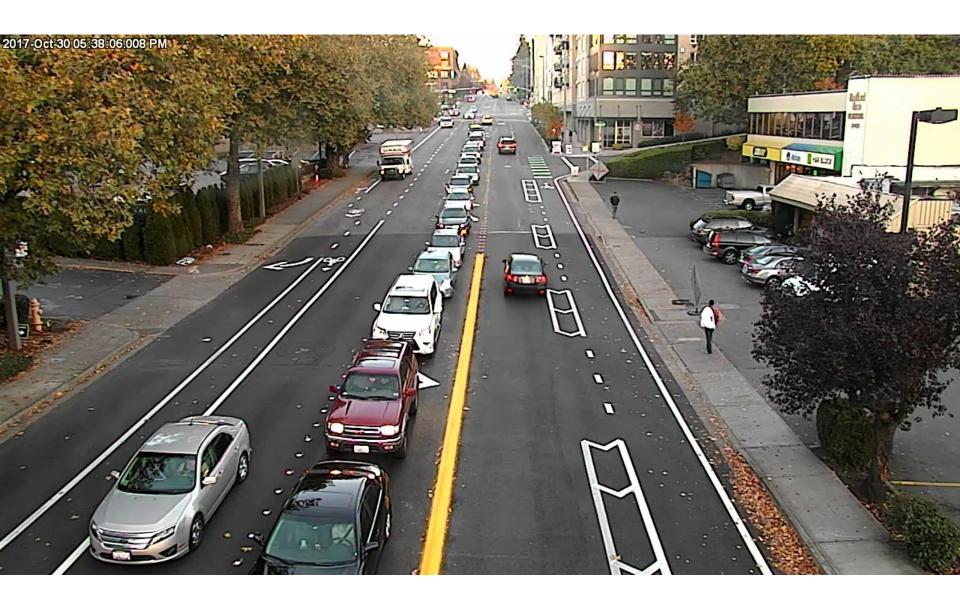
LTS 2

LTS 3

LTS 4



108th Ave NE | MMLOS





Existing conditions



<u>Alternative 1:</u> 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.



<u>Alternative 2:</u> 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



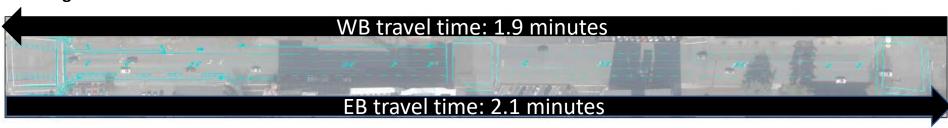
<u>Alternative 1:</u> Extend eastbound buffered bike lane from 105th to 108th, drop westbound curb lane at 108th and construct westbound buffered bike lane from 108th to the existing bike facility at Bellevue Way. Option for parking protection is shown between 107th and 108th, street-grade walkway is 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.



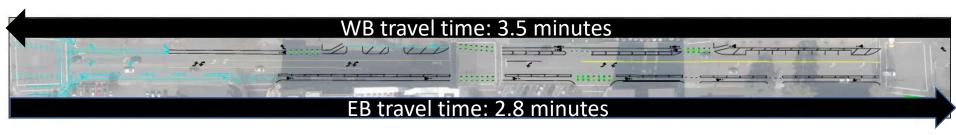
Alternative 2: Extend eastbound buffered bike lane from 105th to 108th. Install standard bike lane between 108th – keep 2 westbound lanes, no pedestrian facility. Construct bike box NB @ 108th to facilitate bike turning at 108th/Main.







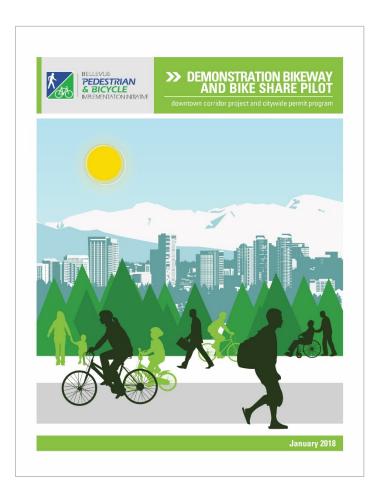
<u>Alternative 1:</u> Extend eastbound buffered bike lane from 105th to 108th, drop westbound curb lane at 108th and construct westbound buffered bike lane from 108th to the existing bike facility at Bellevue Way. Option for parking protection is shown between 107th and 108th, street-grade walkway is 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.



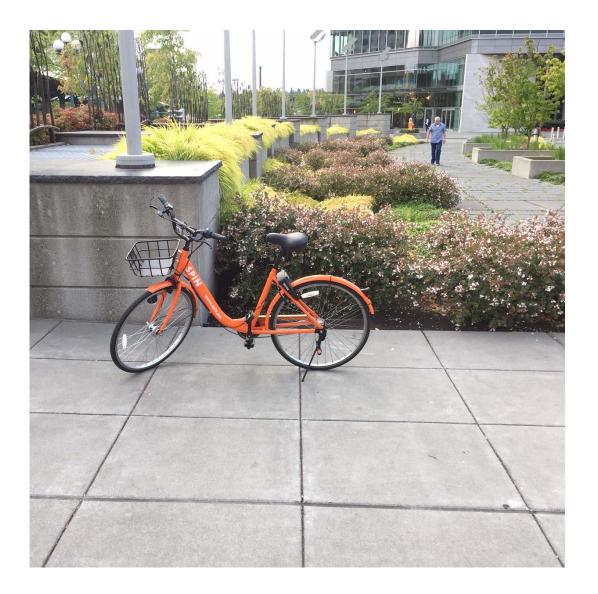
Alternative 2: Extend eastbound buffered bike lane from 105th to 108th. Install standard bike lane between 108th – keep 2 westbound lanes, no pedestrian facility. Construct bike box NB @ 108th to facilitate bike turning at 108th/Main.

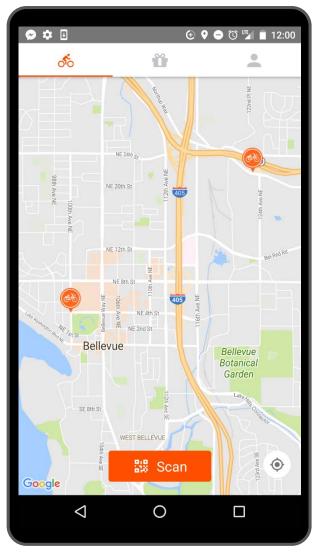






- Draft recommendation is to implement "high-comfort" demonstration bikeway on 108th Ave NE
- Revisions/additions?
- The design discussed is in progress and subject to change as engineering work is completed.







Bike Share in Bellevue





















Eastside Bike Share Fair (9/27/17)

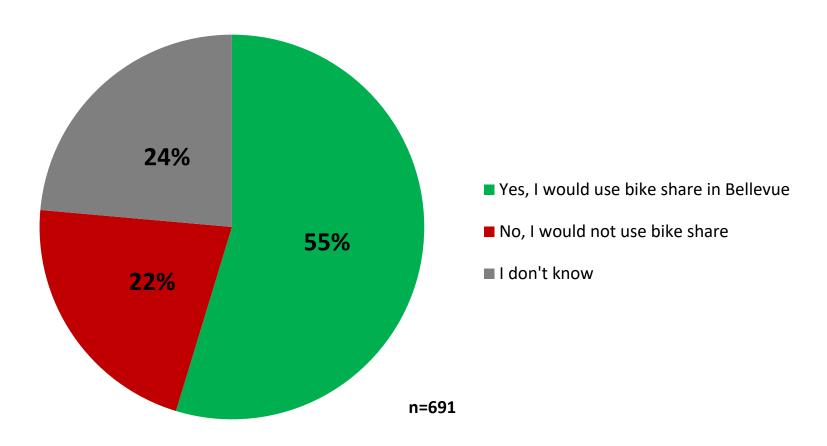


Bicycling and Bike Share in Bellevue

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.
Let
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?





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

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

"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."

n=465



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?

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

"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!"

n=465





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





TRANSMITTAL

January 16, 2018

The Honorable Mayor John Stokes Members of the Bellevue City Council 450 110" Avenue NE

RE: Commission Recommendation – Downtown Demonstration Bikeway Project and Citywide Bike Share Pilot Program

Dear Mayor Stokes and City Councilmembers:

At its January 11, 2018 meeting, the Transportation Commission voted unaimmously in favor of retoromending that the City Council dilitiest starts or proceed with implementing a Downtown demonstration bitway project and establishing a pilot permit for private the provided of the provide

- Downtown Demonstration Bikeway Project Using temporary and low-cost treatments, this project will implement improvements to create a "high-comofat" bikeway along one cortidor in Downtown. Of the four candidate corridors considered, it is recommended that the project be implemented along 108th Ave NE from Main St to NE 12th St (see Attachment 1), which is identified as a nonth-south priority bloycle corridor and provides connections for regional bloycle rourse.
- Citywide Bike Share Pilot Program This will create a permit that establishes a legal framework for private companies to operate
 bike share services in Bellevue as a pilot program for a period of up to one year. Compliance with permit terms will be monitor
 and enforced as warranted. Data will be collected from bike share operators and via community engagement, which will inform
 evaluation of the program.

In support of these projects it is recommended that staff commence work on:

- Design and permitting with a target implementation date of May 2018 (which corresponds with Bike to Work Month);
- Developing a scope of work to assess outcomes for all street users, including people bicycling, walking, driving, using transit, and transporting goods, based on data and community engagement;
- Coordinating with private and non-profit organizations to support the launch and test period of the Downtown demonstration bikeway project with education and encouragement activities.

The data collection period informing the evaluation of both the demonstration bikeway project and bike share pilot program will last through December 2018. Modest popertional refinements may be made to the demonstration bikeway during this period as required to maintain safety for all street users. Staff will share the results of the evaluation with the I ransportation Cormission in early 2019 to inform their consideration of next steps—that is, whether and how to make the bikeway project and the bike share program permanent.

Transportation Commission members are honored by your trust and confidence in selecting us to oversee the Pedestrian and Bicycle Implementation Initiative (PBII). In this capacity, we have been guided by Council's program principles as we collaborate with staff and the community to advance the PBII scope of your, including its paramitments to the prodest identified in this rememberation.

Sincerely,

Vic Bishop

Chair, Transportation Commission

Attachment A - Project Description and Map [Will be emailed in advance and copied in your desk packet]

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.

2018						2019		
January	February	March	April	May	August	February	March	
Transportation Commission Recommendation	City Council	Demonstration Bikeway Design Finalized	Demonstration Bikeway Construction	Demonstration Bikeway Opening Event	3-Month Status Update	Final Evaluation and Staff	City Council Direction on	
	Direction	Bike Share Pilot Permit Requirements Approved by Director	Bike Share Pilot Permit Available for Applications	Bike Share Pilot Program Launch	to Transportation Commission	Recommendation to TC for Action	Next Steps f Bikeway an Bike Share	





Franz Loewenherz

Transportation Department

floewenherz@bellevuewa.gov

425-452-4077

