

Bike Bellevue

Transportation Commission September 14, 2023

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- Background
- Community Engagement
- DRAFT Concept Guide sections
- Bike Bellevue Corridors
- No action is requested tonight



Bike Bellevue Background

- Confluence of several Transportation Department efforts
- Next step in Bellevue's active mode and safety implementation
- Consistent with Mobility
 Implementation Plan





Bike Bellevue Background

CIP (PW-W/B-85) description: "Growth Corridor High Comfort Bicycle Network Implementation" (AKA: Bike Bellevue)

- \$4.5 million in 2023-29 CIP.
- Design and implement rapid-build bicycle projects on existing streets in the Downtown, Wilburton, and BelRed neighborhoods.
- Establish grid of safe and comfortable connections to key destinations for people of all ages and abilities.



Bike Bellevue Principles



Safety

Reduce the frequency and severity of crashes and minimize conflicts between roadway users through bikeway design.



Coordination

Coordinate transportation and land use efforts underway in Bellevue to ensure equity and sustainability outcomes are aligned.



Connectivity

Implement a connected network of bicycle lanes that facilitate access to major destinations.



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Partnerships

Engagement

for Bike Bellevue investments.

Identify partnership opportunities to advance the implementation of bicycle projects.



Comfort

Design bicycle lanes that maximize separation between motor vehicles and people bicycling on streets with higher speed limits and more vehicle traffic.



Evaluation

Use a data informed approach to evaluate impacts to all modes of travel and design the program to maximize the mobility of all modes.



Equity

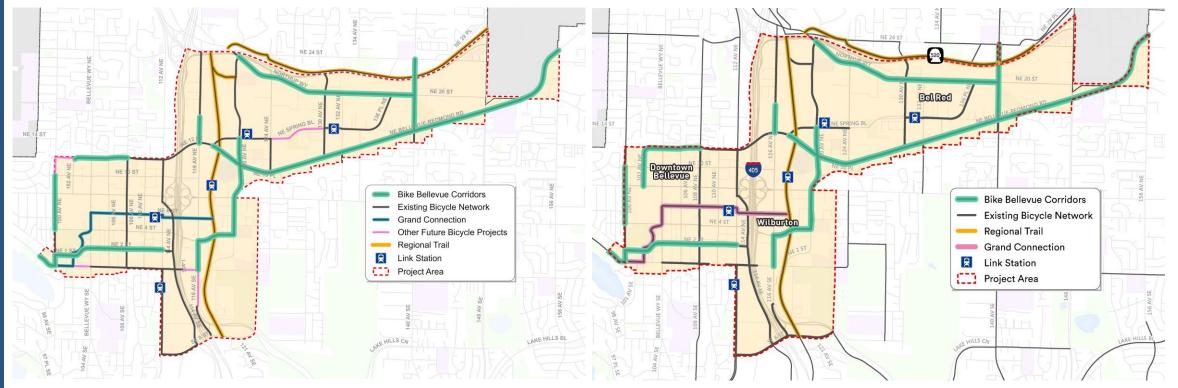
Promote equity and inclusion in the development and delivery of bicycle projects. Consistent with the city's Diversity Advantage Plan, Bike Bellevue will center equity, access, inclusion, and opportunity in project delivery.

Engage community stakeholders in setting the priorities



Current (September 2023)

Previous (March 2023)

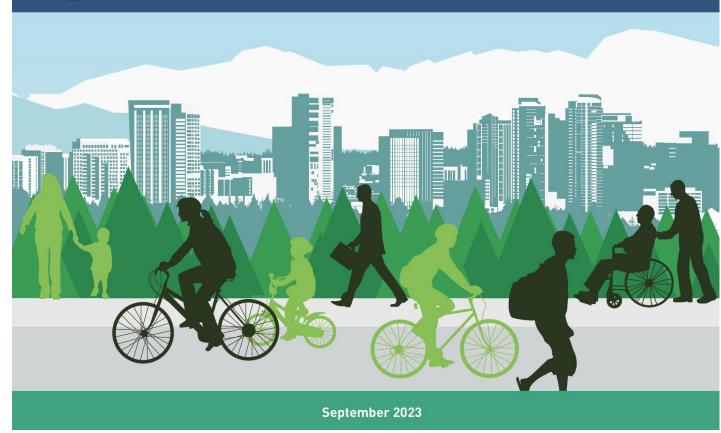




DRAFT Design Concepts Guide



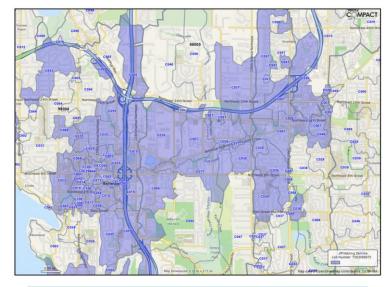
Bike Bellevue DRAFT Design Concepts Guide





Community Engagement

- Online engagement tool
- Mailer
- Yard signs
- Posters
- Focus groups
- Community events
- Public open house



Visit the project design feedback tool at **bikebellevue.konveio.com** or scan the QR code below

請造訪 bikebellevue.konveio.com 或掃描下方二維碼 , 以使用專案設計 反饋工具

请访问 bikebellevue.konveio.com 或扫描下方二维码,以使用项目设计 反馈工具

Visite la herramienta de comentarios sobre el diseño del proyecto en bikebellevue.konvelo.com o escanee el código QR a continuación.

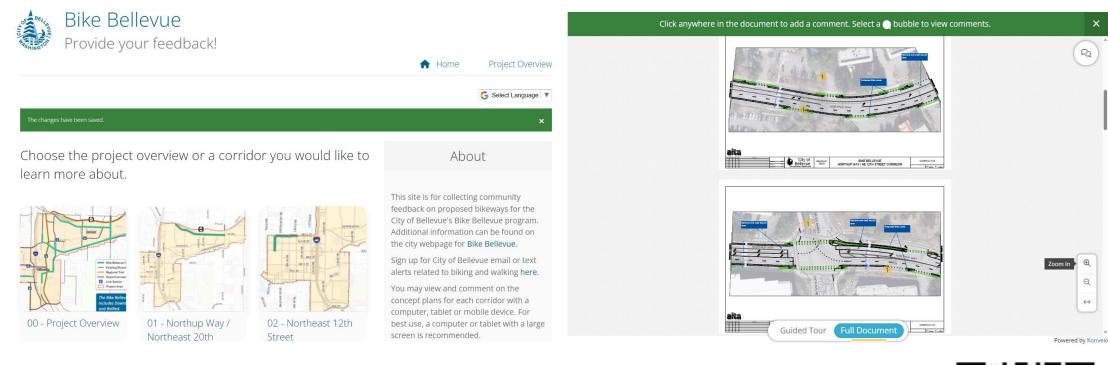
Чтобы открыть инструмент для отзывов о проектах, посетите сайт bikebellevue.konveio.com или отсканируйте QR-код ниже

bikebellevue.konveio.comహై చోరాజాకోట్ డిజైన్ ఫిడ్బ్యాక్ టూల్సు సందర్శించండి లేదా కోరింది QR కోడను నేకాన్ చోయండి.





Online Engagement Tool



https://bikebellevue.konveio.com/ Comments by November 17, 2023







Discussion

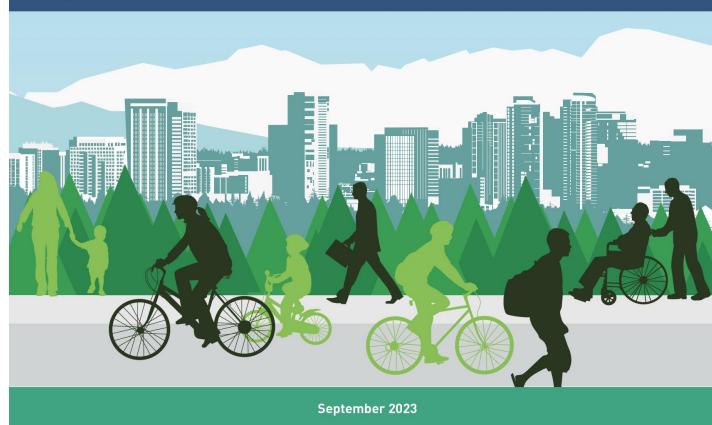
- Clarifying questions
- Discussion



DRAFT Design Concepts Guide



Bike Bellevue DRAFT Design Concepts Guide





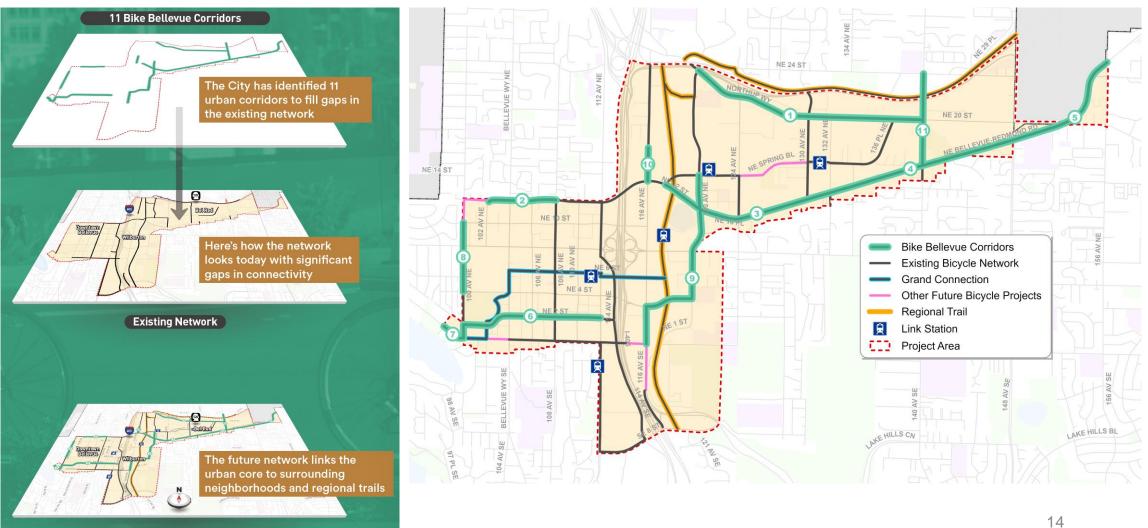
- Key Takeaways
- Transportation Vision

Relationship to Mobility Implementation Plan



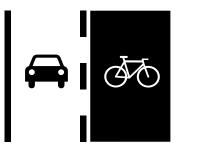
Future Network

What is Bike Bellevue?





Design Development Process



Alternatives Development

- Traffic analysis
- Queuing
- Bike design options
- Transit



- Striping
- Signals



Concepts Assessment

- Bike LTS
- V/C ratios
- Travel speed

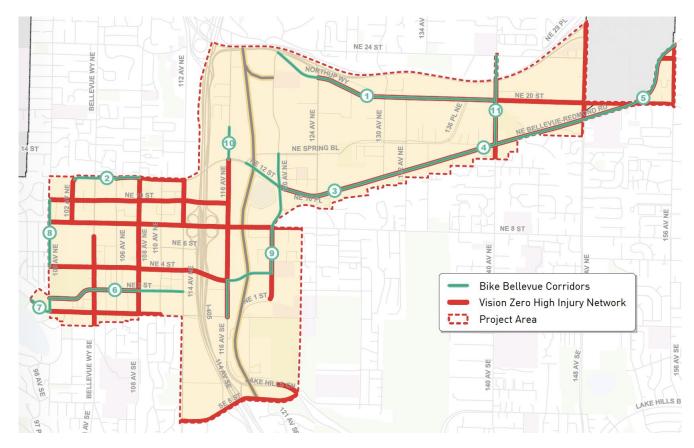


Concepts Guide



Prioritizing Safety

- Bicyclists as vulnerable road users
- Implement proven safety countermeasures
- Aligns with Safe System approach to Vision Zero







All ages
and abilitiesInterested
but concernedEnthused
and confidentStrong
and fearlessImage: Strong but concernedImage: Str

- Designed for different bike riders
- Defined by speed, volume, and bicycle facility

Roadway Characteristics		Bicycle Facility Components: Guideline to Achieve Intended Level of Service/Level of Traffic Stress					
Speed Limit	Arterial Traffic Volume	No Marking	Sharrow Lane Marking	Striped Bike Lane	Buffered Bike Lane (Horizontal)	Protected Bike Lane (Vertical)	Physically Separated Bikeway
=25</td <td><3k</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td>	< 3k	1	1	1	1	1	1
	3-7k	3	3	2	1	1	1
	>/=7k	3	3	2	2	1	1
30	<10k	3	3	2	2	1	1
	10-25k	4	4	3	3	2	1
	>/=25k	4	4	3	3	3	1
35 -	< 25k	4	4	3	3	3	1
	>/=25k	4	4	4	3	3	1
>35	Any	4	4	4	4	3	1



Bicycle LTS



Shared Lane Marking (Sharrow)



Separated Buffered Bike Lane



Conventional Bike Lane



Separated Buffered Bike Lane (two-way)



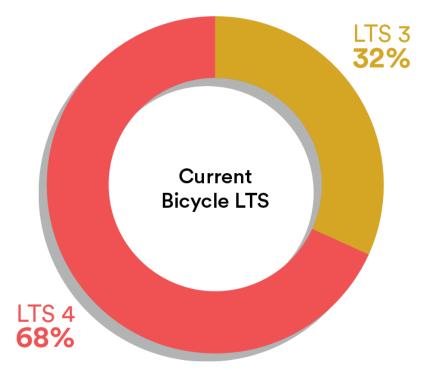
Buffered Bike Lane



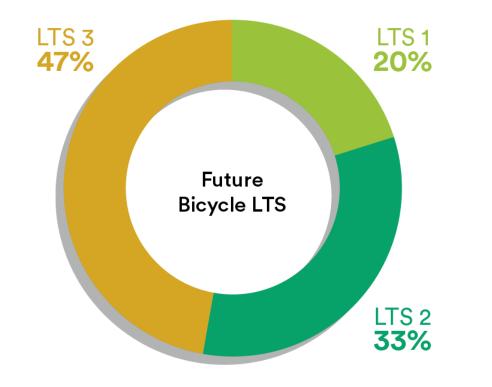
Multi-use Path



Today: mostly LTS 3 and LTS 4



Bike Bellevue: eliminates LTS 4 conditions

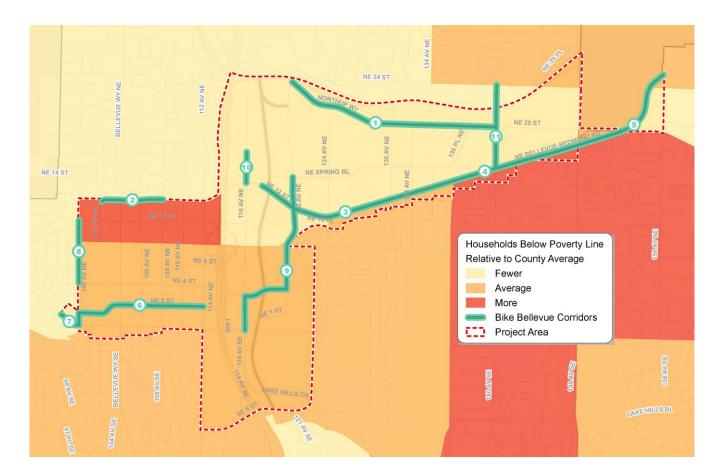


More than half of corridors would be LTS 1 or 2 19



Equitable Access

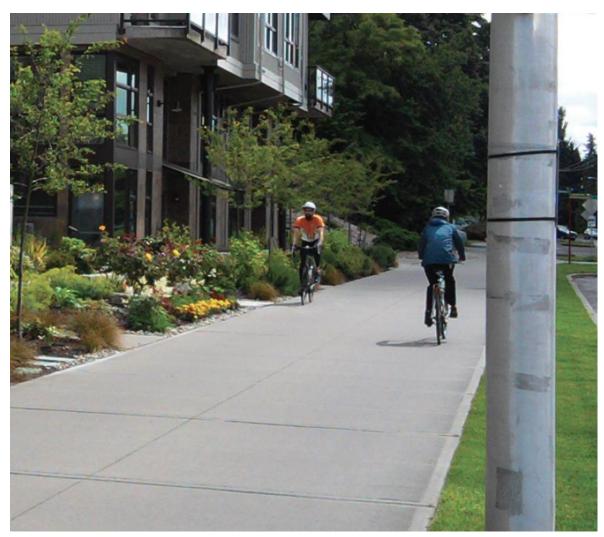
- Many equity metrics; focus on low-income population
- 30% more likely to walk/bike
- 80% more likely to ride transit
- Low-stress bike access gains:
 - 24% more jobs
 - 71% more bus stop access
 - 33% more students per school





Sustainability

- Bicycle mode share increases:
 - Today 0.8%
 - 2035 between 2.6% 4.3%
- Reduces GHG emissions equivalent to annual emissions from 240-890 cars
- Supports Environmental Stewardship Plan





Vehicle Performance



Existing Conditions

2035 with Bike Bellevue Conditions



Roadway Capacity Utilization

- Roadway capacity underutilized
- 12-hour roadway capacity utilization: 48%
- Peak hour roadway capacity exceeded on two corridors
- Capacity can be used to improve LTS

3,000 3,000 (Bi-Directional) 2,500 2,500 2,000 2,000 Hour 1,500 1,500 per .000 1.000 Volume 500 500 5 6 8 9 10 11 12 1 2 3 4 5 6 7 8 9 12 2 10 AM PM

Corridor 1: Northup Way E/O 130th Ave NE - 24-Hour Volume Profile

2015 🔳 2035 no Bike Bellevue 📒 2035 with Bike Bellevue 🗕 no Bike Bellevue Capacity (720 veh/hr/ln) – – – with Bike Bellevue Capacity (720 veh/hr/ln)



Key Conclusions

- Reduce 4-8 fatal/severe injury crashes over 20 years
- Eliminate LTS 4 facilities; 90% of corridors meet MIP LTS Targets
- 24% more jobs; 77% more transit stops accessible
- Increase bike mode share, reduce GHG emissions from transportation
- Vehicle corridor speeds lower by <1MPH



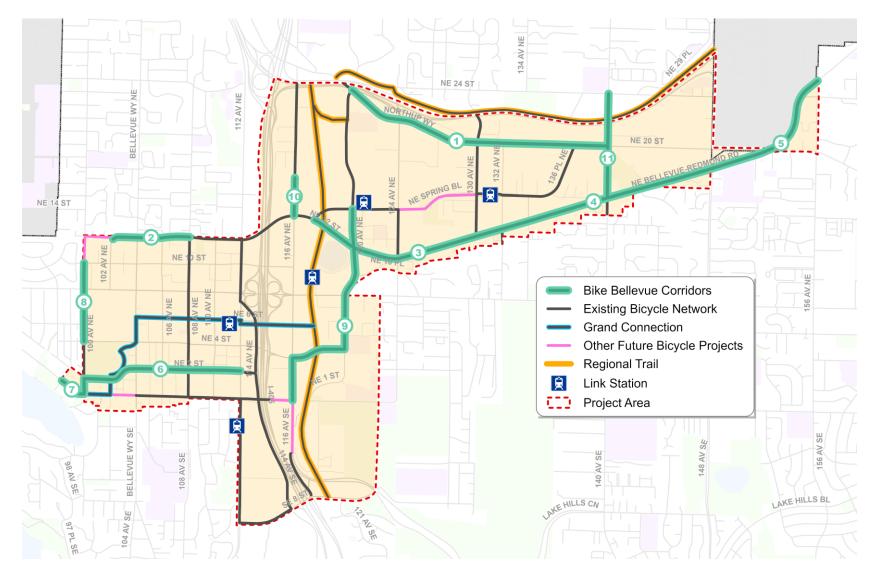


Discussion

- Clarifying questions
- Discussion



Corridor Profiles





Corridor 01: Northup Way

Proposed

Existing



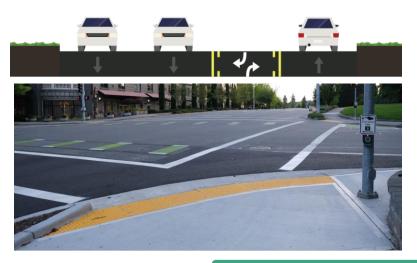
View west along NE 20th Street, east of 132nd Avenue NE



Corridor 02: NE 12th Street



Existing





Proposed

View from NE corner of NE 12th Street and 108th Avenue NE







Corridor 03: NE 12th/Bel-Red Rd

Existing







Proposed



View east along NE 12th Street, west of 120th Avenue NE



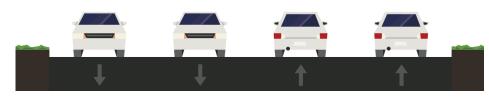






Corridor 04: Bel-Red Rd

Existing







Proposed



View west along Bel-Red Road, west of 130th Avenue NE

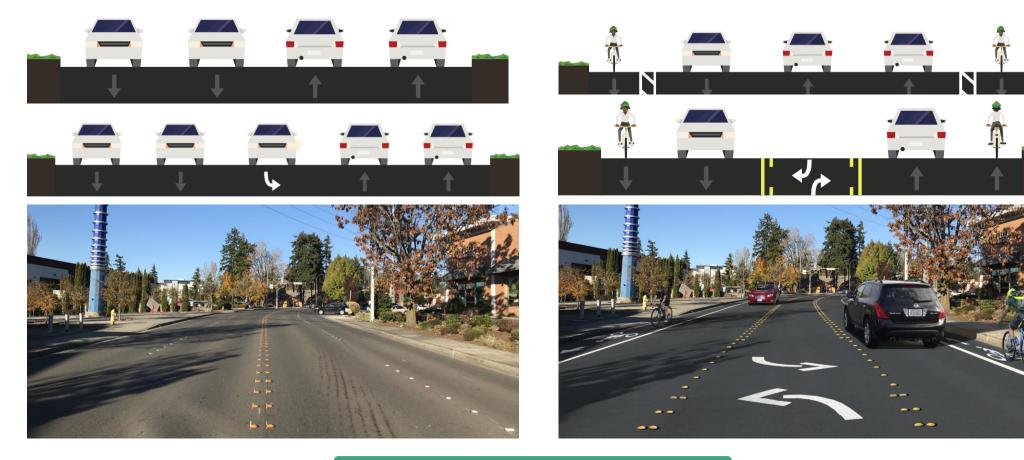


Corridor 05: Bel-Red Rd

Alter free and alter a

Proposed

Existing



View north along Bel-Red Road, north of NE 22nd Place



Corridor 06: NE 1st/ NE 2nd St

Existing









Proposed



View from NW corner of NE 2nd Street and Bellevue Way NE





View west along NE 2nd Street, west of 105th Avenue NE



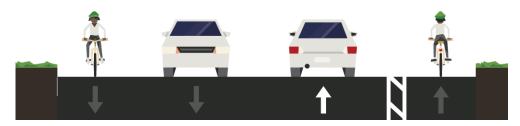
Corridor 07: Lake WA Blvd

Existing









Proposed



View southeast along Lake Washington Boulevard NE, east of 99th Avenue NE



Corridor 08: 100th Ave NE

Existing







Proposed



View south along 100th Avenue NE, north of NE 8th Street





View south along 100th Avenue NE, north of NE 5th Street



Corridor 09: Wilburton Rt.

All fills of the second second

Existing







Proposed



View west at NE 4th Street and 120th Avenue NE







Corridor 10: 116th Ave NE



Existing







Proposed

View south along 116th Avenue NE toward NE 12th Street



Corridor 11: 140th Ave NE

Existing



Proposed







Discussion

- Clarifying questions
- Discussion



Next Steps

• October 12, 2023

• Staff will respond to follow-up TC questions on the DRAFT Design Concepts Guide and share preliminary findings from outreach.

• November 9, 2023

- Staff will share with TC preliminary findings from outreach.
- Online project design tool closes November 17.

• January 11, 2024

 Staff will share with TC an updated DRAFT Design Concepts Guide and DRAFT Community Engagement Report.



Information

Project Webpage

https://BellevueWA.gov/bike-bellevue

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Online Engagement Tool – Comments by November 17, 2023 https://bikebellevue.konveio.com/