



Bike Bellevue **DRAFT** Design Concepts Guide



November 2023



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Bicyclists riding in buffered bike lane

Key Takeaways

Vehicle Lane and Parking Impacts

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» Implementing the bicycle facilities identified in Bike Bellevue will result in the loss of 5.9 miles of vehicle lanes and approximately 30 on-street parking stalls.

» Bike Bellevue will implement 15.11 miles of new or upgraded bicycle facilities that are more attractive to users of all ages and abilities.

Safety

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» People bicycling are more than nine times as likely to be killed or seriously injured in a collision compared to people in vehicles.

» Bike Bellevue improvements are forecast to eliminate 4-8 serious injury or fatality bicycle crashes over the next 20 years.

Bicycle Level of Traffic Stress

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» Today, two-thirds of the Bike Bellevue corridors are rated LTS 4, where the speed limit and traffic volume on the street combined with minimal to no bicycle facilities accommodate only the strong and fearless bicycle rider.

» Bike Bellevue projects will eliminate LTS 4 conditions on all project corridors and will meet Bellevue's MIP performance target on 90% of the Bike Bellevue corridors.

Equity and Accessibility

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» Bellevue residents living below the poverty line are 30% more likely to walk or bike than Bellevue residents living above the poverty line.

» Bike Bellevue expands low-income resident access to jobs by 24% and access to schools by 33%.

Access to Transit

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» Only 9% of current bus stops are accessible by a low-stress bike route today.

» Bike Bellevue will provide low-stress bicycle access to all future Link light rail stations.

» The number of bus stops accessible by a low stress bike route increases by 45%.

Sustainability

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» Today, less than 1% of all trips are made by bicycle.

» In a city survey, 62% of respondents indicated they would ride a bicycle more often if streets had safe and comfortable bike lanes.

» With denser land use and Bike Bellevue investments, the 2035 bicycle mode share is forecasted to be 2.6%-4.3% in the project area.

» The corresponding reduction in driving is equivalent to eliminating the annual greenhouse gas emissions generated by 240-890 cars.

Vehicle Performance

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» Bike Bellevue project concepts were developed in conjunction with a rigorous vehicle performance analysis.

» The average Bike Bellevue corridor speed is forecast to decrease by 0.2 miles per hour with implementation of Bike Bellevue projects.

Transportation Vision



Bike Bellevue is aimed at implementing bicycle network improvements in the urban core areas of Bellevue including Downtown, Wilburton and BelRed. The goal of Bike Bellevue is to enhance the multimodal transportation system in the city; align with the dense, vibrant land use vision in these urban core neighborhoods; and make getting around Bellevue safer, more equitable, sustainable, and accessible.

Background

Bellevue is known for many things. The city in a park, great schools, a growing and vibrant urban core, and quiet neighborhoods, just to name a few. While Bellevue has many strong assets, it is not known for its extensive bicycle network. There is an urgency to build out the infrastructure for Bellevue’s least-developed mode—the bike network—particularly in the urban core.

Major capital projects, levy-supported projects, and private-sector developments are implementing various types of bicycle facilities in Bellevue’s urban core neighborhoods. However, significant gaps in the planned bicycle network remain, limiting access to and the utility of these investments. In 2022, the [Council approved funding](#) to plan and implement rapid-build bicycle infrastructure in the urban core neighborhoods and subsequently [directed staff to work with the Transportation Commission](#) to prepare a Bike Bellevue recommendation plan for implementation.

Who Benefits?

Urban core neighborhoods in Bellevue are, by far, the fastest growing areas of the city and are preparing for 67,000 new jobs and 33,000 new residents by 2035 (Source: BKRCast). Anchoring this growth are five new East Link light rail stations, three planned frequent transit network routes, and the Eastrail regional trail. Completion of these transportation projects and realization of the land use vision will facilitate greater use of non-auto travel options in the Bike Bellevue project area.

The benefits of Bike Bellevue extend to the rest of the city as well. Residents of neighborhoods that surround the urban core will be able to easily access, jobs, shopping and recreation by bike. People anywhere in Bellevue and the region will be able to use transit to access the urban core and reach their destinations without the stress and financial barriers of parking and driving simply by bringing their bike on transit.

Document Outline

This document describes the major elements, benefits, and traffic implications of the Bike Bellevue project including the following:

- » Relationship to Mobility Implementation Plan
- » Project Principles
- » Overview of Bike Bellevue Corridors
- » Prioritizing Safety Improvements
- » Reducing Level of Traffic Stress
- » Enhancing Equitable Access
- » Advancing Environmental Stewardship
- » Implications for Traffic Congestion
- » Detailed Corridor Profiles

Mobility Implementation Plan

A New Approach to Mobility

The [Bellevue Mobility Implementation Plan \(MIP\)](#) is a performance measurement and prioritization system that aligns transportation investments with the city’s land use vision; providing the platform for Bellevue to meet the multimodal future envisioned in the [Comprehensive Plan](#).

Layered Network

The MIP is based on a concept called the “layered network,” shown in Figure 1. A layered network considers the land use context and each mode in the multimodal transportation system to be the “layers” that describe Bellevue’s interconnected multimodal transportation system. The layered network acknowledges that existing and planned land use influences expectations for transportation network performance. For example, people expect to be able to ride their bicycle on arterials and residential streets in Bellevue, and they understand that the type of bicycle facility (e.g., bike lane, shared lane, off-street path) will vary based on adjacent land uses, the type of street, and the proximity and connections to other modes. The layered network acknowledges that there may be competing priorities between modes and constraints to provide an “ideal” facility for all modes on all streets.

Performance Metrics

To guide the implementation of the layered network, the MIP identifies performance metrics for each mode. The MIP also identifies performance targets for each mode that vary by land use context. Specific to Bike Bellevue

corridors, the bicycle and vehicle performance metrics and targets are relevant.

» **Bicycle system performance** is measured using a concept known as level-of-traffic-stress (LTS), which describes the bicycle rider experience related to the speed limit and volume of traffic on the street, and the type of bicycle facility. LTS performance targets are defined by both the role of the bicycle facility as part of the city’s overall network (e.g., priority bicycle corridor versus a general segment of the bicycle network) and the location of the segment with respect to the Performance Management Area (PMA) (described below).

» **Vehicle system performance** is measured using the PM peak period volume/capacity ratio at system intersections and vehicle travel speed along primary vehicle corridors. System intersections and primary vehicle corridors are defined in the MIP.

The bicycle network vision identified in the MIP is a robust network of bicycle facilities within PMA Type 1 as shown in Figure 2. This network will connect the diverse mix of uses within PMA 1, and it will also allow people from across Bellevue to better access the employment, transit, cultural, and recreational amenities within Downtown, BelRed, and Wilburton.

Consistent with the layered network approach, Bike Bellevue significantly expands low-stress bicycle access by strategically expanding bike infrastructure on a complete and connected network within PMA 1, with connections throughout the city and region.

Figure 1. Layered Network

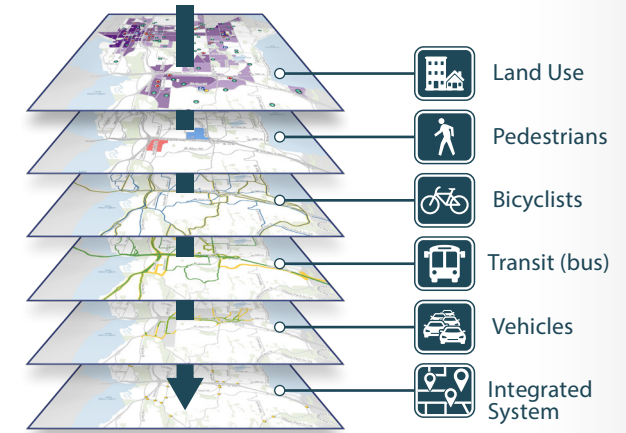






Figure 2. Bicycle Network LTS Vision





Bike Bellevue Principles

On March 27, 2023, the Bellevue City Council [approved eight Bike Bellevue project principles](#) and directed staff to work with the Transportation Commission to prepare and submit a recommendation for implementation to the Transportation Director. The icons below are used throughout the document to establish a connection to the eight Council principles. These principles are:

- **Safety**
Reduce the frequency and severity of crashes and minimize conflicts between roadway users through bikeway design.
- **Connectivity**
Implement a connected network of bicycle lanes that facilitate access to major destinations.
- **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.

- **Coordination**
Coordinate transportation and land use efforts underway in Bellevue to ensure equity and sustainability outcomes are aligned.
- **Partnerships**
Identify partnership opportunities to advance the implementation of bicycle projects.
- **Engagement**
Engage community stakeholders in setting the priorities for Bike Bellevue investments.
- **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.

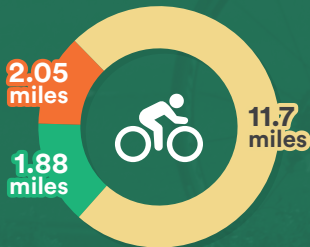
What is Bike Bellevue?

Bike Bellevue will implement 15.11 miles of bicycle network improvements in Downtown, BelRed, and Wilburton that will fill major gaps in the city’s low stress bike network. Bike Bellevue will provide key linkages to East Link light rail stations, Eastrail, and many parks, schools, and other points of interest. The cost to implement Bike Bellevue is estimated at \$18.6 million.

How Will We Add 15.11 Miles of Bike Lanes in Bellevue’s Urban Core?

Implementing bicycle facilities in a built-out environment is challenging. Avoiding extensive property impacts requires trade-offs. The graphic below identifies the impacts to vehicle lanes from Bike Bellevue projects.

Of the 15.11 miles of bike lanes:



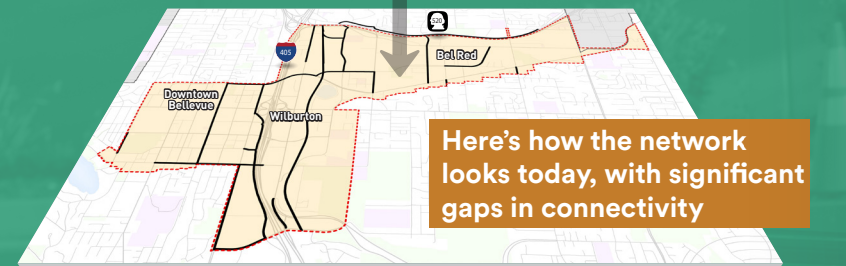
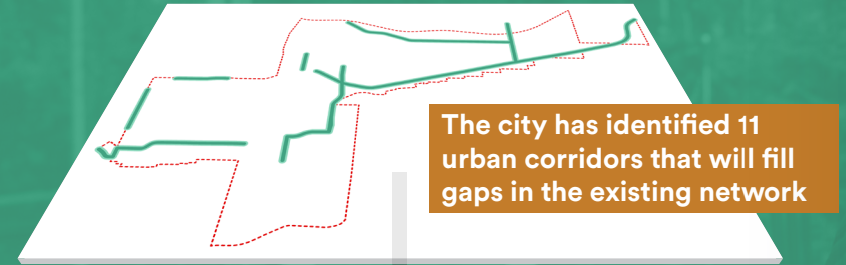
11.17 miles of new bike lanes are added by converting 5.90 miles of existing vehicle travel lanes

2.05 miles of new bike lanes are added with no modifications to vehicle travel lanes

1.88 miles of bike lanes are upgraded to reduce level of traffic stress with no modification to vehicle travel lanes

The project will also remove approximately 30 on-street parking spaces in Downtown Bellevue to provide adequate space for continuous bike lanes. The removed parking is located along Lake Washington Boulevard, 100th Ave NE, and NE 2nd Street. Due to a rigorous design and traffic evaluation, implementing these bicycle improvements will result in PM peak-hour travel speeds decreasing by about 0.2 miles per hour, on average, across the 11 Bike Bellevue Corridors. See the [Documenting Vehicle Performance](#) section and [Appendix A](#) for more details.

11 Bike Bellevue Corridors



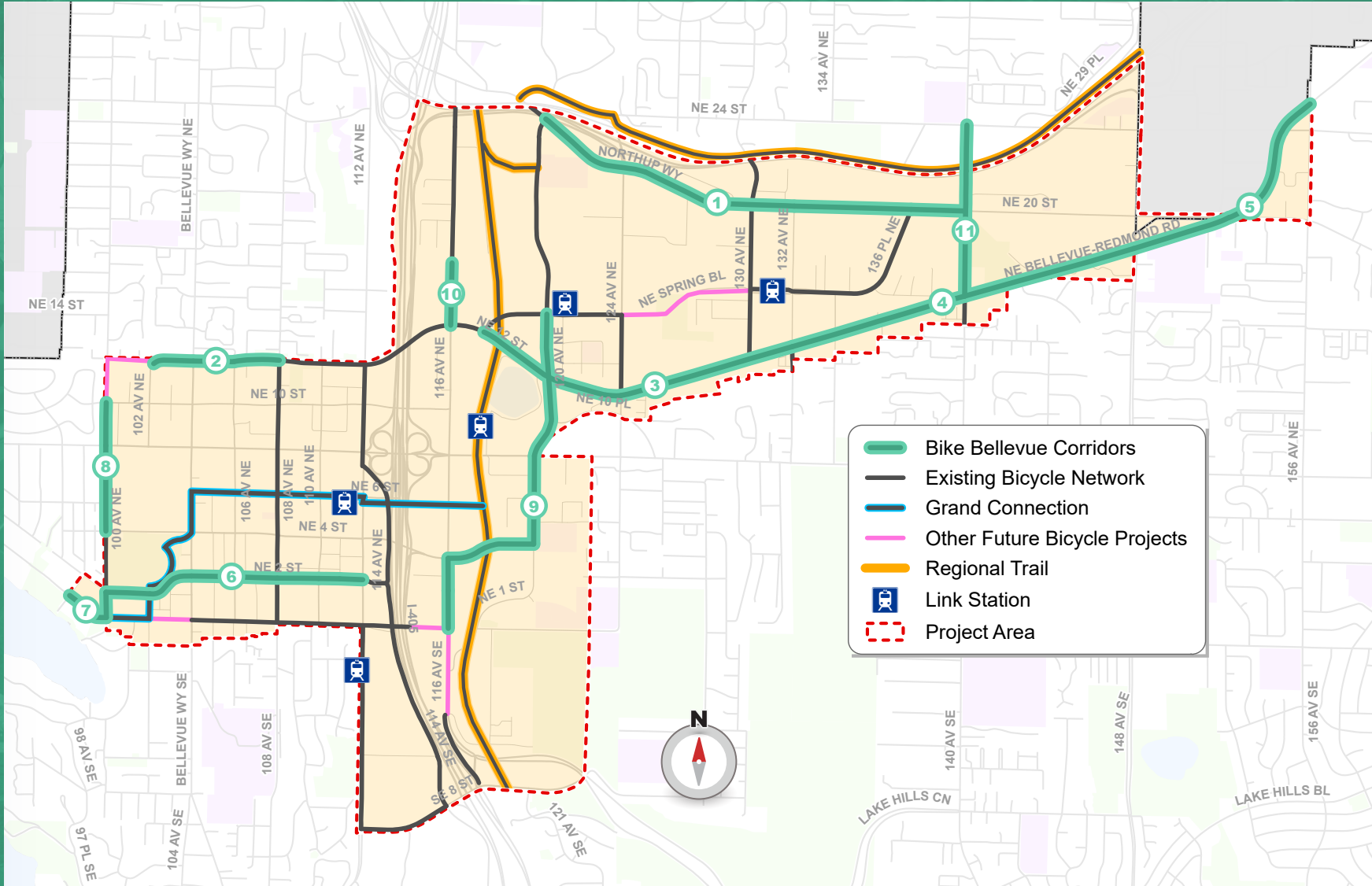
Existing Network



Future Network



The future network will allow people to travel on a dedicated network of bicycle facilities throughout the urban core, greatly expanding access between homes, transit, jobs, and recreation.



Future Network

Prioritizing Safety



People bicycling are more than nine times as likely to be killed or seriously injured in a collision compared to people in vehicles.

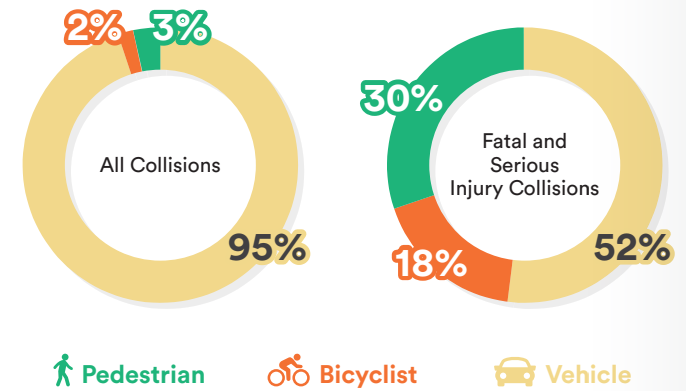
To achieve its [goal of eliminating traffic deaths and serious injury collisions](#) on city streets by 2030, the Bellevue City Council adopted the [Safe System Approach](#). This outcome-based approach to road safety bundles strategies focused on safe people, safe streets, safe speeds, and safe vehicles—as well as the supporting elements of leadership, culture, partnerships, and data.

Bike Bellevue aligns with the City Council’s commitment to a Safe System Approach to Vision Zero. In the Bike Bellevue project area, bicyclists are involved in 10% of all fatal and serious injury crashes even though they represent just 1% of all crashes on city streets in this geography. People bicycling are more than nine times as likely to be killed or seriously injured in a collision compared to people in vehicles (WSDOT Collision Data, 2013-2022).

Consistent with the collision data, Bike Bellevue streets account for only 9% of total street mileage, but 67% of Bike Bellevue corridors are on the [High Injury Network](#). The High Injury Network represents the subset of city streets with the highest share of crashes with fatalities and/or serious injuries. It is a city priority to implement safety projects on the High Injury Network.

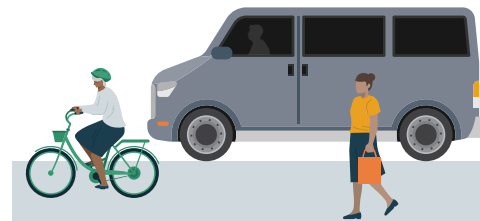
One of the strategies in Bellevue’s Safe System Approach to Vision Zero is [implementing Complete Streets](#) improvements that make it safe, comfortable, and convenient to bike to work, school, shops, services, parks, transit, and anywhere else people want to go. To achieve this outcome, Bellevue is implementing [proven countermeasure](#) improvements that encourage safe behaviors by design (e.g., increasing the separation of bicycles and vehicles to allow for more time for travelers to react to unexpected situations) on sections of the city’s High Injury Network (see [Appendix B](#)).

Collisions in Bellevue (2013 - 2022)



Source: WSDOT Collision Data (2013-2022)

Corridor safety improvements provide more space between vehicles, bicycles, and pedestrians, helping to reduce collisions.



Bike Bellevue could prevent 4-8 fatal and severe injury crashes over a 20 year period.

Prioritizing Safety



There was a 10% increase in vehicle speed on Bike Bellevue corridors from 2019 to 2023.

Speed is understood as one of the biggest threats to the safety of those outside of a vehicle, as [higher speeds lead to worse outcomes](#) when crashes occur. As shown in Figure 3 and 4, an analysis of 2023 citywide motor vehicle operating speed shows a 10% increase in speed on Bike Bellevue corridors from 2019 pre-Covid-19 levels. A 5 mph increase in speed (observed on multiple streets in the Bike Bellevue project area) [correlates to a 10-15% increase](#) in the risk of fatal and serious injury crashes.

Bike Bellevue's separated [bikeways](#), narrower travel lanes, and [road diets](#) are [proven safety countermeasures](#) to reduce vehicle speeding and improve safety for all roadway users. These corridor safety improvements provide more space between vehicles,

bicycles, and pedestrians, allowing more time for people to react to unexpected conditions. Cities that have emphasized and implemented multimodal mobility strategies for people who are walking, bicycling, and using public transportation have seen [consistent reductions in collisions by as much as 50%](#).

Assuming a 20-50% reduction in fatal and severe injury bicycle and pedestrian crashes per year identified by the research, Bike Bellevue could prevent 4-8 fatal and severe injury crashes over a 20 year period (see [Appendix B](#)). Based on the FHWA's economic impact valuations related to fatal crashes, this reduction amounts to \$16 to \$32 million ([Appendix B](#)).

Figure 3. Bellevue Speed Map, 2020

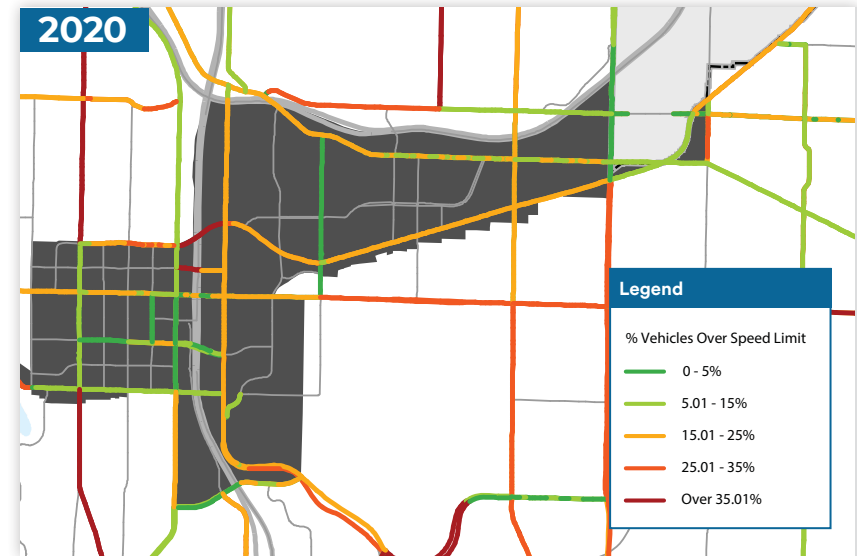
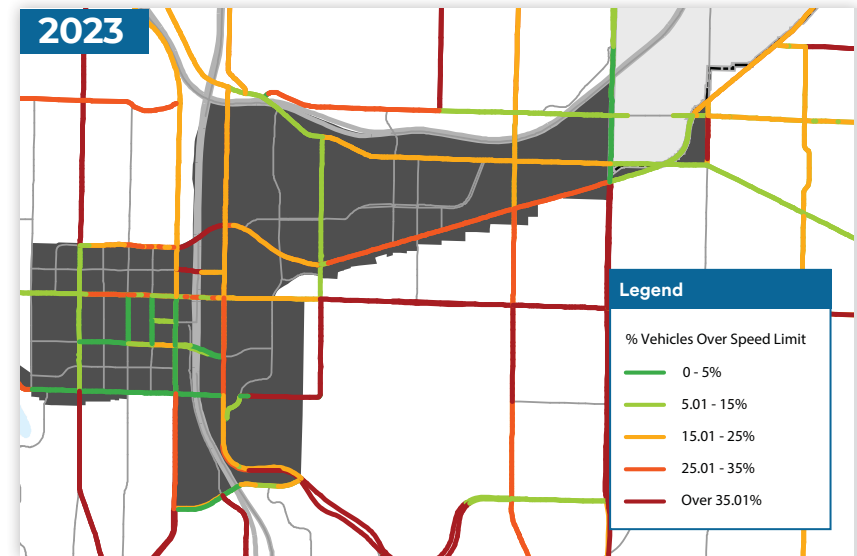


Figure 4. Bellevue Speed Map, 2023



Improving Bicycle LTS



Existing

Today, two-thirds of the Bike Bellevue corridors are rated LTS 4, where the speed limit and traffic volume on the street combined with minimal to no bicycle facilities accommodate only the strong and fearless bicycle rider.

Bellevue’s bicycle network is comprised of connected corridors and intersections with facilities that range from multi-purpose paths separated from arterials, to protected bike lanes along arterials, to standard bike lanes or shared lanes on lower volume arterials. The bicycle network identified in the MIP was originally drawn from the city’s [2009 Pedestrian and Bicycle Transportation Plan](#), with a 2021 update to address known constraints/conflicts, as well as to include new bicycle facility types.

The Performance Metric defined in the MIP for the bicycle network is Level of Traffic Stress (LTS). LTS considers that different types of bicycle riders are comfortable using different types of facilities depending on the characteristics of the roadway. The LTS and rider type range from LTS 1, which is a facility that can accommodate riders of all ages and abilities, to LTS 4, which will be comfortable for only the most experienced riders who are comfortable mixing with cars on congested corridors at high speeds. Upon completion, Bike Bellevue will eliminate the LTS 4 conditions on the 11 Bike Bellevue corridors.

Today, nearly two-thirds of Bike Bellevue corridors are rated as LTS 4, and none of the corridors are rated as LTS 1 or 2. See Figure 5 for a map of the existing LTS within the project area and Figure 6 for a breakdown of Bike Bellevue corridors by LTS. The lack of a complete and connected low-stress bike network is a substantial barrier to bicycling for people who are uncomfortable riding in mixed traffic.

Figure 5. Existing LTS Map, where two-thirds of the Bike Bellevue corridors are LTS 4

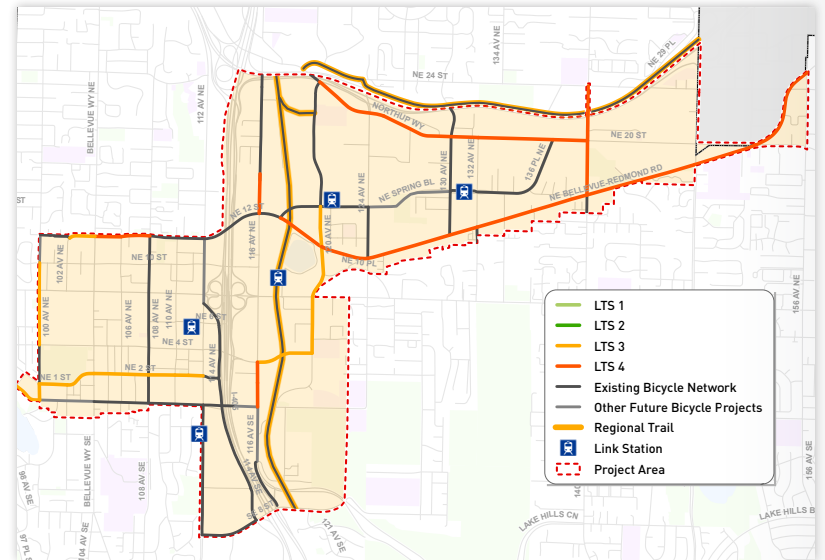
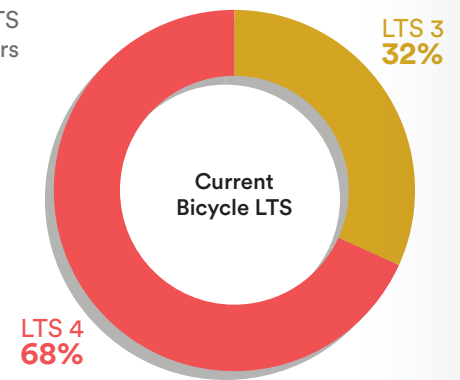






Figure 6. Current Bicycle LTS along Bike Bellevue corridors



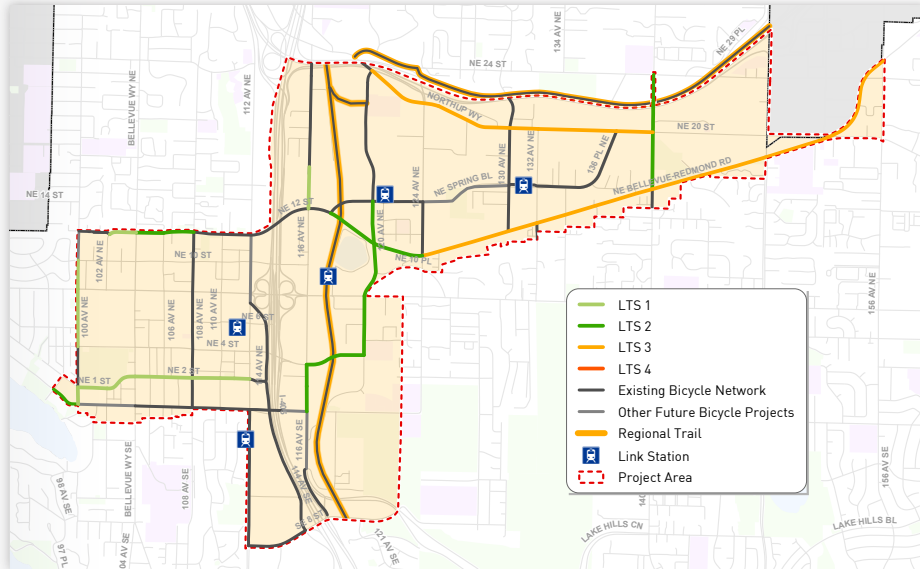
			
LTS 1	LTS 2	LTS 3	LTS 4
All ages and abilities	Interested but concerned	Enthusied and confident	Strong and fearless

Improving Bicycle LTS



Future

Figure 7. Bike Bellevue LTS Map, where 53% of Bike Bellevue segments will be LTS 1 and 2



Bike Bellevue projects will eliminate LTS 4 conditions on all project corridors and will meet Bellevue’s MIP performance target on 90% of the Bike Bellevue corridors.

The Bike Bellevue project area is a subset of the citywide bicycle network and is intended to provide lower-stress routes to accommodate riders of various ability levels looking to access or travel through Downtown, Wilburton, and BelRed. The LTS ratings after Bike Bellevue is implemented are shown in Figure 7 and a breakdown of Bike Bellevue corridors by LTS is presented in Figure 8.

The implementation of separated bicycle facilities will eliminate the LTS 4 conditions on the Bike Bellevue corridors and will meet Bellevue’s LTS target on 90% of the corridors. With these improvements, cyclists of all ages and abilities will have access to a network of separated bicycle facilities totaling 15.11 miles of roadway, up from 7.5 miles today—an increase of 100%.

Eight miles of Bike Bellevue corridors, approximately 55%, will be low-stress bicycle facilities comprised of LTS 1 and 2 segments; these corridors will accommodate riders of all ages and abilities. Low-stress bicycle facilities are shown to [improve safety for all road users](#), not just those who are bicycling.

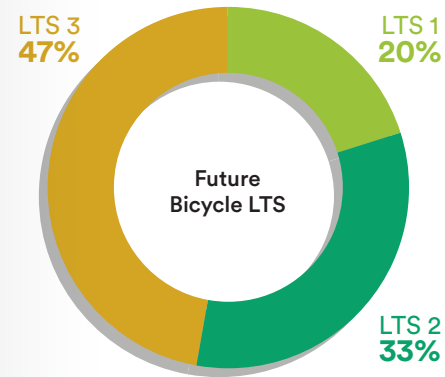


Figure 8. Future Bicycle LTS along Bike Bellevue corridors

Enhancing Equitable Access



Bellevue residents living below the poverty line are 30% more likely to walk or bike and 80% more likely to ride transit than Bellevue residents living above the poverty line. Bike Bellevue expands resident access to jobs by 34%.

Transportation systems provide a vital link between people and opportunities. Travel to work, school, shopping, medical care, and social visits are necessary to live a healthy and fulfilling life. The connection between people and opportunities is captured by the term accessibility, defined as the ability to reach destinations distributed across an area. Put simply, accessibility—connections between people and opportunities—is the most important economic and social benefit created by a transportation system and it facilitates participation in activities that individuals need to lead a meaningful life.

One of the city's [Diversity Advantage Initiative's](#) guiding principles is equity, and "transportation equity seeks fairness in mobility and accessibility to meet the needs of all community members." Bike Bellevue aims to consider the circumstances that impact resident's mobility and accessibility needs. The goal is to expand active transportation access for all residents while focusing on underserved and disadvantaged communities.

There are many ways to evaluate equity and subject matter experts have correlated many social, economic, and demographic characteristics with underserved and disadvantaged communities. See [Appendix C](#) for how equity populations are distributed across Bellevue. When considering how equity intersects with transportation needs, the Transportation Commission has previously identified that Bellevue residents with low-incomes and people who work low-wage jobs are key groups to prioritize. For these low-income individuals, the cost-burden of owning, operating and maintaining a vehicle is proportionally higher compared to those with higher-incomes, and convenient accessibility by other modes is important to ensure people with lower-incomes can travel where they need and want to go.

To illustrate this point, City of Bellevue travel model data ([Appendix D](#)) demonstrates that residents who live below the poverty line are 30% more likely to walk or bike and 80% more likely to ride transit than Bellevue residents living above the poverty line. Low-income residents are mapped in Figure 9 and the city's retail and office areas have the highest concentrations of low-wage jobs.

The Bike Bellevue corridors would provide low-stress bicycle connections communities that could directly benefit from more active transportation options while also providing greater connectivity citywide. The expanded low-stress connections would provide the following benefits in the project area:

- » **24% increase** in the number of jobs accessible to low-income residents by a low-stress bike route.
- » **71% increase** in the number of low-income residents that have access to a bus stop via a low-stress bike route.
- » **33% increase** in the number of low-income residents that would have a low-stress bicycle route to schools.

See [Appendix C](#) for more detailed access evaluations.

Bike Bellevue improvements greatly expand the number of employment opportunities, schools, transit stations and stops that people can comfortably get to by bike within the project area.

Enhancing Equitable Access



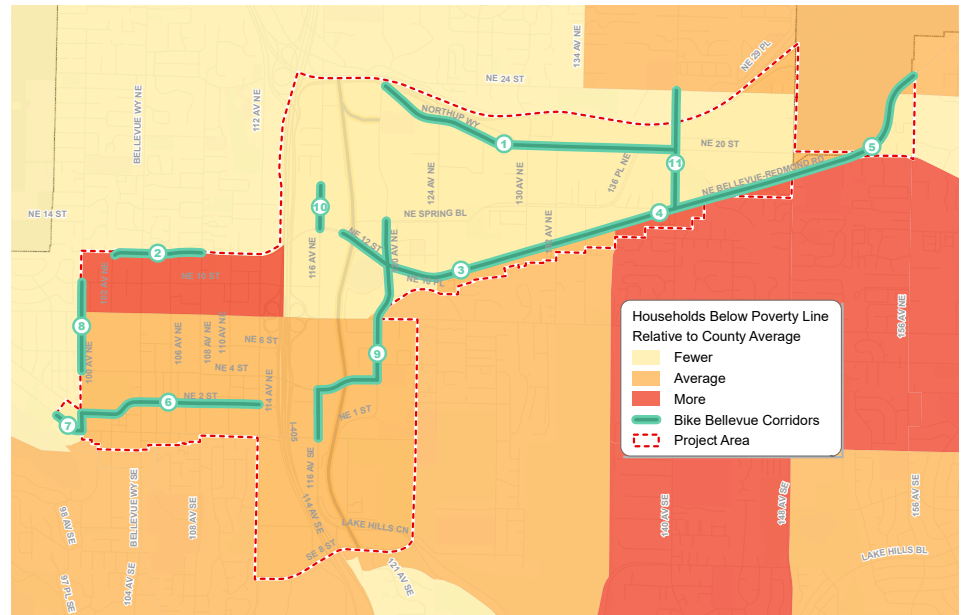
Access to Transit

Bellevue recognizes the importance of transit access as it relates to mobility, economic development, and overall livability. The [Bellevue Transit Master Plan](#) identifies a set of policies and city investments to support "abundant access" through an enhanced transit system. Key elements of the Transit Master Plan that relate to Bike Bellevue include leveraging existing investments, making connections to transit easy and attractive, and encouraging walking and biking. Today, just 9% of bus stops in the project area have access via a low-stress bicycle route. Bike Bellevue helps advance the city's accessible transit vision by:

- » **Building low-stress bicycle connections** that improve network connectivity near the East Link light rail stations
- » **Reducing the level of traffic stress** adjacent to 19 bus stops on routes planned to be reconfigured as part of the [East Link Connections](#) project
- » **Increasing the total number of residents that have low-stress access to a transit stop by 45%**
- » **Improving the pedestrian environment to access transit** along Bike Bellevue corridors by creating additional separation between moving vehicles and the sidewalk

As noted in [Appendix C](#), the City of Bellevue and King County Metro are working together to implement best practices on the design of bus stops along Bike Bellevue corridors. This collaborative effort will continue as the project concepts continue to be refined.

Figure 9. Low Income Population in the Bike Bellevue Project Area Based on US Census Bureau Data (2019-2023)



Sustainability



Improving bike facilities encourages more people to ride. City modeling indicates that Bike Bellevue improvements and increased land use density will result in bicycle mode share increasing from 0.8% today to 2.6-4.3% by 2035 ([Appendix E](#)). These modeling results support a city survey, that found that 62% of respondents indicated they would ride a bicycle more often if streets had safe and comfortable bike lanes. **When built out in 2035, Bike Bellevue will:**



Facilitate 825,000^a to 4 million^b bike trips a year



Reduce GHG emissions by between 1,100^a - 4,000^b metric tons per year; equivalent of eliminating the annual GHG emissions of 240^a - 890^b cars



Reduce VMT between 1.2 million^a and 10.8 million^b miles per year



Support Bellevue's Environmental Stewardship goals of reducing total GHG emissions and per capita VMT by 50% over the next 10 years

Over the 20-year project lifetime, between 31,000^a and 115,000^b metric tons of GHG emissions are eliminated, equivalent to eliminating the annual emissions of:



or



or



or



6,900^a and 25,700^b cars

3,900^a or 14,600^b homes

Burning 3.5^a million to 12.9^b million gallons of gasoline

Planting between 37,000^a and 137,500^b acres of new forest

a. BKRCast Bike Bellevue 2035 Build Model ([Appendix E](#))

b. ICLEI International Local Government GHG Emissions Analysis Protocol (IEAP) Level B ([Appendix B](#))



Sustainability

Improved Health Outcomes

In addition to expanding the set of viable choices for how people travel and reducing pollution, bicycling produces tangible health benefits by increasing physical activity. Using a model from the [World Health Organization](#) that quantifies the benefits of active transportation on long-term health outcomes, Bike Bellevue is expected to reduce the number of premature deaths within the project area by 0.8 annually, by 2035.

Over 20 years, improved health outcomes attributable to more people bicycling will have a cumulative positive economic benefit of \$208 million.

When combining the safety and health benefits of Bike Bellevue, the community should expect to see a benefit/cost ratio of 5.8-10.8 over a period of 20 years ([Appendix B](#)).



Cyclists on shared-use

Documenting Vehicle Performance (Existing)



The MIP defines a key performance metric for the vehicle network:

Volume-to-capacity ratio (V/C) at System Intersections Typical Urban Travel Speed on Vehicle Corridors during the two-hour PM peak period (4-6 PM)

We used BKRCast to analyze the combined impact of the Bike Bellevue corridors on vehicle performance and travel behavior. The vehicle network Performance Metrics from the MIP were used to evaluate System Intersections in and near the project area and along the 11 Bike Bellevue corridors. The vehicle Performance Metrics are evaluated during the PM peak period (4-6 PM) to capture the most congested part of the day. The Bike Bellevue project area is consistent with the Performance Management Area (PMA) Type 1 designation in the MIP which includes Downtown, Wilburton, and BelRed. The vehicle Performance Targets are based on the PMA in which the intersection or corridor are located.

The results for existing conditions, based on the 2019 Base Year model, are shown in Figure 11 for system intersections and Figure 12 for travel speed on the Bike Bellevue corridors. Within the analysis area, two system intersections do not meet the Performance Target (V/C < 1.00). However, these intersections have programmed improvements that will be implemented prior to 2035. The eleven Bike Bellevue corridors meet the Performance Target for Typical Urban Travel Speed (>= 0.5).

Type 1 PMA: High Density Mixed-Use | 1.0 V/C ratio at System Intersections

Figure 11. Existing Conditions, 2019 Base Year Model, Intersection V/C for Analysis Area

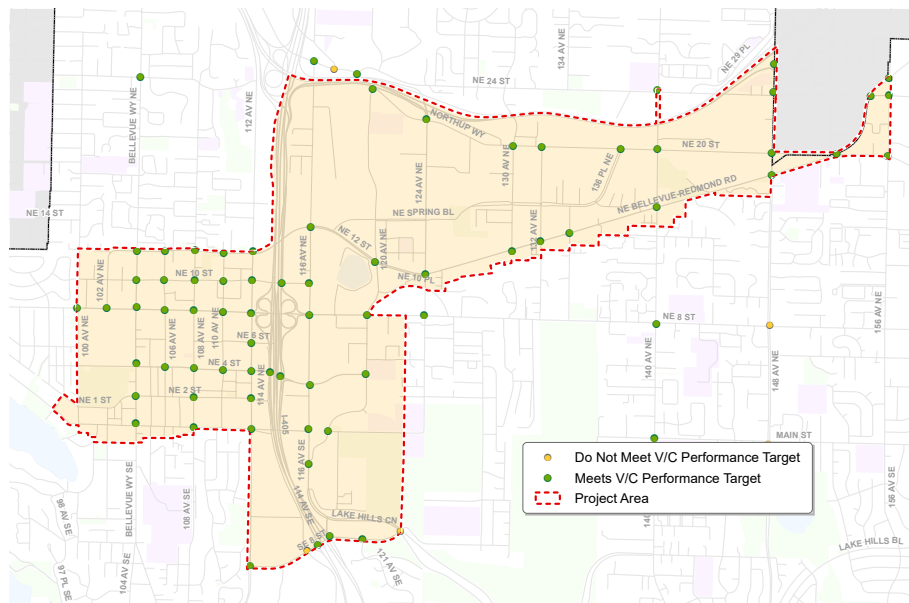
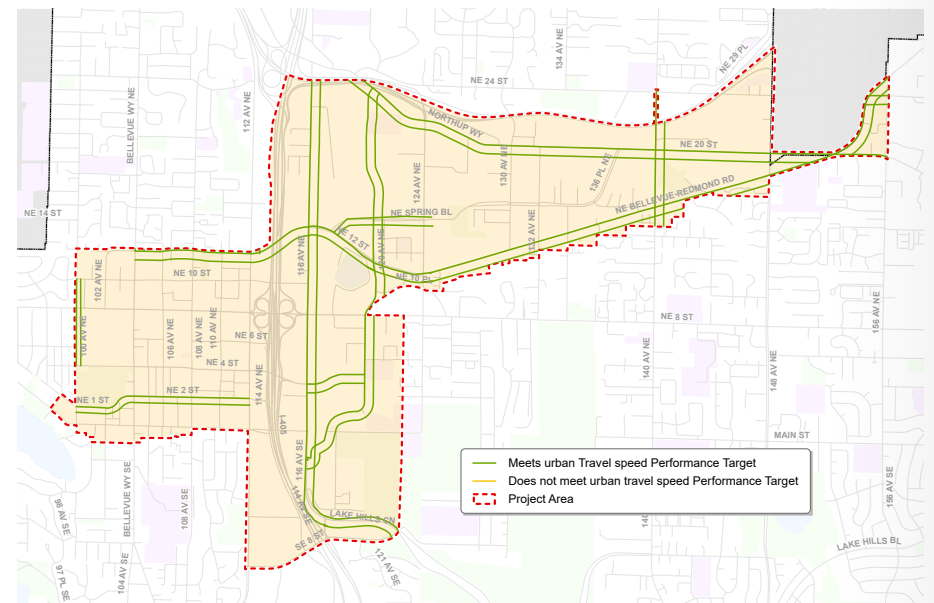


Figure 12. Existing Conditions, 2019 Base Year model, Urban Travel Speed on Bike Bellevue Corridors



Documenting Vehicle Performance (Future)



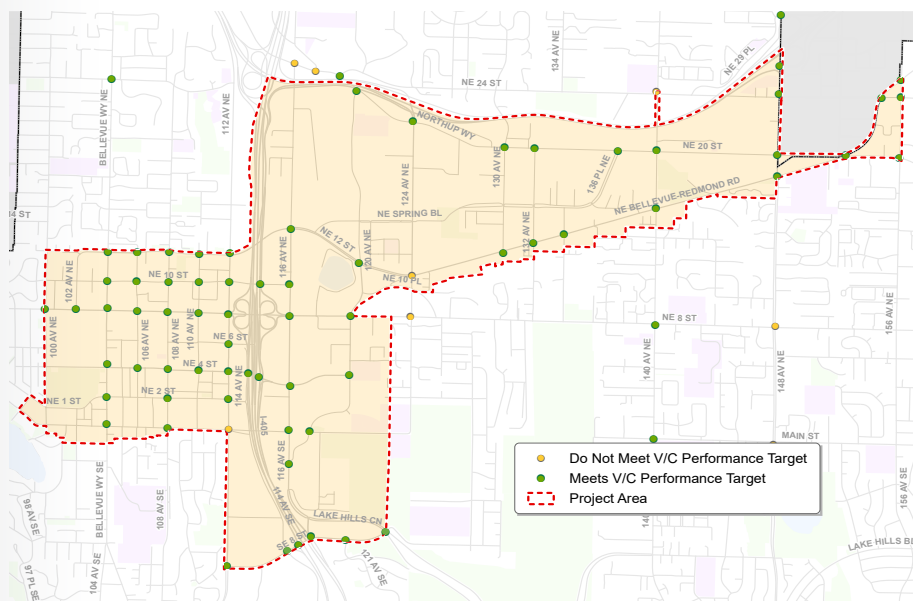
The average PM peak-hour vehicle speed on the 11 Bike Bellevue corridors decreased, on average, by 0.2 miles per hour with implementation of the projects.

In addition to modeling existing conditions using the 2019 Base Year model, two additional future year models were developed to evaluate the Build and No Build scenarios in 2035. The 2035 future year models are based on the BKRCast TFP Land Use Scenario (see [Appendix E](#) for a detailed description of the modeling assumptions and results). The projected land use in the project area includes the following:

- » **Nearly 152,000 jobs**, an increase of almost 67,000 jobs from 2019.
- » **Approximately 27,000 households**, an increase of nearly 16,000 households from 2019.
- » **About 51,100 residents**, an increase of nearly 33,000 residents from 2019.

The only difference between the Build and No Build models are the 11 Bike Bellevue projects. Both future year models assume the completion of seven major transportation projects by 2035 (see [Appendix E](#)).

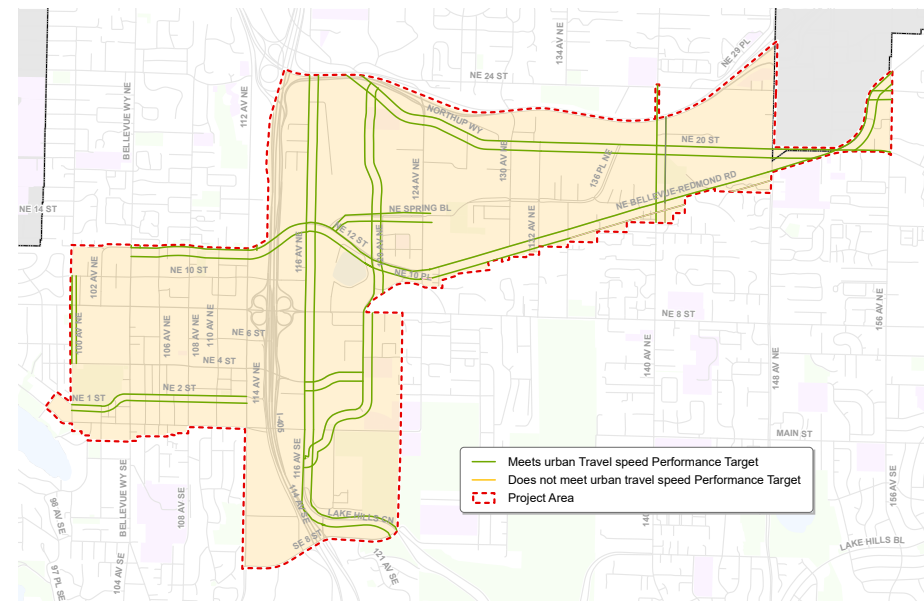
Figure 13. Future Conditions, 2035 Bike Bellevue Build Model, Intersection V/C for Analysis Area



The results for future conditions, based on the 2035 Bike Bellevue Build model, are shown in Figure 13 for system intersections and Figure 14 for travel speed on the Bike Bellevue corridors. Within the analysis area, two system intersections within PMA 1 do not meet the Performance Target (Main St/112th Ave and Bel-Red Rd/124th Ave). Additionally, within the analysis area, one system intersection within PMA 3 does not meet the Performance Target (NE 24th St/14th Ave NE). See both results in [Appendix E](#).

Of the three intersections in the analysis area that do not meet the Performance Target under future Build Conditions, two of the intersections also do not meet the Performance Target under future No Build Conditions. See the modeling approach [Appendix E](#) for additional information on the analysis. The eleven Bike Bellevue corridors meet the Performance Target for Typical Urban Travel Speed (≥ 0.5).

Figure 14. Future Conditions, 2035 Bike Bellevue Build Model, Urban Travel Speed on Bike Bellevue Corridors



Explore the 11 Bike Bellevue Corridors

Explore each of the corridor improvements on the following pages:

Page 19

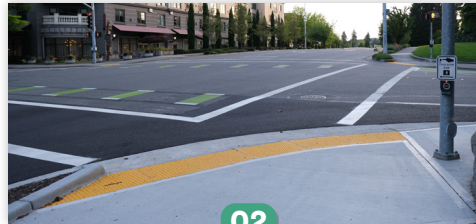


01

120TH AVE NE TO 140TH AVE NE

Northup Way

Page 21



02

102ND AVE NE TO 108TH AVE NE

NE 12th Street

Page 23

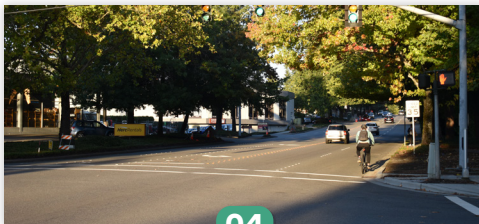


03

NE SPRING BLVD TO 132ND AVE NE

NE 12th Street & Bel-Red Road

Page 25

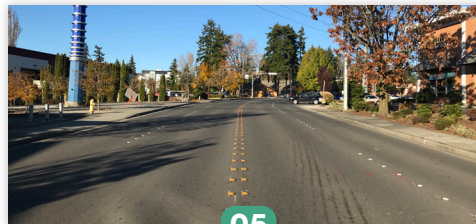


04

132ND AVE NE TO 148TH AVE NE

Bel-Red Road

Page 27

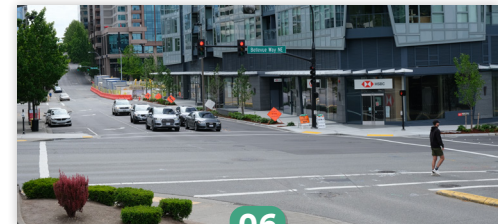


05

148TH AVE NE TO 156TH AVE NE

Bel-Red Road

Page 29



06

100TH AVE NE TO 112TH AVE NE

NE 1st & NE 2nd Street



Explore the 11 Bike Bellevue Corridors

Explore each of the corridor improvements on the following pages:

Page 31



100TH AVE NE TO 99TH AVE NE

Lake Washington Boulevard

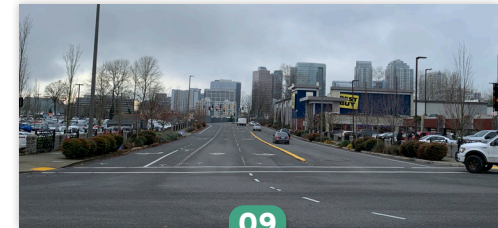
Page 33



MAIN ST TO NE 10TH ST

100th Ave NE

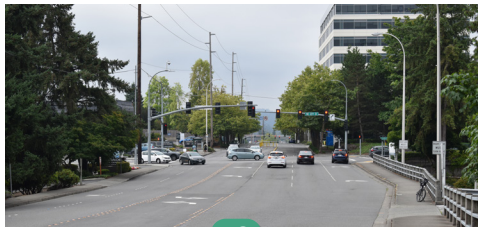
Page 35



116TH AVE NE & NE 4TH STREET

Wilburton Route

Page 37



NE 12TH STREET TO NE 14TH STREET

116th Ave NE

Page 39



BEL-RED ROAD TO NE 24TH ST

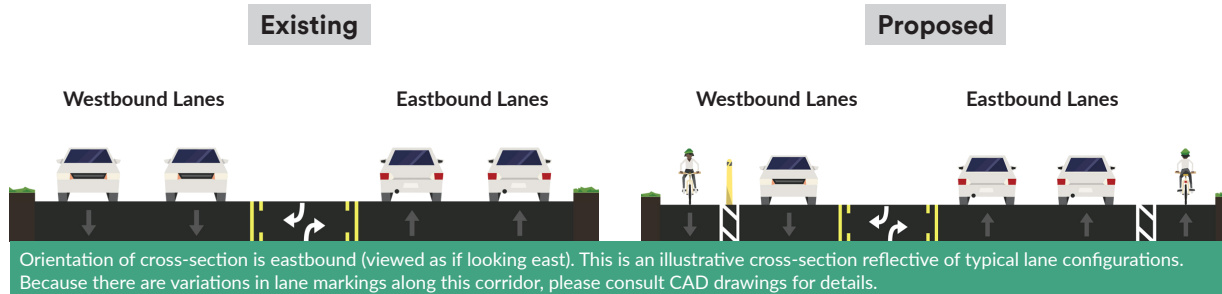
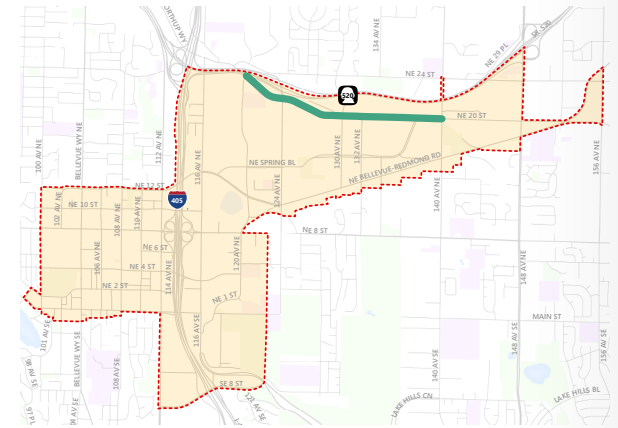
140th Ave NE

01 Northup Way

Project Description

Northup Way/NE 20th Street is an important east-west corridor serving the Bel-Red mixed-use area, which is rapidly densifying and changing from a light industrial to a mixed-use area.

The proposed concept reallocates one existing westbound lane to provide one-way separated buffered bike lanes on both sides of the corridor. The two-way left turn lane will be retained to provide vehicle access to the many businesses on both sides of the street.



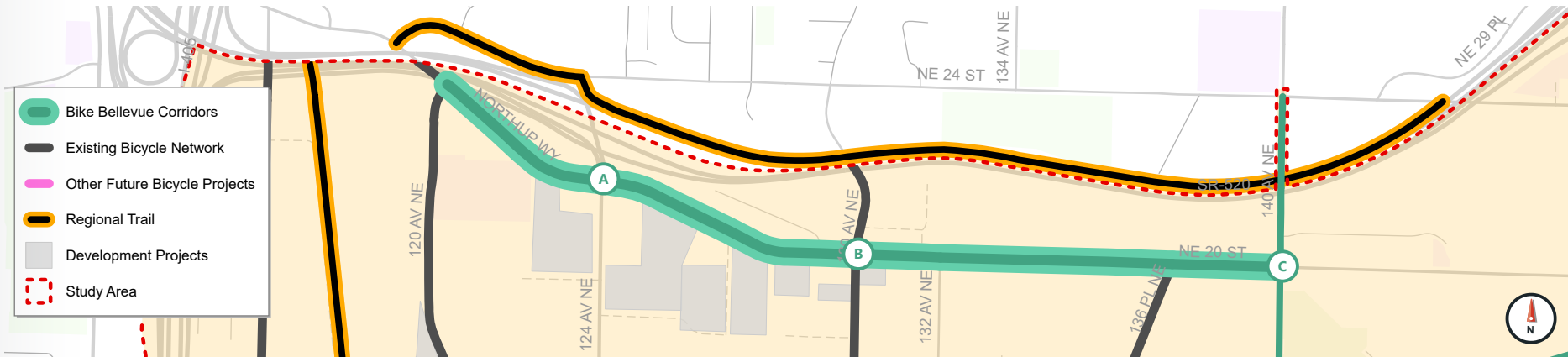
Visualization looking west along Northup Way/Northeast 20th Street, east of 132nd Avenue Northeast. Please consult CAD drawings for details.

Street Classification	Minor arterial
Traffic Volume (ADT)	20,000 - 30,000
Posted Speed Limit	35 mph
Existing Bicycle Facility	No facility
Existing Bike LTS	1 2 3 4
Target Bike LTS	1 2 3 4
Safety Data	<ul style="list-style-type: none"> On the Vision Zero High Injury Network. 3 severe or fatality crashes (2011 - 2022)
Major Nearby Destinations	Highland Park; access to SR 520 Trail and Eastrail
Population (600 Foot Buffer)	3,600 (2019) 16,850 (2050)
Employment (600 Foot Buffer)	18,300 (2019) 40,000 (2050)
Transit Route	King County Metro 249

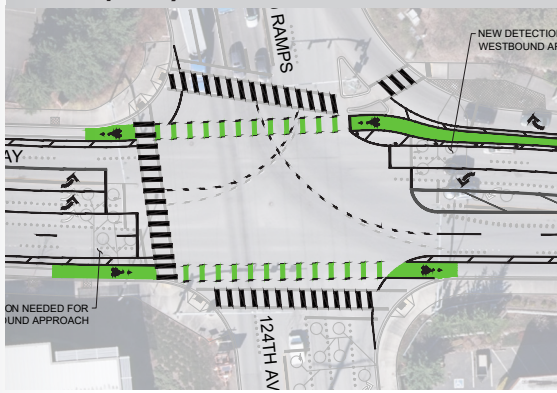


120TH AVE NE TO 140TH AVE NE

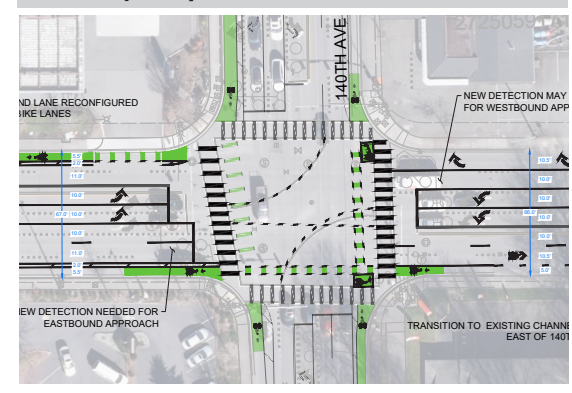
01 Northup Way



Northup Way at 124th Avenue NE



Northup Way and 140th Avenue NE



Changes

- A** Coordinate with WSDOT on 124th Avenue NE Interchange Project
 - B** Convert 1 of 2 westbound lanes to separated buffered bike lanes
 - C** Integrate with bike lanes on 140th Avenue NE
- Level of traffic stress meets MIP target (LTS 3) between 120th Ave NE and 136th Place NE. Improves condition, but does not meet LTS 1 target east of 136th Place NE.

With changes, all intersections meet vehicle performance target of 1.0 V/C or lower.

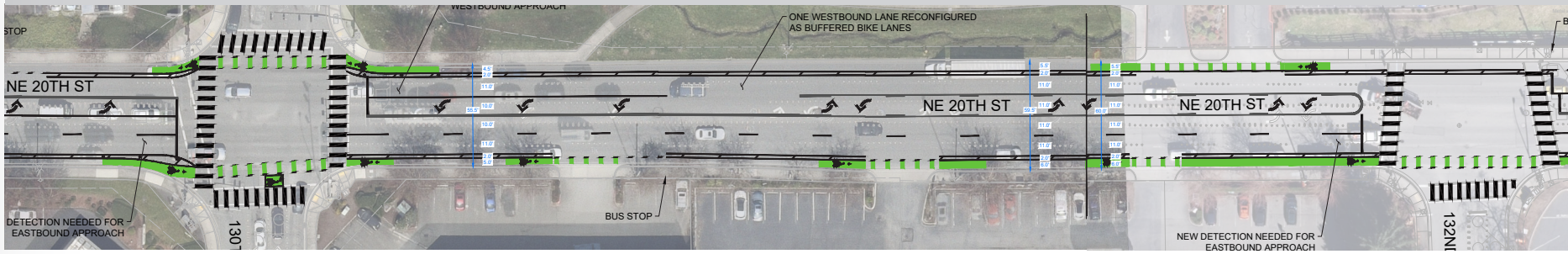
Benefits

One of two continuous east-west arterials in the BelRed neighborhood, connects to major commercial uses along corridor. Improves access to the East Link stations at 120th and 130th Avenues. Provides a less hilly alternative to the SR 520 trail.

Cost Estimate

\$3.90M

Northup Way and 130th/132nd Avenue NE



02 NE 12th Street

Project Description

The NE 12th Street project would extend the from the existing shared-use path that ends at 108th Avenue NE to a planned bicycle facility that extends west of 102nd Avenue NE. This would create a continuous low-stress bicycle route

across all of north downtown. The proposed design reallocates one westbound lane to provide a two-way separated buffered bike lane on the north side of NE 12th Street.

Existing

Westbound Lanes

Eastbound Lanes



Proposed

Westbound Lanes

Eastbound Lanes



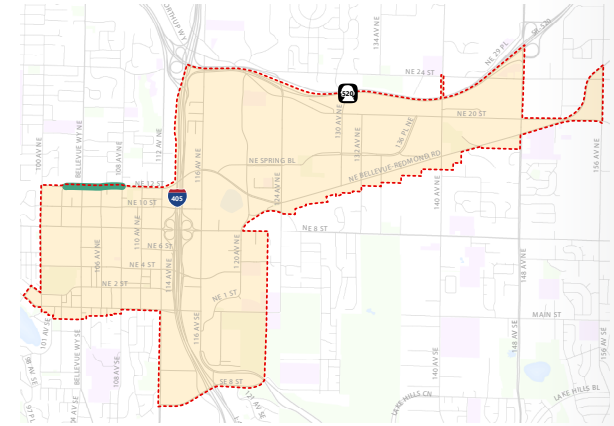
Orientation of cross-section is eastbound (viewed as if looking east). This is an illustrative cross-section reflective of typical lane configurations. Because there are variations in lane markings along this corridor, please consult CAD drawings for details.



Visualization looking west along Northeast 12th Street at 108th Avenue Northeast. Please consult CAD drawings for details.



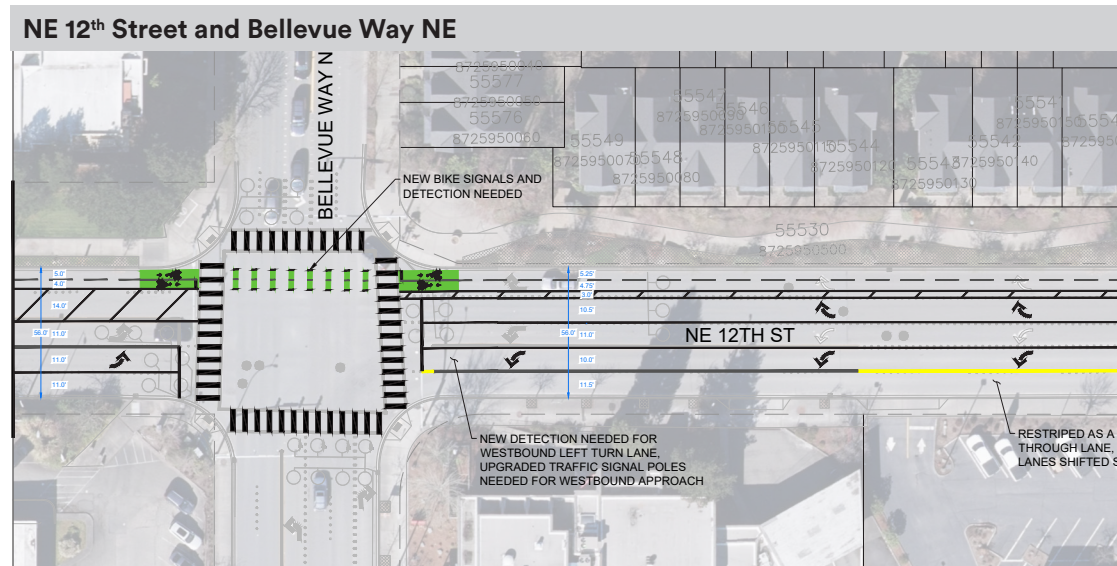
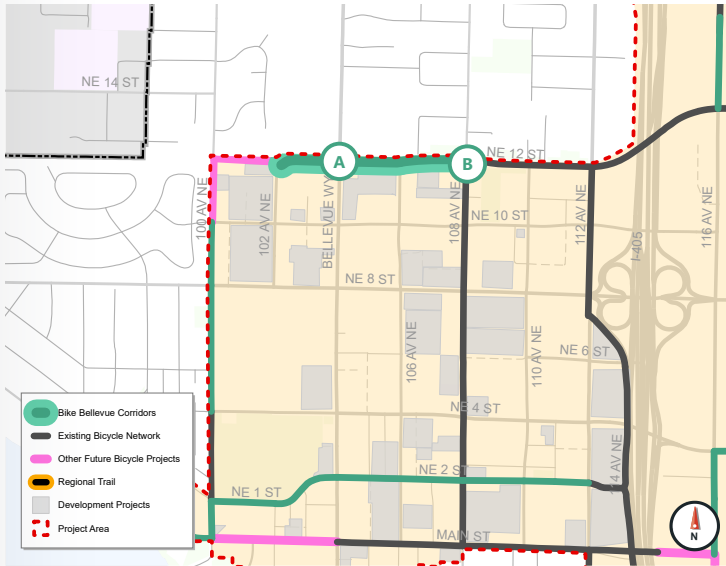
Visualization looking east along Northeast 12th Street, east of 102nd Avenue Northeast. Please consult CAD drawings for details.



Street Classification	Major/Minor arterial
Traffic Volume (ADT)	14,000 - 22,000
Posted Speed Limit	30 mph
Existing Bicycle Facility	No facility
Existing Bike LTS	1 2 3 4
Target Bike LTS	1 2 3 4
Safety Data	<ul style="list-style-type: none"> 2 severe or fatality crashes (2011 - 2022)
Major Nearby Destinations	Bellevue Square, Bellevue Village Center
Population (600 Foot Buffer)	6,300 (2019) 27,200 (2050)
Employment (600 Foot Buffer)	17,100 (2019) 30,800 (2050)
Transit Route	N/A



02 NE 12th Street



Changes

- A** 1 of 2 eastbound lanes removed east of Bellevue Way NE, 106th Avenue NE and 108th Avenue NE to improve westbound traffic operations.
- B** New westbound right turn bay at 108th Avenue NE.
- C** New level of traffic stress is between 2 and 3 (depending on vehicle volumes). Conditions are improved, but does not meet LTS 1 target along NE 12th Street.

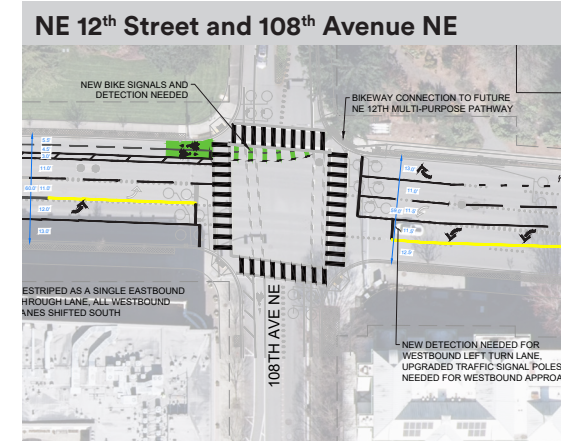
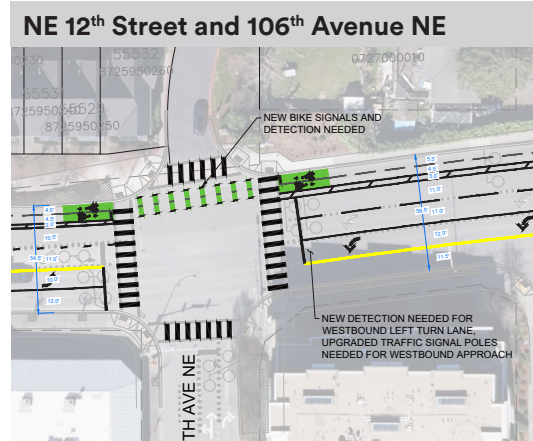
With changes, all intersections meet vehicle performance target of 1.0 V/C or lower.

Benefits

Extends bicycle connection along NE 12th Street from the 108th Avenue corridor.

Cost Estimate

\$0.99M



NE SPRING BLVD TO 132ND AVE NE

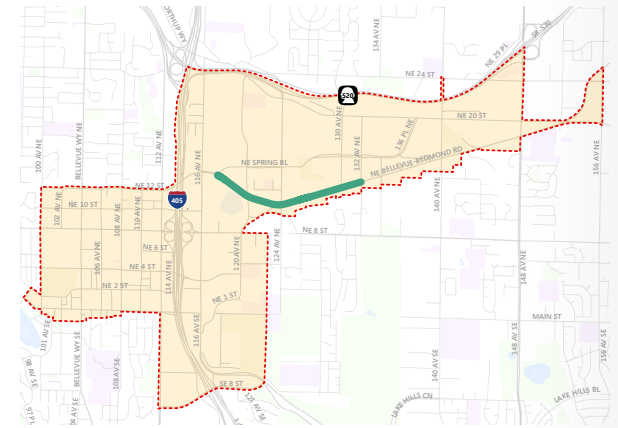
03 NE 12th Street/Bel-Red Road

Project Description

The connection along NE 12th Street and Bel-Red Road is a key link between downtown Bellevue and the city's emerging BelRed neighborhood. This will be the only low-stress bike route between these areas until redevelopment occurs and NE Spring Boulevard is completed.

The proposed design reallocates 1 of 2 westbound

lanes between NE Spring Blvd and 124th Avenue NE, and transitions to reallocating 1 of 2 eastbound lanes east of 124th Avenue NE to provide one-way separated buffered bike lanes in each direction. A new protected intersection will be installed at NE 12th Street and 120th Avenue NE to facilitate safe connections between the two bicycle routes.



Existing

Westbound Lanes

Eastbound Lanes



Proposed

Westbound Lanes

Eastbound Lanes



Orientation of cross-section is eastbound (viewed as if looking east). This is an illustrative cross-section reflective of typical lane configurations. Because there are variations in lane markings along this corridor, please consult CAD drawings for details.



Visualization looking east along Northeast 12th Street at 120th Avenue Northeast. Please consult CAD drawings for details.

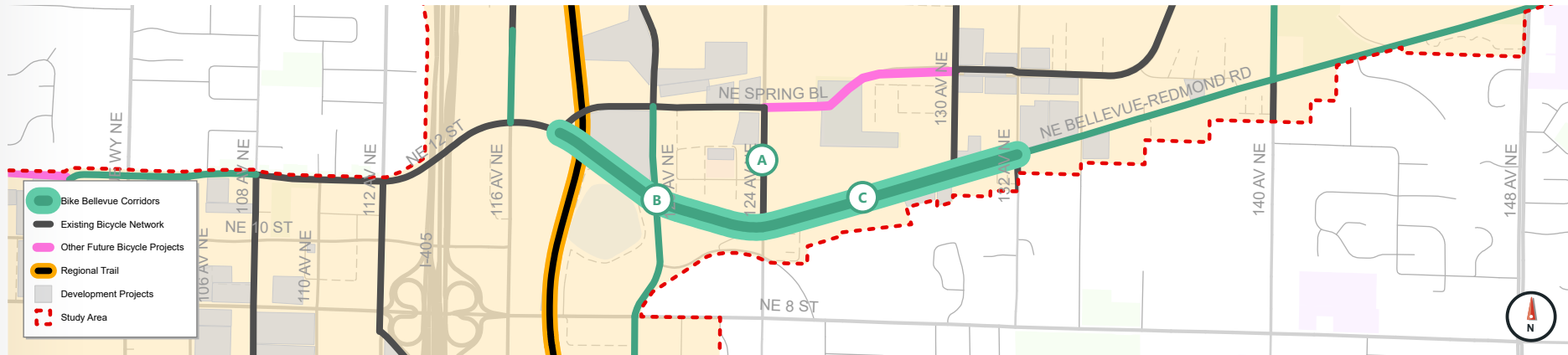


Visualization looking west along Bel-Red Road, east of 124th Avenue Northeast. Please consult CAD drawings for details.

Street Classification	Major arterial
Traffic Volume (ADT)	18,000 - 29,000
Posted Speed Limit	30/35 mph
Existing Bicycle Facility	No facility
Existing Bike LTS	1 2 3 4
Target Bike LTS	1 2 3 4
Safety Data	<ul style="list-style-type: none"> On the Vision Zero High Injury Network. 4 severe or fatality crashes (2011 - 2022)
Major Nearby Destinations	Overlake Medical Center, Spring District
Population (600 Foot Buffer)	4,700 (2019) 15,300 (2050)
Employment (600 Foot Buffer)	21,950 (2019) 40,550 (2050)
Transit Route	King County Metro 226

NE SPRING BLVD TO 132ND AVE NE


03 NE 12th Street/Bel-Red Road




Changes

- A** Convert 1 of 2 westbound lanes to one-way buffered bike lanes between NE Spring Boulevard and 124th Avenue NE.
- B** New protected intersection corners at NE 12th Street and 120th Avenue NE to facilitate safe bicycle movements between the two bike routes.

- C** Maintain 2 westbound lanes and convert 1 of 2 eastbound lanes east of 124th Avenue NE to accommodate one-way separated buffered bike lanes on each side of the street.

 Level of traffic stress meets MIP target (LTS 3).

 With changes, one intersection does not meet the vehicle performance target of 1.0 V/C or lower, 124th Avenue NE & Bel-Red Road (V/C = 1.01).

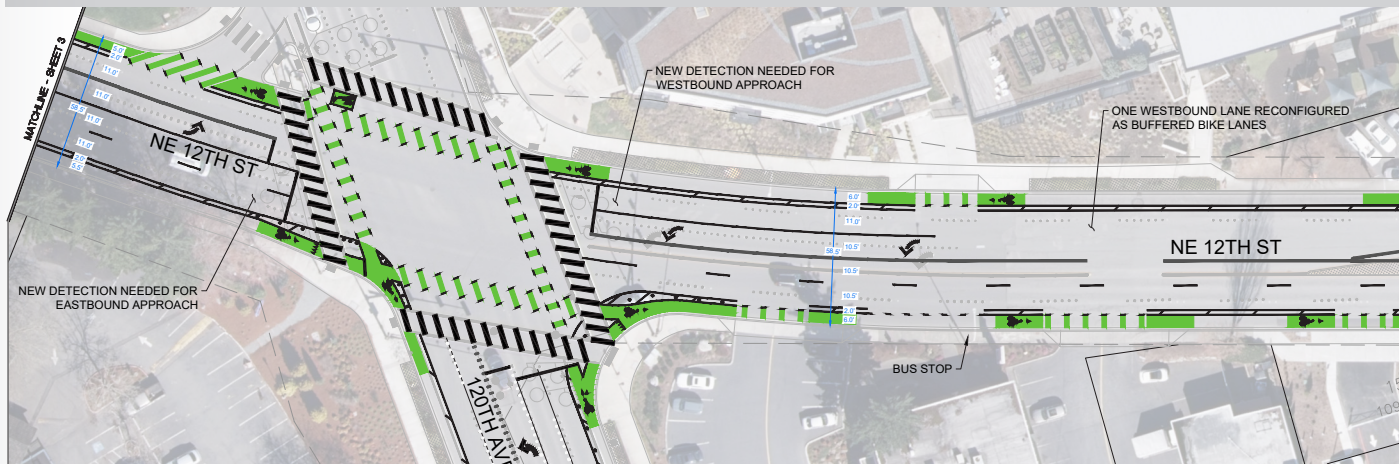
Benefits

One of two continuous east-west arterials in the BelRed neighborhood, connects to major commercial uses along corridor downtown, Wilburton, and other surrounding neighborhoods to the businesses and commercial uses in the BelRed neighborhood.

Cost Estimate

\$3.38M

NE 12th Street and 120th Avenue NE



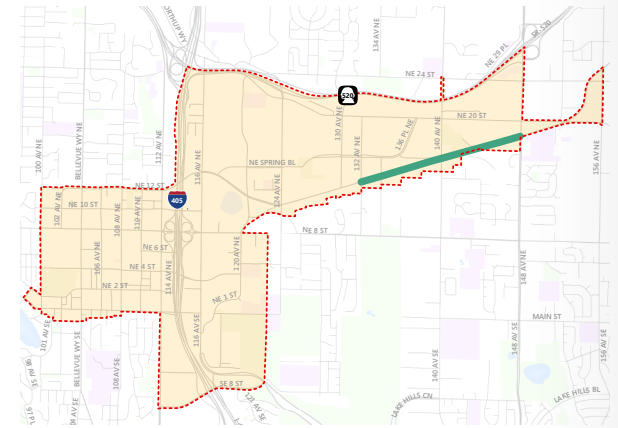
132ND AVE NE TO 148TH AVE NE

04 Bel-Red Road

Project Description

Bel-Red Road is a major continuous east-west corridor that serves the BelRed neighborhood and is one of the few continuous east-west streets through Bellevue. The area along Bel-Red Road is rapidly changing from light industrial to higher-density mixed-use consistent with the City's BelRed Plan.

The proposed design reallocates 1 of 2 eastbound lanes between 132nd Avenue NE and opens back up to 2 lanes on approach to the busy 148th Avenue NE intersection. This design provides one-way separated buffered bike lanes on both sides of the street. Between 143rd Avenue NE and 148th Avenue NE, 1 of 2 westbound lanes is modified to provide a two-way left turn lane, improving access to destinations on both sides of the corridor.



Street Classification	Major arterial
Traffic Volume (ADT)	19,000 - 25,000
Posted Speed Limit	35 mph
Existing Bicycle Facility	No facility
Existing Bike LTS	1 2 3 4
Target Bike LTS	1 2 3 4
Safety Data	<ul style="list-style-type: none"> On the Vision Zero High Injury Network. 5 severe or fatality crashes (2011 - 2022)
Major Nearby Destinations	Bel-Red mixed use neighborhood, Highland Park
Population (600 Foot Buffer)	6,150 (2019) 7,350 (2050)
Employment (600 Foot Buffer)	14,150 (2019) 30,250 (2050)
Transit Route	King County Metro 226

Existing



Proposed

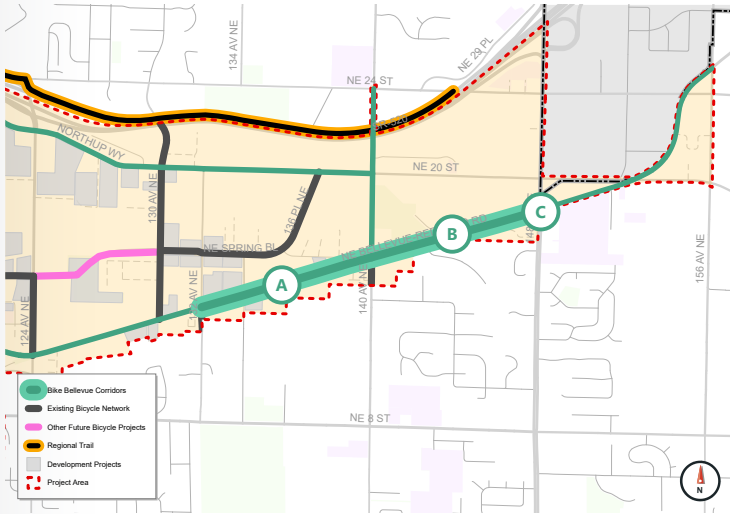


Orientation of cross-section is eastbound (viewed as if looking east). This is an illustrative cross-section reflective of typical lane configurations. Because there are variations in lane markings along this corridor, please consult CAD drawings for details.





Visualization looking east along Bel-Red Road at 132nd Avenue Northeast. Please consult CAD drawings for details.

04 Bel-Red Road



Changes

- A** Convert 1 of 2 eastbound lanes to one-way separated buffered bike lanes, retain 2 lanes westbound between 134th Avenue NE and 143rd Avenue NE.
- B** Between NE 20th Pl and 148th Avenue NE, convert one of two westbound lanes to a one-way separated buffered bike lane; retain 2 lanes eastbound.
- C** Convert 1 of 2 westbound lanes and retain 2 lanes eastbound at 148th Avenue NE.

-  Level of traffic stress meets MIP target (LTS 3).
-  With changes, all intersections meet vehicle performance target of 1.0 V/C or lower.

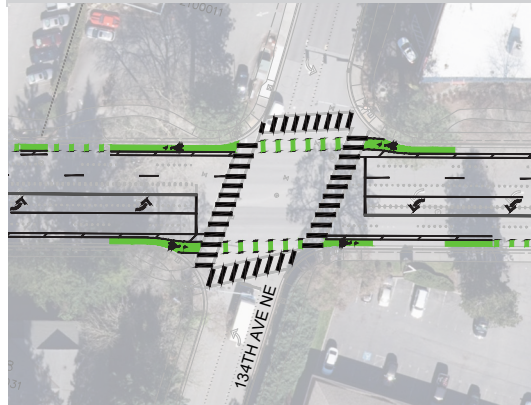
Benefits

One of the only continuous east-west bicycle routes in Bellevue between I-405 and the neighborhoods east of 156th Avenue NE.

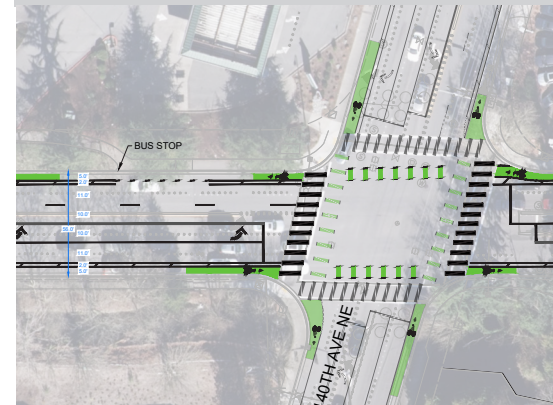
Cost Estimate

\$2.81M

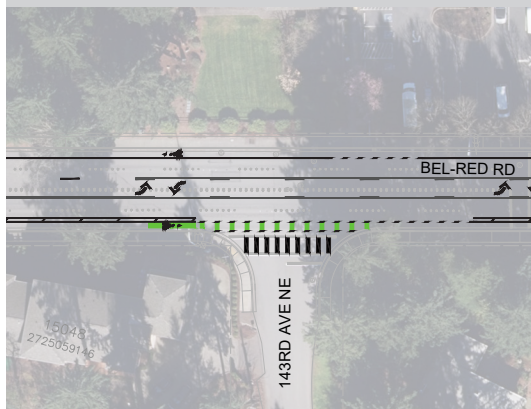
Bel-Red Road and 134th Avenue NE



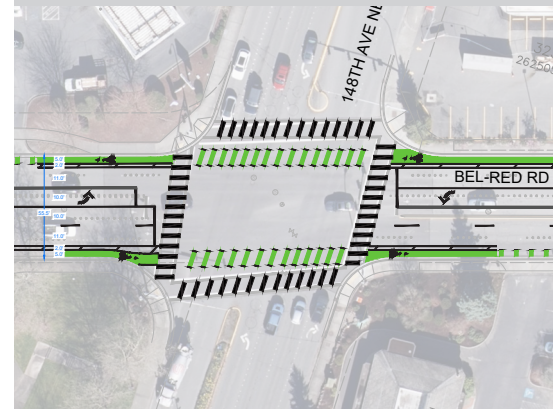
Bel-Red Road and 140th Avenue NE



Bel-Red Road and 143rd Avenue NE



Bel-Red Road and 148th Avenue NE



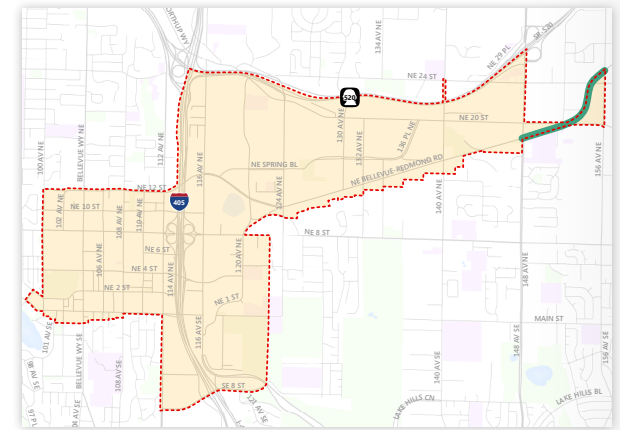
05 Bel-Red Road

Project Description

This segment of Bel-Red Road runs adjacent to the South Overlake neighborhood in Redmond, which is rapidly densifying with mixed-use development replacing low-density retail. This segment also is a key link between Bellevue's and Redmond's bicycle networks.

The proposed design:

- » 2 lanes EB, 1 lane WB (143rd to NE 20th)
- » 3 lanes (NE 20th to NE 24th)
- » 2 lanes WB, 1 lane EB (NE 24th to 156th Avenue NE)



Existing

Southbound Lanes Northbound Lanes



Proposed



Orientation of cross-section is northbound (viewed as if looking north). This is an illustrative cross-section reflective of typical lane configurations. Because there are variations in lane markings along this corridor, please consult CAD drawings for details.

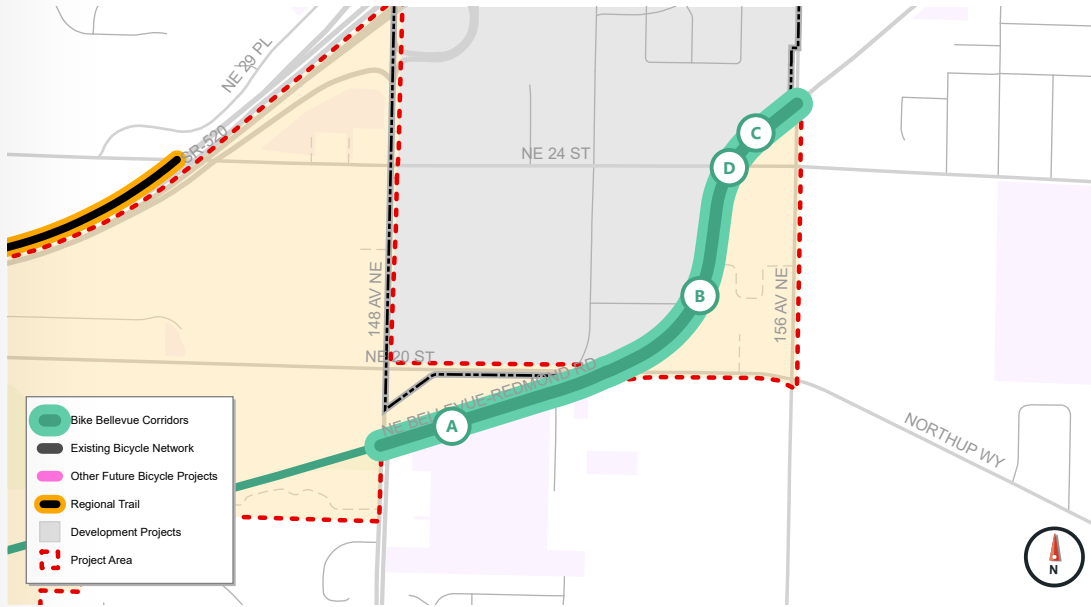


View north along Bel-Red Road, north of Northeast 22nd Place. Please consult CAD drawings for details.

Street Classification	Major arterial
Traffic Volume (ADT)	12,000 - 19,000
Posted Speed Limit	35 mph
Existing Bicycle Facility	No facility
Existing Bike LTS	1 2 3 4
Target Bike LTS	1 2 3 4
Safety Data	<ul style="list-style-type: none"> • On the Vision Zero High Injury Network. • 6 severe or fatality crashes (2011 - 2022)
Major Nearby Destinations	Highland Middle School
Population (600 Foot Buffer)	9,850 (2019) 11,100 (2050)
Employment (600 Foot Buffer)	11,700 (2019) 20,650 (2050)
Transit Route	King County Metro 226


148TH AVE NE TO 156TH AVE NE


05 Bel-Red Road



Changes

- A** Convert 1 of 2 eastbound lanes to one-way separated buffered bike lanes between 148th Avenue NE and NE 20th Street
- B** Convert 1 eastbound lane and 1 westbound lane to a one-way separated buffered bike lanes and install a two-way left turn lane between NE 20th Street and NE 24th Street
- C** Convert 1 of 2 eastbound lanes to one-way separated buffered bike lanes between NE 24th Street and 156th Avenue NE
- D** Remove northbound peak hour left turn restriction

 Level of traffic stress meets MIP target (LTS 3).

 With changes, all intersections meet vehicle performance target of 1.0 V/C or lower.

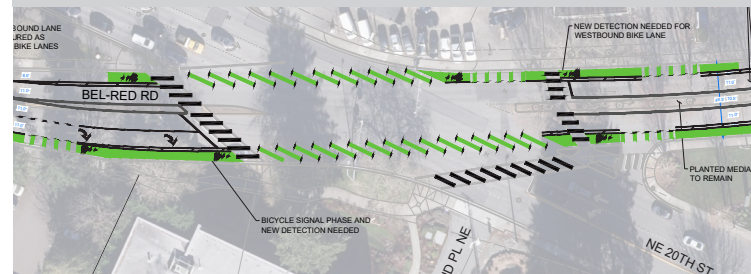
Benefits

One of two continuous east-west arterials in the BelRed neighborhood, connects to major commercial uses along corridor.

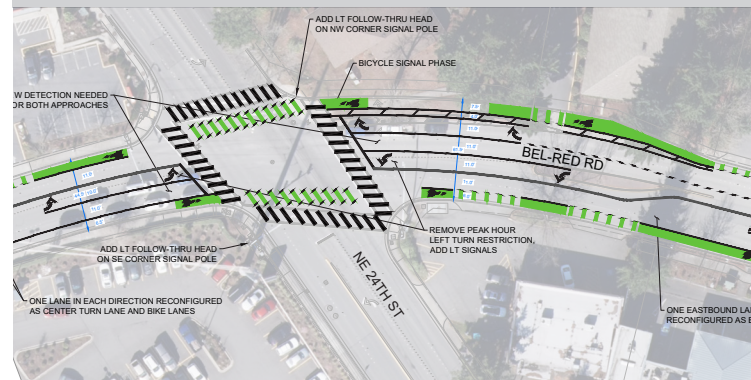
Cost Estimate

\$1.61M

Bel-Red Road and NE 20th Street



Bel-Red Road and NE 24th Street



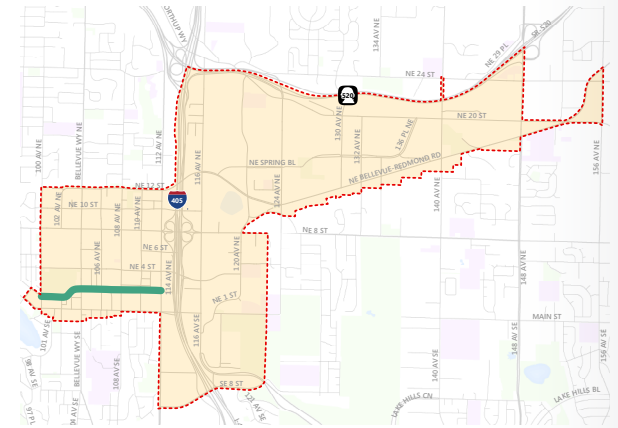
06 NE 1st/NE 2nd Street

Project Description

NE 1st Street and NE 2nd Street are minor arterials in the heart of downtown Bellevue that provide a direct connection to Bellevue Downtown Park, the 108th Avenue bicycle corridor, and other high density land uses.

The proposed design converts the westbound travel lane on NE 1st Street and NE 2nd Street to a

two-way curb-separated bike lane on the north side of the street between 100th Avenue NE and Bellevue Way. The two-way curb-separated bike lane transitions to one-way bike lanes (mix of conventional, buffered, and separated buffered bike lanes) east of Bellevue Way NE, retaining 1 travel lane and the two-way left turn lane in each direction.



Existing

Westbound Lanes Eastbound Lanes



Proposed

Westbound Lanes Eastbound Lanes



Orientation of cross-section is eastbound (viewed as if looking east). This is an illustrative cross-section reflective of typical lane configurations. Because there are variations in lane markings along this corridor, please consult CAD drawings for details.



Visualization looking east along Northeast 2nd Street at Bellevue Way Northeast. Please consult CAD drawings for details.



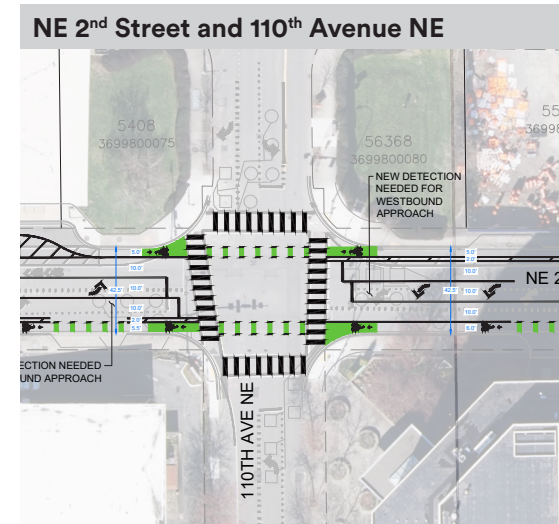
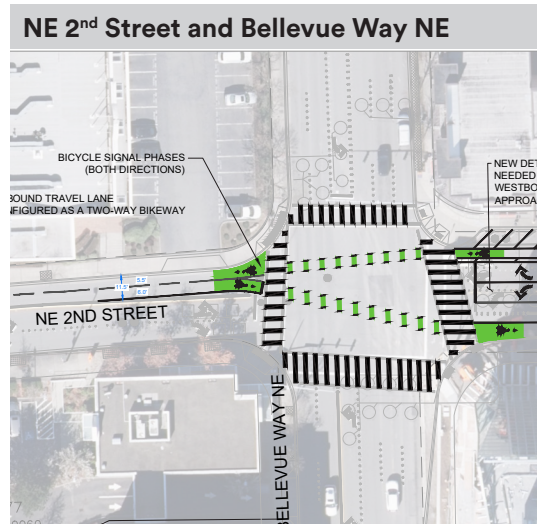
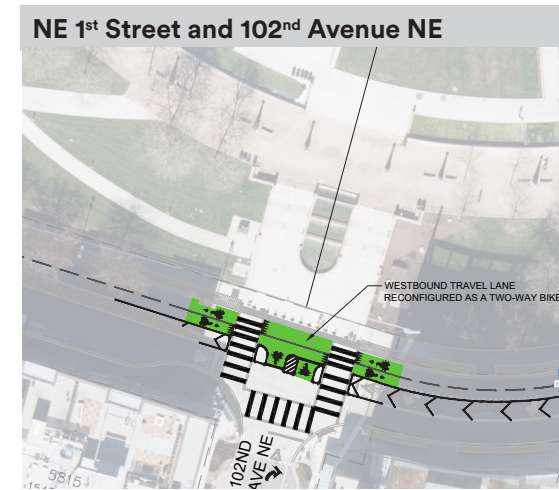
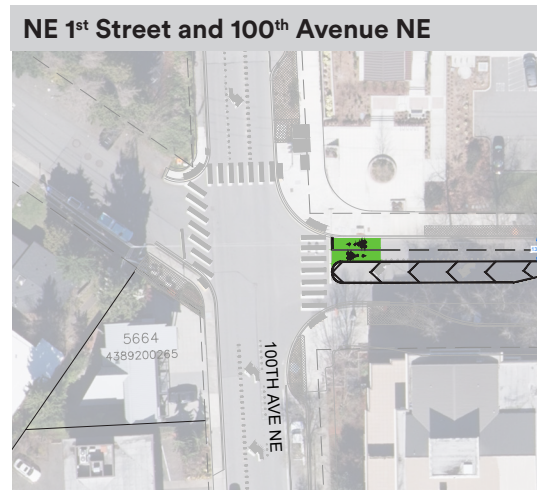
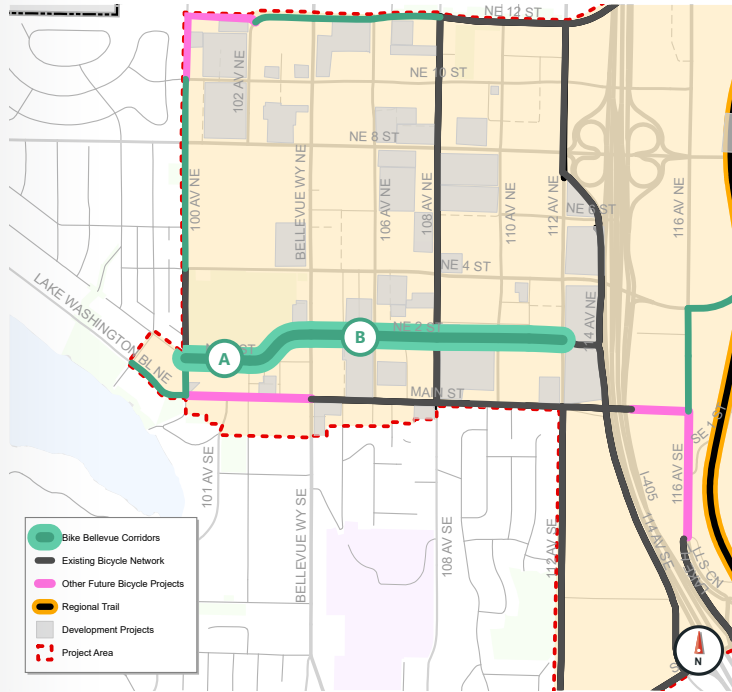
Visualization looking west along Northeast 2nd Street at 105th Avenue Northeast. Please consult CAD drawings for details.



Street Classification	Collector Arterial (NE 1 st Street) Minor Arterial (NE 2 nd Street)
Traffic Volume (ADT)	7,500-9,000
Posted Speed Limit	25 mph (NE 1 st Street) 30 mph (NE 2 nd Street)
Existing Bicycle Facility	Buffered bike lane at some locations
Existing Bike LTS	1 2 3 4
Target Bike LTS	1 2 3 4
Safety Data	<ul style="list-style-type: none"> On the Vision Zero High Injury Network. 3 severe or fatality crashes (2011 - 2022)
Major Nearby Destinations	Bellevue Downtown Park 108 th Avenue bicycle corridor
Population (600 Foot Buffer)	8,100 (2019) 23,800 (2050)
Employment (600 Foot Buffer)	14,900 (2019) 31,400 (2050)
Transit Route	N/A


100TH AVE NE TO 112TH AVE NE

06 NE 1st/NE 2nd Street



Changes

- A** Convert NE 1st Street and NE 2nd Street between 100th Avenue NE and Bellevue Way NE to one-way eastbound only for motor vehicles and provide a two-way curb-separated bike lane on the north side.
- B** Between Bellevue Way NE and 112th Avenue NE, retain 1 lane in each direction to provide one-way bike lanes (a mix of conventional, buffered, and separated buffered).


 With changes, all intersections meet vehicle performance target of 1.0 V/C or lower.

Benefits

Provide a direct connection to Bellevue Downtown Park and access to Meydenbauer Bay Park. Connects to 108th Avenue corridor.

Cost Estimate

\$1.25M

 Level of traffic stress is better than MIP target (LTS 3).

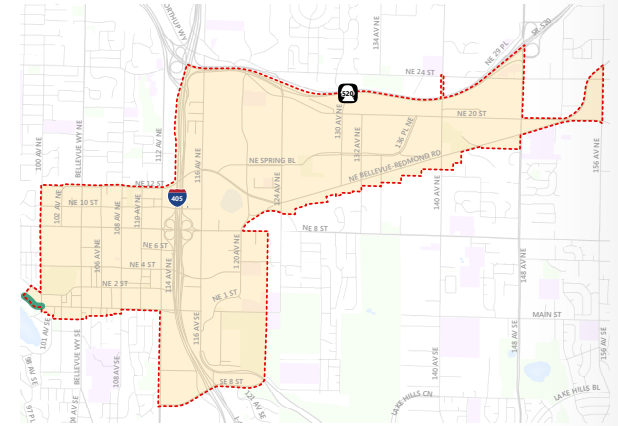
100TH AVE NE TO 99TH AVE NE

07 Lake Washington Boulevard

Project Description

Lake Washington Boulevard is an important corridor along Meydenbauer Bay, providing access to destinations including Meydenbauer Bay Park before turning into Main Street east of 100th Avenue NE.

The proposed design reallocates existing on-street parking on the south side and implements a set of one-way bicycle lanes (which vary from conventional to buffered bike lanes).



Existing

Westbound Lanes Eastbound Lanes



Proposed

Westbound Lanes Eastbound Lanes



Orientation of cross-section is eastbound (viewed as if looking east). This is an illustrative cross-section reflective of typical lane configurations. Because there are variations in lane markings along this corridor, please consult CAD drawings for details.

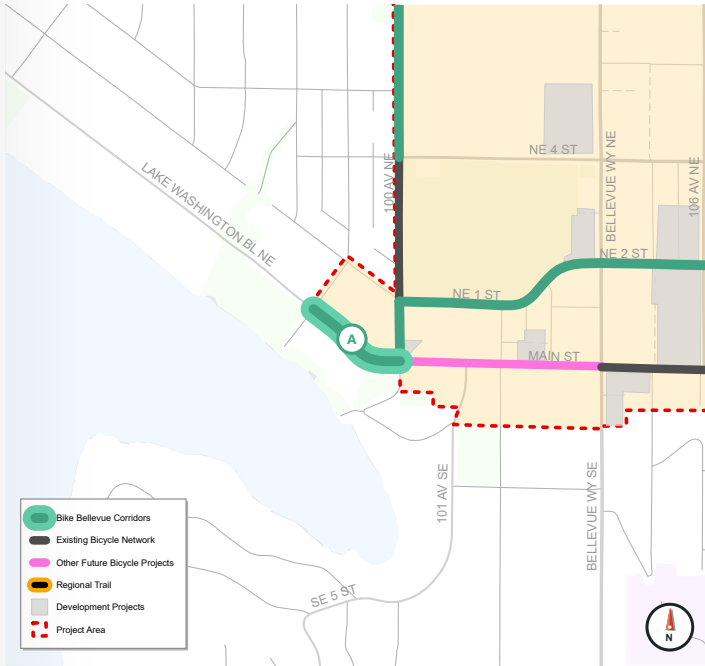


Visualization looking southeast along Lake Washington Boulevard Northeast at 99th Avenue Northeast. Please consult CAD drawings for details.



Street Classification	Collector arterial
Traffic Volume (ADT)	6,500 - 7,500
Posted Speed Limit	30 mph
Existing Bicycle Facility	No facility
Existing Bike LTS	1 2 3 4
Target Bike LTS	1 2 3 4
Safety Data	1 severe or fatality crash (2011 - 2022)
Major Nearby Destinations	Old Bellevue, Meydenbauer Bay Park
Population (600 Foot Buffer)	5,600 (2019) 14,400 (2050)
Employment (600 Foot Buffer)	2,000 (2019) 3,100 (2050)
Transit Route	N/A

100TH AVE NE TO 99TH AVE NE

07 Lake Washington Boulevard



Changes

- A** Remove curbside parking on the south side to accommodate a pair of bicycle lanes.
-  Level of traffic stress meets MIP target (LTS 2).
-  No changes to vehicle operations.

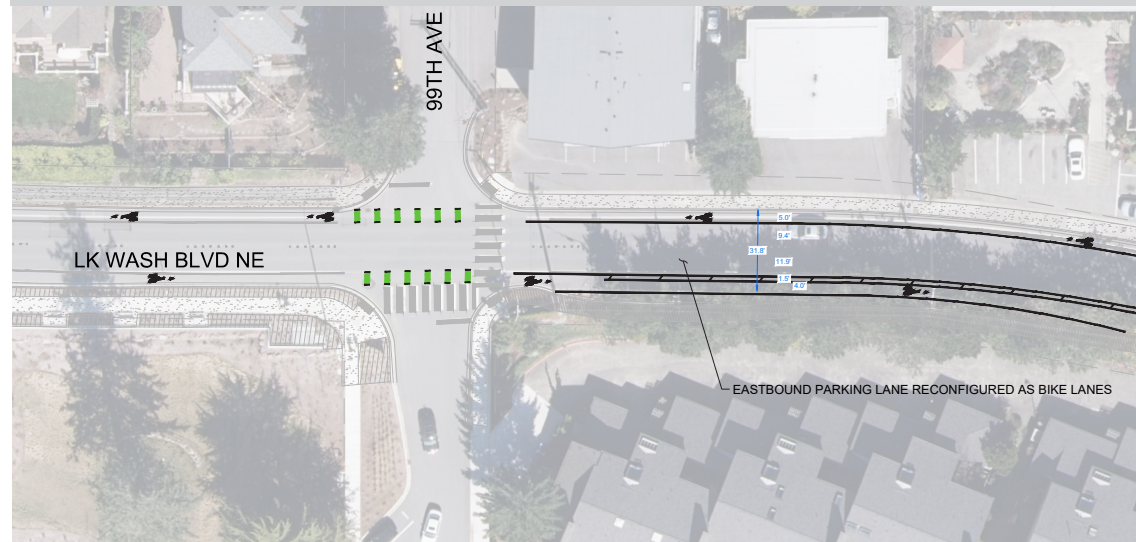
Benefits

Improves bicycle and pedestrian access along Lake Washington Boulevard between Meydenbauer Bay Park and 100th Avenue NE.

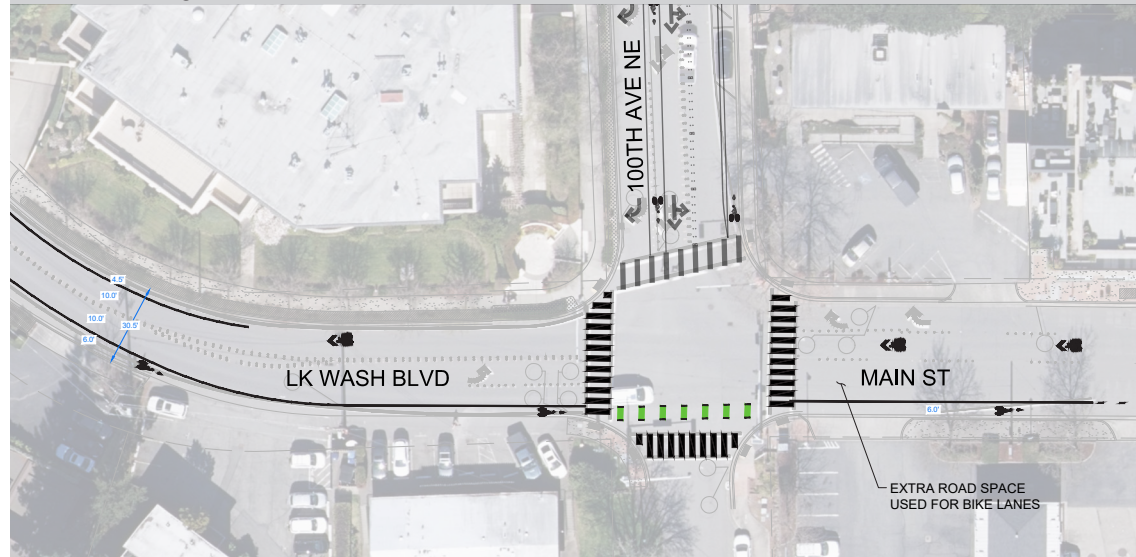
Cost Estimate

\$0.21M

Lake Washington Boulevard and 99th Avenue SE



Lake Washington Boulevard and 100th Avenue NE



MAIN ST TO NE 10TH ST

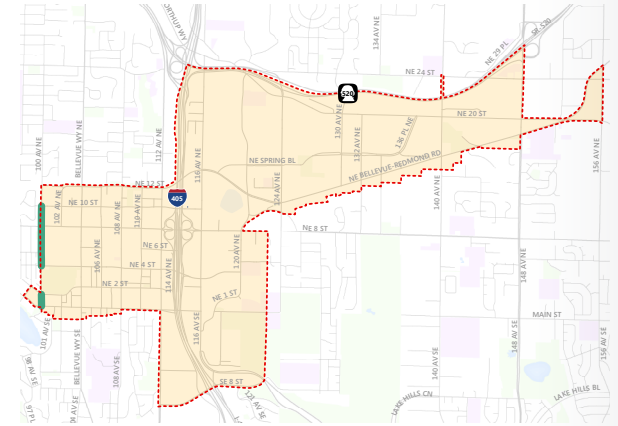
08 100th Avenue NE

Project Description

100th Avenue NE is a continuous north-south corridor on the western edge of downtown Bellevue and provides a direct connection to Bellevue Square and Bellevue Downtown Park.

The proposed design provides one-way bike lanes (mix of conventional and buffered) between

Main Street and NE 1st Street and transitions to the existing shared-use path on the east side between NE 1st Street and NE 4th Street. Between NE 4th and NE 8th Street, a two-way separated buffered bike lane is provided on the east side of the street and transitions to one-way bike lanes north of NE 8th Street.



Existing

Southbound Lanes Northbound Lanes



Proposed

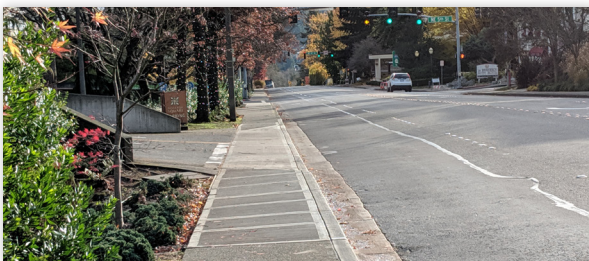
Southbound Lanes Northbound Lanes



Orientation of cross-section is northbound (viewed as if looking north). This is an illustrative cross-section reflective of typical lane configurations. Because there are variations in lane markings along this corridor, please consult CAD drawings for details.



Visualization looking south along 100th Avenue Northeast, north of Northeast 8th Street. Please consult CAD drawings for details.



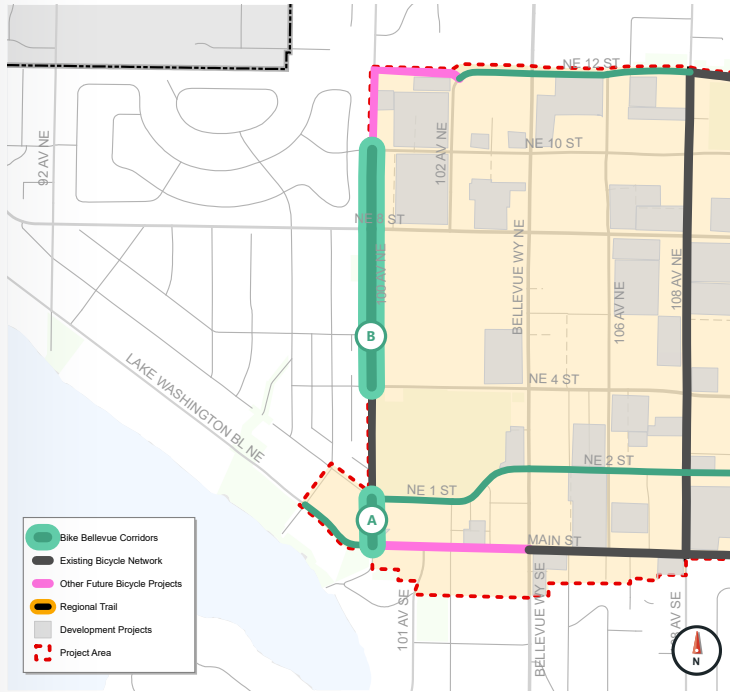
Visualization looking south along 100th Avenue Northeast, north of Northeast 5th Street. Please consult CAD drawings for details.

Street Classification	Minor arterial
Traffic Volume (ADT)	9,000 - 12,000
Posted Speed Limit	30 mph
Existing Bicycle Facility	No facility
Existing Bike LTS	1 2 3 4
Target Bike LTS	1 2 3 4 (Main Street to NE 8 th Street) 1 2 3 4 (NE 8 th Street to NE 24 th Street)
Safety Data	No severe or fatality crashes (2011 - 2022)
Major Nearby Destinations	Bellevue Square, Bellevue Downtown Park
Population (600 Foot Buffer)	7,600 (2019) 20,400 (2050)
Employment (600 Foot Buffer)	9,650 (2019) 17,600 (2050)
Transit Route	N/A



MAIN ST TO NE 10TH ST

08 100th Avenue NE



Changes

- A** Convert curbside parking to one-way bike lanes between Main Street and NE 1st Street.
- B** Between NE 4th Street and NE 8th Street, reallocate 1 of 2 northbound lanes to provide a separated buffered two-way bicycle facility on the east side.
- Level of traffic stress meets MIP target (LTS 1) between NE 4th Street and NE 8th Street.

With changes, all intersections meet vehicle performance target of 1.0 V/C or lower.

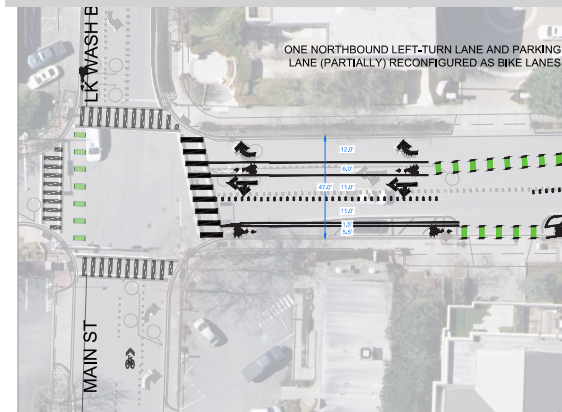
Benefits

Direct bicycle access to Bellevue Square and Bellevue Downtown Park for people of all ages and abilities. Improves low-stress access in a dense residential area.

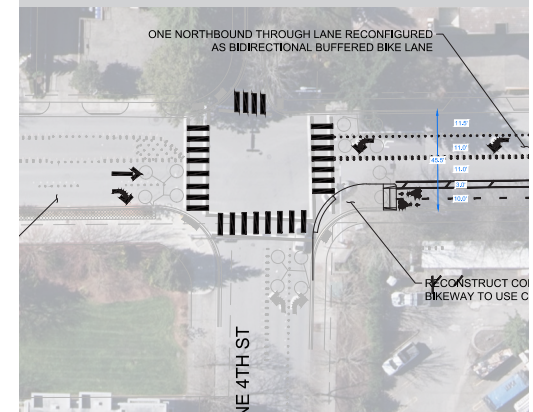
Cost Estimate

\$0.61M

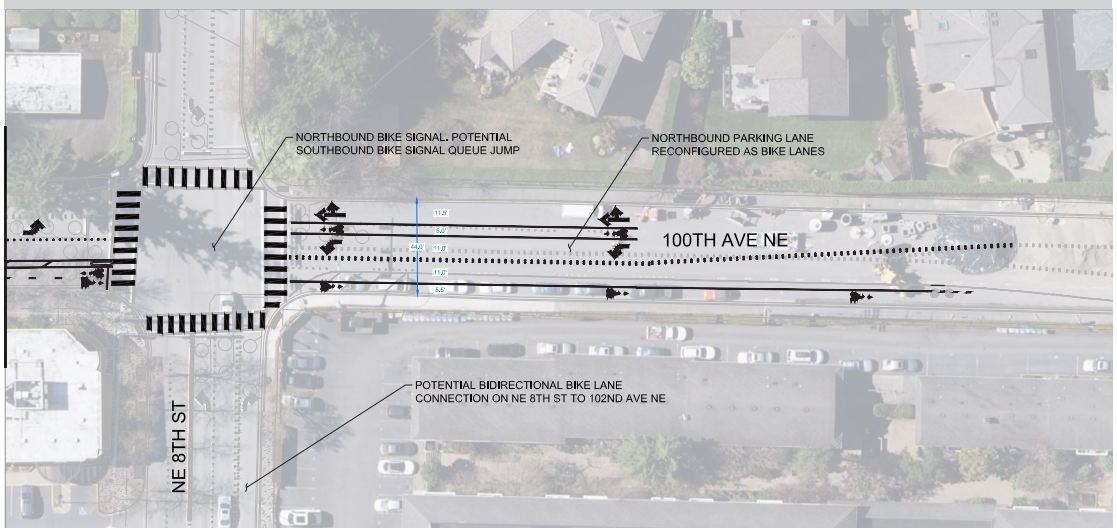
100th Avenue NE and Main Street



100th Avenue NE and NE 4th Street



100th Avenue NE and NE 8th Street



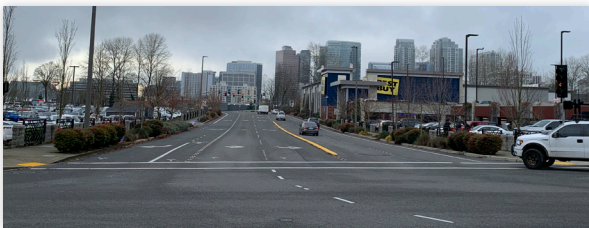
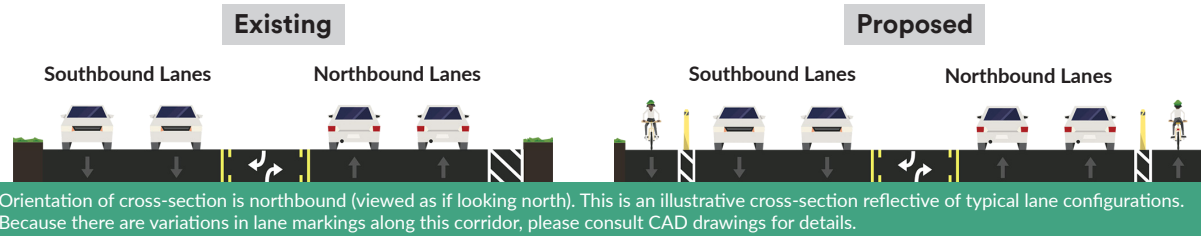
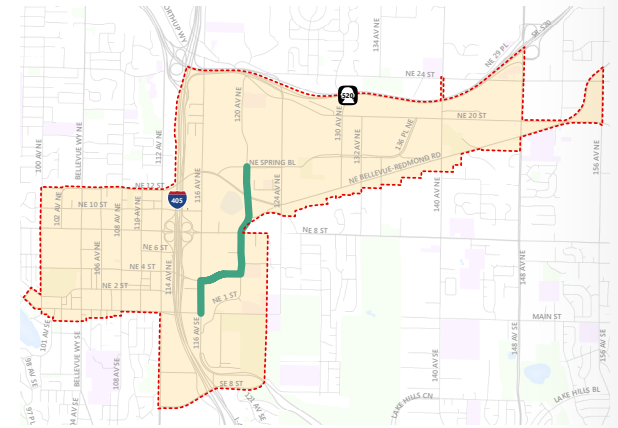
116TH AVE NE & NE 4TH STREET

09 Wilburton Route

Project Description

The Wilburton route along 116th Avenue NE, NE 4th Street, and 120th Avenue NE provides a main bicycle connection through the commercial portion of the Wilburton neighborhood and direct access to the Eastrail regional trail and Spring District/120th Link light rail station. This facility will close a key gap in the bicycle network between Main Street and Eastrail.

The proposed design retains two travel lanes in each direction and the two-way left turn lane on the entire route. The design installs one-way separated buffered bike lanes in each direction. A new protected bicycle corner will also be installed at the intersection of 116th Avenue NE and NE 4th Street to facilitate safe movements between the two bike routes.



Visualization looking west along Northeast 4th Street at 120th Avenue Northeast. Please consult CAD drawings for details.

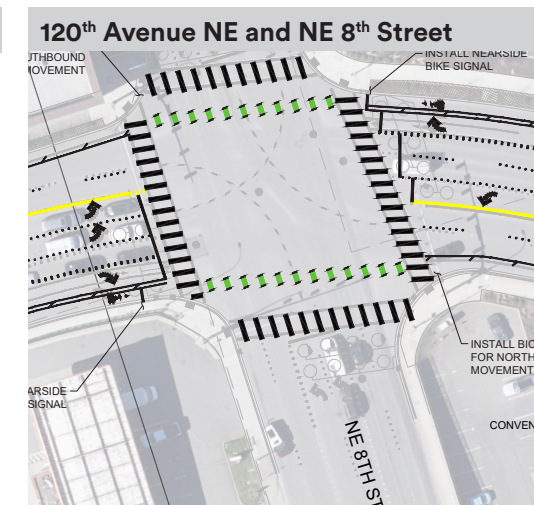
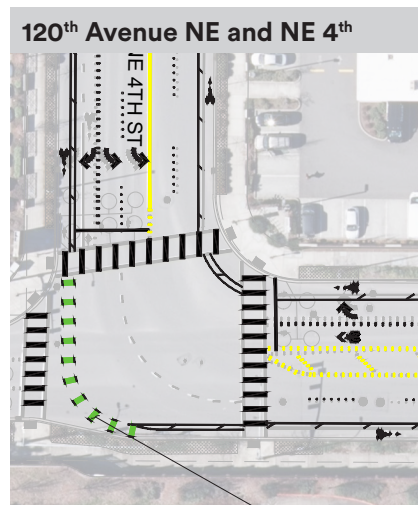
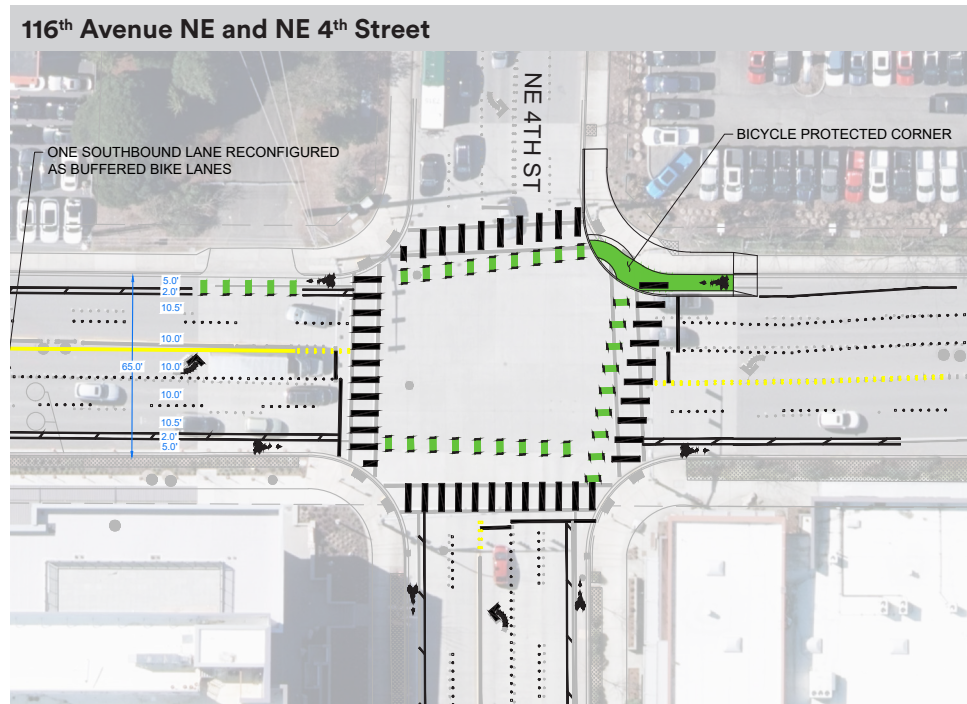
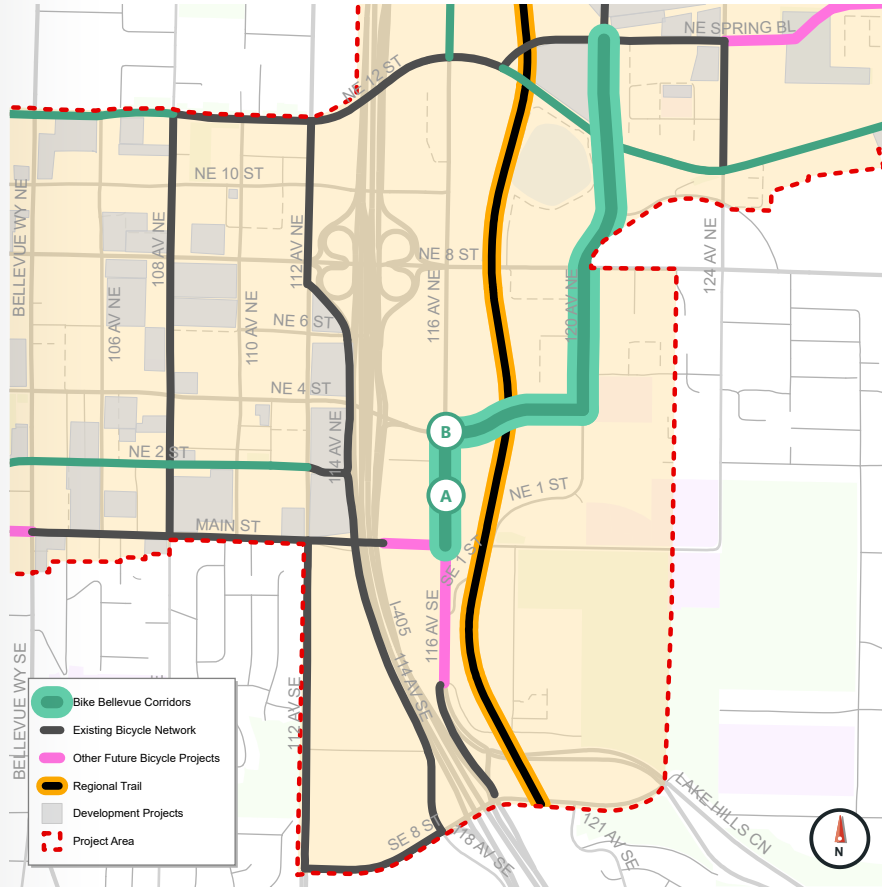


Visualization looking north along 116th Avenue Northeast at Northeast 2nd Place. Please consult CAD drawings for details.


Street Classification	Major arterial
Traffic Volume (ADT)	12,000 - 20,000
Posted Speed Limit	30 mph
Existing Bicycle Facility	<ul style="list-style-type: none"> No facility on 116th Avenue NE 1-way painted bike lane on 4th Avenue NE
Existing Bike LTS	1 2 3 4
Target Bike LTS	1 2 3 4
Safety Data	<ul style="list-style-type: none"> On the Vision Zero High Injury Network. 3 severe or fatality crashes (2011 - 2022)
Major Nearby Destinations	Eastrail, major retailers
Population (600 Foot Buffer)	1,288 (2019) 1,976 (2050)
Employment (600 Foot Buffer)	5,973 (2019) 11,425 (2050)
Transit Route	King County Metro 271


116TH AVE NE & NE 4TH STREET

09 Wilburton Route



Changes

- A** Restripe channelization to provide separated buffered bike lanes while maintaining existing 5-lane cross section.
 - B** Protected bicycle corner at the intersection of 116th Avenue NE and NE 4th Street to improve westbound to southbound bicycle movement.
-  Level of traffic stress meets MIP target (LTS 3) while providing enhanced separation.

 No change. Proposed design does not impact existing vehicle operations.

Benefits

Connects downtown Bellevue to Wilburton and Eaststrail.

Cost Estimate

\$1.87M

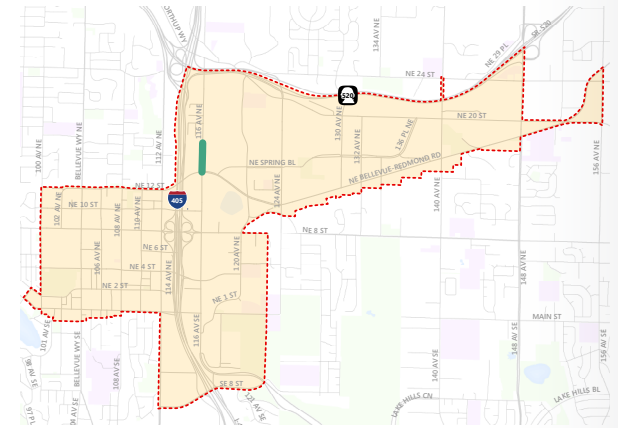
NE 12TH STREET TO NE 14TH STREET

10 116th Avenue NE

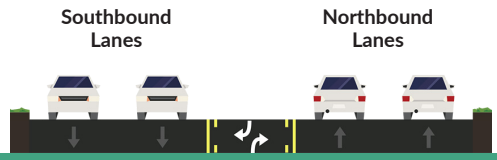
Project Description

116th Avenue NE provides a connection between the Bridle Trails neighborhood, the SR 520 regional trail, downtown Bellevue, and the medical centers. This route would also provide direct access to the Spring District/120th Link station via the shared-use path along Spring Boulevard and NE 12th Street.

The proposed design closes the bicycle network gap along 116th Avenue NE between Northrup Way and NE 12th Street by converting one of two northbound lanes (south of the NE 12th intersection) to a right turn lane and removing the merge lane north of the intersection to provide conventional bike lanes on both sides of the street.



Existing



Proposed



Orientation of cross-section is northbound (viewed as if looking north). This is an illustrative cross-section reflective of typical lane configurations. Because there are variations in lane markings along this corridor, please consult CAD drawings for details.

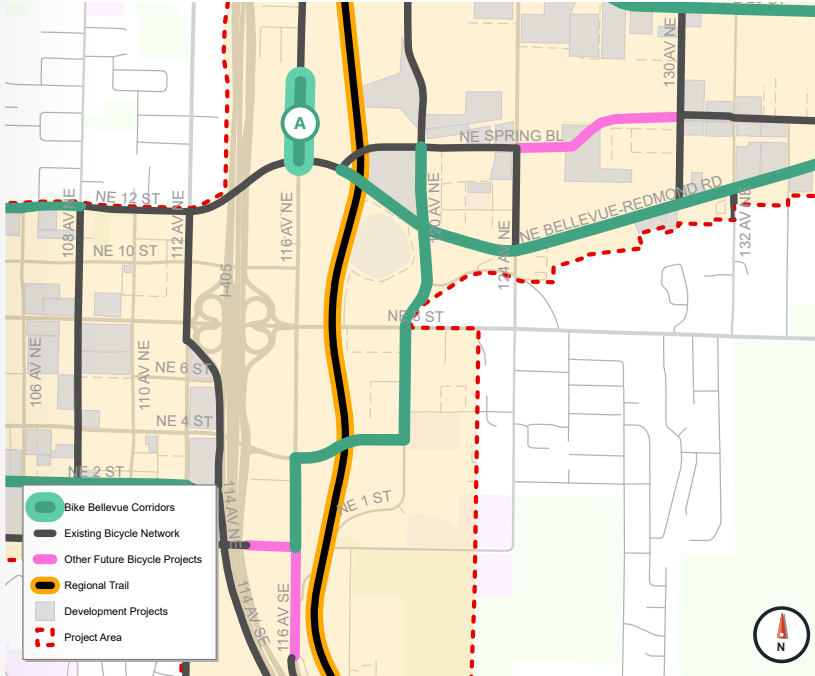
Street Classification	Minor arterial
Traffic Volume (ADT)	10,500 - 12,000
Posted Speed Limit	30 mph
Existing Bicycle Facility	No existing facility
Existing Bike LTS	1 2 3 4
Target Bike LTS	1 2 3 4
Safety Data	1 severe or fatality crash (2011 - 2022)
Major Nearby Destinations	Overlake Hospital, Seattle Children's Hospital
Population (600 Foot Buffer)	400 (2019) 550 (2050)
Employment (600 Foot Buffer)	9,600 (2019) 13,800 (2050)
Transit Route	King County Metro 250





Visualization looking south along 116th Avenue Northeast, north of Northeast 12th Street. Please consult CAD drawings for details.

NE 12TH STREET TO NE 14TH STREET

10 116th Avenue NE



Changes

- A** Install new conventional bike lanes on both sides of the street by removing the northbound merge lane (north of NE 12th Street) and converting the curb lane to a right turn lane (south of NE 12th Street).
-  Level of traffic stress improves from LTS 4 to LTS 3 and meets the MIP LTS target.
-  No changes to the existing V/C at 116th Avenue NE and NE 12th Street.

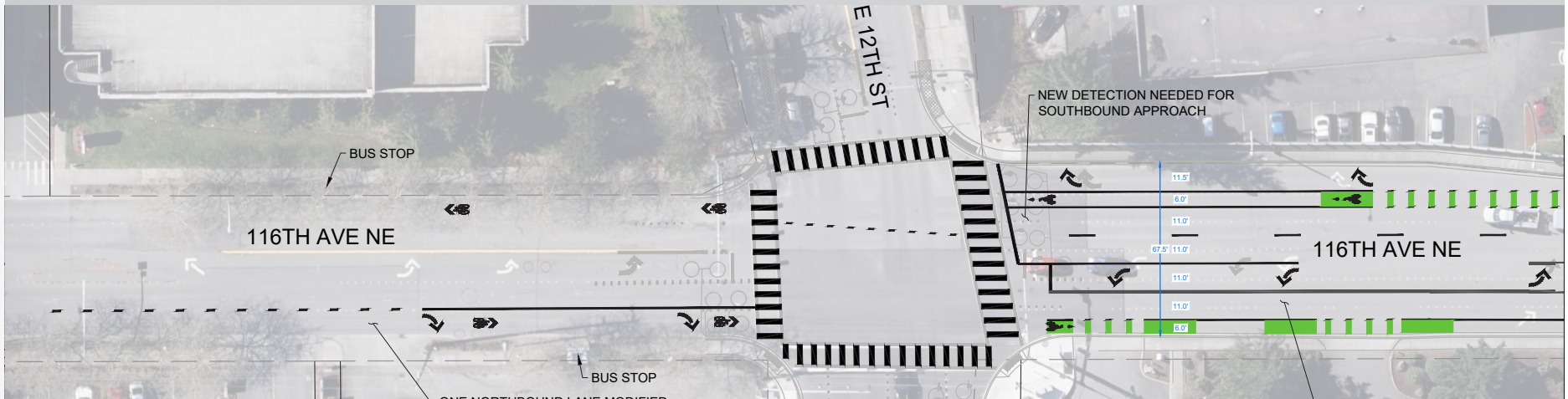
Benefits

Closes a major gap in the bicycling network by connecting the 116th Avenue NE corridor from Northrup Way to NE 12th Street. NE 12th Street/Spring Boulevard has a low-stress connection to downtown Bellevue and the Spring District.

Cost Estimate

\$0.20M

116th Avenue NE and NE 12th Street



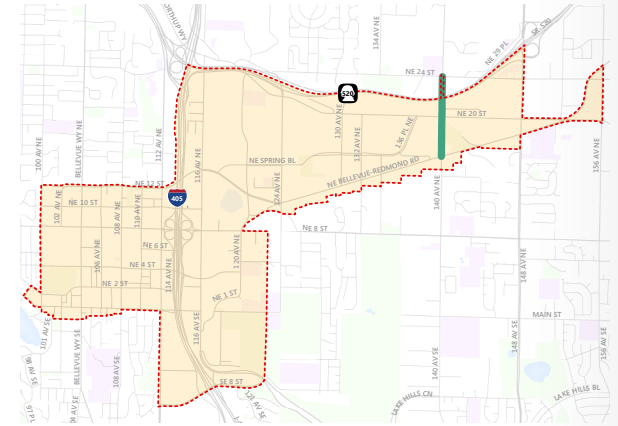
BEL-RED ROAD TO NE 24TH ST

11 140th Avenue NE

Project Description

140th Avenue NE, a priority bicycle corridor, provides a continuous north-south connection between the neighborhoods of Bridle Trails to the north and Crossroads and Lake Hills to the south. The proposed design reallocates one southbound travel lane to provide separated buffered bike

lanes in both directions. Right turn conflicts between vehicles and bicycles will be managed by providing separate right turn phases at Bel-Red Road (WB), NE 20th Street (WB), and NE 24th Street (EB). Green pavement markings will be installed at major intersections.



Existing

Southbound Lanes

Northbound Lanes



Proposed

Southbound Lanes

Northbound Lanes



Orientation of cross-section is northbound (viewed as if looking north). This is an illustrative cross-section reflective of typical lane configurations. Because there are variations in lane markings along this corridor, please consult CAD drawings for details.

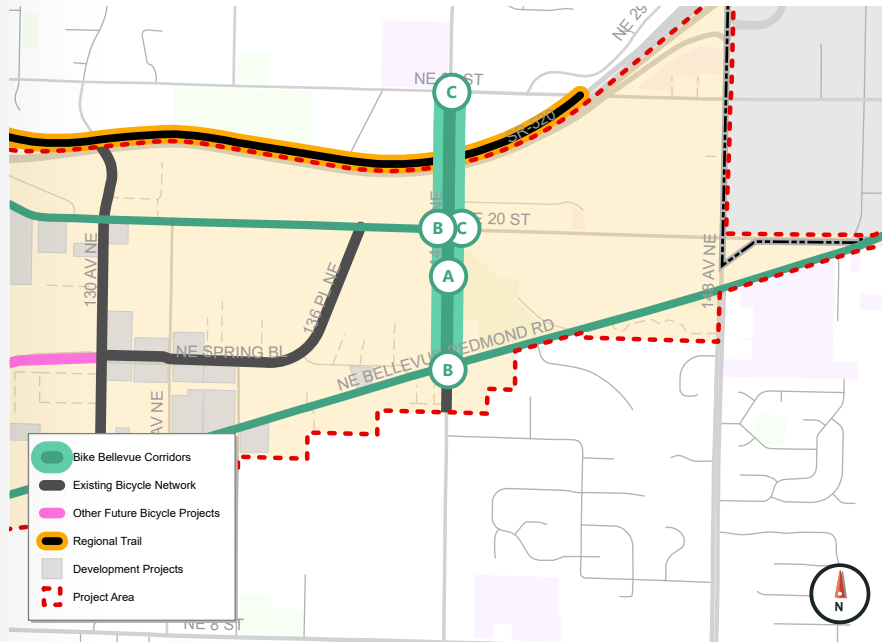


Visualization looking south along 140th Avenue Northeast, south of Northeast 18th Street. Please consult CAD drawings for details.


Street Classification	Minor arterial
Traffic Volume (ADT)	21,000 - 25,000
Posted Speed Limit	30 mph
Existing Bicycle Facility	<ul style="list-style-type: none"> Conventional bike lane (Northbound) Sharrow (Southbound)
Existing Bike LTS	<p>1 2 3 4 (Northbound)</p> <p>1 2 3 4 (Southbound)</p>
Target Bike LTS	1 2 3 4
Safety Data	<ul style="list-style-type: none"> 2 severe or fatality crashes (2011-2022) On the Vision Zero High Injury Network
Major Nearby Destinations	Highland Park, grocery stores and other retail
Population (600 Foot Buffer)	9,300 (2019) 9,600 (2050)
Employment (600 Foot Buffer)	15,900 (2019) 31,400 (2050) 249
Transit Route	King County Metro


BEL-RED ROAD TO NE 24TH ST

11 140th Avenue NE



Changes

- A** Convert 1 of 2 southbound lanes to separated buffered bike lanes.
 - B** Separate bicycle and right turn signal phases at Bel-Red Road (WB), NE 20th Street (WB), and NE 24th Street (EB) to manage turning conflicts and improve safety.
 - C** Existing dual westbound left turn lanes at NE 24th Street and NE 20th Street will be converted to single left turn lanes.
-  Level of traffic stress improves from LTS 4 to LTS 3 southbound, and remains LTS 3 northbound. Does not meet the MIP target of LTS 1.

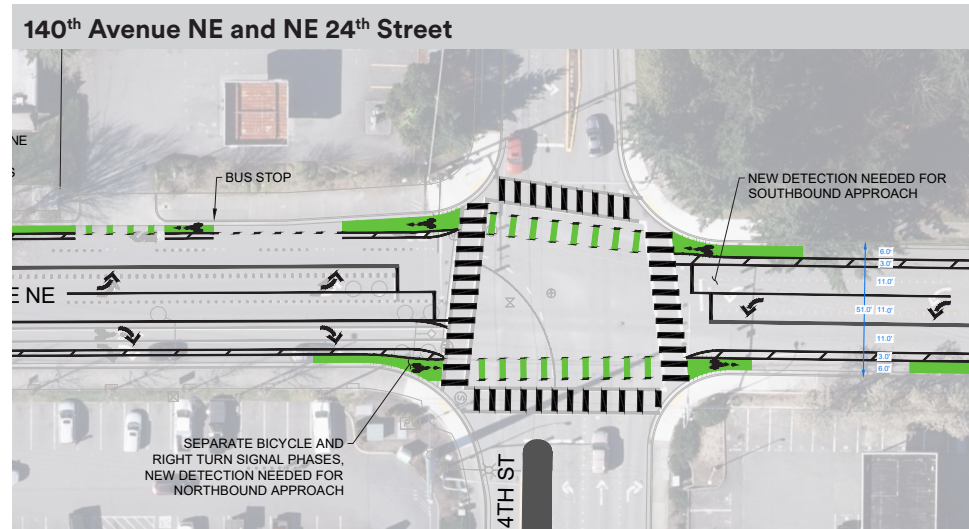
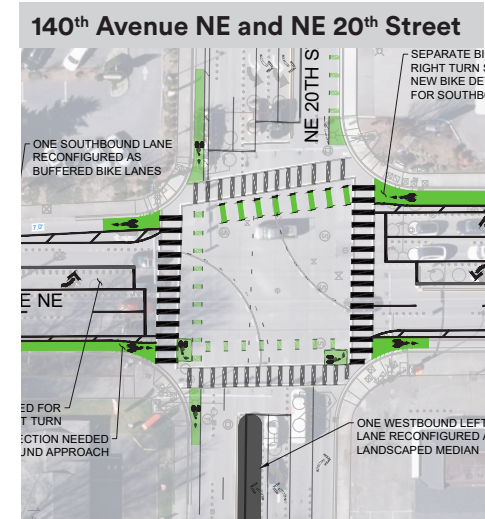
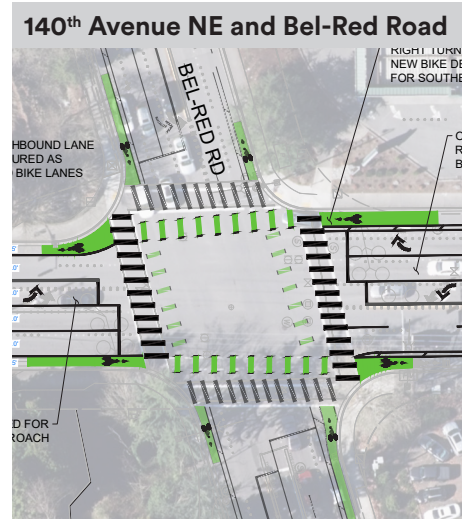
 With changes, the intersection of 140th Avenue NE and NE 24th Street (V/C = 0.97) does not meet the vehicle performance target for PMA 3 (V/C < 0.85).

Benefits

Significantly improves safety on one of the few continuous north-south corridors through Bellevue. Provides enhanced access to many of the businesses along 140th Avenue NE.

Cost Estimate

\$1.76M





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Appendix A: Vehicle Lane and Parking Impacts



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Appendix B: Safety



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Appendix C: Equity and Accessibility



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Appendix D: Sustainability



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Appendix E: Modeling



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Appendix F: Corridor Files