DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE., P.O. BOX 90012
BELLEVUE, WA 98009-9012

OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 21-132720-LM

Project Name/Address: City of Bellevue Transportation Implementation Mobility Plan/City-Wide

Planner: Drew Folsom
(425) 452-4441, dfolsom@belevuewa.gov

Minimum Comment Period: February 3, 2022

Materials included in this Notice:

- ☑ Blue Bulletin
- ☑ Checklist
- ☐ Vicinity Map
- ☐ Plans
- ☑ Other: Mobility Implementation Plan - Draft

OTHERS TO RECEIVE THIS DOCUMENT:

- ☑ State Department of Fish and Wildlife
- ☑ State Department of Ecology, Shoreline Planner N.W. Region
- ☑ Army Corps of Engineers
- ☑ Attorney General
- ☑ Muckleshoot Indian Tribe

Development Services

SEPA Environmental Checklist

The City of Bellevue uses this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions

The checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully and to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions.

You may respond with “Not Applicable” or "Does Not Apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies and reports. Please make complete and accurate answers to these questions to the best of your ability in order to avoid delays. For assistance, see SEPA Checklist Guidance on the Washington State Department of Ecology website.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The city may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Background

1. Name of proposed project, if applicable Mobility Implementation Plan
2. Name of applicant Kevin McDonald
3. Contact person Kevin McDonald Phone 425-452-4558
4. Contact person address P.O.. Box 90012, Bellevue WA 98009-9012
5. Date this checklist was prepared 11/10/2021
6. Agency requesting the checklist Bellevue Transportation Department

D. Folsom 1/19/2022

7. Proposed timing or schedule (including phasing, if applicable)

Council is anticipated to adopt the Mobility Implementation Plan in late Q1 2022. A final plan report is in review by city staff and the Transportation Commission.

8. Do you have any plans for future additions, expansion or further activity related to or connected with this proposal? If yes, explain.

Earlier work as part of the Mobility Implementation Plan related to multimodal concurrency policy moved forward as a recommendation from the Transportation Commission and the Planning Commission as a separate action item for Council consideration on October 25, 2021. Adoption of multimodal concurrency policies as part of the 2021 annual Comprehensive Plan Amendment package is expected on December 13, 2021.

To be consistent with the Comprehensive Plan, amendments to the Traffic Standards Code are planned to incorporate multimodal concurrecny - this is expected in Q1 2022.

The Mobility Implementation Plan will help inform transportation projects to be identified and prioritized for funding in the next update of the Transportation Facilities Plan.

(Sorry - Don't know how to make font larger)

9. List any environmental information you know about that has been prepared or will be prepared, that is directly related to this proposal.

Staff prepared a SEPA checklist for multimodal concurrency Comprehensive Plan policy amendments on April 23, 2021. File No. AC 107724 AC was assigned to this project. A Determination of non-Significance was issued on June 24, 2021

10. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

Multimodal concurrency policy amendments to the Comprehensive Plan - Council adoption scheduled for December 13, 2021
Traffic Standards Code amendments to embed multimodal concurrency - Council adoption anticipated Q1 2022

11. List any government approvals or permits that will be needed for your proposal, if known.

The Transportation Commission will recommend Council approve the Mobility Implementation Plan in Q1 2022. Related: The Bellevue City Council is anticipated to approve multimodal concurrency policies on December 13, 2021. These policies are part of the scope of work the Council assigned to the Transportation Commission in the Mobility Implementation Plan. Policies were prepared and processed separately from the balance of the Mobility Implementation Plan due to the timing requirements related to 2021 Comprehensive Plan Amendments. Amendments to the Traffic Standards Code are anticipated in Q1 2022.

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12. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The Mobility Implementation Plan describes Performance Metrics and Performance Targets for each mode, establishes 7 new Performance Management Areas related to existing and planned land use, identifies a process framework to advance project concepts toward implementation, and documents a new multimodal approach to concurrency.

13. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and the section, township and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The Mobility Implementation Plan will apply citywide. In the MIP are 7 new Performance Management Areas that are the successors of the 14 Mobility Management Areas in the Comprehensive Plan and the Traffic Standards Code. The Performance Management Areas are in three categories that reflect existing/planned land and mobility options.
Type 1 PMA: Downtown, BelRed, Wilburton/East Main
Type 2 PMA: Crossroads, Eastgate, Factoria
Type 3 PMA: Residential

Environmental Elements

Earth

1. General description of the site:
   - ☐ Flat
   - ☐ Rolling
   - ☐ Hilly
   - ☐ Steep Slopes
   - ☐ Mountainous
   - ☐ Other N/A

2. What is the steepest slope on the site (approximate percent slope)? N/A

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3. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

N/A

4. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

N/A

5. Describe the purpose, type, total area and approximate quantities and total affected area of any filling, excavation and grading proposed. Indicate the source of the fill.

N/A

6. Could erosion occur as a result of clearing, construction or use? If so, generally describe.

N/A

7. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? N/A

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8. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.

The Mobility Implementation Plan includes no provisions related to erosion control.

Air

1. What types of emissions to the air would result from the proposal during construction, operation and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

N/A

2. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

N/A

3. Proposed measures to reduce or control emissions or other impacts to air, if any.

The Mobility Implementation Plan includes no provisions related to control emissions.

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Water

1. Surface Water
   a. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

      N/A

   b. Will the project require any work over, in or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

      N/A

   c. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of the fill material.

      N/A

   d. Will the proposal require surface water withdrawals or diversions? Give a general description, purpose and approximate quantities, if known.

      N/A

   e. Does the proposal lie within a 100-year floodplain? N/A
      If so, note the location on the site plan.

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f. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

N/A

2. Ground Water

a. Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

N/A

b. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

N/A

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3. Water Runoff (including stormwater)
   a. Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

      N/A

   b. Could waste materials enter ground or surface waters? If so, generally describe.

      N/A

   c. Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

      N/A

   Indicate any proposed measures to reduce or control surface, ground and runoff water, and drainage pattern impacts, if any.

   The Mobility Implementation Plan includes no provisions related to reducing or controlling runoff or drainage patterns.

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Plants

1. Check the types of vegetation found on the site:
   - ☐ deciduous tree: alder, maple, aspen, other N/A
   - ☐ evergreen tree: fir, cedar, pine, other N/A
   - ☐ shrubs
   - ☐ grass
   - ☐ pasture
   - ☐ crop or grain
   - ☐ orchards, vineyards or other permanent crops
   - ☐ wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other N/A
   - ☐ water plants: water lily eelgrass, milfoil, other N/A
   - ☐ other types of vegetation N/A

2. What kind and amount of vegetation will be removed or altered?

   N/A

3. List any threatened and endangered species known to be on or near the site.

   N/A

4. Proposed landscaping, use of native plants or other measures to preserve or enhance vegetation on the site, if any.

   N/A

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5. List all noxious weeds and invasive species known to be on or near the site.

N/A

Animals

1. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:

   Birds: ☐hawk, ☐heron, ☐eagle, ☐songbirds, ☐other N/A

   Mammals: ☐deer, ☐bear, ☐elk, ☐beaver, ☐other N/A

   Fish: ☐bass, ☐salmon, ☐trout, ☐herring, ☐shellfish, ☐other N/A

2. List any threatened and endangered species known to be on or near the site.

N/A

3. Is the site part of a migration route? If so, explain.

N/A

4. Proposed measures to preserve or enhance wildlife, if any.

The Mobility Implementation Plan includes no provisions related to wildlife.

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5. List any invasive animal species known to be on or near the site.

N/A

Energy and Natural Resources

1. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

N/A

2. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

N/A

3. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

N/A

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Environmental Health

1. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill or hazardous waste, that could occur as a result of this proposal? If so, describe.

N/A

   a. Describe any known or possible contamination at the site from present or past uses.

N/A

   b. Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

N/A

   c. Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

N/A

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d. Describe special emergency services that might be required.

N/A

e. Proposed measures to reduce or control environmental health hazards, if any.

N/A

2. Noise

a. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

N/A

b. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

N/A

c. Proposed measures to reduce or control noise impacts, if any.

N/A

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Land and Shoreline Uses

1. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

N/A

2. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to non-farm or non-forest use?

N/A

   a. Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling and harvesting? If so, how?

N/A

3. Describe any structures on the site.

N/A

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4. Will any structures be demolished? If so, what?

N/A

5. What is the current zoning classification of the site? N/A

6. What is the current comprehensive plan designation of the site? N/A

7. If applicable, what is the current shoreline master program designation of the site?

N/A

8. Has any part of the site been classified as a critical area by the city or county? If so, specify.

N/A

9. Approximately how many people would reside or work in the completed project? N/A

10. Approximately how many people would the completed project displace? N/A

11. Proposed measures to avoid or reduce displacement impacts, if any.

N/A

12. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

N/A

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13. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any.

N/A

Housing

1. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

N/A

2. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

N/A

3. Proposed measures to reduce or control housing impacts, if any.

N/A

Aesthetics

1. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

N/A

2. What views in the immediate vicinity would be altered or obstructed?

N/A

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3. Proposed measures to reduce or control aesthetic impacts, if any

N/A

Light and Glare

1. What type of light or glare will the proposal produce? What time of day would it mainly occur?

N/A

2. Could light or glare from the finished project be a safety hazard or interfere with views?

N/A

3. What existing off-site sources of light or glare may affect your proposal?

N/A

4. Proposed measures to reduce or control light and glare impacts, if any.

N/A

Recreation

1. What designated and informal recreational opportunities are in the immediate vicinity?

N/A

2. Would the proposed project displace any existing recreational uses? If so, describe.

N/A

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3. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any.

N/A

Historic and Cultural Preservation

1. Are there any buildings, structures or sites located on or near the site that are over 45 years old listed in or eligible for listing in national, state or local preservation registers located on or near the site? If so, specifically describe.

N/A

2. Are there any landmarks, features or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

N/A

3. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

N/A

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4. Proposed measures to avoid, minimize or compensate for loss, changes to and disturbance to resources. Please include plans for the above and any permits that may be required.

N/A

Transportation

1. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

N/A

2. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

N/A

3. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

N/A

4. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

The Mobility Implementation Plan includes Performance Metrics and Performance Targets for each mode and provides a process to identify the highest priority projects to address perfromance gaps. It does not prescribe an outcome, but it provides a transparent process for making decisions on project priorities and funding.

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5. Will the project or proposal use (or occur in the immediate vicinity of) water, rail or air transportation? If so, generally describe.

N/A

6. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?

N/A

7. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

N/A

8. Proposed measures to reduce or control transportation impacts, if any.

N/A

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Public Service

1. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

N/A

2. Proposed measures to reduce or control direct impacts on public services, if any.

N/A

Utilities

1. Check the utilities currently available at the site:

- ☐ Electricity
- ☐ natural gas
- ☐ water
- ☐ refuse service
- ☐ telephone
- ☐ sanitary sewer
- ☐ septic system
- ☐ other

2. Describe the utilities that are proposed for the project, the utility providing the service and the general construction activities on the site or in the immediate vicinity which might be needed.

N/A

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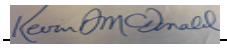
Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature 

Name of signee Kevin D. McDonald

Position and Agency/Organization Principal Transportation Planner, Bellevue Transportation Department

Date Submitted 11/10/2021

D. Folsom 1/19/2022

Development Services

Non-project Action SEPA Checklist

These questions pertain to land use actions that do not involve building and construction projects, but rather pertain to policy changes, such as code amendments and rezone actions.
Because the questions are very general, it may be helpful to read them in conjunction with the Environmental Checklist. When answering these questions, be aware of the extent to which the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented.

Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

   Adoption of the Mobility Implementation Plan will not increase the potential impacts to water, emissions to air, earth resources or noise production.

   Indicate proposed measures to avoid or reduce such increases.

   None

2. How would the proposal be likely to affect plants, animals, fish or marine life?

   The Mobility Implementation Plan will not increase the potential impacts to plants and animals.

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Indicate proposed measures to protect or conserve plants, animals, fish or marine life.

None

3. How would the proposal be likely to deplete energy or natural resources?

The Mobility Implementation Plan will have no adverse impacts to energy or natural resources.

Indicate proposed measures to protect or conserve energy and natural resources.

None

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains or prime farmlands?

The Mobility Implementation Plan is not anticipated to use or affect environmentally sensitive areas. The MIP recognizes the considerations of environmentally sensitive areas in the evaluation of project concepts that would address Performance Target gaps.

Indicate proposed measures to protect such resources or to avoid or reduce impacts.

None

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

The Mobility Implementation Plan will not affect land or shoreline use or encourage land or shoreline uses that are incompatible with existing plans. The MIP recognizes existing and planned land use in the evaluation of project concepts that would address Performance Target gaps.

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Indicate proposed measures to avoid or reduce shoreline and land use impacts.

None

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

The Mobility Implementation Plan will not will not increase or decrease demands on transportation or public services and utilities. Generally, the MIP provides a multimodal approach to accommodate the mobility demands of growth. A longer-term outcome of the MIP could be a greater non-SOV mode share because it porioritizes completing the pedestrian and bicycle system, especially in high-growth areas. The MIP recognizes the importance of reliable transit service on the Frequent Transit Network and of the access and amenities at bus stops in evaluating project concepts that would address Performance Target gaps.

Indicate proposed measures to reduce or respond to such demand(s).

None

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

The Mobility Implementation Plan is not in conflict with local, state, or federal laws or requirements for the protection of the environment. The MIP is consistent in its approach relative to protecting the natural environment – it acknowledges the Growth Management Act in the approach to multimodal concurrency that reduces dependency on the vehicle mode to achieve concurrency.

D. Folsom 1/19/22

Mobility Implementation Plan

DRAFT

Bellevue Transportation Commission

City of Bellevue, WA
January 2022

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Acknowledgements

TRANSPORTATION COMMISSION (December 2021)

- Loreana Marciante, Chair
- Karen Stash, Vice-Chair
- Christina Beason
- Jonathan Kurz
- Brad Helland
- Nick Rebhuhn
- Albert Ting

CITY COUNCIL (December 2021)

- Lynn Robinson, Mayor
- Jared Nieuwenhuis, Deputy Mayor
- Jennifer Robertson, Transportation Commission Liaison
- Jeremy Barksdale, Planning Commission Liaison
- Conrad Lee
- John Stokes
- Janis Zahn

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- Don Samdahl, PE, Principal; City of Bellevue Alumnus and Architect of Inital Transportation Concurrency Program

NELSON NYGAARD

- Ian Masek, Equity Analyst

Executive Summary

The Bellevue Mobility Implementation Plan (MIP) is a new 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. The MIP builds on more than a decade of work from the Transportation Commission on multimodal transportation network plans, policies, and evaluation metrics.

Why has the Transportation Commission done this work? Bellevue is a very different place than it was in the 1980s and 1990s. The future envisioned in the Comprehensive Plan is playing out before our eyes. As planned, many neighborhoods are undergoing a dramatic transformation with higher densities and a greater mix of housing, employment and shopping. This evolving land use pattern supports different travel outcomes in which people make shorter trips using multiple modes of travel. More people in Bellevue are choosing to walk, ride a bike, or take transit compared to 30 years ago, and the transportation system is expanding to meet this need. However, the City's primary tool to measure transportation system performance and to evaluate and implement transportation investments is still rooted in 1980s and 1990s thinking with a focus on private vehicle travel. Given Bellevue's evolution, the Transportation Commission has developed this MIP to identify a multimodal suite of metrics and tools to build out the transportation infrastructure of the future.

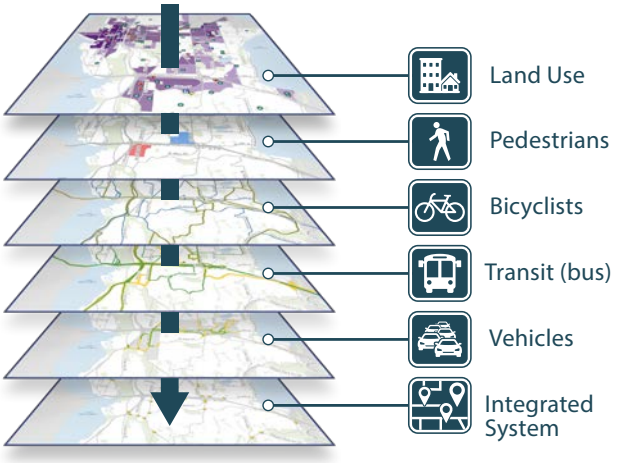
Specifically, the MIP provides tools and information that Bellevue can use to:

- clearly identify where the transportation system meets mobility expectations,
- transparently identify projects and investments to address gaps in performance,
- consider the transportation demand generated by growth,
- better respond to equity considerations in transportation access/mobility, and
- ultimately implement a sustainable, equitable, and multimodal transportation system.

The MIP also establishes:

- **Layered Network**: The Mobility Implementation Plan is based on a concept called the "layered network". 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. Mobility options for all people are intended to be compatible with the land use that the transportation system supports. The layered network acknowledges that the existing and planned land use influences expectations for transportation system performance. For example, people expect to be able to walk on sidewalks along all arterials in Bellevue, and they understand that the facilities will vary depending on where they are walking based on the adjacent land uses. The layered network acknowledges that there are competing priorities between modes and constraints to providing the planned projects for all modes on all streets.
- **Performance Metrics**: These are the measurements that describe the intended design and function of the transportation system, which varies by mode—pedestrian, bicycle, transit, and vehicle. The metrics are largely derived from the Transportation Commission's 2017 report on *MMLOS Metrics, Standards, and Guidelines* (MMLOS is Multimodal Level-of-Service).
  - » **Pedestrian**
    - › Width of sidewalk plus the adjacent landscape strip along arterials
    - › Spacing between designated intersection and mid-block pedestrian crossings of arterials
  - » **Bicycle**
    - › Level of Traffic Stress (LTS) along the bicycle network corridors. LTS describes the bicycle rider experience related to the speed and volume of traffic on the adjacent street, and the type of bicycle facility
    - › LTS at intersections on the bicycle network, intended to maintain the bicycle rider comfort level through an intersection
  - » **Transit**
    - › Transit travel time ratio: travel time on a bus relative to travel time in a car on corridors between activity centers
    - › Bus stop passenger amenities
  - » **Vehicle**
    - › Volume-to-capacity ratio (v/c) at system intersections
    - › Corridor travel speed along Primary Vehicle Corridors

Figure 1: Layered Network

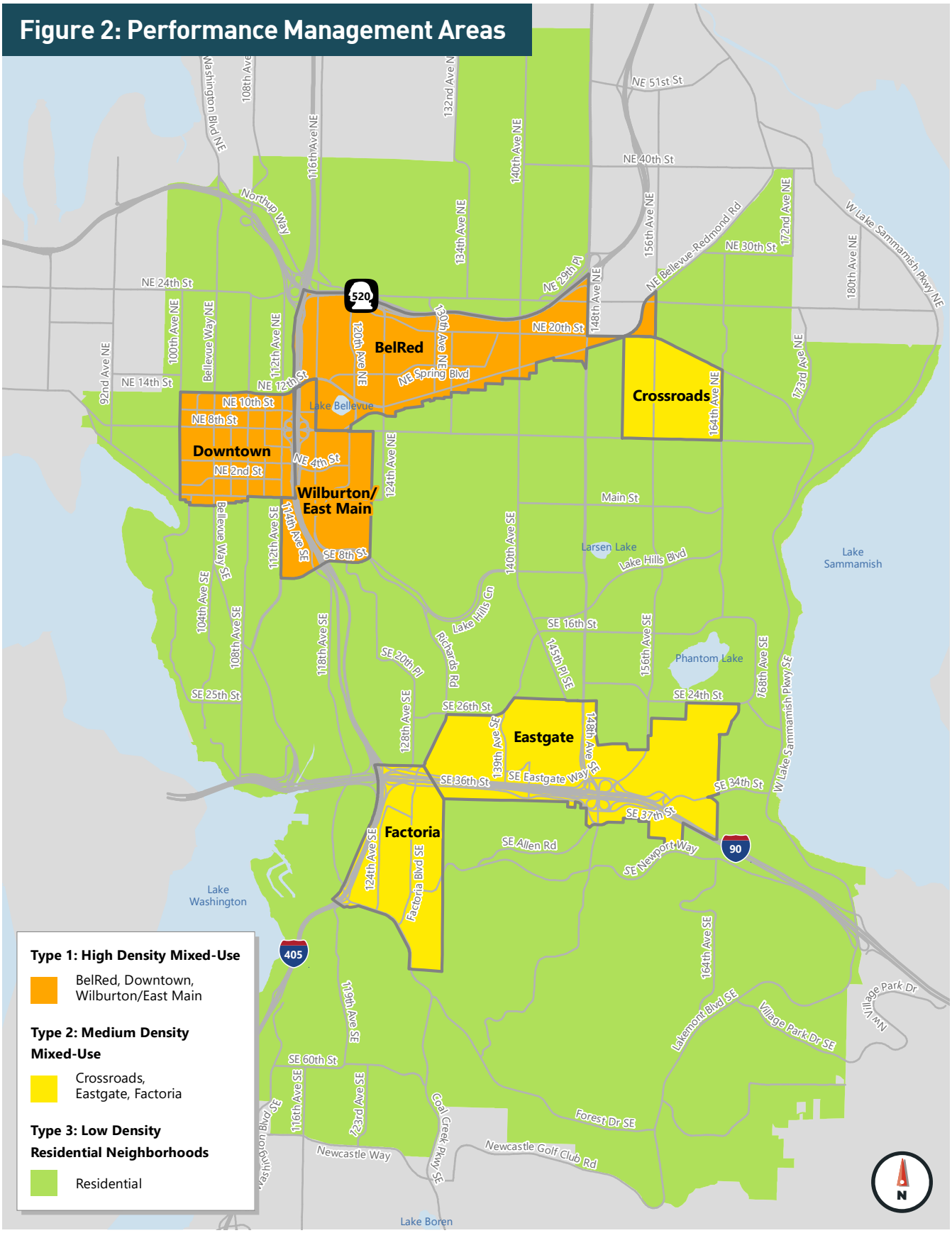


- **Performance Management Areas**: The Performance Management Areas (PMA) are contextual, based on the type and intensity of land use and the diversity of the transportation options that are readily accessible. These geographic areas are where Performance Targets for the vehicle mode are set and where progress toward improving mobility for each mode is summarized.
  - **Type 1 PMA** includes High Density Mixed-Use areas like Downtown, BelRed and Wilburton/East Main
  - **Type 2 PMA** includes Medium Density Mixed-Use areas like Crossroads, Eastgate and Factoria
  - **Type 3 PMA** includes the lower-density, predominantly residential areas of the city
- **Performance Targets**: Expectations for the performance and user experience of the transportation system are expressed as "targets" to be achieved over time. Targets are related to the intended facilities/infrastructure provided (for pedestrian, bicycle, transit access, and transit passenger amenities), and to the operations of the system (for transit travel time, vehicle travel speed, and vehicle intersection v/c). Targets for facilities/infrastructure focus on completing the planned system, while targets for operations relate to the capacity and performance of the system. Specific projects to address the intended Performance Targets may encounter various constraints that may lead the community to choose an alternate approach.

Existing conditions represent an incomplete system relative to the intended Performance Targets – these are "gaps" to be addressed through the MIP. A gap may be described as infrastructure that is missing or operations of a facility (transit or arterials) that do not meet the target. The Transportation Commission has defined Performance Target gaps that include:

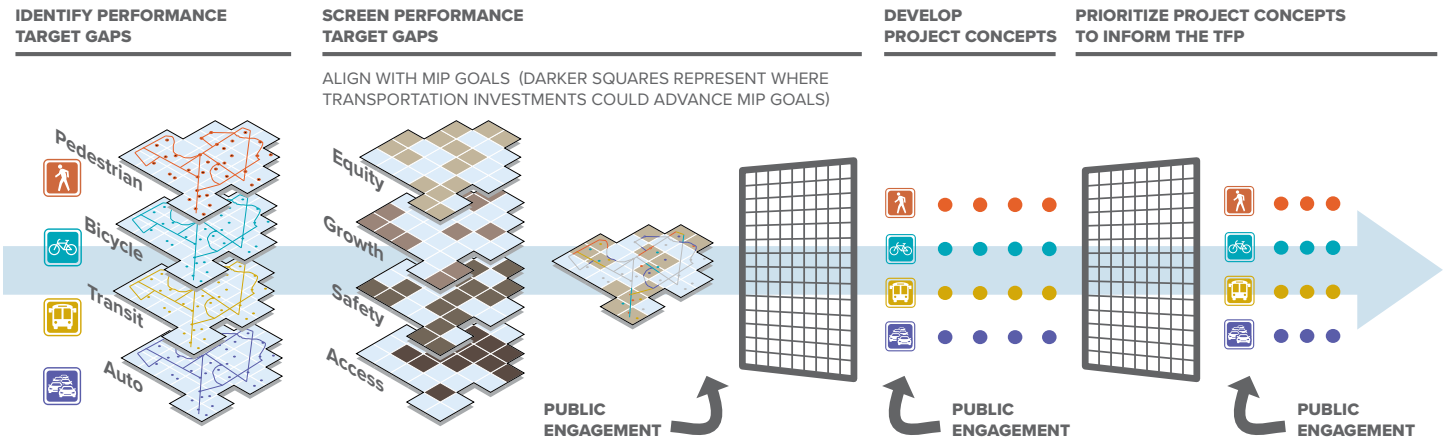
- **Pedestrian**
  - Arterial segment that is missing a sidewalk, particularly where a sidewalk is missing on both sides of the street
  - Arterial segment that does not have a designated pedestrian crossing at an intersection or mid-block crossing location, according to the intended spacing or specific pedestrian trip generators
- **Bicycle**
  - Segments of the bicycle network in general, and the Bicycle Priority Network in particular, that do not meet the Level of Traffic Stress (LTS) Performance Target
- **Transit**
  - Frequent transit network route where riding a bus would take more than twice as long (2.0 times longer) as driving a car between defined activity centers
  - Bus stops that do not meet the intended passenger amenities
- **Vehicle**
  - System Intersection where the volume-to-capacity (v/c) ratio does not meet the Performance Target (v/c Performance Target varies by Performance Management Area)
  - Segment of a Primary Vehicle Corridor where travel speed is slower than the Performance Target (corridor travel speed target varies by speed limit and Performance Management Area)

Figure 2: Performance Management Areas



- **Project Identification and Prioritization Framework**: The Framework provides guidance for the Transportation Commission and the community to address a gap in the Performance Target for a given mode. While there may be many Performance Target gaps, resources are limited, therefore prioritization is necessary. The process considers the Mobility Implementation Plan goals as a basis to define a decision-making approach that will advance the City's overall mobility objectives. There are four steps as shown in the graphic. Considerations for project prioritization include financial and environmental constraints, the magnitude of growth and trips generated in an area, the needs of transportation-burdened groups, input received from the community, and other City priorities.
- **Transportation Concurrency**: Bellevue's transportation concurrency program is explicitly multimodal and implements a person-trip framework to quantify both the demand for mobility and the supply of transportation projects. Policies in the Comprehensive Plan describe the broad concepts of a multimodal approach to concurrency. The multimodal approach to concurrency is intended to ensure that the "supply" of transportation equals or exceeds the "demand" for transportation. The "supply" is deemed created when projects and programs are funded in the Capital Investment Program. The "demand" is expressed as the new person-trips generated by growth. Conceptually, transportation concurrency is expressed in the graphic below.
- **Performance Monitoring**: A suite of metrics that the City monitors will inform the Transportation Commission and the community how transportation investments help complete the system, how they are being utilized, and how they advance City priorities and support intended outcomes. Periodic monitoring and reporting will provide data to the community on progress to achieve the Performance Targets as well as the environmental metrics such as per capita vehicle miles traveled and commute mode-share.

Figure 3: Project Identification and Prioritization Framework



Conclusion

This Mobility Implementation Plan is grounded in the MMLOS Metrics, Standards and Guidelines report from the Transportation Commission in 2017. It establishes broad goals for mobility, Performance Metrics and Performance Targets for each mode, and Performance Management Areas that reflect planned land use. The MIP describes a process to identify transportation projects that address Performance Target gaps and prioritization for funding. A multimodal approach to transportation concurrency allows the City to provide adequate transportation infrastructure (supply) to meet the demand from growth. Ultimately, the MIP provides a template for achieving a complete and connected multimodal transportation system in Bellevue.

Supply	Demand
Transportation Projects	**Development Projects**
4 miles sidewalk 5 midblock crossings	100-unit condominium
5 miles protected bike lane 2 bike signals	1 million square foot office building
2 bus stops with crossing improvements Transit signal priority at 3 intersections	250,000 square feet retail
4 turn lanes 4 new lane miles	
A — Transportation Projects that provide "Supply" to support "Demand" from Growth	B — Growth that "Demands" transportation "Supply" of all modes

Concurrency is achieved when A > B

chapter

01

Introduction

Throughout its history and particularly over the past decade, the City of Bellevue has systematically refined its transportation planning, design, and implementation practices to better reflect the changing land use context and the values of the community. These values are largely articulated in the adopted modal plans for pedestrians, bicycles, and transit, and in the Comprehensive Plan (last major update in 2015).

Emerging policy direction is to achieve a multimodal outcome for the community through such topics as:

- Creating a transportation system that is accessible to all;
- Envisioning a multimodal network from the foundation of the individual modal plans;
- Establishing and utilizing multimodal level-of-service (MMLOS) metrics, standards and guidelines;
- Monitoring MMLOS and adjusting programs and resources to achieve mobility targets;
- Meeting Complete Streets and Vision Zero goals;
- Establishing multimodal concurrency; and,
- Developing a citywide Mobility Implementation Plan.

Since the adoption of the major update to Comprehensive Plan (2015), the Transportation Commission has advanced these policies by defining MMLOS Metrics, Standards, and Guidelines (2017), identifying a framework for multimodal concurrency (2020), and preparing this Mobility Implementation Plan (2021).

Comprehensive Plan

The Comprehensive Plan provides the vision for the transportation system and the policy direction for the modal plans and for implementation. Transportation policy has evolved with the community. While policy has evolved, the consistent intent is to support planned land use and the need for people to move within the city and to connect to the region. In 2021, the City Council approved policy to fully embed a multimodal approach in support of a complete and connected transportation system for all modes. The Comprehensive Plan acknowledges this Mobility Implementation Plan as the framework to guide investments in transportation projects and programs.

Bellevue's Multimodal Evolution

Bellevue was developed with a land use pattern and a transportation network centered around vehicle travel. Low-density residential areas with dispersed commercial areas connected by wide roads that allowed free flowing vehicle travel was the predominant form of development. Transportation improvements were focused primarily on making traveling by car safe and convenient. This vehicle-centered outlook is reflected in the original transportation concurrency system from the late 1980s that was focused solely on the performance of the vehicle system at arterial intersections. However, even within this vehicle-centric concurrency framework, progressive multimodal policies, plans, and projects supported non-motorized transportation and transit; examples include the first Non-Motorized Transportation Plan (1993) and the Downtown Bellevue Transit Center (1985, 2002).

Bellevue, along with the region, has promoted and experienced substantial change over the past two decades. Planned land use has created dense activity centers with a vibrant mixed-use character. More residents and workers generate vehicle traffic and the land use pattern creates the potential for short trips and travel by non-auto modes. Public opinion, while still expressing concern with traffic congestion, has also grown more focused on providing safe and comfortable access for people walking, bicycling and riding transit. To support this changing context, Bellevue recognizes the need for comprehensive multimodal transportation planning to provide equitable access to transportation as well as to promote better environmental and financial sustainability.

Major City efforts to articulate the transportation vision and to advance multimodal transportation planning include the Transit Master Plan (2003, 2014); Pedestrian and Bicycle Transportation Plan (1993, 1999, 2009); the Multimodal Level-of-Service (MMLOS) Metrics, Standards, and Guidelines (2017); and the Multimodal Transportation Concurrency Report (2020). All of these planning efforts—which are discussed in more detail in the Background and Context Report included in Volume 2 of this document—are aimed at building a complete multimodal network in Bellevue. These plans provide the foundation on which the Mobility Implementation Plan is built.

Why Develop the Mobility Implementation Plan?

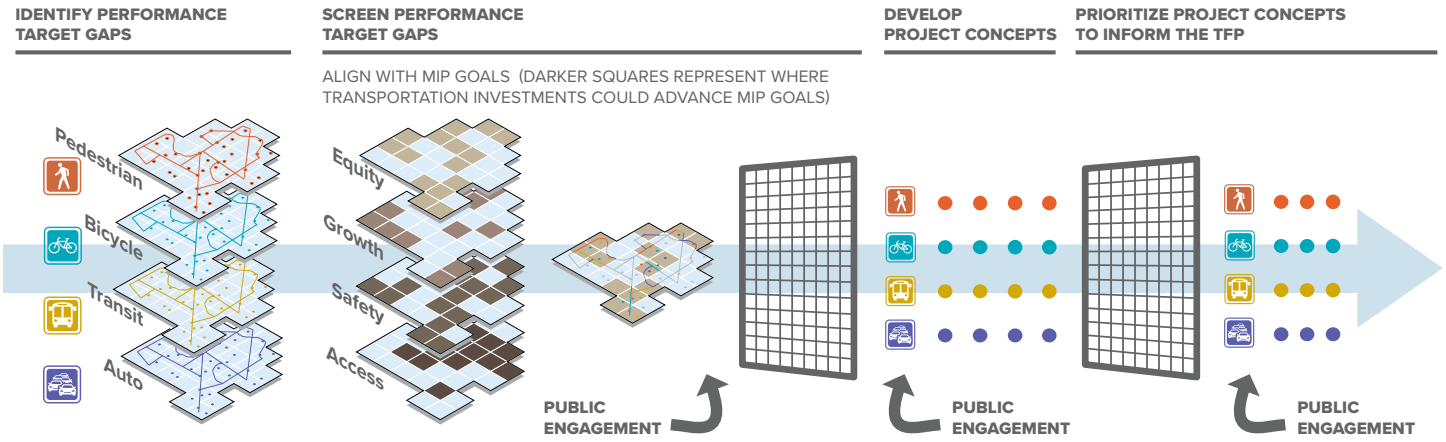
Bellevue has created the building blocks of a multimodal transportation vision including policies in the Comprehensive Plan, a set of modal plans, subarea plans, and other supporting plans. The step now taken is to coalesce this work into the Mobility Implementation Plan (MIP) to clearly articulate how to implement the planned multimodal transportation system.

The MIP consolidates the City's prior work on multimodal transportation planning, design, and implementation to:

- Define Performance Metrics for each mode to measure the components and operations of the transportation system,
- Describe Performance Targets for each mode that express the quality of the user experience,
- Delineate Performance Management Areas to reflect the land use character and within which Performance Targets and the expected user experience may vary,
- Clearly define the existing and forecast Performance Target gaps in multimodal system performance,
- Develop a system to screen Performance Target gaps for further project concept design,
- Identify a process to prioritize project concepts for funding, and
- Define how multimodal concurrency will be evaluated and implemented so that the multimodal network will sustainably support growth.

The flowchart below summarizes these critical elements of the Project Identification and Prioritization function of the Mobility Implementation Plan:

Figure 4: Project Identification and Prioritization Framework



Mobility Implementation Plan Goals

The MIP consolidates Bellevue's multimodal planning efforts toward the outcome of a complete, connected and accessible transportation system for the benefit of all people and for all modes. Along with these goals is Bellevue's commitment to develop and invest in an environmentally and fiscally sustainable manner. These goals form the foundation for the MIP and are referred to throughout this document. In establishing the groundwork for the MIP, the City Council included several fundamental goals:

- **Safety**: Bellevue is committed to providing safe streets for everyone, whether they are driving, walking, biking, or using transit. This is accomplished through interdepartmental efforts to coordinate planning, investments, and City actions to eliminate serious injuries and fatalities resulting from crashes on the transportation system. The MIP fully embraces transportation safety and is integrated as part of Bellevue's overall Safe System approach and Vision Zero goal.
- **Equity**: There is a strong recognition that transportation investments in Bellevue should be equitable for all when viewed through a socioeconomic or demographic lens. The MIP introduces a new data and analytical framework to evaluate the transportation needs from different transportation-disadvantaged populations and to more transparently design improvements and prioritize investments that provide equitable access.
- **Support Growth**: A fundamental tenet of transportation planning in Washington state is that transportation investments support planned growth in population and employment. This requirement of the Growth Management Act is incorporated in the MIP and in policy. With an eye toward supporting growth, Bellevue will continue to be a vibrant regional center supported by transportation network investments that

accommodate new technologies and the travel demands of an increasingly diverse population.

- **Access and Mobility**: As the city grows denser with a greater mix of land uses, simultaneous consideration of access and mobility is warranted. "Access" relates to the infrastructure that creates the "complete system" that supports the land uses - the transportation system provides access to destinations such as workplaces and schools. "Mobility" relates to the experience of people who use the complete transportation system to get where they want to go - the complete transportation system provides mobility for people in a manner that suits their needs. With respect to both access (infrastructure) and mobility (level-of-service), the MIP provides that people in each type of neighborhood can easily walk, bike, drive, or take transit to reach a job, restaurant, or store. The MIP describes access and mobility in a multimodal environment where there are different transportation needs and expectations across Bellevue's diverse neighborhoods.

Updating the Mobility Implementation Plan

The MIP may be revised periodically, with each major update of the Comprehensive Plan, or as changing circumstances warrant as directed by the City Council. The intent of future updates is to ensure that the MIP remains aligned with Bellevue's transportation policies, any updates to modal plans, or substantive changes to Performance Metrics, Performance Management Areas, or Performance Targets.

chapter

02

Bellevue's Layered Transportation Network

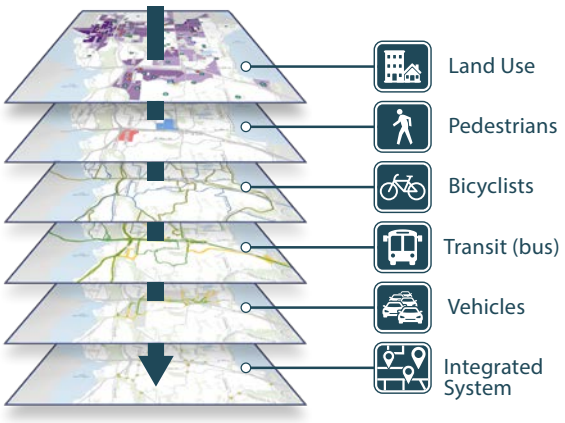
In 2016, Bellevue adopted a Complete Streets ordinance stating that the City will implement streets that "provide appropriate facilities to meet the mobility needs of people of all ages and abilities who are walking, bicycling, riding transit, driving and transporting goods" to the maximum extent practical. The Complete Streets Transportation Design Manual describes the intent and requirements for the design and implementation of transportation facilities within the public rights-of-way. The "Layered Network" concept complements the Complete Streets ordinance and Design Manual by describing the relationships between land use and the various travel modes.

The Complete Streets ordinance requires that all mobility options be considered in the scoping, planning, design, implementation, operation and maintenance of a facility. Bellevue recognizes that there are constraints to the level of accommodation that can be provided for each mode on any one facility and that a single roadway corridor may not offer the optimal experience for every mode given the inherent constraints and conflicts. However, this optimal travel experience can be achieved at the network level. The Layered Network approach builds upon the Complete Streets framework by acknowledging those constraints, conflicts and opportunities, and identifying modal priorities throughout the network. Although not every individual street can simultaneously provide the highest level of accommodation to all modes, the Layered Network contains a comprehensive and connected network for each mode—pedestrian, bicycle, transit, and vehicle.

To advance the Layered Network, the MIP combines modal plans, subarea plans and prior planning efforts to create an integrated, complete transportation system that is supportive of and compatible with Bellevue's land use vision. The Layered Network reveals potential modal conflicts and incompatibilities in terms of planned land uses, available right-of-way, other known modal needs or projects, and environmental factors to evaluate the feasibility of constructing planned improvements. The layers of Bellevue's multimodal network are shown in **Figure 5** and described in the following sections.

In its work to prepare the MMLOS (2017) report on transportation metrics, standards and guidelines, the Transportation Commission recognized that land use may be used to help define the facility type and reconcile competing priorities in the Layered Network

Figure 5: Layered Network



approach. The land use vision in the Comprehensive Plan describes the intended mix and intensity of development that is the context for transportation projects. For example, land use in the high-growth Type 1 Performance Management Area of Downtown, Wilburton/East Main and BelRed creates an environment in which pedestrian mobility is a high priority that informs infrastructure investment decisions. Pedestrian destinations such as schools may also inform the design and priority of specific facilities. Conflicting modal priorities may be resolved in favor of the pedestrian network in these types of locations.

Pedestrian Network

Bellevue's development standards ensure that a comfortable and safe pedestrian environment is built as properties redevelop or as the City makes major street improvements. The dimensional requirements for sidewalks and the landscape buffer strips are outlined in Chapter 3 and the Complete Streets Design Manual. While new private and public projects are required to build sidewalks that meet those dimensional requirements, a focus of the MIP is to address completely missing sidewalk gaps along the arterial network so that it is comfortable and safe for people to walk along and to cross the busiest streets in the city. **Figure 6** shows the MIP Pedestrian Network.

Bicycle Network

As described in Chapter 3, the MIP builds on the Pedestrian and Bicycle Transportation Plan to define the intended Level of Traffic Stress on the bicycle network. The Level of Traffic Stress (LTS) experienced by a bicyclist is a function of the average daily traffic volume and the speed limit, together with the type of bicycle facility. The bicycle network is comprised of connected corridors with facilities that range from multipurpose paths separated from arterials, to protected bike lanes along arterials, to shared streets along low-speed, low-volume local roads. The bicycle network for the MIP was originally drawn from the City's 2009 Pedestrian and Bicycle Plan, with a 2021 update to address known constraints/conflicts. A Priority Bicycle Network defines eleven north-south and east-west routes that connect neighborhoods and provide links to the regional system. The planned bicycle network including the Priority Bicycle Corridors is shown in **Figure 7**.

Figure 6: Pedestrian Network

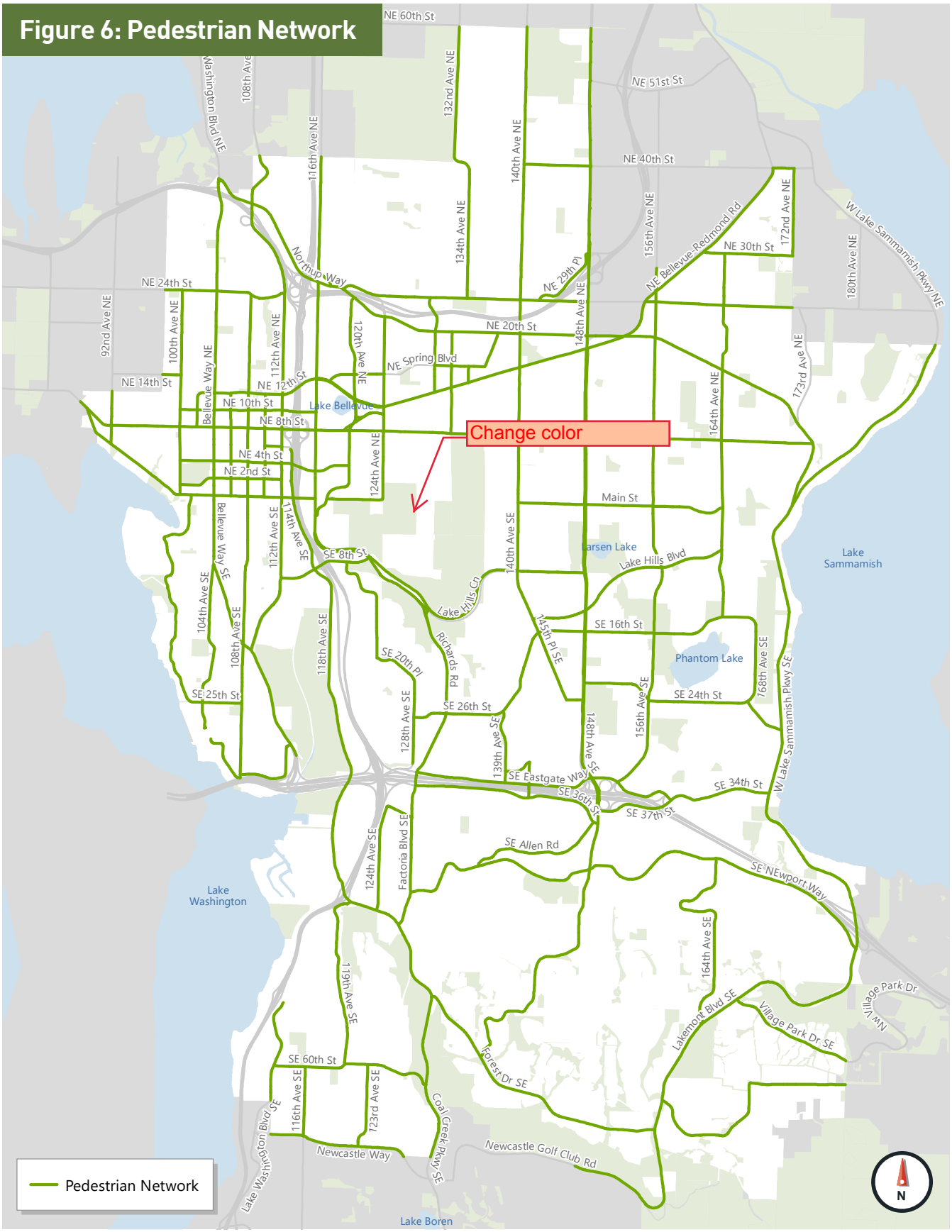
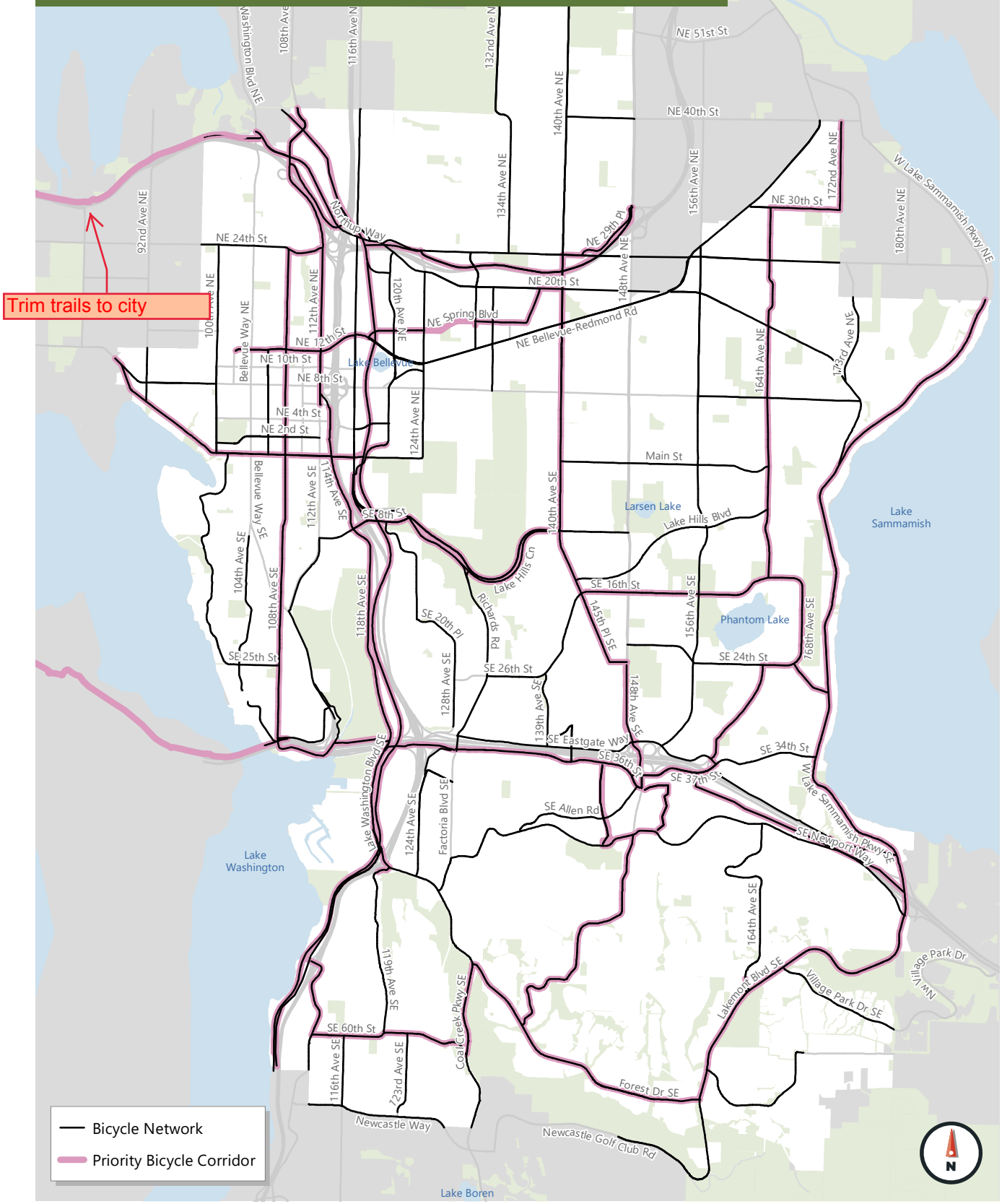


Figure 7: Bicycle Network and Priority Bicycle Corridors



Transit Network

Many Bellevue arterials carry buses operated by transit service providers, primarily King County Metro and Sound Transit. This network is shown in **Figure 8**. Although transit is not operated by the City, Bellevue supports efficient transit operations so that riding transit is an attractive mode for residents and workers.

The Frequent Transit Network (FTN) defined in the Bellevue Transit Master Plan includes the major transit routes that connect activity centers in Bellevue with frequent all-day service. Frequent service is defined as a bus that arrives every 15 minutes or less from 6am to 6pm on weekdays. The FTN evolves as new transit connections are made or services improved. The Frequent Transit Network includes the following routes, also shown in **Figure 8**.

- **Route 245** (Factoria-Eastgate-Crossroads-Overlake)
- **Route 271** (Eastgate-Wilburton-Downtown-U District)
- **Route 250** (Downtown-Kirkland-Redmond)
- **B Line** (Downtown-Wilburton-Crossroads-Overlake)
- **Stride BRT** (Lynnwood-Downtown-Burien; service scheduled to begin in 2026)
- **Link 2 Line** (Seattle-Downtown-BelRed-Overlake; service scheduled to begin in 2023)

Expansion of the FTN may include additional RapidRide service between Kirkland, Bellevue, Newcastle, and Renton and Link Light Rail between Bellevue, Kirkland, and Issaquah.

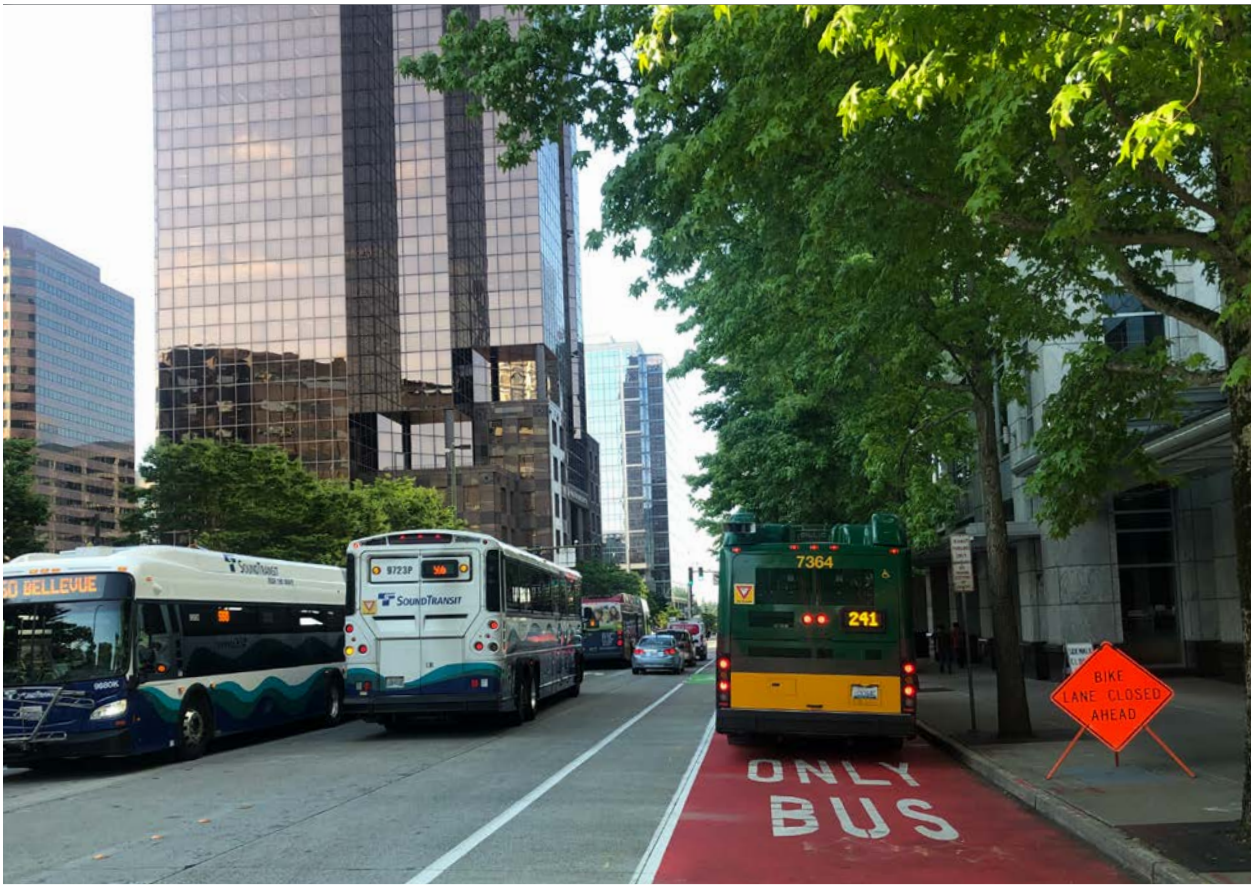
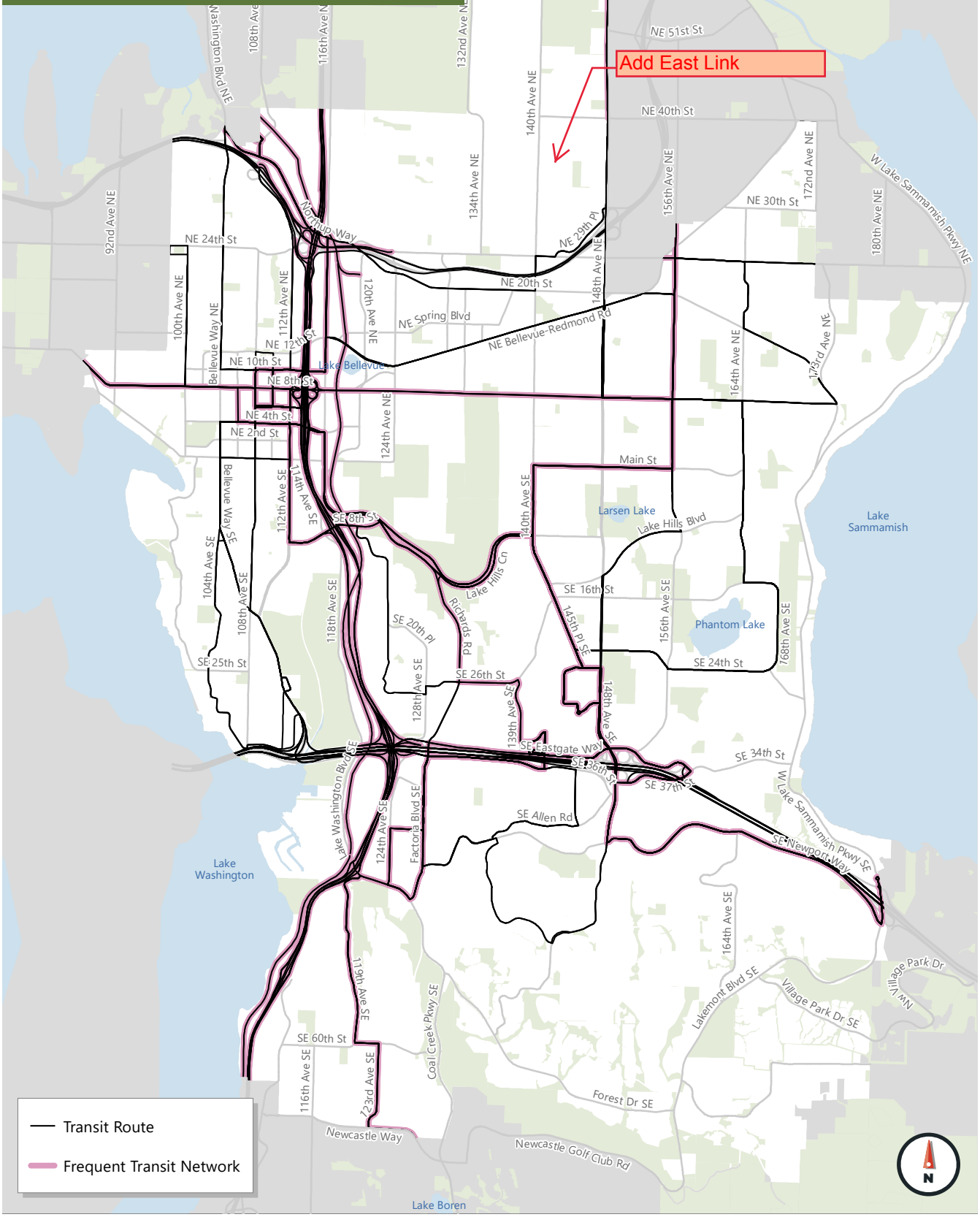


Figure 8: Frequent Transit Network



Vehicle Network

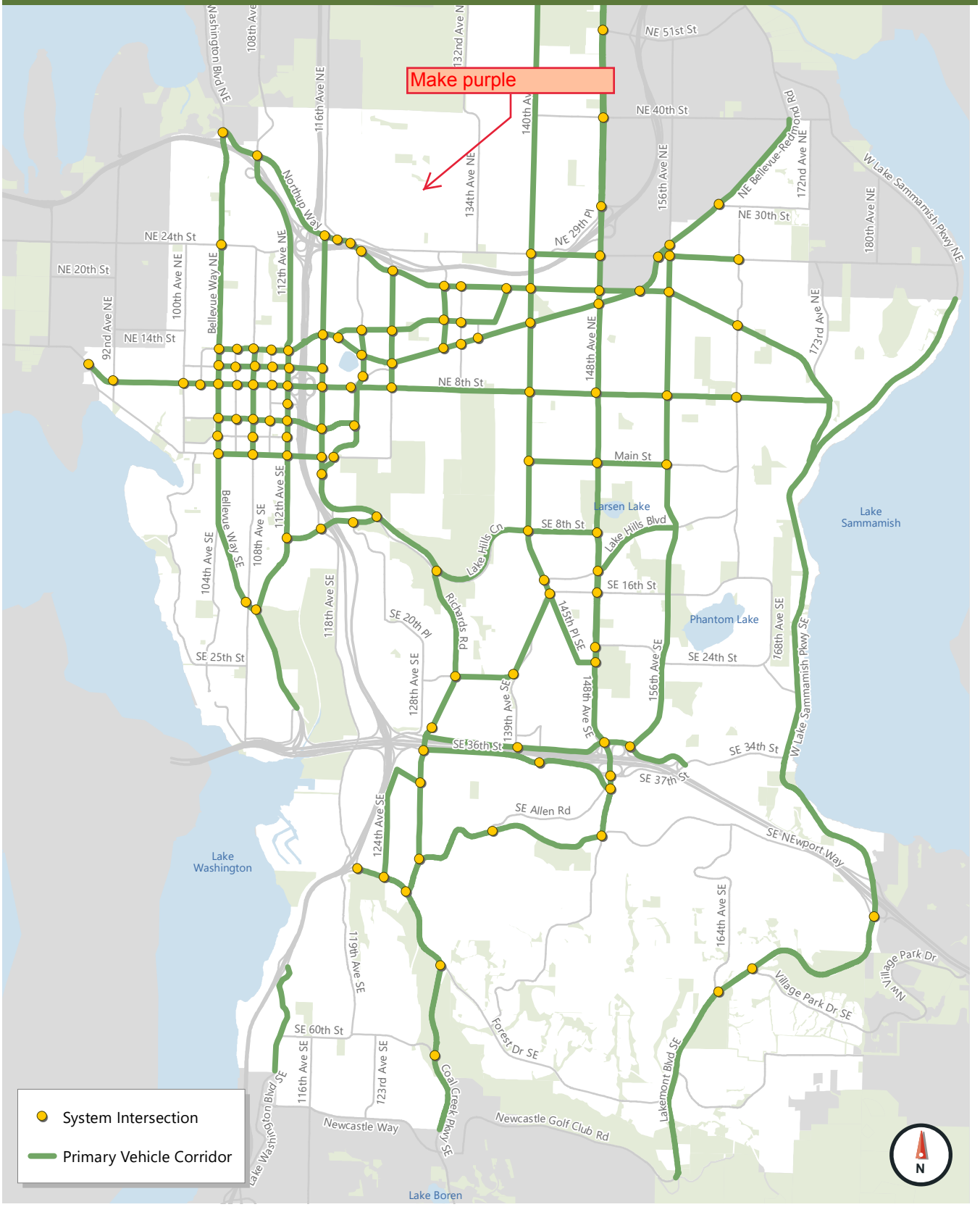
Bellevue has a complete and connected roadway network that accommodates auto-oriented travel everywhere in the city and to the region. The MIP defines Primary Vehicle Corridors and System Intersections as described below.

- A Primary Vehicle Corridor is a subset of the City's arterials with the following characteristics:
  - » Classified in the Comprehensive Plan as an arterial (collector, minor, or major);
  - » Carries roughly 10,000 or more vehicles per day; and
  - » Is between 0.5 and 2.0 miles in length (shorter segments are typically in areas with greater traffic signal density and System Intersections).
- A System Intersection meets both of the following criteria:
  - » Signalized or roundabout intersection with two arterials or freeway ramps; and
  - » At least one of the arterials at the System Intersection is a Primary Vehicle Corridor.

The Primary Vehicle Corridor designation does not imply that vehicle mobility is the top priority for the corridor. Considerations like the land use context (see the discussion on Performance Management Areas in Chapter 3), overlap with other modal networks, and community input must be weighed when considering modal priorities on a corridor. However, traffic congestion management will be an important consideration along the Primary Vehicle Corridors and at System Intersections. These arterials and intersections are a priority because they connect neighborhoods to other destinations in Bellevue and to the regional highway network.

Based on these criteria, the existing set of System Intersections along with the Primary Vehicle Corridors are shown in **Figure 9**.

Figure 9: Vehicle Network – Primary Vehicle Corridors and System Intersections



chapter 03

Performance Metrics

Performance Metrics for each mode are based on the MMLOS Metrics, Standards, and Guidelines Final Report with some refinements to streamline performance monitoring and to reflect the latest Transportation Commission guidance on mobility priorities. This section describes the metrics for each mode in the Layered Network.

Pedestrian Network

The MMLOS Metrics, Standards, and Guidelines Final Report describes specific dimensions for sidewalks that vary depending on the land use context and location of the sidewalk. The City strives to build (or have developers build) sidewalks to the relevant dimensions so that there is a safe and comfortable location to walk. As shown in **Table 1**, the Landscape buffer strip width is set as 5 feet throughout the city, while paved sidewalk dimensions vary from 7 feet to 15 feet depending on the location and nearby land use.

Designated arterial crossings at intersections and mid-block locations are also recommended in the MMLOS Report. Recommended arterial crossing frequencies vary form 300 feet to 800 feet depending on the location and nearby land use. **Table 2** shows the desired spacing between arterial pedestrian crossings.

Table 1: Sidewalk and Landscape Buffer Width

Context / Component	Downtown / BelRed	Activity Center	Neighorhood Shopping Center	Pedestrian Destination	Elsewhere in the City
Sidewalk Width and Landscape Buffer Width	Downtown Land Use Code BelRed Land Use Code	16 ft. total	13 ft. total on frontage adjacent to shopping center	13 ft. total on frontage of pedestrian destination and within 100 ft. of a FTN stop	Bellevue Land Use Code Transportation Design Manual

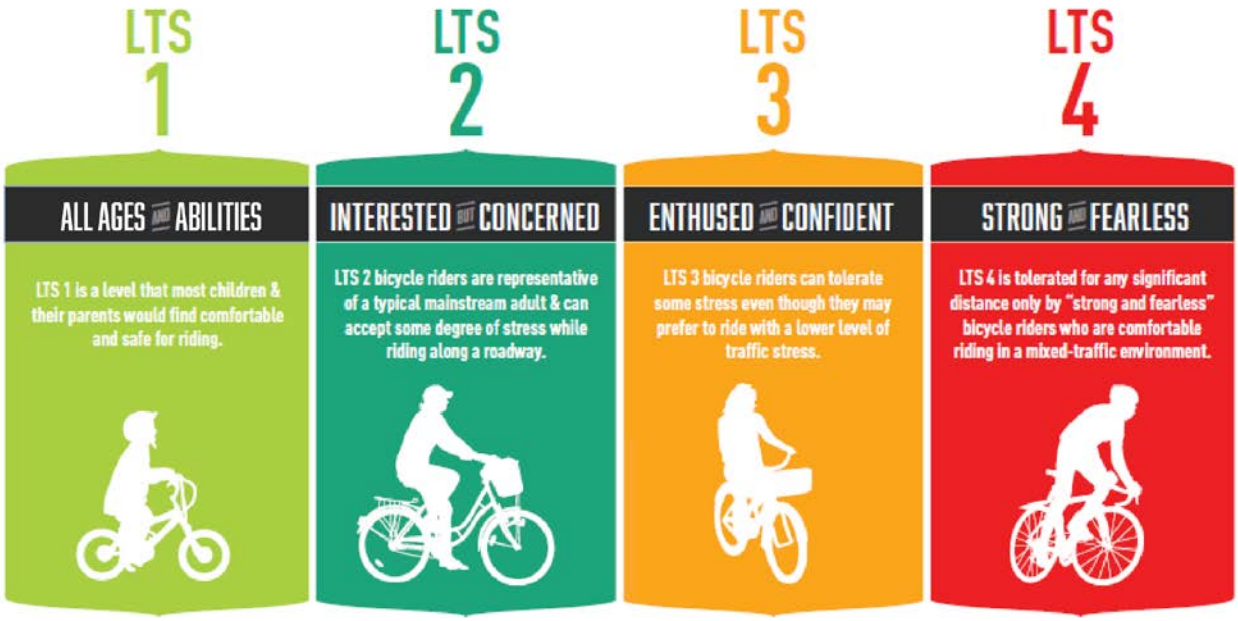
Table 2: Arterial Crossing Frequency

Context / Component	Downtown / BelRed	Activity Center	Neighorhood Shopping Center	Pedestrian Destination	Elsewhere in the City
Arterial Crossing Frequency	Downtown Transportation Plan (300 ft.)	≤ 800 ft.: Factoria ≤ 600 ft.: Elsewhere	One crossing every 600 ft. or less within shopping center area	Within 600 feet of primary entrance Within 300 ft. of bus stop pair on FTN	Applicable as needed

Bicycle Network

Bellevue measures bicycle level-of-service on the bicycle network as defined in the Pedestrian and Bicycle Transportation Plan with refinements made in 2021 based on a review of potential modal conflicts by City staff. The Performance Metric used to describe the user experience on the bicycle network is consistent with the level of traffic stress (LTS) guidelines outlined in the MMLOS Metrics, Standards, and Guidelines Final Report. The concept of LTS is illustrated in **Figure 10**.

Figure 10: Bellevue Bicycle Level of Traffic Stress (LTS) Categories



For bicycle network corridors, LTS is a function of the posted speed limit, the average daily volume of traffic on the street, and the type of bicycle facility provided. **Table 3** shows this relationship.

Table 3: Bicycle Level of Service/Level of Traffic Stress

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	<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

Transit Network

The ratio of travel time on transit versus in a private vehicle in the peak commute hour (known as a Transit Travel Time Ratio) is the Performance Metric used to measure the operations of the frequent transit network (FTN). Specifically, the Transit Travel Time Ratio is measured between the City's major activity centers, where the majority of Bellevue's transit trips take place, either from or to. The Transit Travel Time Ratio speaks to the competitiveness of transit relative to the vehicle mode. Moreover, this Performance Metric can be influenced by City actions that improve the speed and reliability of transit on its streets.The activity center pairs used to assess the FTN are shown in **Figure 11**.

In addition to influencing the speed and reliability of transit on the roadway network, Bellevue can improve the amenities at the transit stops where transit riders access transit service. **Table 4** summarizes the transit stop passenger amenity metrics.

Figure 11: Transit Travel Time Ratio Activity Center Pairs

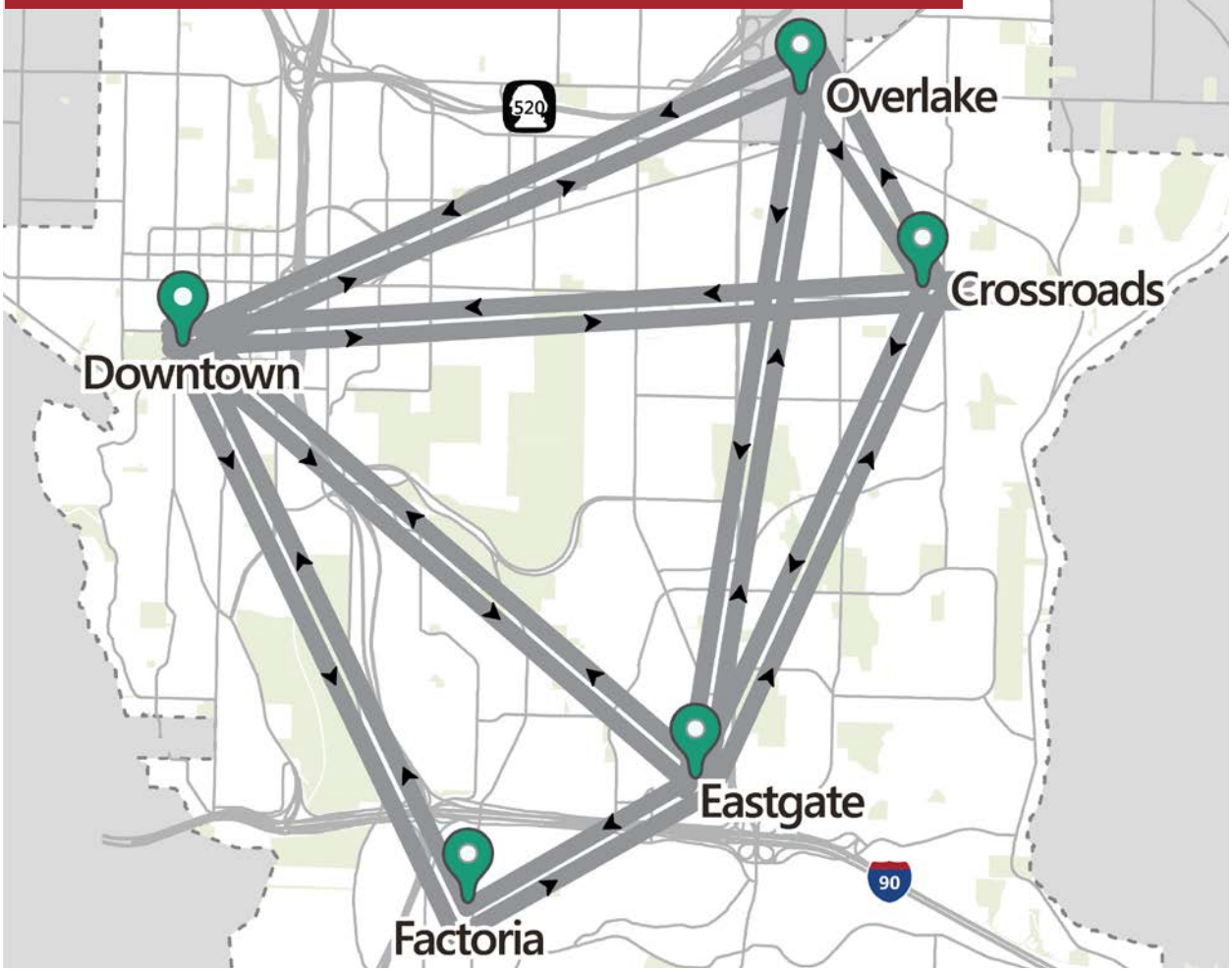


Table 4: Transit Stop/Station Level of Service

Context / Component	Local Transit Stop	Primary Transit Stop	Frequent Transit Network Stop/ RapidRide Stop
Weather Protection	Yes, Priority locations have 25+ daily boardings	Yes	Yes
Seating	Yes, Priority near Pedestrian Destinations	Yes	Yes
Paved Bus Door Passenger Zone	Yes, Zone length 25-30 ft.	Yes, Zone length 40 ft.	Yes, Zone length 60 ft.
Wayfinding	Optional	Yes	Yes
Bicycle Parking	Optional	Yes	Yes

Vehicle Network

The MIP defines two Performance Metrics for the vehicle network to evaluate vehicle LOS:

- Vehicle travel speed along segments of a Primary Vehicle Corridor in the PM Peak period.
- Intersection volume-to-capacity ratio (V/C) at System Intersections in the PM Peak period.

The V/C metric at System Intersections describes intersection performance and is complemented by the vehicle travel speed metric. For example, a driver traveling along NE 8th Street will get more green signal time than a driver approaching from a perpendicular arterial – in this example, intersection V/C might be high because it is the average of all approaches, but vehicle travel speed on NE 8th Street is steady because of the coordinated and adaptive traffic signals. These two vehicle Performance Metrics provide a more complete picture of traffic flow and are intended to be used together to identify and prioritize potential traffic congestion reduction projects.

Vehicle Travel Speed

Vehicle travel speed is adapted for the MIP from the "Typical Urban Travel Speed" metric described in the MMLOS Metrics, Standards, and Guidelines Final Report. The "Typical Urban Travel Speed" is defined as 40% of the posted speed limit; the performance of the arterial is measured against the "typical" speed. This methodology takes intersection delay into account since vehicles rarely travel at a free-flow speed along a corridor within an urban area and better accounts for travel through several intersections. The 40% factor is identified as appropriate for urban corridors by the Highway Capacity Manual (Transportation Research Board, 2016).

Intersection Volume-to-Capacity Ratio

Bellevue has a long-established system of using a V/C metric to quantify vehicle mobility through System Intersections. This Performance Metric compares the potential maximum number of vehicles that can be expected to move through an intersection relative to the actual number of vehicles that use the intersection. As that ratio of maximum-to-actual approaches 1.0, meaning the number of vehicles is approaching the capacity of the intersection—operations degrade and drivers may experience delay.

chapter

04

Performance Management Areas

Performance Management Areas are the successors to the City's Mobility Management Areas and are tailored for the Mobility Implementation Plan. The Performance Management Areas are established to acknowledge that the context of the transportation system and surrounding land uses vary, and that travelers using all modes expect a level of performance consistent with the context.

To recognize this variability in the user expectations and experience, three types of Performance Management Areas (PMAs) have been defined based on land use and mobility context, described below:

- **Type 1 - High Density Mixed-Use:** Downtown, BelRed, and Wilburton/East Main are mixed-use activity centers with high density and growing land uses, light rail service, and many mobility options that provide access within the PMA and to other areas; these are shown in orange shading on **Figure 12**.
- **Type 2 - Medium Density Mixed-Use:** Crossroads, Eastgate, and Factoria are mixed commercial/residential activity centers with moderate density land use and frequent bus transit service; these are shown in yellow shading on **Figure 12**.
- **Type 3 - Residential**: The remainder of the city is categorized as a primarily lower-density residential area with supporting retail/service land uses and fewer mobility and accessibility options; this area is shown in green shading on **Figure 12**.

Type 1 and Type 2 PMAs are each comprised of three separate geographic areas to allow a more granular summary of the pedestrian and bicycle network Performance Targets. These locations are broken out because most of the City's land use growth is taking place in these areas and the Transportation Commission expressed an interest in providing pedestrian and bicycle investments where potential utilization would be the greatest.

The PMAs are used to establish and monitor Performance Targets as summarized in **Table 5** and described in detail in the following chapter. Each PMA has Performance Targets tailored to acknowledge the existing and planned land uses and mobility and accessibility options.

Figure 12: Performance Management Areas

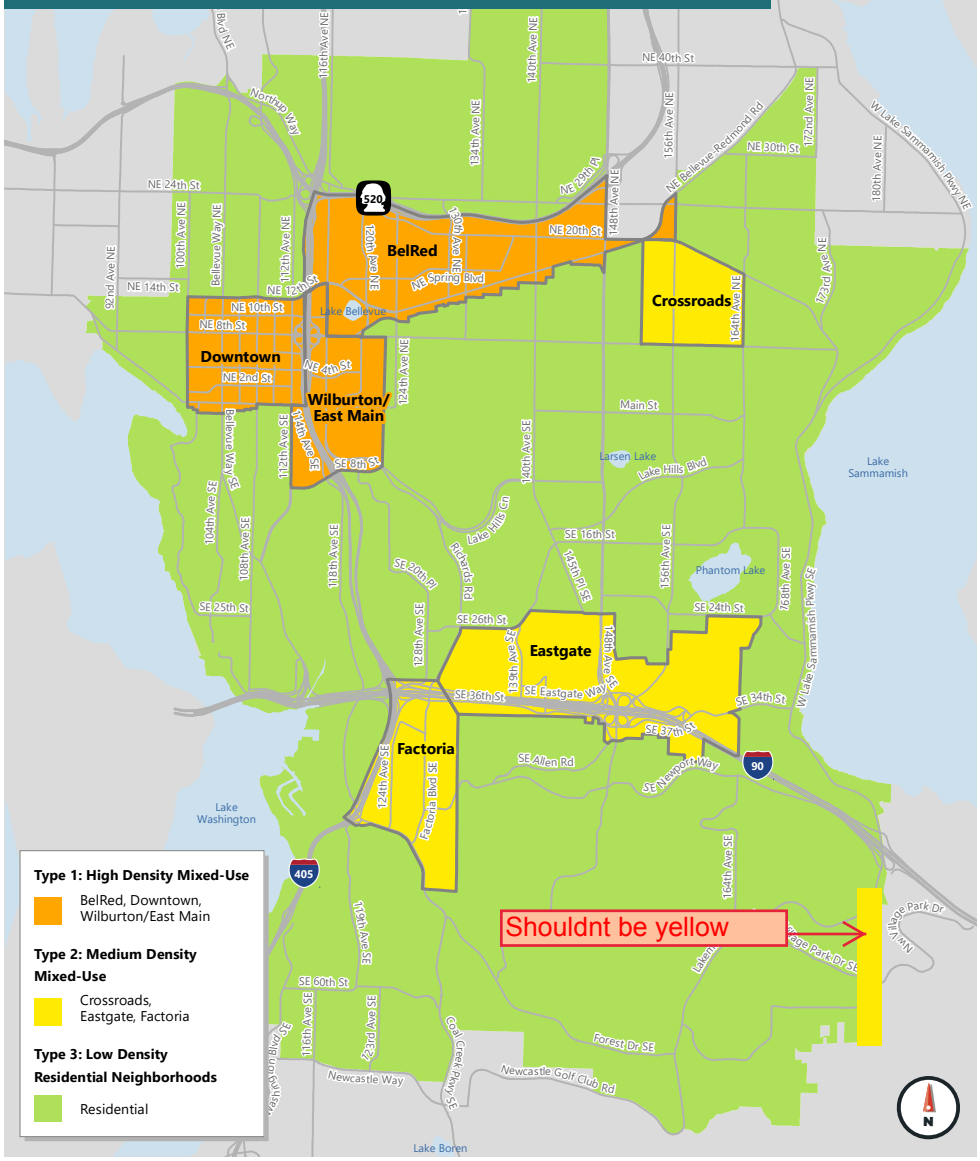


Table 5: PMA Relationship with Performance Target

Mode	PMA Relationship with Performance Target
Pedestrian	Pedestrian network system completeness summarized by PMA geography
Bicycle	Bicycle network system completeness summarized by PMA geography
Transit	Activity center pairs within Type 1 and Type 2 PMAs are used to document transit travel time vs auto travel time Performance Target
Vehicle	Performance Targets for System Intersections and Primary Vehicle Corridors are based on PMA geography

chapter

05

Performance Targets

The Performance Metrics for each mode in the MIP define how performance is measured for walking, biking, taking transit, or driving. The Performance Targets describe the intended facility operations or design of each mode of travel—in other words, the intended user experience.

For the MIP, the Transportation Commission has identified that the highest priority is to address fundamental gaps in the system for pedestrians, bicyclists, and transit riders (as opposed to rebuilding an existing facility that does not meet the more stringent Performance Targets identified in the MMLOS Final Report). Therefore, the MIP Performance Targets are focused on a more streamlined view of system performance, as shown in **Table 6**. As the Performance Target gaps are filled they would be built to match the expectations outlined in the MMLOS Report. For the vehicle mode, the specific Performance Targets align with the PMAs, as shown in **Table 7**.

Table 6: Transit Stop/Station Level of Service

Context / Component	Local Transit Stop	Primary Transit Stop	Frequent Transit Network Stop/ RapidRide Stop
Weather Protection	Yes, Priority locations have 25+ daily boardings	Yes	Yes
Seating	Yes, Priority near Pedestrian Destinations	Yes	Yes
Paved Bus Door Passenger Zone	Yes, Zone length 25-30 ft.	Yes, Zone length 40 ft.	Yes, Zone length 60 ft.
Wayfinding	Optional	Yes	Yes
Bicycle Parking	Optional	Yes	Yes

Table 7: Performance Targets

Mode	Performance Target		Monitoring and Reporting
Pedestrian	• Sidewalk on both sides of the arterial; sidewalk dimensions vary • Arterial crossings at designated frequencies near major trip-generating land uses; the frequency of arterial crossings varies by land use context		Percentage of sidewalk system complete citywide and for locations within each PMA
Bicycle	Bicycle network facilities (corridors and intersections) meet the intended LTS		Percentage of bicycle network complete citywide and for locations by PMA
Transit	• Transit travel time ratio of less than 2.0 • Stops on the FTN have passenger amenities		List and map of activity center pairs that meet the travel time ratio Performance Target; percent of bus stops on the FTN that include all five passenger amenites
Vehicle	**Type 1 PMA** High Density Mixed-Use	• 1.0 v/c ratio at System Intersections • >0.5 Typical Urban Travel Speed for Primary Vehicle Corridors	List and map of Primary Vehicle Corridors and System Intersections that meet the PMA Performance Target
	Type 2 PMA Medium Density Mixed-Use	• 0.90 v/c ratio at System Intersections • >0.75 Typical Urban Travel Speed for Primary Vehicle Corridors	
	Type 3 PMA Residential	• 0.85 v/c ratio at System Intersections • >0.9 Typical Urban Travel Speed for Primary Vehicle Corridors	

Section 5.1. Performance Evaluation: Existing Conditions

This section summarizes the existing conditions (2021) of each mode in the Layered Network relative to the Performance Targets and Performance Management Areas.

Pedestrian Network Performance

Over time, Bellevue intends to ensure that complete and connected sidewalks exist on both sides of every arterial corridor, achieving a pedestrian network system completeness Performance Target of 100%. System completeness is summarized by PMA and citywide in **Table 8**. Pedestrian network performance is summarized in three categories:

- Sidewalk complete on both sides of the arterial;
- Sidewalk complete on one side of the arterial; or
- Sidewalk missing from both sides of the arterial.

Table 8: Existing (2021) Pedestrian Network Performance

Citywide	Sidewalk on Both Sides	Sidewalks on One Side	Sidewalk Gaps
Miles	77	44	17
Proportion	56%	32%	12%

Locations within the PMA		Sidewalk on Both Sides	Sidewalks on One Side	Sidewalk Gaps
Type 1 High Density Mixed-Use	**Downtown**	95%	5%	0%
	BelRed	86%	8%	6%
	Wilburton/ East Main	56%	41%	3%
Type 2 Medium Density Mixed-Use	**Crossroads**	100%	0%	0%
	Eastgate	29%	63%	8%
	Factoria	70%	28%	2%
Type 3 Residential	**Residential**	47%	37%	16%

Citywide, approximately 56% of arterial corridors have sidewalks on both sides of the street, 32% on one side of the street, and 12% lack sidewalks on both sides. In the Crossroads PMA 100% of the arterial corridors have a sidewalk on both sides and thus has achieved the pedestrian network Performance Target. As shown in **Figure 13**, sidewalk gaps are most prevalent along arterials in the Residential PMA (Type 3), particularly in the residential areas of the Eastgate neighborhood, along West Lake Sammamish Parkway and portions of Enatai and Newport Hills. Within the High Density Mixed-Use PMA (Type 1) and Medium Density Mixed-Use (Type 2) Performance Management Areas, sidewalks are generally present on at least one side of the arterial, with some gaps in BelRed and Eastgate. Redevelopment in these areas (BelRed and Eastgate), along with Wilburton, will result in construction of planned new streets, sidewalks, and pedestrian connections that will advance system completeness.

Figure 14 displays the arterials within the mixed-use PMAs that meet or do not meet the City's arterial crossing guidelines. In the Eastgate and Factoria areas, arterials closest to the I-90 corridor tend to meet the guidelines while those farther away have longer distances between designated crossings. Arterial crossings in Downtown, Wilburton/East Main, BelRed, and Crossroads vary by location with the majority of arterials not meeting the arterial crossing guidelines.

Figure 13: Pedestrian Network Performance – Existing

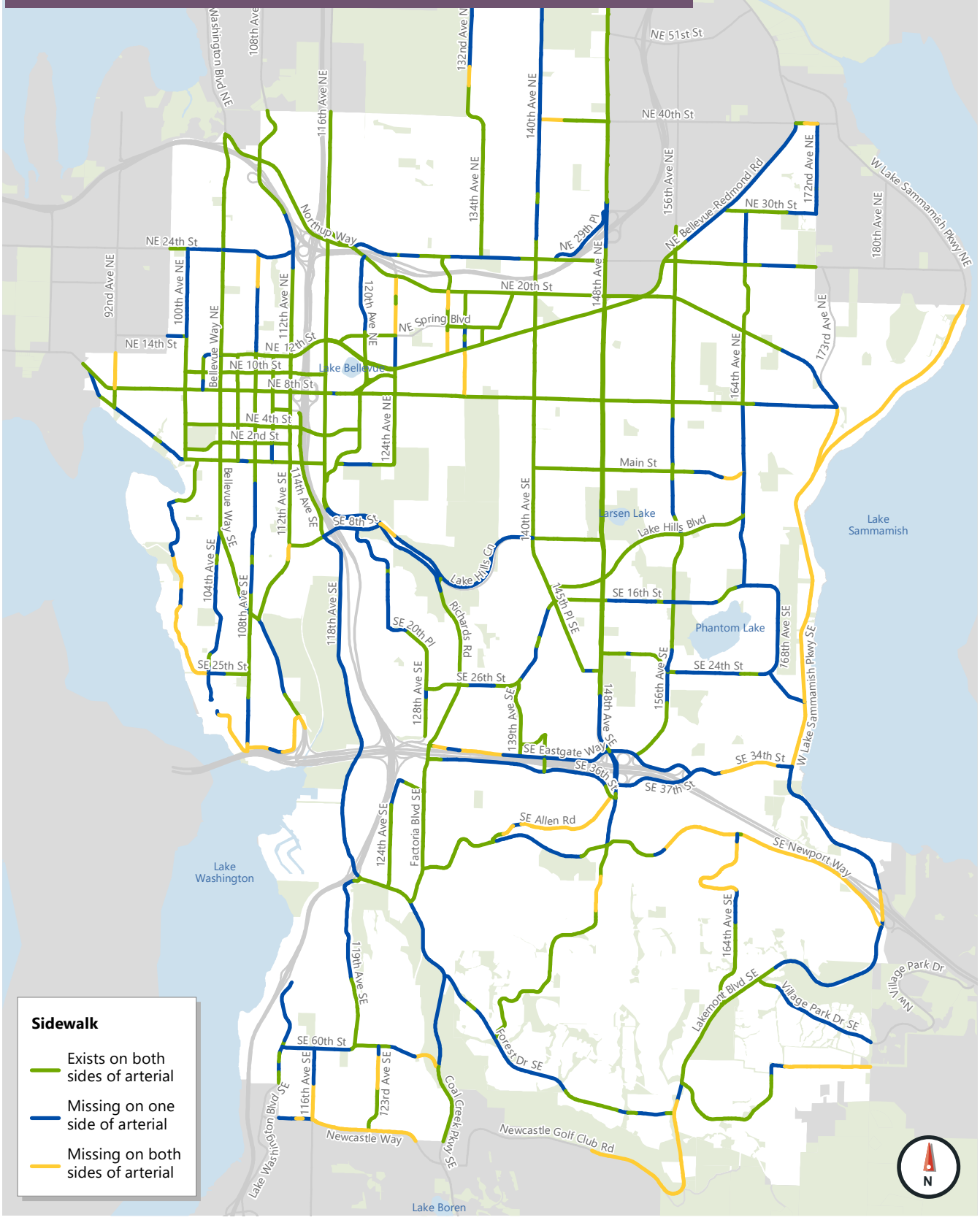
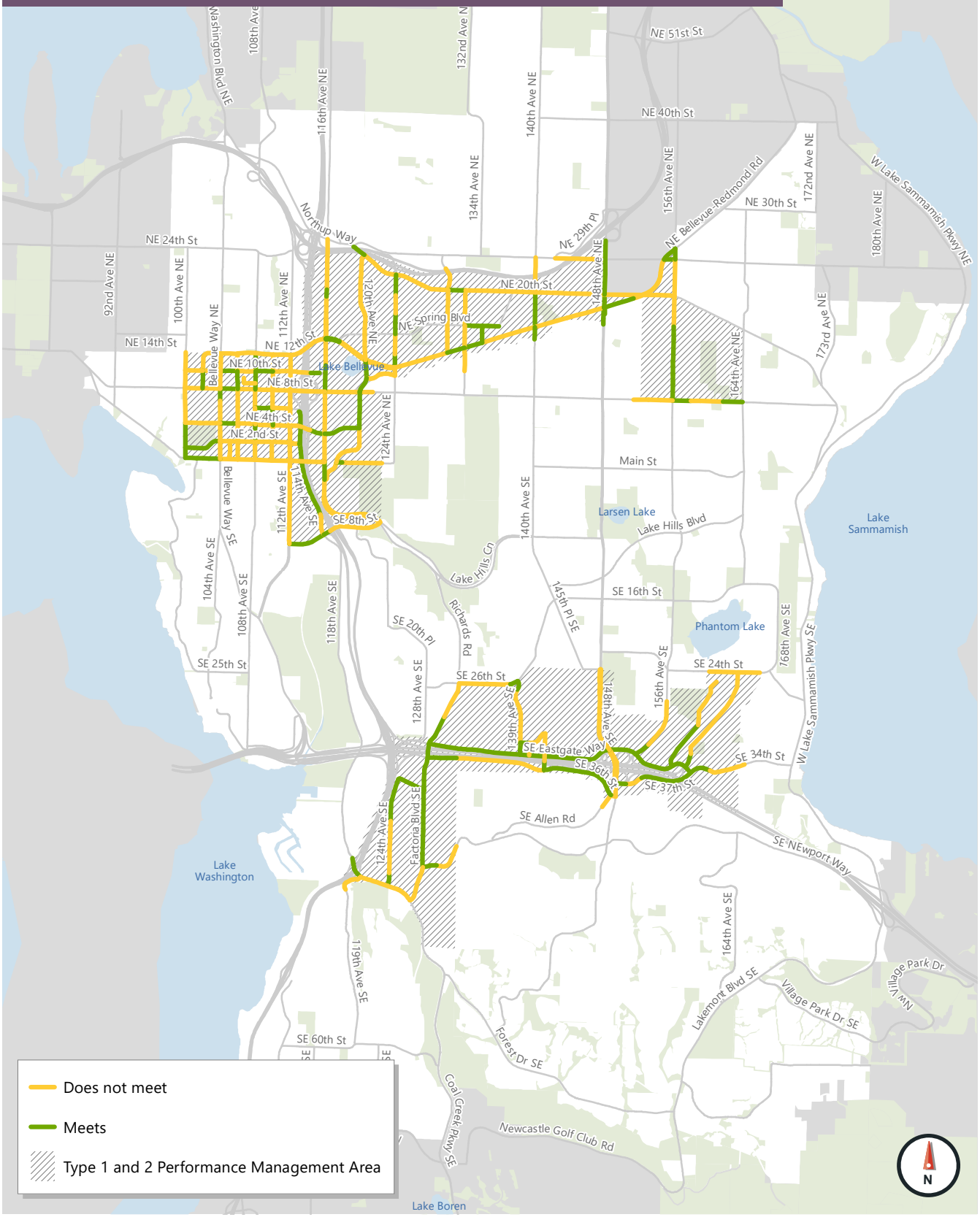


Figure 14: Arterial Crossing Frequency Performance - Existing



Bicycle Network Performance

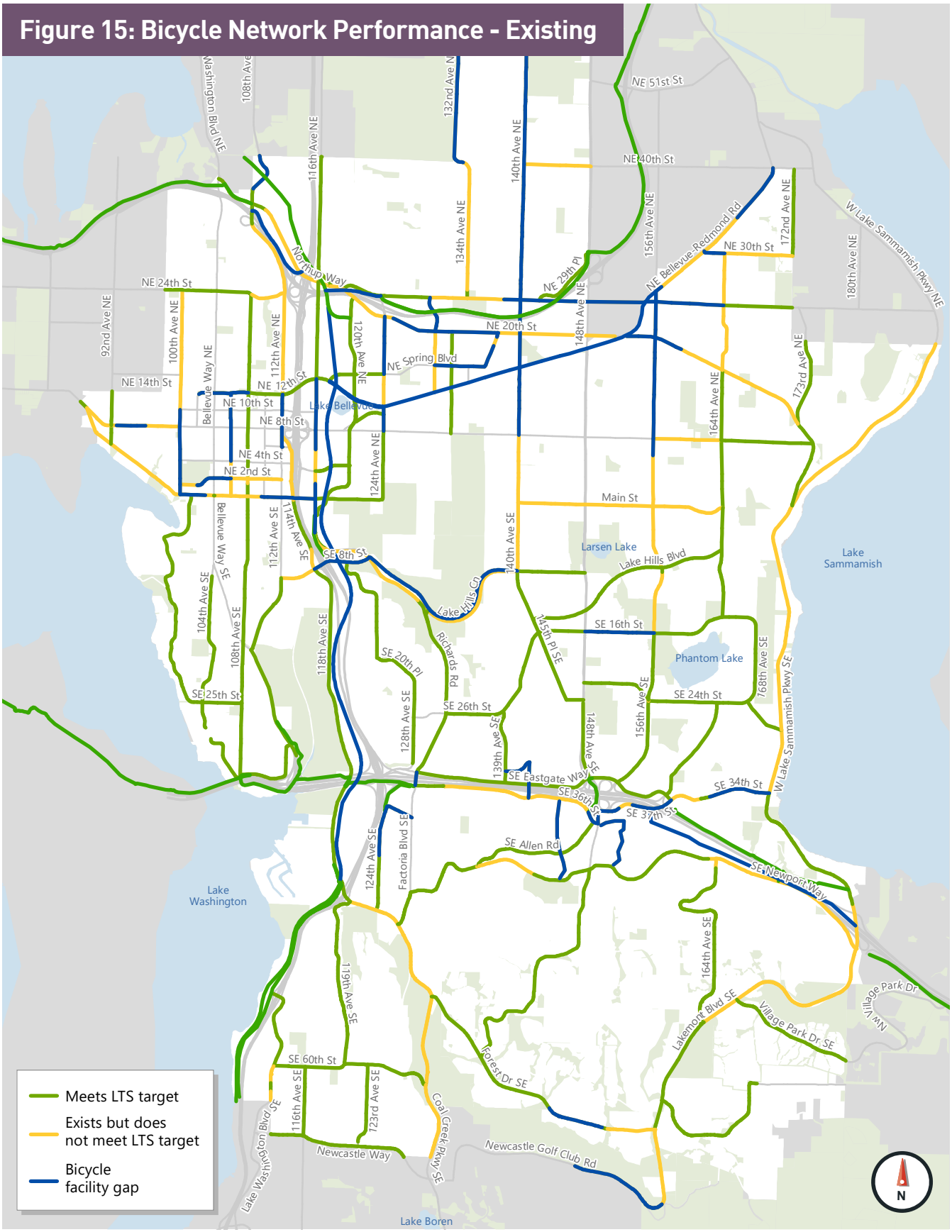
Bellevue is targeting completion of bicycle facilities to meet the intended level-of-traffic stress (LTS) along each network corridor as defined in the Pedestrian and Bicycle Transportation Plan. Existing conditions for bicycle LTS is summarized at two geographic scales: the full bicycle network and the Priority Bicycle Corridors. **Figure 15** displays the performance of each bicycle network corridor with respect to the LTS: a bicycle network facility that meets the intended LTS, a bicycle network facility that does not meet the intended LTS, or a gap in bicycle network facilities. The results are summarized in **Table 9** and **Figure 15**.

Table 9: Existing (2021) Bicycle Network Performance

			Facilities that Meet LTS	Facilities Do Not Meet LTS	Facility Gaps
Citywide	Miles		72	33	33
	Proportion		52%	24%	24%
Performance Management Area	Type 1 High Density Mixed-Use	Downtown	27%	36%	37%
		BelRed	37%	8%	55%
		Wilburton/East Main	47%	14%	38%
	Type 2 Medium Density Mixed-Use	Crossroads	1%	59%	40%
		Eastgate	60%	24%	16%
		Factoria	58%	27%	15%
	Type 3 Residential	Residential	57%	25%	18%
Priority Bicycle Corridor	Enatai-Northtowne		93%	7%	0%
	Lake Washington Loop		65%	25%	10%
	Eastrail		23%	0%	77%
	Somerset-Redmond		62%	17%	21%
	Spiritridge-Sammamish		44%	56%	0%
	West Lake Sammamish Pkwy		25%	75%	0%
	SR 520 Trail		77%	23%	0%
	Downtown-Overlake		41%	10%	49%
	Lake-to-Lake Trail		41%	21%	38%
	Mountains to Sound Greenway		32%	26%	42%
	Coal Creek-Cougar Mountain		55%	39%	6%
	Total		50%	28%	22%

Slightly more than half of the Priority Bicycle Corridors meet the intended LTS, 24% of corridors do not meet the intended LTS, and 24% of corridors lack bicycle facilities.

Figure 15: Bicycle Network Performance - Existing



Transit Network Performance

Bellevue supports public transit as a time-competitive mode compared to private vehicle travel between activity centers. Quantitatively, the Performance Target is a transit travel time ratio of 2.0 or less relative to travel time in a private vehicle during the PM peak hour. Existing transit travel time ratios are displayed in **Figure 16**. Currently (2021), the following transit trip pairs between activity centers meet the transit travel time Performance Target:

- Downtown to Eastgate
- Downtown to Overlake
- Downtown to Crossroads
- Factoria to and from Eastgate

All other transit trip pairs currently have a travel time ratio of over 2.0 which indicates transit may be an unattractive option for many riders for travel between activity centers.

In terms of existing transit stop amenities, only a handful of stops on the frequent transit network (FTN) have all four transit amenities described in Chapter 3, as documented in the Performance Metrics chapter of the MIP. **Figure 17** shows the existing status of transit stop amenities along the FTN. In general, Bellevue will continue to collaborate with transit agencies to improve transit stops. City programs support improving pedestrian access improvements to transit stops.

Figure 16: Transit Network Performance - Existing

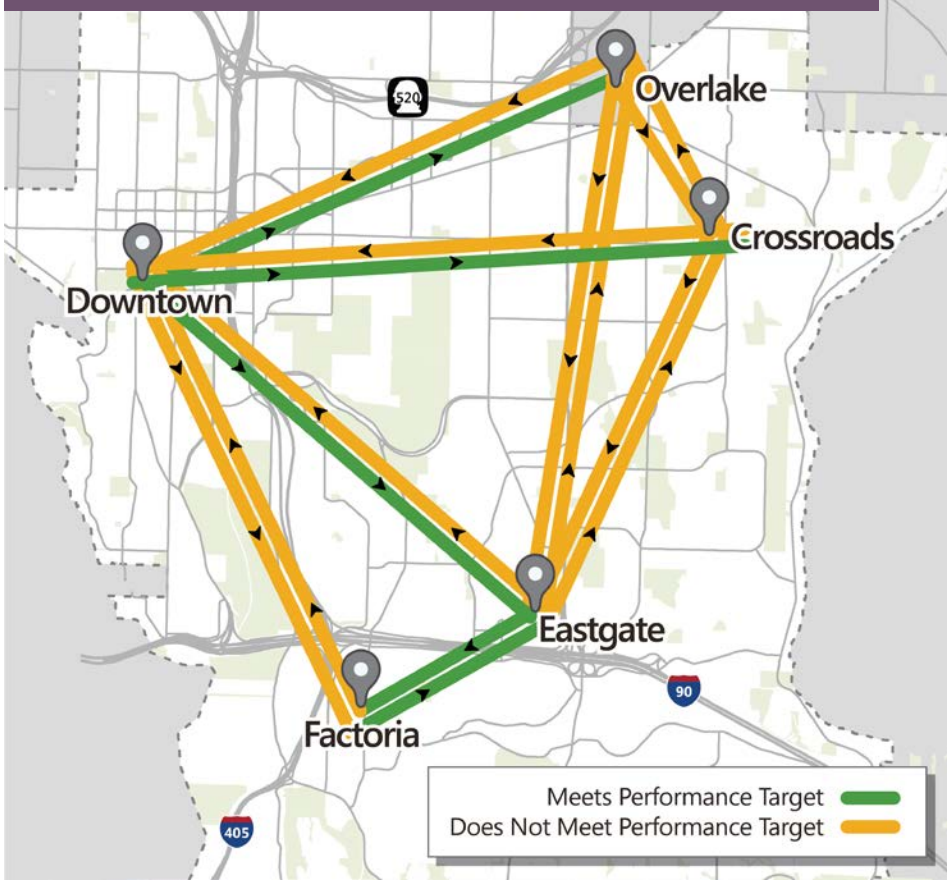
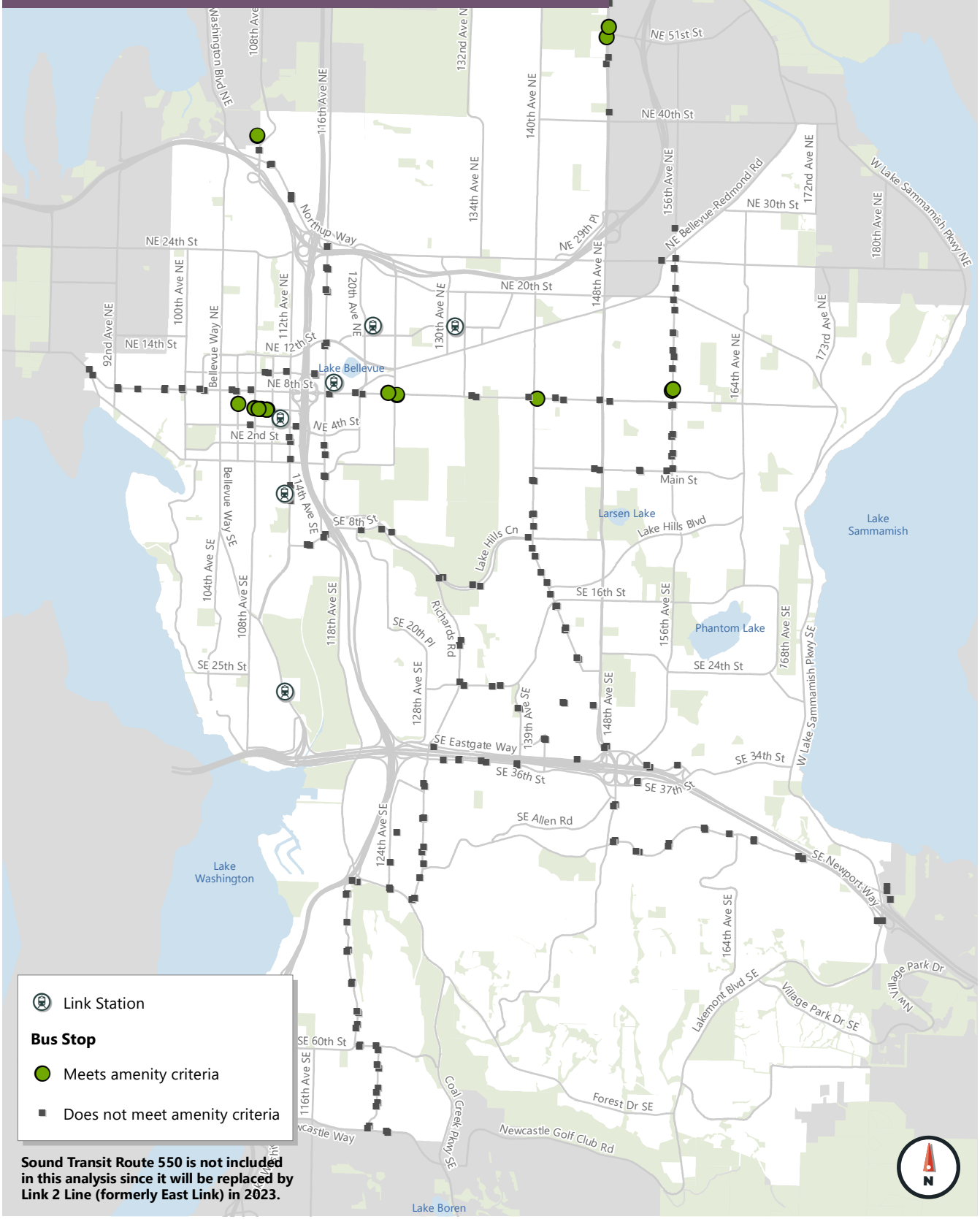


Figure 17: FTN Bus Stop Performance - Existing



Vehicle Network Performance

Vehicle network Performance Targets at System Intersections and along Primary Vehicle Corridors are based on the land use context of the Performance Management Area and availability of other modes. Each System Intersection and Primary Vehicle Corridor is assessed relative to the Performance Targets set for each PMA.

Intersection Volume-to-Capacity (V/C) Ratio

Figure 18 displays each System Intersection and denotes whether it currently meets the MIP Performance Target. The new System Intersections defined in the MIP have not yet been analyzed and are shown in gray. Results will be updated as the City collects data. Most of the System Intersections that do not currently meet the Performance Target are along the 148th Avenue corridor with several others near I-405 and I-90 interchanges.

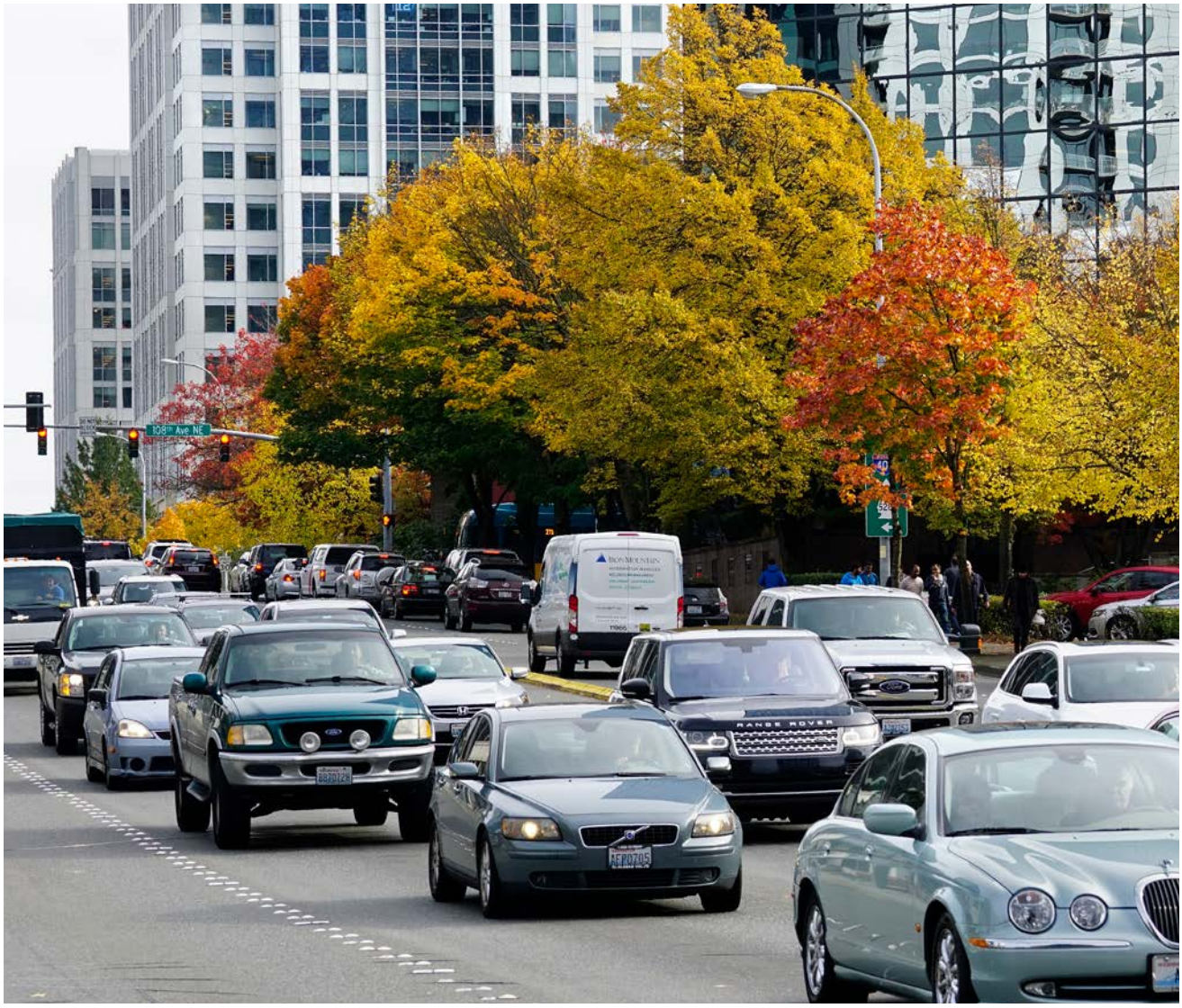
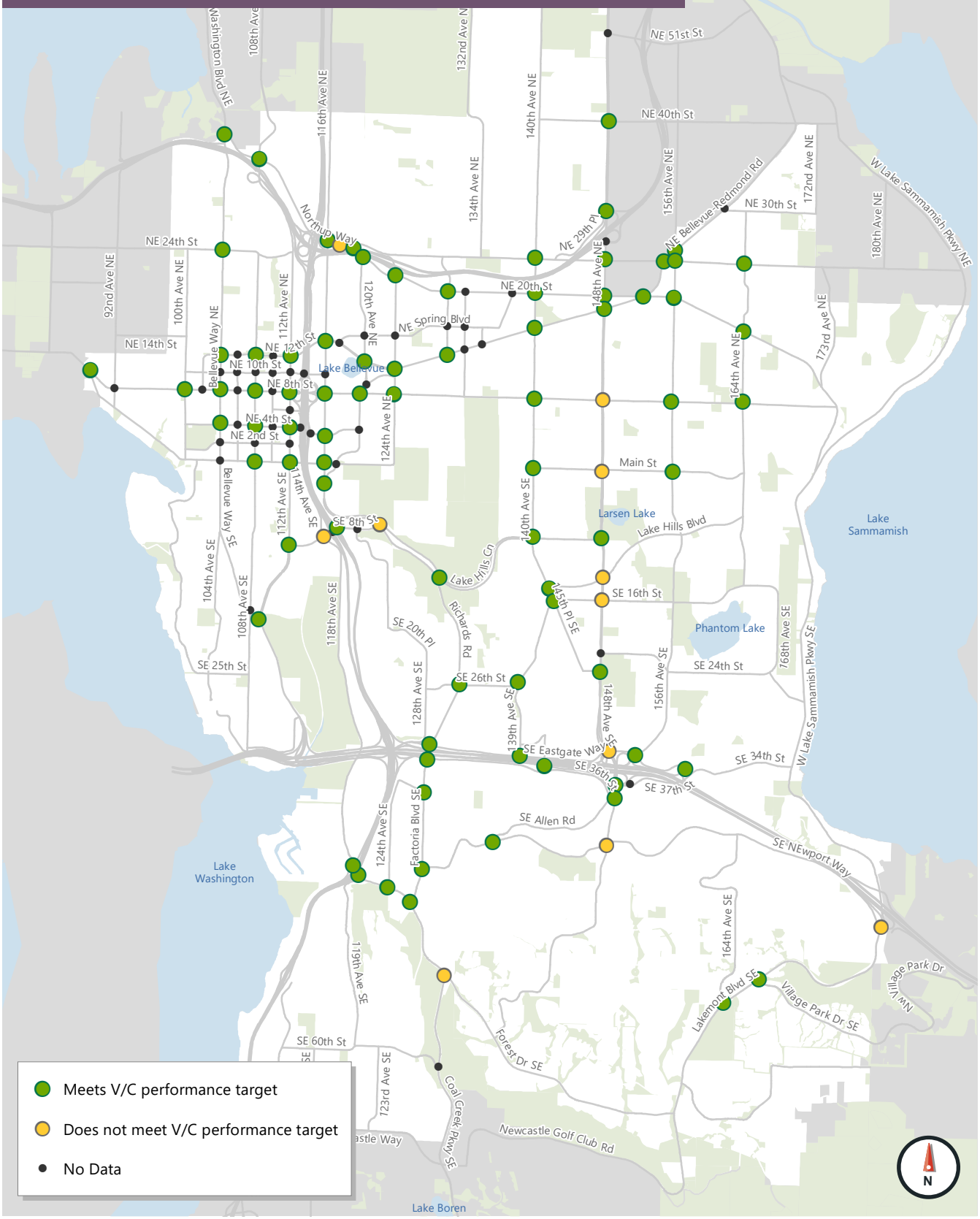


Figure 18: System Intersection Performance - Existing

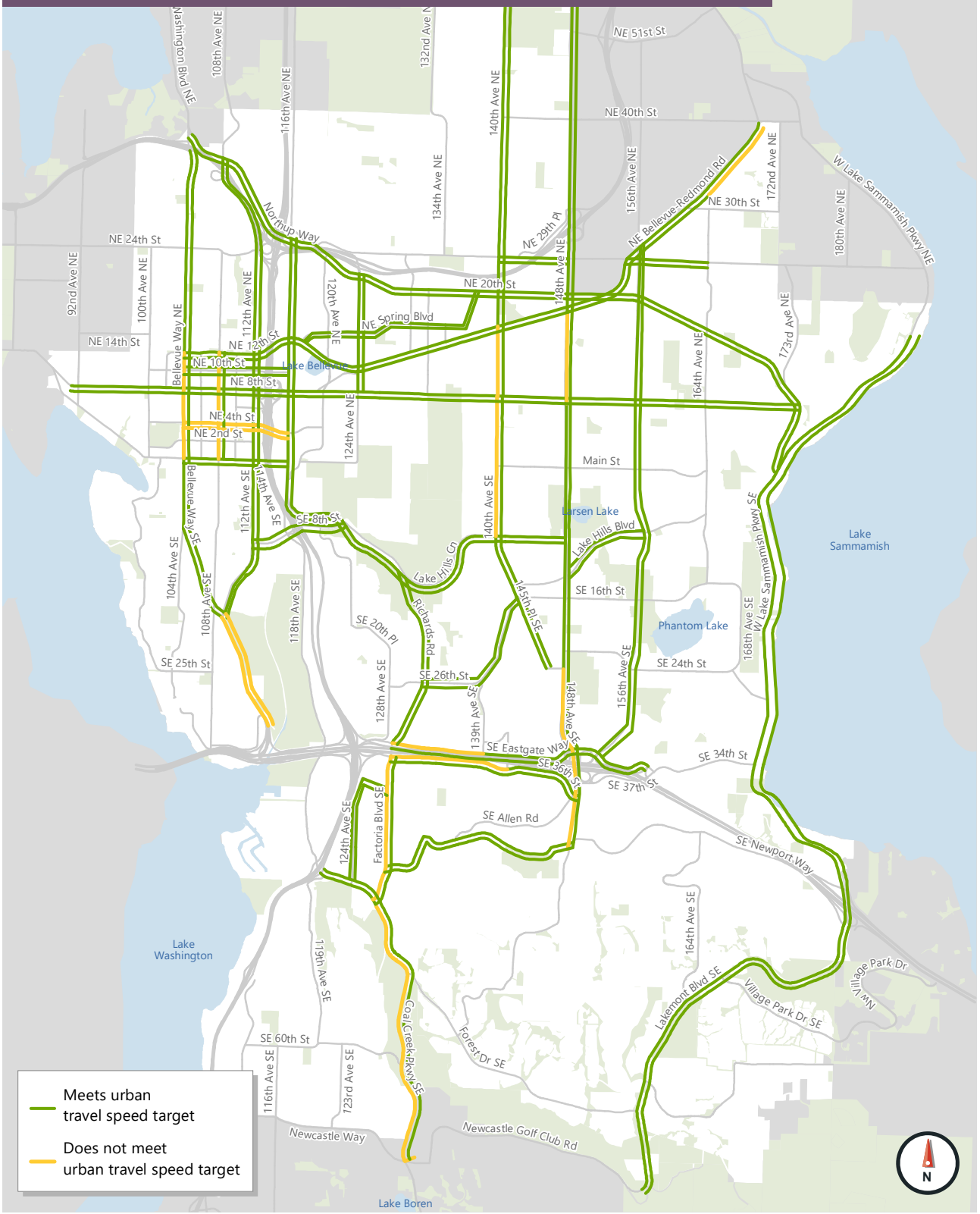


Corridor Travel Speed

The results of the Primary Vehicle Corridor travel speed analysis are shown in **Figure 19**. The corridors that do not meet the corridor travel speed Performance Target are a mix of those within or proximate to the Type 1 and Type 2 Performance Management Areas (Downtown, BelRed, Eastgate, Factoria) and arterial segments that parallel congested freeway corridors (like Coal Creek Parkway).

Appendix A provides the detailed travel speed for each corridor during the PM peak hour.

Figure 19: Primary Vehicle Corridor Performance - Existing



Section 5.2. Performance Evaluation: Future Conditions

Considering how the transportation system is expected to perform in the future is an important factor in weighing what Performance Target gaps to prioritize for project development and implementation. By evaluating expected future conditions, City staff and the Transportation Commission can better understand the implications of the following:

- How land use growth will impact travel patterns at the neighborhood, city, and regional level; the mode choice of new trips; and the overall quantity of new trips.
- Changes to travel patterns and mode choice related to planned transportation investments by the City of Bellevue, neighboring jurisdictions, other agencies, and the private sector.

Over time, travel patterns, the use of the various transportation modes, and the quantity of overall travel will change. Understanding these future conditions while considering current transportation needs is crucial to identifying and prioritizing transportation investments. This section describes the forecast conditions in 2044 assuming the Puget Sound Regional Council growth forecast and the planned transportation investments from the Preliminary 2022-2033 Transportation Facilities Plan (TFP).

This analysis reflects the expected performance of the transportation system in 2033 given the land use forecast for 2044 and could be viewed as a "very high growth" scenario. In general, normal economic cycles will likely result in a slowdown from today's very rapid growth and result in fewer new residents and jobs than is forecast in this scenario. Thus, the results in this section could be viewed as a "stress test" of what Bellevue could look like with continued rapid growth.

Since Bellevue has not previously used the MIP Performance Targets to identify gaps and project concepts, the alignment between the Performance Target gaps, project concepts, and investment priorities would likely be different in the future.

Pedestrian Network Performance

The preliminary 2022-2033 TFP project list includes new pedestrian network facilities—some projects would replace and improve existing facilities and others would fill Performance Target gaps, as shown in **Figure 20**. Roughly 10 miles of new pedestrian network facilities are expected to be constructed along arterials as part of specific 2022-2033 TFP projects. As shown in **Table 8**, roughly 56% of arterials currently have a sidewalk on both sides, 32% have a sidewalk on one side, and 12% have a sidewalk gap. With the TFP projects in place, **Table 10** documents a forecast that 59% of arterials would have a sidewalk on both sides, 33% would have a sidewalk on one side, and 8% would have a sidewalk gap. There is no specific information about how new arterial designated pedestrian crossings (intersections and mid-block locations) would be addressed in the TFP as these are programmatic investments, so no new maps or analyses are prepared.

Figure 20: Pedestrian Network Performance – 2033 TFP

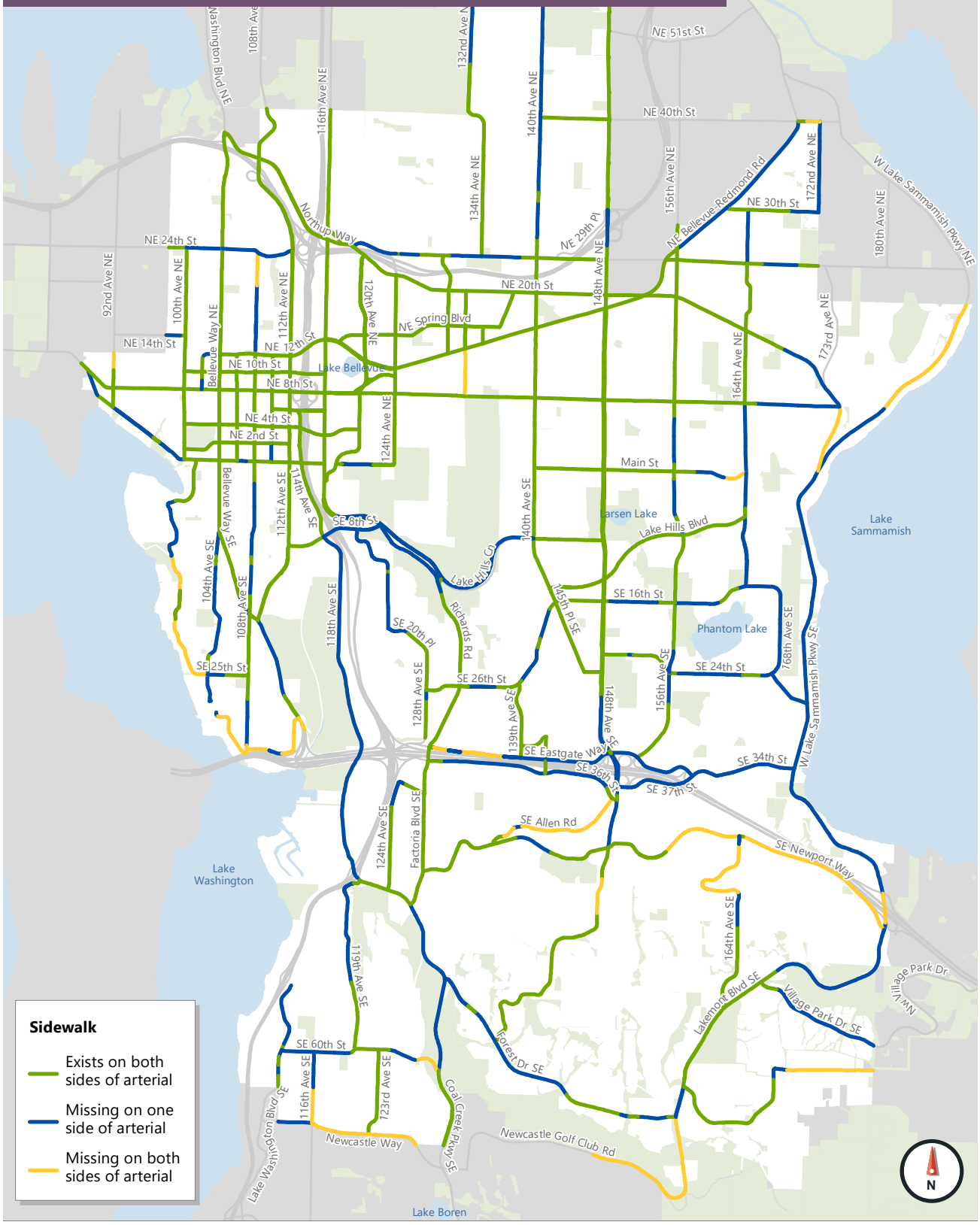


Table 10: 2033 Pedestrian Network Performance

Citywide	Sidewalk on Both Sides	Sidewalks on One Side	Sidewalk Gaps
Miles	82	45	12
Proportion	59%	33%	8%

Locations within the PMA		Sidewalk on Both Sides	Sidewalks on One Side	Sidewalk Gaps
Type 1 High Density Mixed-Use	**Downtown**	95%	5%	0%
	BelRed	98%	1%	1%
	Wilburton/East Main	59%	41%	0%
Type 2 Medium Density Mixed-Use	**Crossroads**	100%	0%	0%
	Eastgate	29%	65%	6%
	Factoria	70%	28%	2%
Type 3 Residential	**Residential**	50%	38%	12%

The TFP also includes a funding reserve for the implementation of priority pedestrian and bicycle projects to be determined by the City's Pedestrian & Bicycle Implementation Initiative and other programs. This funding reserve has potential projects listed within the TFP, but specific projects have not been identified and the specific impact on addressing the pedestrian network Performance Target gaps is not known. However, given the $21 million reserve funding identified in the TFP, substantial progress can be expected to fill the pedestrian network Performance Target gaps. It is worth noting that Bellevue has implemented about three miles of pedestrian facilities per year over the past decade through large-scale multimodal corridor improvement projects and stand-alone sidewalk and pathway projects.

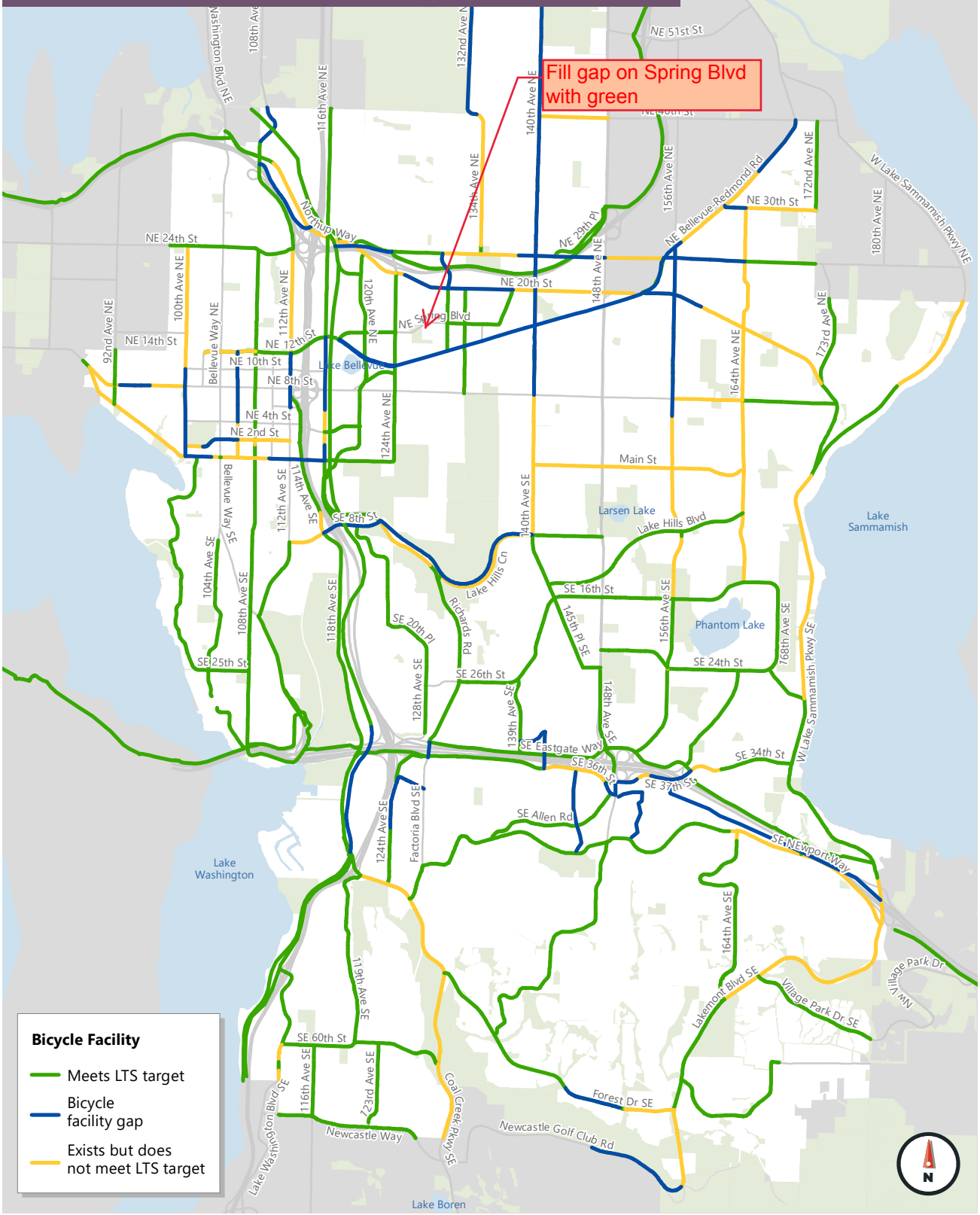
Bicycle Network Performance

As shown in **Table 9**, roughly 52% of Priority Bicycle Corridors currently meet the intended LTS Performance Target, 24% of Priority Bicycle Corridors do not meet the intended LTS Performance Target, and 24% of Priority Bicycle Corridors have a Performance Target gap. The 2022-2033 TFP includes projects that would construct new bicycle network facilities assumed to meet the intended LTS. With those projects in place by 2033, it is expected that roughly 63% of Priority Bicycle Corridors would meet the intended LTS, 19% of Priority Bicycle Corridors would not meet the intended LTS, and 18% of Priority Bicycle Corridors would have a Performance Target gap. The results are shown in **Table 11** and **Figure 21**.

Table 11: 2033 Bicycle Network Performance

			Bicycle Facility Meets LTS Target	Bicycle Facility Does Not Meet LTS Target	Bicycle Facility Gaps
Citywide Network	Miles		87	26	25
	Proportion		63%	19%	18%
Performance Management Area	Type 1 High Density Mixed-Use	Downtown	33%	29%	37%
		BelRed	57%	5%	38%
		Wilburton/ East Main	72%	7%	21%
	Type 2 Medium Density Mixed-Use	Crossroads	1%	59%	40%
		Eastgate	74%	11%	15%
		Factoria	58%	27%	15%
	Type 3 Residential	Residential	66%	20%	14%
Priority Bicycle Corridor	Enatai-Northtowne		98%	2%	0%
	Lake Washington Loop		79%	11%	10%
	Eastrail		83%	0%	17%
	Somerset-Redmond		62%	17%	21%
	Spiritridge-Sammamish		44%	56%	0%
	West Lake Sammamish Pkwy		49%	51%	0%
	SR 520 Trail		77%	23%	0%
	Downtown-Overlake		86%	14%	0%
	Lake-to-Lake Trail		48%	21%	32%
	Mountains to Sound Greenway		48%	11%	42%
	Coal Creek-Cougar Mountain		55%	39%	6%
	Total		64%	23%	13%

Figure 21: Bicycle Network Performance – 2033 TFP



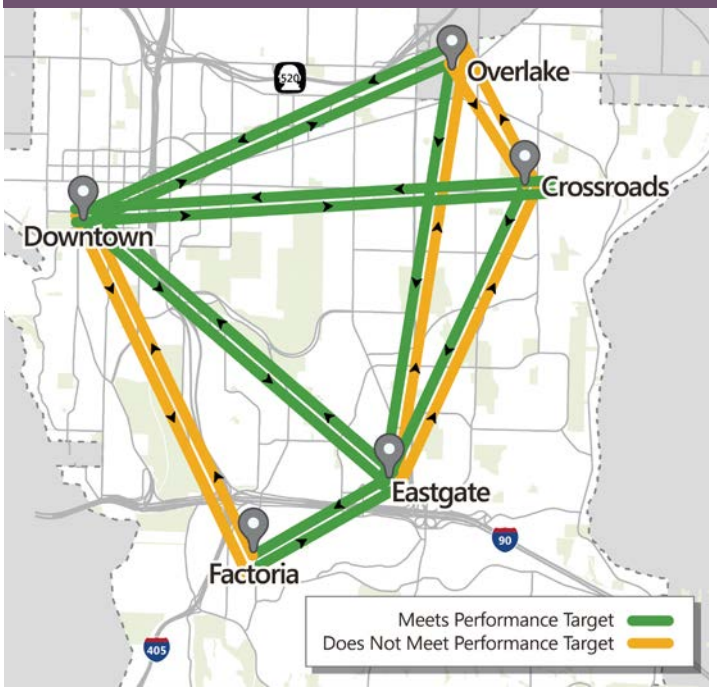
Transit Network Performance

Transit travel time vs. auto travel time was evaluated for 2033 conditions based on forecasted corridor travel times and new operating characteristics for transit between the activity center pairs. Results are shown in **Figure 22**. Specifically, the Link 2 Line (East Link) light rail extension will shorten transit travel time between Downtown and Overlake and the RapidRide K Line bus rapid transit service will shorten transit travel time between Downtown and Eastgate. The TFP also includes the NE 6th Street extension from I-405 to 120th Avenue NE, the Bellevue College Connection, and southbound HOV lanes on a segment of Bellevue Way. These projects would improve transit travel time by providing speed and reliability improvements on existing routes or allowing more efficient routing. These reduced transit travel times were compared to the forecasted auto travel times, with the following findings:

- **Downtown – Overlake:** Transit travel time vs. auto travel time ratio for both directions of travel between Downtown and Overlake would decrease to less than 1.0 indicating that a transit trip travel time is expected to be shorter than an auto trip during the PM peak period. This is a direct benefit of Link light rail investments.
- **Downtown – Crossroads:** The NE 6th Street extension across I-405 to 120th Avenue NE would allow buses to access the Bellevue Transit Center more efficiently by avoiding congestion along NE 8th Street.
- **Eastgate – Downtown, Overlake and Crossroads:** Transit travel time vs auto travel time ratio between Eastgate and Downtown, Overlake, and Crossroads would decrease with the more direct Bellevue College Connection, bringing the travel time ratio below the 2.0 Performance Target on some activity center pairs.

All other activity center pairs would maintain existing transit service characteristics and both buses and autos would experience the same relative change in travel time. Therefore, the transit travel ratio between those activity centers is expected to stay roughly the same as existing conditions.

Figure 22: Transit Network Performance – 2033 TFP with 2044 Land Use



Vehicle Network Performance

The effects of the projected land use growth and continued investment in the transportation system were modeled using the City's travel demand forecasting tool, BKRCast. For this analysis, a 2044 land use growth projection is assumed along with the preliminary 2022-2033 TFP investments and other regional transit and roadway projects. The BKRCast tool provides a forecast for the intersection V/C ratio for each System Intersection and the travel speed/travel time for the Primary Vehicle Corridors.

Intersection Volume-to-Capacity (V/C) Ratio

Figure 23 displays each System Intersection and denotes whether it is projected to meet the Performance Target in 2033. A full table of results is provided in **Appendix B**. Increases in the V/C ratio at System Intersections across the city match the pattern of land use growth, but the ratio increases the most in the fastest growing Type 1 Performance Management Area (Downtown, Wilburton/East Main, and BelRed). Some intersections in the Eastgate portion of the Type 2 PMA have a slightly lower V/C ratio because of TFP projects that add vehicle capacity that would not be fully consumed by growth.

Corridor Travel Speed

As shown in **Figure 24**, the results of the travel speed analysis generally mirror that of the intersection V/C analysis; however, several corridors show degraded travel speed as a result of expected growth in vehicle trips. Corridors that are expected to have degraded travel speed include Bellevue Way near I-90, Richards Road and Eastgate Way near I-90, 148th Avenue SE near I-90, and West Lake Sammamish Parkway.

Figure 23: System Intersection Performance – 2033 TFP with 2044 Land Use

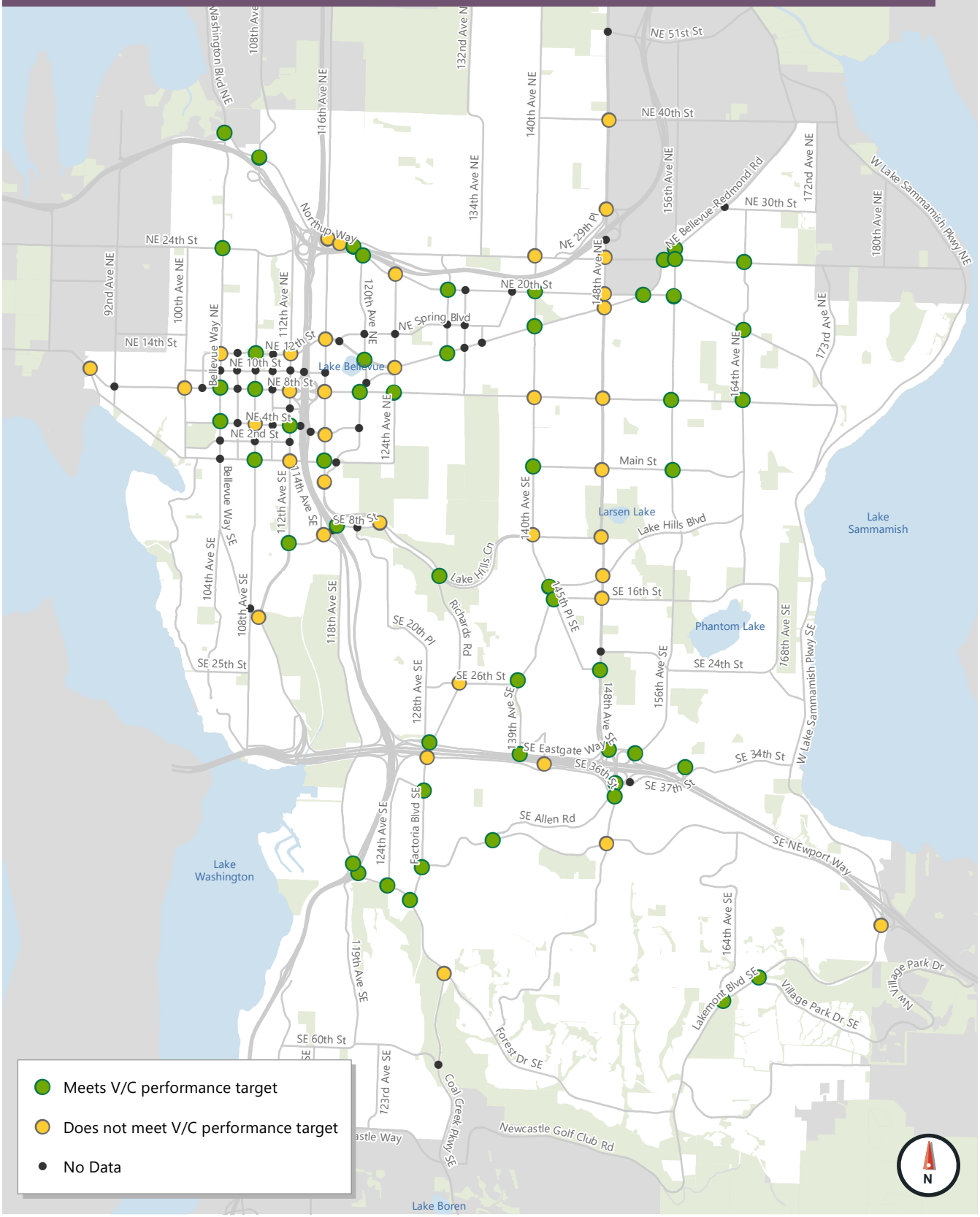
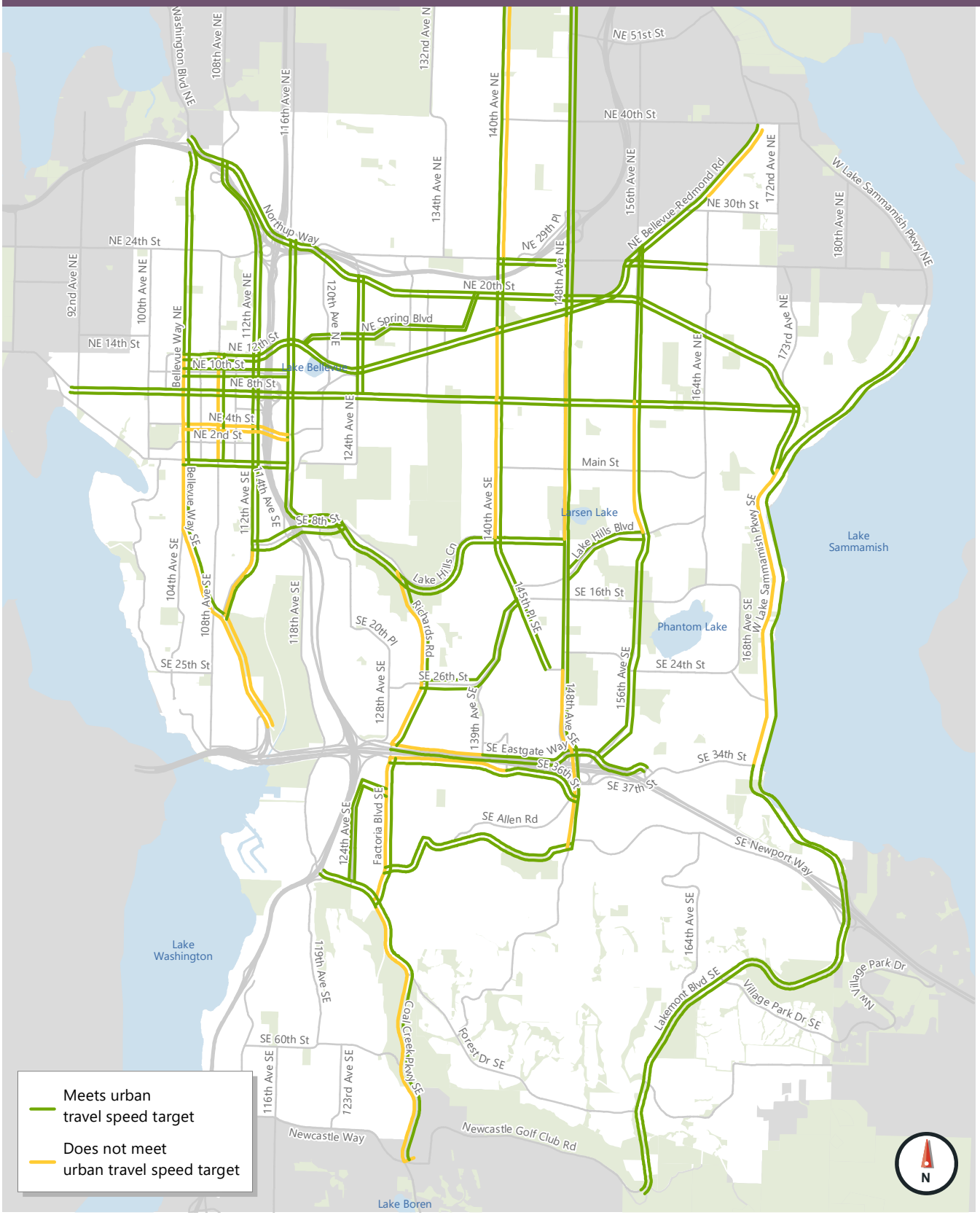


Figure 24: Primary Vehicle Corridor Speed Performance – 2033 TFP with 2044 Land Use



Section 5.3. Monitoring Performance Targets Over Time

As a commitment to provide the community with transparent reporting on how MIP Performance Targets are changing as the City grows, Bellevue will periodically analyze and report on MIP Performance Metrics and related transportation metrics identified in the Environmental Stewardship Plan. Specific metrics may include:

- **Pedestrian**
  - » Percent of arterials with sidewalks on both sides
  - » Percent of arterials with sidewalk on one side
  - » Percent of arterials with a gap in the sidewalk network
  - » Percent of arterials with crossings that meet MMLOS crossing frequency targets
- **Bicycle**
  - » Percent of bicycle network with bicycle facilities that meets intended LTS
  - » Percent of bicycle network that does not meet intended LTS
  - » Percent of Priority Bicycle Corridors with bicycle facilities that meets intended LTS
  - » Percent of Priority Bicycle Corridors with bicycle facilities that does not meet intended LTS
  - » Bicycle network facility gaps – overall network, Priority Bicycle Corridors
- **Transit**
  - » Percent of activity center pairs with transit travel time ratios
  - » Bus stops with intended passenger amenities
- Vehicle
  - » Percent of Primary Vehicle Corridor network that meets corridor travel speed Performance Target
  - » Percent of System Intersections that meet V/C Performance Target
- **Commute mode share** – residents
- **Commute mode share** – workers
- **Per capita VMT**
- **Pedestrian and bike counts**

In addition to proving general information on the performance of the transportation system, the analysis of Performance Metrics and Targets will be valuable to inform updates to the Transportation Facilities Plan, which is a key component of how Bellevue's transportation system is implemented, as described in the next chapter.

chapter

06

Project Identification & Prioritization

The Mobility Implementation Plan identifies how Bellevue measures the performance of the transportation system, the geographic areas where performance is summarized, the Performance Targets for each mode that define when the system may need an investment to accommodate growth, and a snapshot of existing and future conditions when viewed through the lens of the Performance Targets.

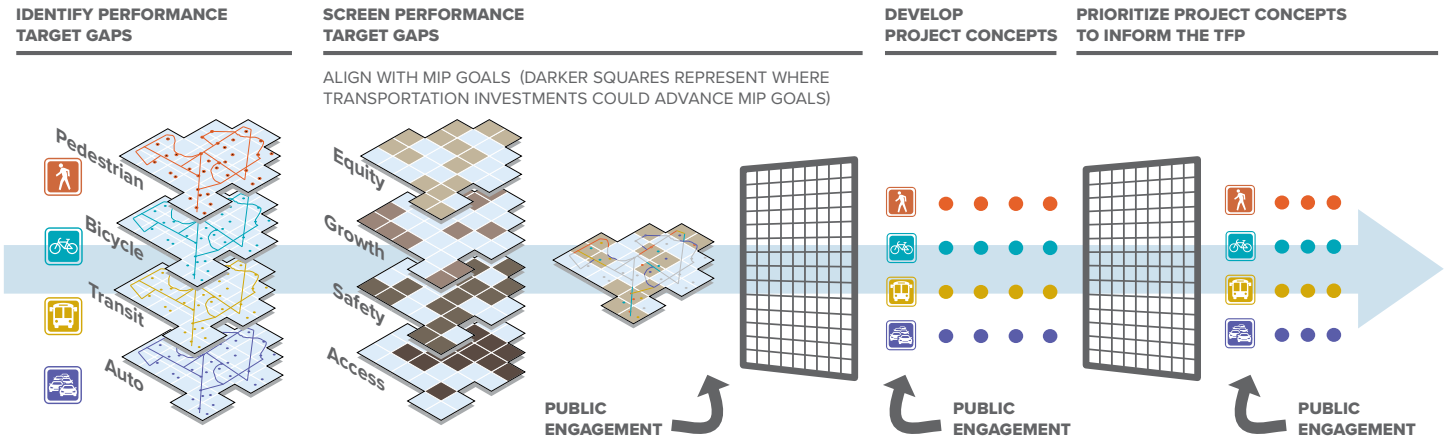
Based on this analytical approach, this chapter identifies how the City will address Performance Target gaps. In an ideal world, Bellevue would quickly address all the Performance Target gaps so that all travelers could easily and safely get around the city in the mode of their choice in a manner that meets their expectations. However, financial, land use, and environmental constraints, and potential conflicts between modes and with other city goals limit the types of investments the City may choose to pursue. Additionally, factors such as livability, urban form, and right-of-way must be taken into consideration as the City makes choices to invest its limited transportation funding.

While identifying Performance Target gaps is a critical first step, advancing a project concept into project design, funding, and implementation requires additional analysis and outreach. This chapter describes a Project Identification and Prioritization framework that City staff and the Transportation Commission will use to narrow the identified Performance Target gaps to those that are most urgent, identify when to seek public input, and align transportation investments with community goals. The framework creates a consistent and transparent process to identify, evaluate, develop/design, and advance transportation projects that address the Performance Target gaps. Objectives of this framework are to provide:

- Consistency to ensure the process uses readily available data and can be repeated,
- Transparency to ensure clear and understandable decision making, and
- Evaluation tools to assist the City to select projects that may be implemented within available funding while balancing environmental targets and other community considerations.

The framework depicted graphically in **Figure 25** uses the MIP goals of designing for safety, advancing equity, supporting growth, and aligning transportation investments with access and mobility needs. It defines a decision-making approach that will advance Bellevue's mobility objectives.

Figure 25: Project Identification and Prioritization Framework



The framework outlines a transparent, data-driven, four-step process. Each step is introduced in the chart below and further described in this chapter.

Step 1	Step 2	Step 3	Step 4
Identify Performance Target Gaps	**Screen Performance Target Gaps**	**Develop Project Concepts**	**Screen for Funding and Implementation**
Identify where the documented performance of the transportation system does not meet the defined Performance Targets.	Screen Performance Target gaps for alignment with MIP goals and determine appropriateness to move forward to develop project concepts that address Performance Target gaps.	Develop project concepts to address Performance Target gaps that align with MIP goals. Factors such as environmental sustainability, equity, and livability are considered.	Inform the development of the TFP by considering the outcomes of the prior steps: clearly identifying Performance Target gaps, screening the Performance Target gaps based on MIP goals, and developing a set of potential projects that can be incorporated into the TFP.

Step 1: Identify Performance Target Gaps

Purpose

Identify where the documented performance of the transportation system does not meet the Performance Targets. Performance Targets reflect the quality of the user's experience for each mode.

Step 1 begins with an assessment of each modal network (pedestrian, bicycle, transit, vehicle) to identify where the Performance Targets are not met. The MIP defines Performance Target gaps for each mode as follows:

- **Pedestrian**: Arterial segments that are missing a sidewalk, particularly where sidewalks are missing on both sides of the street; arterial segments that do not have a designated pedestrian crossing as warranted by pedestrian destinations.
- **Bicycle**: Segments and intersections on the bicycle network that do not meet the Level of Traffic Stress (LTS) Performance Target.
- **Transit**: Frequent transit network routes between activity center pairs where riding a bus would take more than 2.0 times longer than driving a car; frequent transit network bus stops that do not provide the intended passenger amenities at stops or stations.
- **Vehicle**: System Intersections where the volume-to-capacity (V/C) ratio exceeds the Performance Target; segments of the Primary Vehicle Corridors where travel is slower than the Performance Target.

The segments of the multimodal transportation network that do not meet the Performance Targets will be documented by the City under existing and future conditions to inform Transportation Facilities Plan (TFP) update. See **Appendix C** for the list of existing and future Performance Target gaps.

Outcome

The outcome of Step 1 is a map and list of network Performance Target gaps by mode.

Step 2: Screen Performance Target Gaps

Purpose

Screen Performance Target gaps for alignment with MIP goals and determine appropriateness to move forward to develop project concepts that address Performance Target gaps.

A list and map of Performance Target gaps are generated by the MIP Performance Target assessment. To narrow this list of gaps, it is important to clearly identify a subset of gaps that warrant project concept development.

The screening process includes three sub-steps: **1)** Determine if the Performance Target gap aligns with the MIP goals, **2)** Engage the Transportation Commission and the public to ensure that MIP goals are accurately reflected in the data, and **3)** Screen the Performance Target gap for further project concept development if it passes through the first two parts of this process. The steps are further described below.

Performance Target gaps that do not pass this screening step are acknowledged and a reason for not advancing the gap to project concept development is documented. A Performance Target gap that is not addressed may be reconsidered when Performance Targets are reevaluated, which is anticipated to occur in advance of TFP updates. Specific administrative and procedural details of this screening process will be finalized as the program is established.

Step 2.1: Assess Performance Target Gaps against MIP

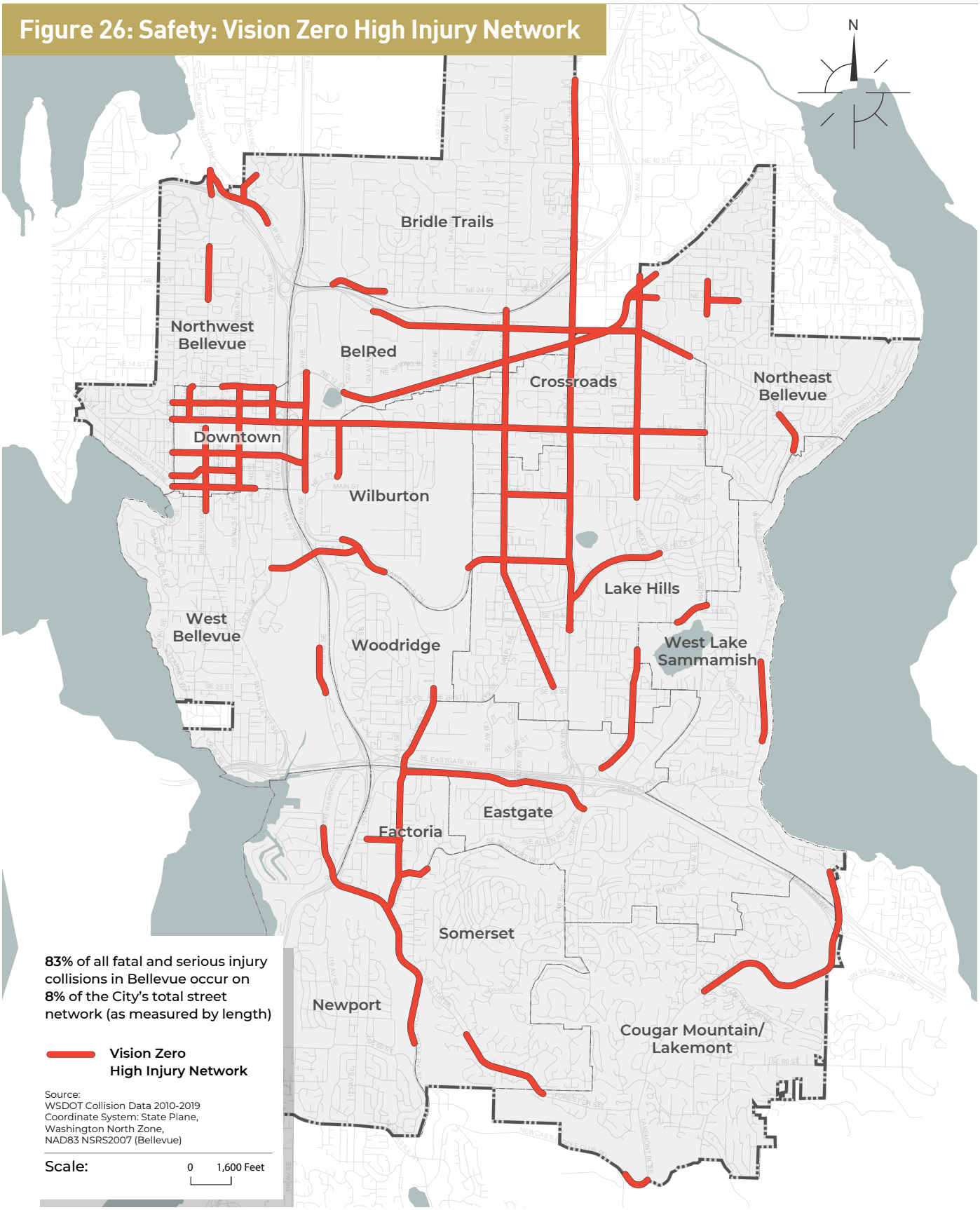
Spatial representation, through GIS-based mapping, is used to assess how well network Performance Target gaps align with MIP goals of safety, equity, supporting growth, and enhancing access/mobility. Each MIP goal has data that can be reviewed to identify where transportation investments could best advance the desired outcome. These "areas of need" may be used to screen Performance Target gaps, identify and design project concepts, and prioritize investments. They can be used alone or in combination to focus on addressing Performance Target gaps that advance multiple MIP goals.

Goal: Safety

Focusing on safety as a screening tool ensures alignment with Bellevue's Vision Zero goals. The City continuously analyzes traffic collision data to identify the portions of Bellevue's arterial network that have the highest proportion of fatal and serious injury crashes.

These high-crash locations are known as the High Injury Network and are shown on **Figure 26**. Proximity to the High Injury Network may be considered when prioritizing Performance Target gaps since a single investment may be able to add travel capacity and address a transportation safety issue.

Figure 26: Safety: Vision Zero High Injury Network



Goal: Equity

The MIP integrates an equity lens into Bellevue's transportation planning and prioritization of projects. A transportation equity evaluation documents where people with transportation and mobility challenges live and work and where there may be an opportunity to build projects that enhance mobility and address specific access needs. The transportation equity evaluation includes traditionally underserved or transportation-disadvantaged population groups. **Table 12** summarizes the components, which are presented in alphabetical order and are not in order of priority.

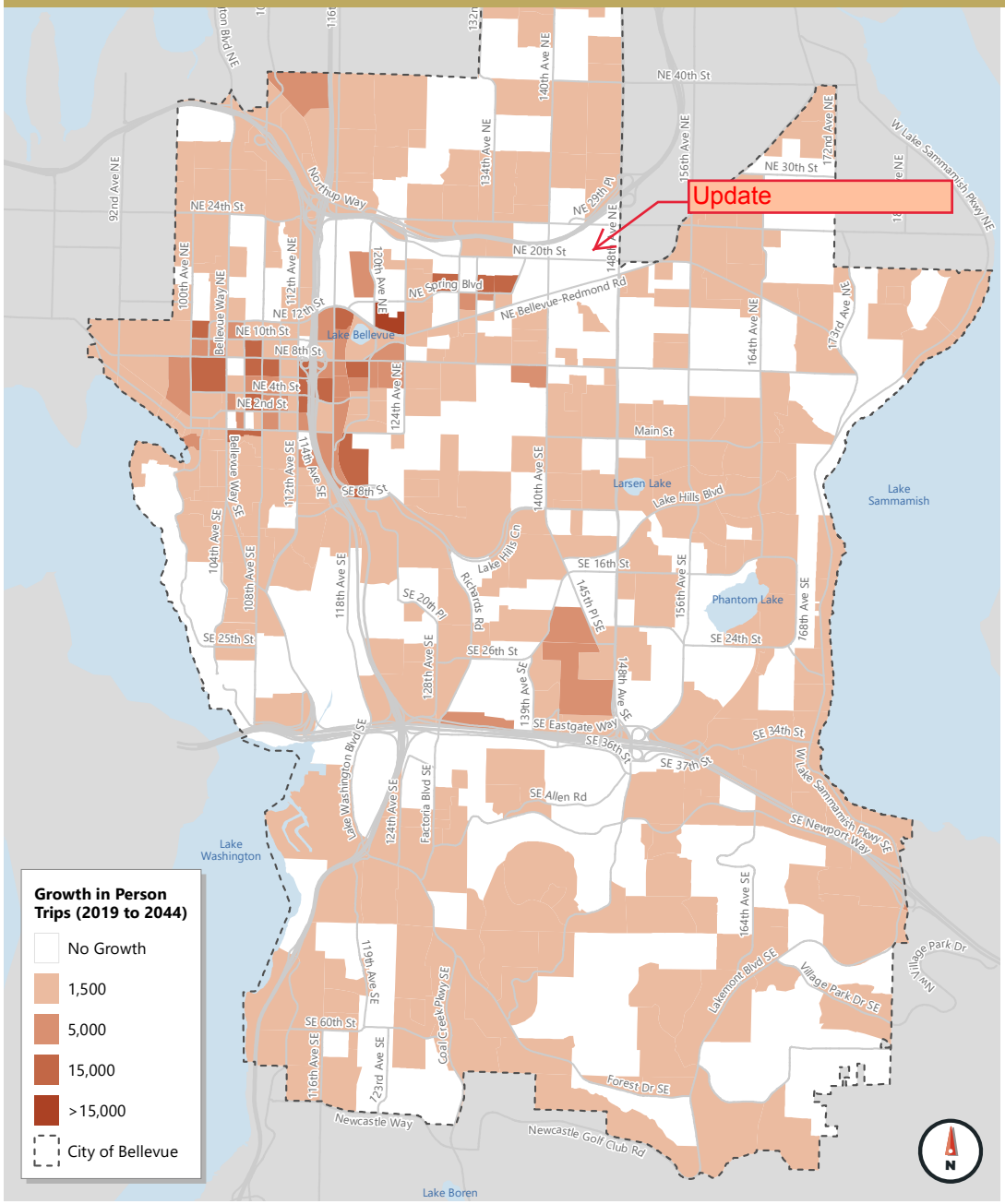
Table 12: Equity Evaluation Components

Equity Index Component	Relationship to Transportation
Housing costs as percentage of income (renter-occupied)	People who are "housing cost burdened" tend to have less income to spend on transportation (even if they are not classified as low-income) and therefore tend to drive less and rely more on other modes.
Limited English proficiency households	Limited English proficiency households (even when controlling for income) tend to travel more by walking, biking and transit.
Low-income households	Lower income households tend to drive less as the cost of operating a vehicle presents a substantial burden; this group tends to walk, bicycle, and use transit more than higher-income households.
Low-wage jobs (based on job location)	People with low-wage jobs tend to rely more on walking, biking, and transit to reach their job since the cost of driving and parking can consume a substantial proportion of their wages.
People of color	Across the country, people of color (even when controlling for income), tend to travel more by walking, biking, and transit.
People over age 64	Older people may require additional accommodations (e.g., longer pedestrian phases at intersections) and tend to drive less than other populations.
People under age 18	16-18 year-olds tend to drive at a lower rate than other groups and use other modes more often.
People with a disability	People with a disability may require additional or specific accommodations (e.g., audible pedestrian signals or curb ramps) and tend to drive less than other populations.
Single-parent households	Single-parent households tend to have less income to spend on transportation and also tend to be more schedule constrained. These households may still own a car, but drive less to save money.
Zero-vehicle households	These households do not have regular access to a private vehicle.

Goal: Growth

A focus of the MIP is to prioritize transportation investments that support growing travel demands from new development. When evaluating Performance Target gaps for the vehicle mode in the PM peak period, growth is summarized as the projected growth in vehicle trips and the impact of those trips added to the System Intersections and along Priority Vehicle Corridors. Greater expected demand from planned land use is particularly important when evaluating Performance Target gaps for pedestrian, bicycle, and transit modes to help determine where project concepts will address the greatest need and result in the greatest utilization. **Figure 27** shows the areas of the city that are expected to grow the most by 2044.

Figure 27: Growth: Forecast Growth in Population and Employment 2019 to 2044

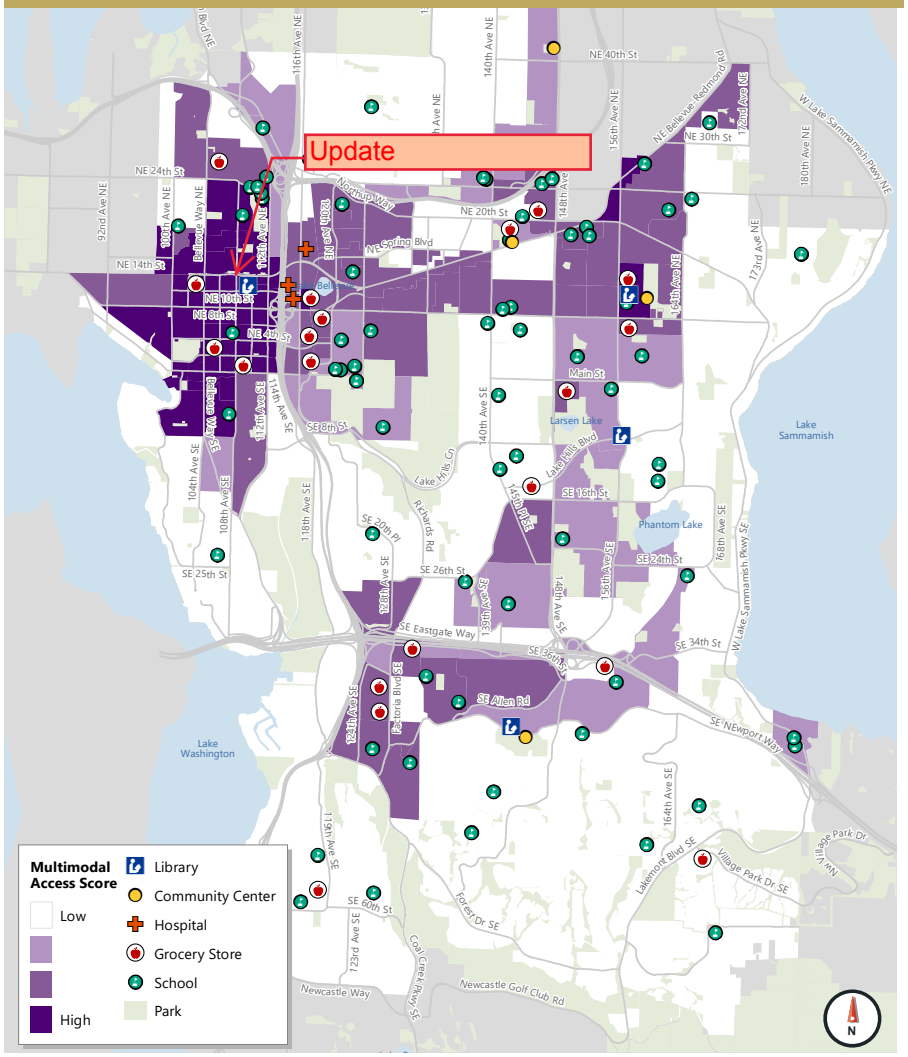


Goal: Access and Mobility

The access and mobility goal combines the evaluation of land use destinations and overall land use mix and intensity to help inform the mobility needs. Areas with high access include dense, mixed-use locations where pedestrian, bicycle and transit modes may substitute for a short vehicle trip. Specific land uses that may be included in the access and mobility evaluation include schools, certain types of parks, libraries, community centers, hospitals, and grocery stores.

Figure 28 shows the PMAs stratified by future land use density and mixed-uses. Existing destinations that nearly all people access and have important mobility considerations are also shown in the figure. The access and mobility data are most relevant for screening pedestrian, bicycle, and transit Performance Target gaps. Areas with high access and mobility concentrations could be used to screen for the highest-priority pedestrian, bicycle, and transit Performance Target gaps to advance to project concept development. The access and mobility data may be less relevant for screening vehicle Performance Target gaps, but multimodal alternatives are more viable to address vehicle congestion in areas with high access, as is described in Step 3.

Figure 28: Access and Mobility Score: Land Use Areas and Destinations



Step 2.2 Engage the Public

Public engagement, including the discussions and deliberations of the Transportation Commission, is critical in this stage to confirm Performance Target gaps and to understand local transportation needs. Questions the community may consider include the following:

- Relative to other Performance Target gaps, what are the Performance Target gaps you are most interested having the City invest in?
- Relative to the goals of the MIP, are there other transportation needs that are not being considered when Performance Target gaps are being screened?

Step 2.3 Screen Performance Target Gaps

To screen Performance Target gaps, staff will review the data on where investments could advance MIP goals and and also review public feedback to determine whether the Performance Target gap warrants further investigation to be considered for project development. The Performance Target gaps that will not have a project concept developed will be documented so that they can be considered in the future as projects are completed and priorities are reconsidered.

Questions to consider during screening include the following:

- Does the Performance Target gap overlap with an area of need to advance multiple MIP goals?
- If the Performance Target gap is not being evaluated to develop a project concept, why?
- Are there impacts outside of transportation if a project concept is not being developed at this time?

Outcome

The outcome of Step 2 is a narrowed-down list of network Performance Target gaps for which project concepts would be developed.

Step 3: Develop Project Concepts

Purpose

Develop project concepts to address Performance Target gaps that most align with MIP goals, community input, environmental targets, and other City goals.

Following the Performance Target gap screening in Step 2, the Performance Target gaps in the top tier (i.e., those that most align with MIP goals) are evaluated to identify project concepts. The project concept development step is consistent with existing City programs that consider existing design standards, existing and future travel needs, environmental constraints, and overall costs. The MIP enhances the project concept development process by bringing forward new data sources for consideration, specifically the identification of Performance Target gaps for all modes and reviewing those gaps in the context of the MIP goals.

Project concept development is often an iterative process; therefore, a second round of public engagement is also critical to this stage. Questions to consider during engagement include the following:

- Does the project concept address the Performance Target gap effectively?
- Is the project concept consistent with Bellevue's environmental and land use goals?
- Is the project concept consistent with the MIP goals of safety, equity, supporting growth, and improving access/mobility?
- Can the project concept be incorporated as part of other investments (e.g., implement a bicycle facility with a utility project, or build an arterial crossing when a new school is constructed)?
- Are there secondary positive benefits or adverse impacts of the project concept on other modes (e.g., a wider intersection that would increase vehicle capacity but make it harder or less safe to walk across the street, or a transit travel time project that would also reduce vehicle delay)?
- Is there a better or alternative way to address the Performance Target gap by providing a project for an alternative mode or travel route? Are there programmatic interventions that could address the gap at a lower cost or with better effectiveness than a capital project?
- Is the project concept in alignment with input and feedback from the community?
- What other community considerations could influence the project concept?

Outcome

The outcome of Step 3 is a list of project concepts that address Performance Target gaps, achieve MIP goals, are consistent with community feedback, are environmentally sustainable, are implementable, and can be incorporated into future funding decisions and planning projects.

Step 4: Screen Project Concepts for Implementation

Purpose

Inform the development of the Transportation Facilities Plan (TFP) by considering the outcomes of the prior steps: clearly identifying Performance Target gaps, screening the Performance Target gaps based on MIP goals, and developing a set of potential projects that can be incorporated into the TFP.

Bellevue has an established process to allocate funding for transportation projects and programs. This process is the periodic update of the City's Transportation Facilities Plan (TFP).

The data in the MIP enhances the TFP update process by providing more contextual information to select the project concepts to advance to funding and that will be included in the final list of approved TFP projects. For example, equity screening could elevate the priority of a bicycle network Performance Target gap project that connects to Crossroads. The MIP data demonstrate the area's lower income, high proportion of zero-car households, high proportion of low-English proficiency households, and high bicycle commuting mode share. As another example, providing partnership funding to WSDOT to implement the South Downtown I-405 access improvements could be a priority given the cluster of intersection V/C Performance Target gaps around the existing I-405 interchanges in Downtown.

A third round of public engagement is embedded in the TFP update to confirm that project concepts align with community feedback.

In addition to using MIP data to inform the update of the TFP, Bellevue would continue to work with private developers to implement mobility improvements and to address off-site impacts, as approprate. The Performance Metrics and Performance Targets will help to ensure these private contributions to Bellevue's transportation network are also in alighnment with the public investements identified in the TFP.

Outcome

The outcome of Step 4 is the TFP project list that has been informed by Performance Target gaps, MIP goals, and additional public feedback.

Summary

The transparent, data-driven Project Identification and Prioritization framework in the Mobility Implementation Plan will help Bellevue identify the Performance Target gaps that should be prioritized for project concept development and funding. The screening of Performance Target gaps is centered around the MIP goals of improving the transportation system in a way that is safe, equitable, supports planned growth, and considers the access and mobility context of adjacent land uses. Public engagement is included at key steps of the framework to understand community sentiment, ensure project concepts support City goals, and confirm that project concepts align with community feedback.

chapter

07

Transportation Concurrency

Transportation Concurrency is a fundamental concept embedded in the Washington State Growth Management Act (GMA). The State Legislature passed the GMA in 1990 to address a perceived misalignment between rapid land use growth and the lack of transportation investments that are needed to support the new growth. Concurrency requires cities and counties to define a specific level of transportation investment or performance at a given level of growth and to ensure that the transportation improvements are funded and built concurrently with new development.

The Mobility Implementation Plan (MIP) introduces a multimodal approach to transportation concurrency that aligns with Comprehensive Plan transportation and land use policies and the Complete Streets ordinance. In particular, Bellevue's new transportation concurrency approach provides a fiscally and environmentally sustainable approach to support planned land use growth in a way that is consistent with the City's policy direction to implement a multimodal transportation system. Furthermore, the multimodal concurrency approach allows for transportation project concepts to be developed that address Performance Target gaps for all modes because the concurrency standard is mode-neutral. A multimodal approach is foundational to livability, sustainability and equitable access across Bellevue.

Multimodal Concurrency

A modern transportation concurrency approach for Bellevue incorporates all the elements of the MIP to identify and implement a multimodal transportation network that supports growth. Informed by Transportation Commission study sessions from 2014 through 2021 and based on the policy direction in the Comprehensive Plan, Bellevue has adopted a "system completeness" approach to multimodal concurrency that requires the "supply" of transportation should equal or exceed the "demand" for transportation.

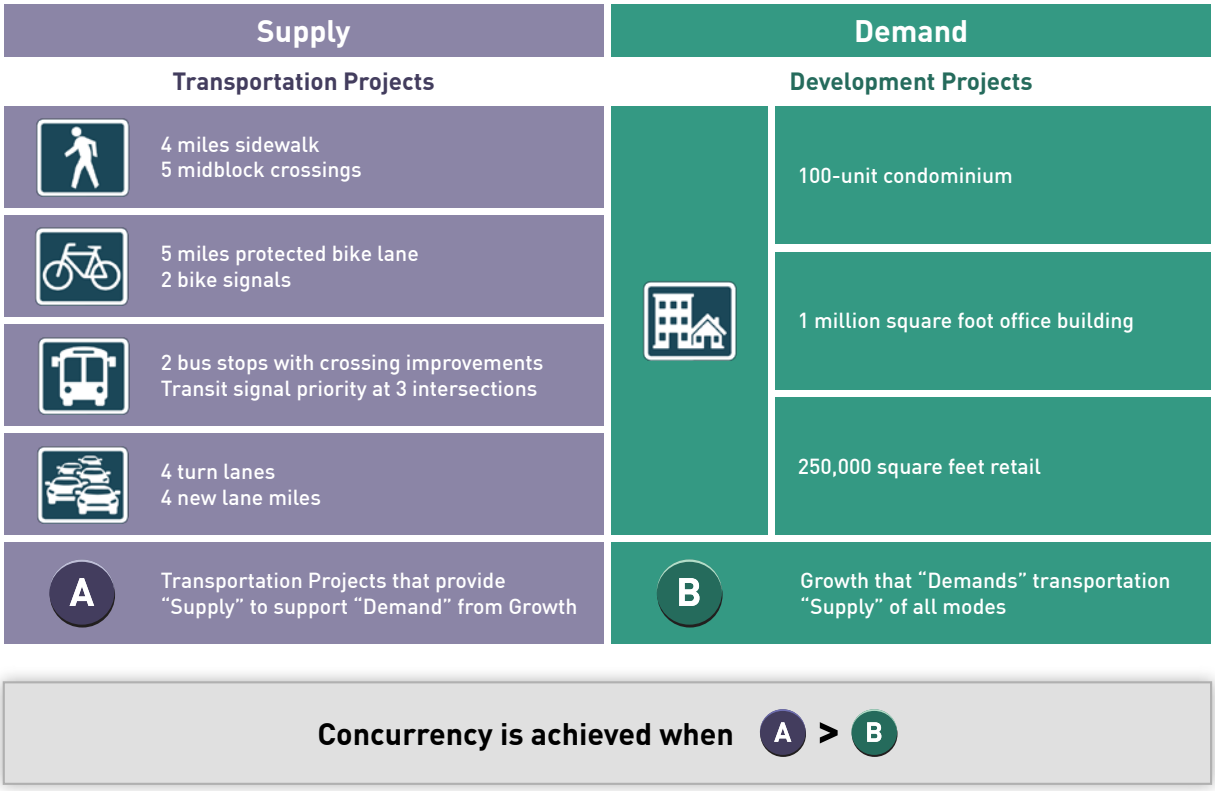
System completeness requires that Bellevue:

1. Forecast long-term growth in population and employment. Typically, these growth forecasts are developed by the state of Washington, the Puget Sound Regional Council, and King County with input from Bellevue and all other jurisdictions in the region. This growth forecast is consistent with what is assumed in state, regional, and City plans (e.g., Bellevue's Comprehensive Plan).
2. Identify a level of transportation investment that the City can afford, based on assumptions related to long-term transportation revenues that include dedicated transportation funding, general funds, developer impact fees, and grants. Because revenues are influenced by growth (through impact fees), there is a relationship between the growth and revenue forecasts.
3. Implement "supply" at a rate that keeps pace with or stays ahead of development "demand". Concurrency is achieved and maintained when the supply of transportation capacity provided by projects for all modes is greater than the demand for mobility created by new development. **Figure 29** shows how concurrency works in practice.

To track transportation concurrency, the MIP defines two new terms:

- **Concurrency Debit** is the number of forecasted PM peak hour person trips anticipated to be generated by new development in the City. The City's Transportation Impact Analysis Process defines how to calculate person trips. Concurrency Debits are generated when a development project seeks a permit. The total number of forecasted Concurrency Debits is based on the long-term growth in population and employment in Bellevue.

Figure 29: Multimodal Concurrency Framework



- **Concurrency Credits** are created when the City obligates funds to build new transportation capacity that supports growth. Specifically, Concurrency Credits are generated through the City's Capital Improvement Program (CIP). The total supply of Concurrency Credits is based on the total long-term transportation funding forecast.

The fundamental elements of Bellevue's transportation concurrency approach are as follows:

- **Multimodal:** The multimodal concurrency approach has a mode-neutral concurrency standard which can be achieved by building new transportation capacity that advances the Performance Targets for any mode in the MIP.
- **Revenue-based:** The multimodal concurrency approach is firmly footed in what the City can afford to build and actual implementation of the new transportation capacity is informed by the Performance Targets and goals outlined in the MIP.
- **Aligned with Policy:** The multimodal concurrency approach is aligned with City policies related to Complete Streets, environmental stewardship, transportation safety, expanding modal options, reducing congestion, and equity.

Multimodal Concurrency and Transportation Project Implementation

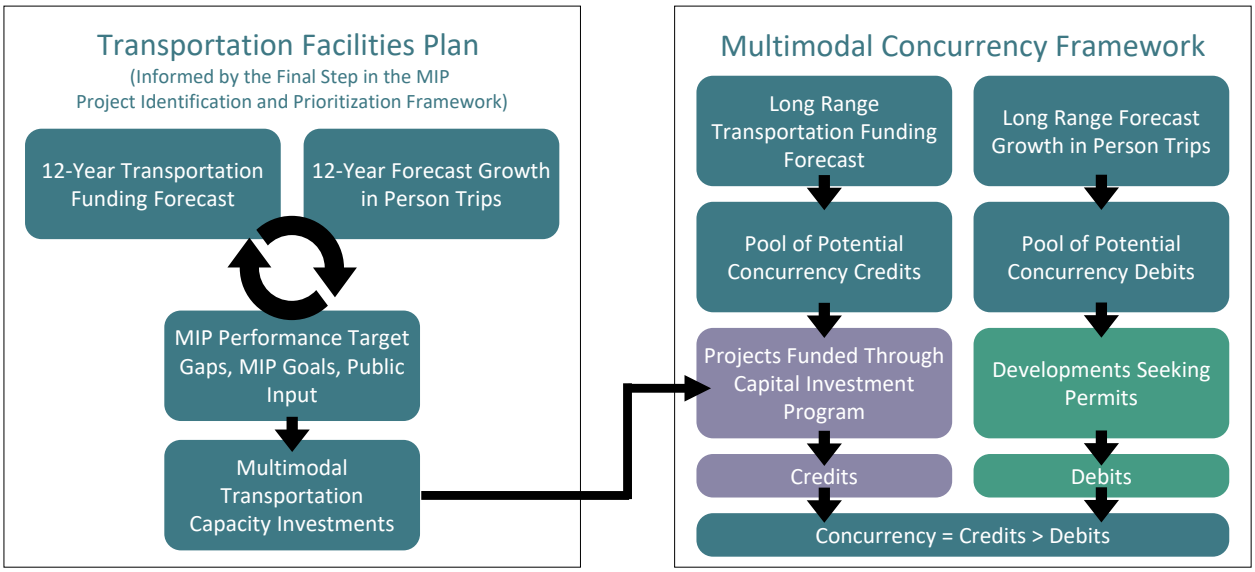
Multimodal concurrency requires that transportation projects be funded for implementation in the CIP to generate Concurrency Credits. However, multimodal concurrency intentionally does not provide any guidance about the type or location of new transportation capacity. The only requirement is that Bellevue ensures that the supply of available Concurrency Credits exceeds the demand for Concurrency Debits.

This structure is a direct outcome of the Transportation Commission's recommendation that a multimodal concurrency approach be simple to implement and administer.

Therefore, it is the role of City staff (with input from the public) to identify and prioritize which projects to advance to implementation.

The MIP chapters on Performance Metrics, Performance Management Areas, Performance Targets, and the Prioritization and Implementation Framework describe how the City measures transportation performance, identifies gaps, aligns potential projects with growth (and other City goals), and ultimately adds projects to the Transportation Facilities Plan (TFP). From the TFP, the City can implement a project through the Capital Investment Program (CIP) and generate a Concurrency Credit. This linkage between the TFP and the CIP shows the relationship between the MIP and Bellevue's Multimodal Concurrency approach and is visually depicted in **Figure 30**.

Figure 30: Relationship between Multimodal Concurrency and the Transportation Facilities Plan



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