Where do you live and work?

145TH STREET
Multimodal Corridor Study

CITY OF SHORELINE

Orientation Boards

145th Street Multimodal Corridor Study

145th Street is a key regional connection to I-5, Lake City Way (SR522), and Aurora (SR99) in North King County and cities to the north via SR522.

With a light rail station coming, the need for safe and reliable travel in the corridor becomes even more critical.

145th Street is also a principal arterial connecting Shoreline and Seattle neighborhoods, businesses, parks and services.

145TH STREET
Multimodal Corridor Study

CITY OF SHORELINE

What's the problem?

- Bad and deteriorating traffic congestion
- Deficient pedestrian and bike environment
- Few buses (few bus routes exist on the corridor due to congestion and poor pedestrian facilities)
- Light rail station coming but people can't get there easily
- Collision records show unsafe conditions for cars, bikes, and pedestrians

What's the problem?

Bad and deteriorating traffic congestion / deficient pedestrian and bike environment

Non-ADA accessible pathways / many pedestrian barriers

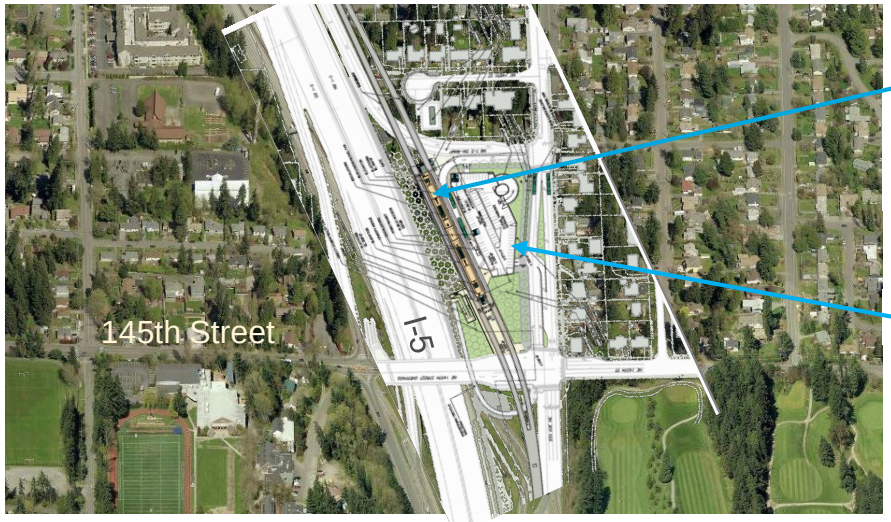
Lack of transit and bus stop facilities due to congestion and poor pedestrian facilities

Poor sight distance and lack of left-turn management contribute to safety concerns

145TH STREET
Multimodal Corridor Study

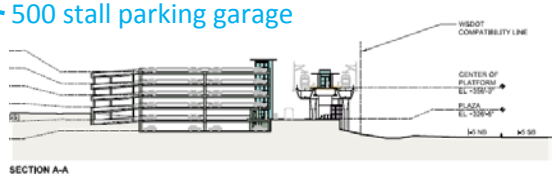
CITY OF SHORELINE

What's the problem?



Station with 6,000 weekday boardings

500 stall parking garage



Light rail station coming to 145th Street, but people can't get there easily

One of 300 poles centered in sidewalks on 145th Street

Pedestrians walking along 1st Ave NE – a roadway without pedestrian or bike facilities within a block of the 145th station

Pedestrians walking along 145th Street

What are the main goals for the project?

Ensure we can walk, bike, bus, access light rail, and drive safely and reliably along and across the corridor.

And:

Develop transportation improvements that:

- Support the local economy
- Protect the environment
- Support a vibrant community

What's the process to get there?

FEBRUARY 2015 | APRIL 2015 | MAY 2015 | JUNE 2015 | AUGUST 2015 | NOVEMBER 2015 | FEBRUARY 2016

1 Define
Establish study purpose and goals

2 Investigate
Research existing conditions and future projections

3 Develop
Create different strategies for how to improve 145th Street

4 Evaluate
Evaluate strategies to see which best meet the study goals

5 Refine
City staff will develop a preferred design concept

6 Approve
Council will review and may approve concept for 145th Street

We are here

Open House #1:
Learn about the study process and share your knowledge of the 145th Street corridor

Open House #2:
Review the ideas for improving 145th Street and give your feedback

Open House #3:
Learn about the recommended plan for 145th Street and give your feedback

Ongoing Community Advisory Task Force Meetings

Ongoing Interagency Technical Team Meetings

Ongoing opportunities for public feedback – call, email or visit the website anytime!

We are here

Corridor Study – 1 year

Environmental Review – 1-2 years

Preliminary Design – 1 year

ROW/Property Acquisition and Final Design – 1-2 years

Construct – 2 years +

145TH STREET
Multimodal Corridor Study

CITY OF SHORELINE

Project Partners

WSDOT

SoundTransit

City of Seattle

King County

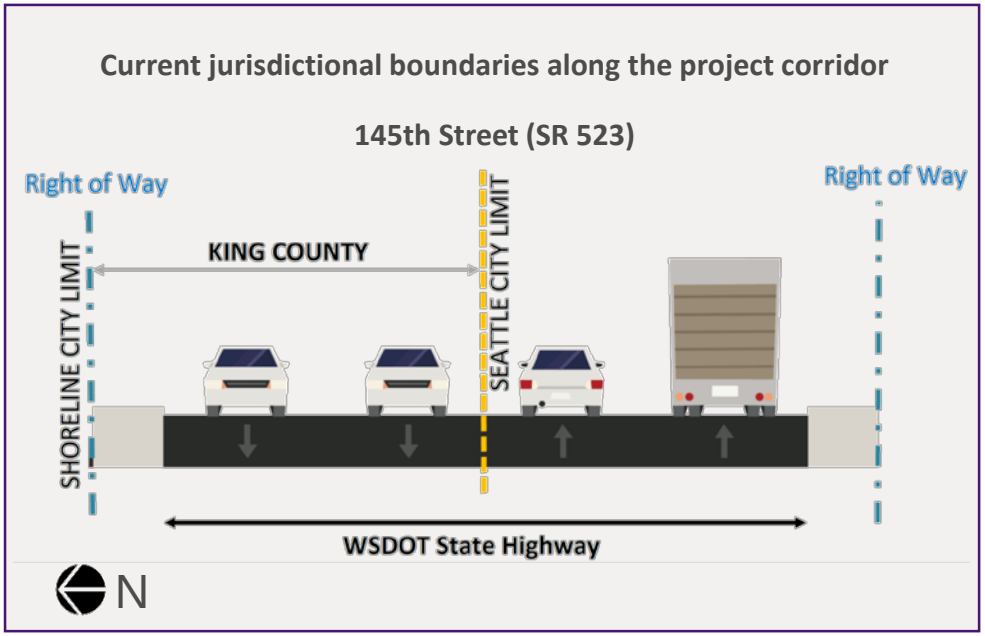
Puget Sound Regional Council
PSRC

Kenmore By the Lake

City of Bothell

Lake Forest Park Washington

City of Shoreline

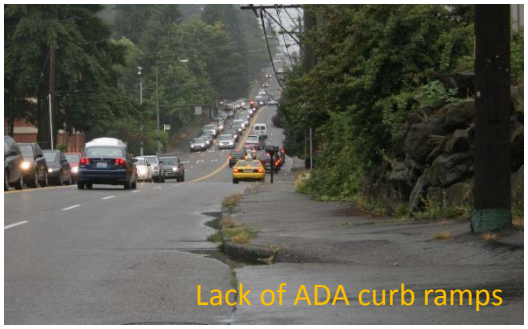


145TH STREET
Multimodal Corridor Study

City of Shoreline

Existing Conditions

Example conditions for pedestrians on 145th Street


Lack of ADA curb ramps

Narrow pathways

Non-accessible pathways


Lack of ADA curb ramps


Narrow sidewalks adjacent to traffic


Unmarked crosswalks at I-5


Utility poles block access


Crosswalks

145TH STREET
Multimodal Corridor Study

CITY OF SHORELINE

Example of bus stop conditions on 145th Street


Non-ADA accessible zones


Some shelters with lack of ADA accessibility


Narrow zones with no amenities


Poor lighting of transit zones


Bus stop near I-5, lack of shelters and pedestrian lighting


Some shelters

Limited ADA lift space

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Multimodal Corridor Study

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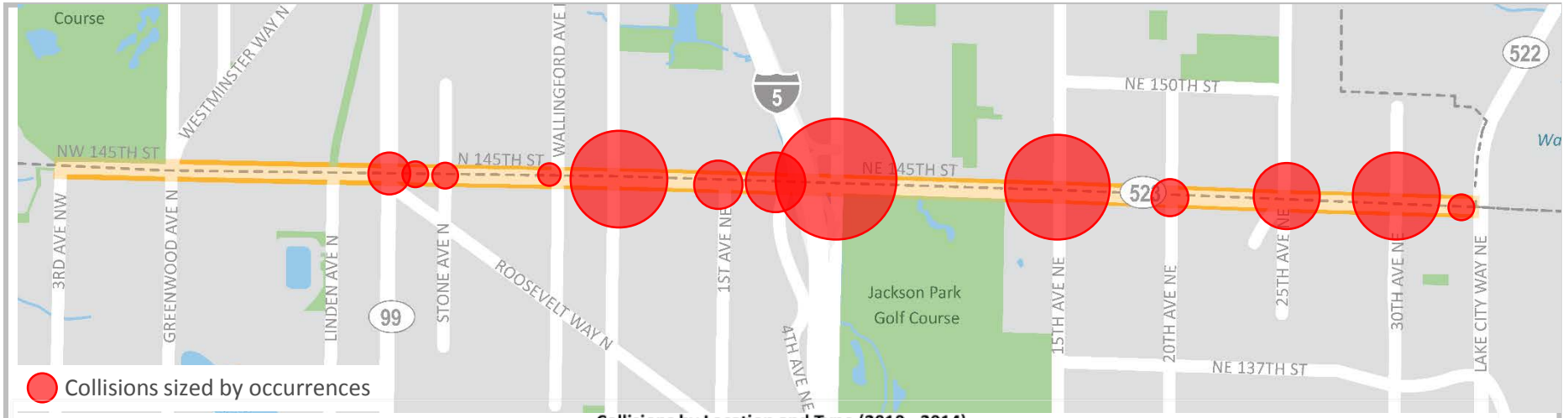

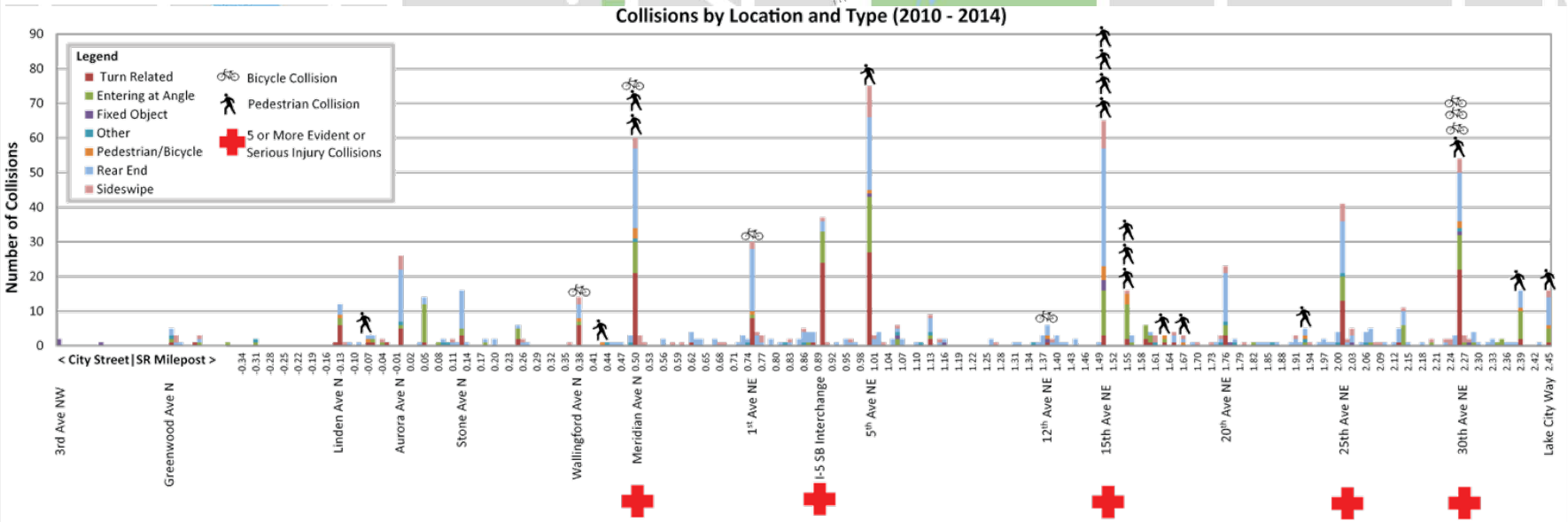

COLLISION HISTORY 2010-2014

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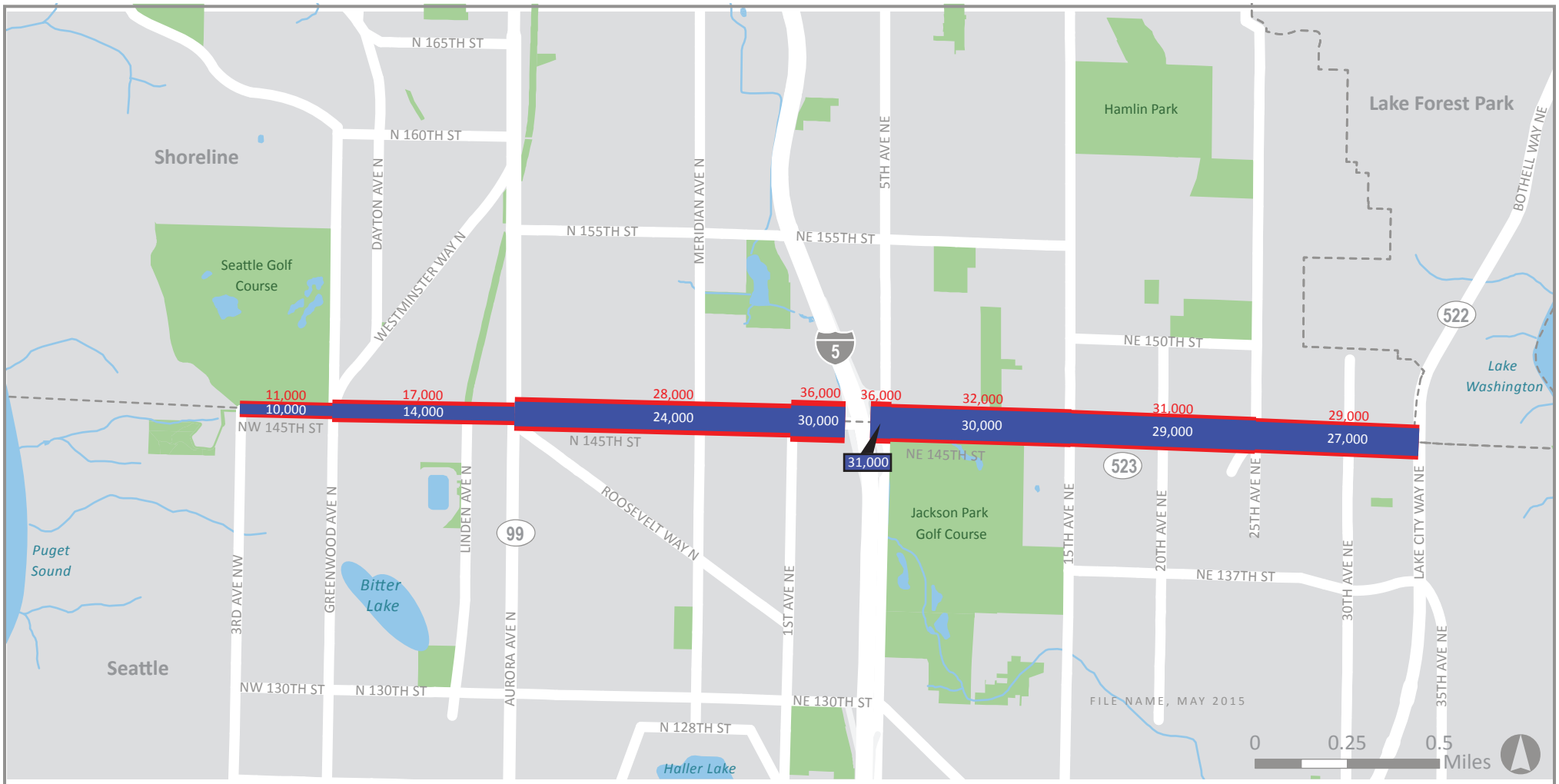


Waterbody

Park

City Boundary

2015 Average Daily Traffic Volumes (Per Segment Location)

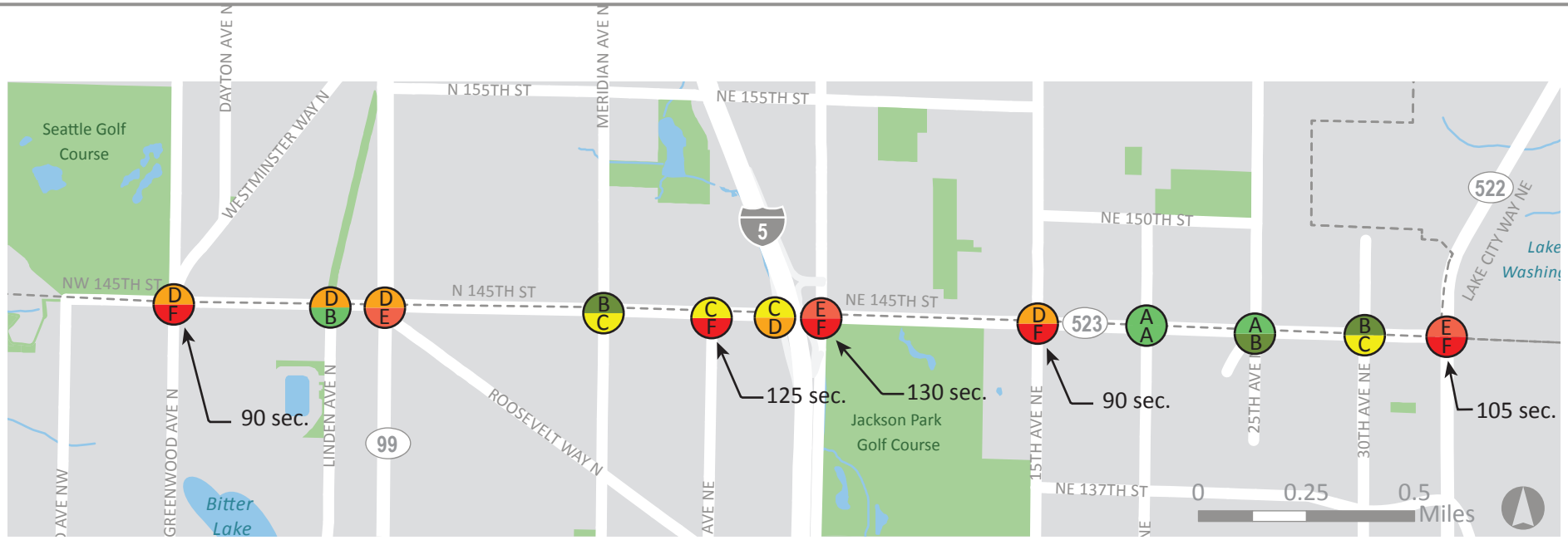
2035 Average Daily Traffic Volumes (Per Segement Location)

AVERAGE DAILY TRAFFIC VOLUMES

145TH STREET
Multimodal Corridor Study

CITY OF SHORELINE

MAY 2015



Waterbody

Park

City Boundary

AC 2015 Existing LOS

2035 No Build LOS

XX sec. Average vehicle delay at LOS F locations

The City of Shoreline adopted Level of Service standard is to maintain LOS D or better at signalized intersections.

PM PEAK HOUR LEVEL OF SERVICE SIGNALIZED INTERSECTIONS

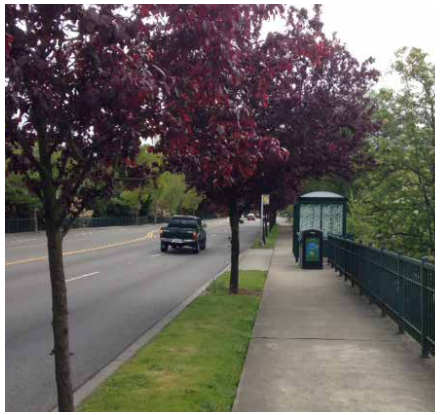
145TH STREET
Multimodal Corridor Study

CITY OF SHORELINE

MAY 2015

Modal Improvement Concepts

Sidewalks

Bus Stop Enhancements

Grade-Separated Crossing

Pedestrian Refuge Islands

PEDESTRIAN FACILITIES TOOLBOX

ADA Curb Ramp

Curb Extensions

High-Visibility Crosswalks

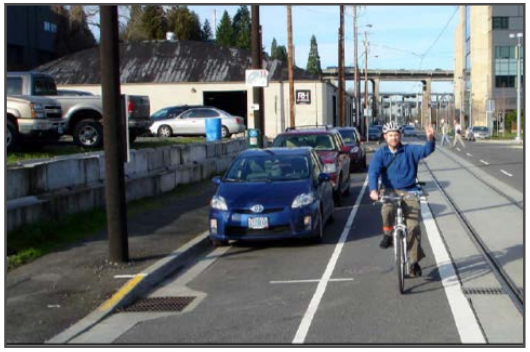
Mid-Block Crossing

Enhanced Pedestrian Signals

PEDESTRIAN FACILITIES TOOLBOX

Shared Lane Marking

Bike Lane



Buffered Bike Lane

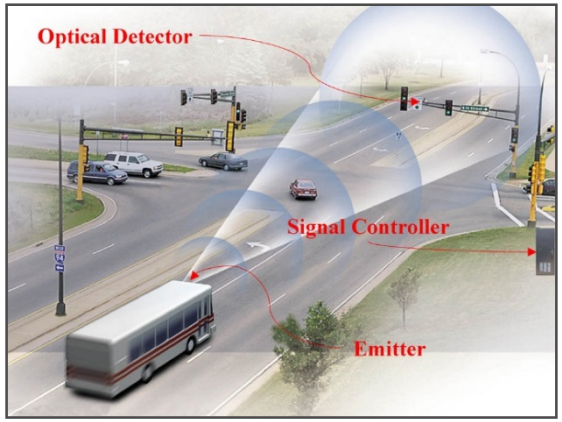
Cycle Track at Grade

Buffered Bike Lane with Sidewalk

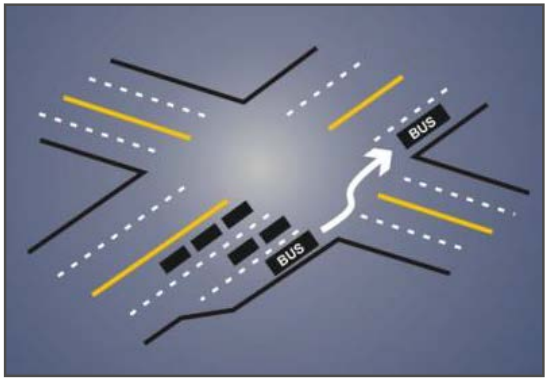
Multi-Use Trail

BIKE IMPROVEMENTS TOOLBOX

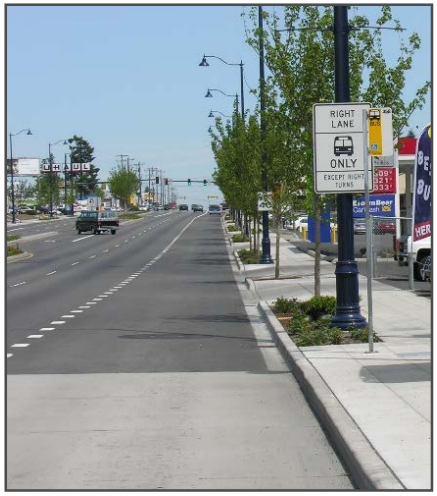
Transit Signal Priority



Queue Jump



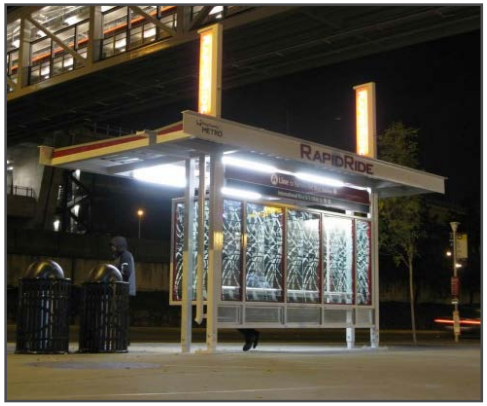
BAT Lanes



Off-Board Fare Collection

Bus Stop Amenities

Lighting



TRANSIT IMPROVEMENTS TOOLBOX

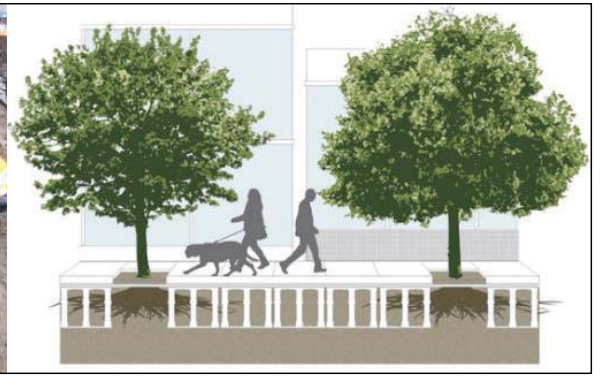
Rain Gardens

Swales

Porous Concrete

Permeable Pavers

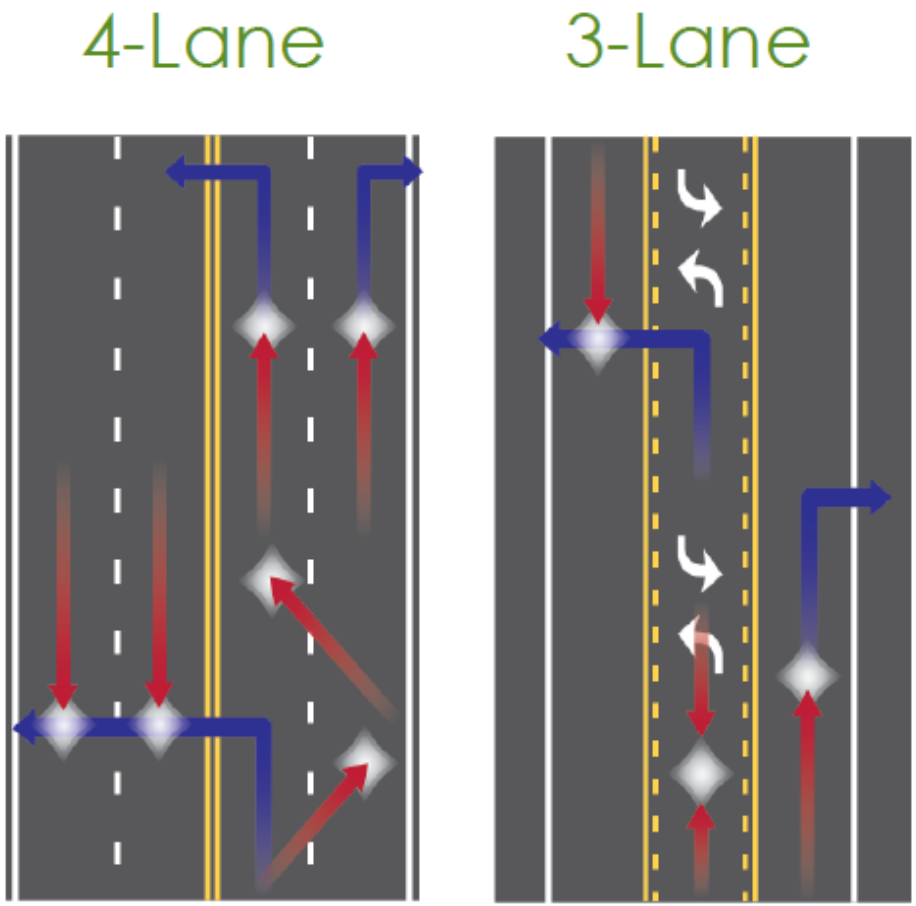
Silva Cells



STORMWATER IMPROVEMENTS TOOLBOX

“Road Diet” - converting from 4 lanes to 3 lanes

- **Safer for cars** – reduction in turning conflict points. Studies show 19 – 47% collision reduction.
- **Safer for pedestrians** – fewer lanes for pedestrians to cross and an opportunity to install pedestrian refuge islands.
- **Safer for bikes** - Extra space can be used for bikes and creates more room between vehicular traffic and pedestrians.
- Less right-of-way required.
- **Can improve traffic flow** – left turn lane eliminates weaving behavior. Can work for roadways with Average Daily Traffic volumes of **up to 25,000 vehicles per day**.



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Multimodal Corridor Study

CITY OF SHORELINE

Why other modes of travel are important…

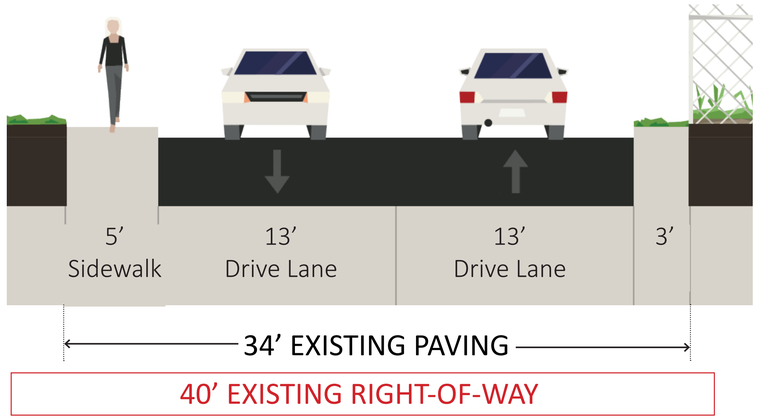
- Providing pedestrian, bicycle and transit infrastructure **allows people to choose how they want to travel.**
- Buses, sidewalks, and bicycles are necessary modes of transportation for those who can't drive, or who can't afford to. **Lack of transportation choices creates an inconvenient and socially unjust barrier to mobility**.
- Pedestrian, bicycle and transit infrastructure improves a community's livability, encourages healthier behavior, and can reduce green house gas emissions.
- Even if you travel by car, providing the opportunity for others to walk, bike or ride the bus benefits you by taking cars off the road.

CONCEPT 1, NO CHANGE: LOOKING WEST

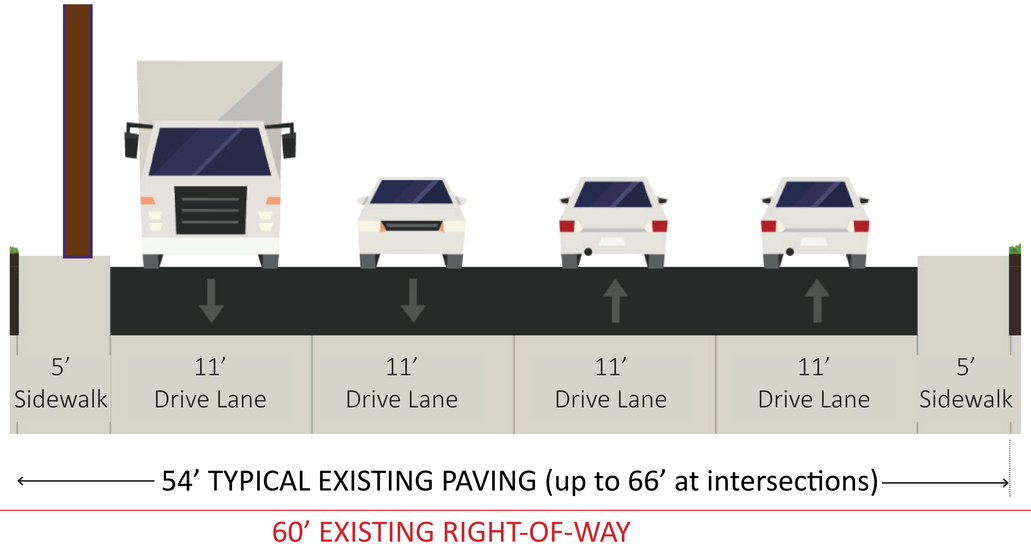
- 4 Travel lanes
- No bus lanes
- Non-accessible sidewalks
- No bike facilities
- Utility poles exist on both sides of roadway

CONCEPT 1, NO CHANGE: SECTIONS

3rd Ave to Greenwood Blvd



Greenwood Ave to Lake City Way

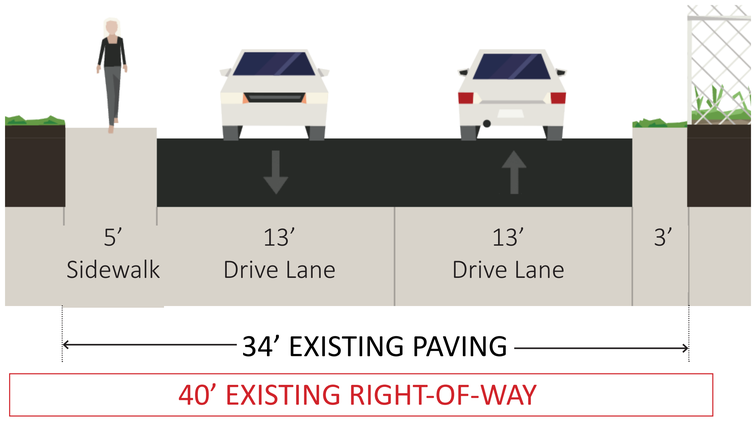


CONCEPT 2: LOOKING WEST

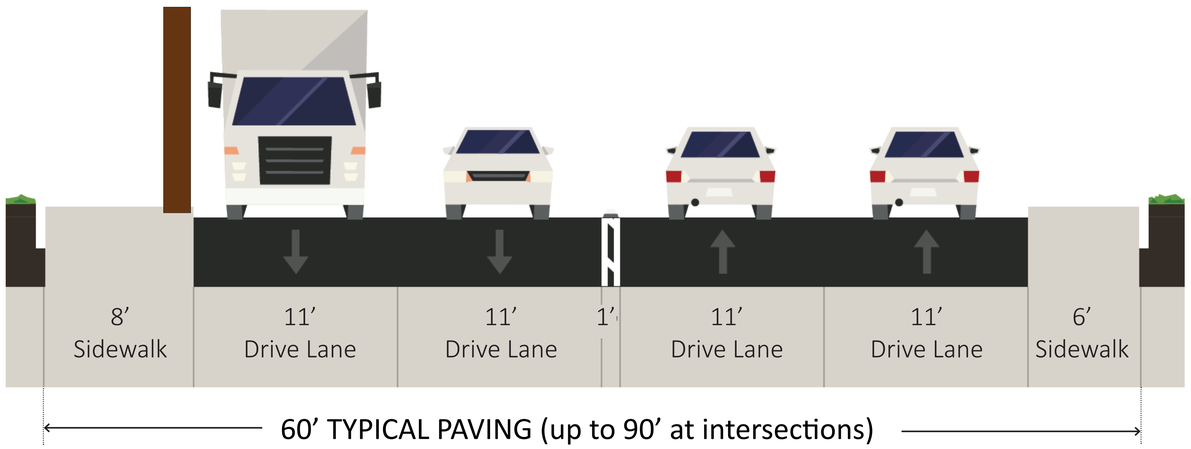
- 4 Travel lanes
- Intersection upgrades
- Minimum standard sidewalks, will vary based on presence of utility pole
- Restricting left turns and u-turns for greater vehicular efficiency
- No bus lanes
- Off-corridor bike facilities, “Greenway”
- Utility poles on both sides of roadway

CONCEPT 2: SECTIONS

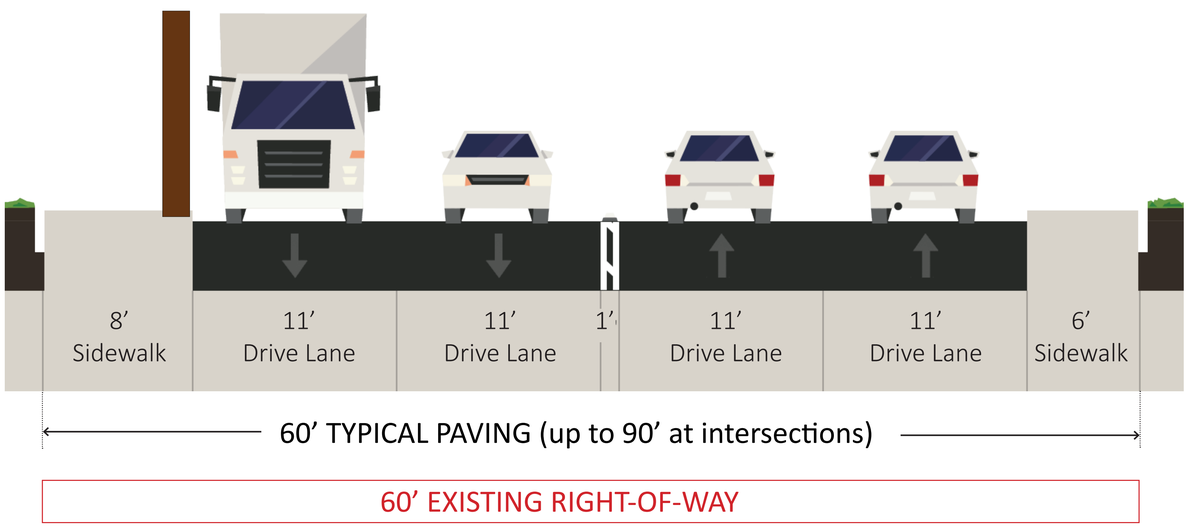
3rd Ave to Greenwood Blvd

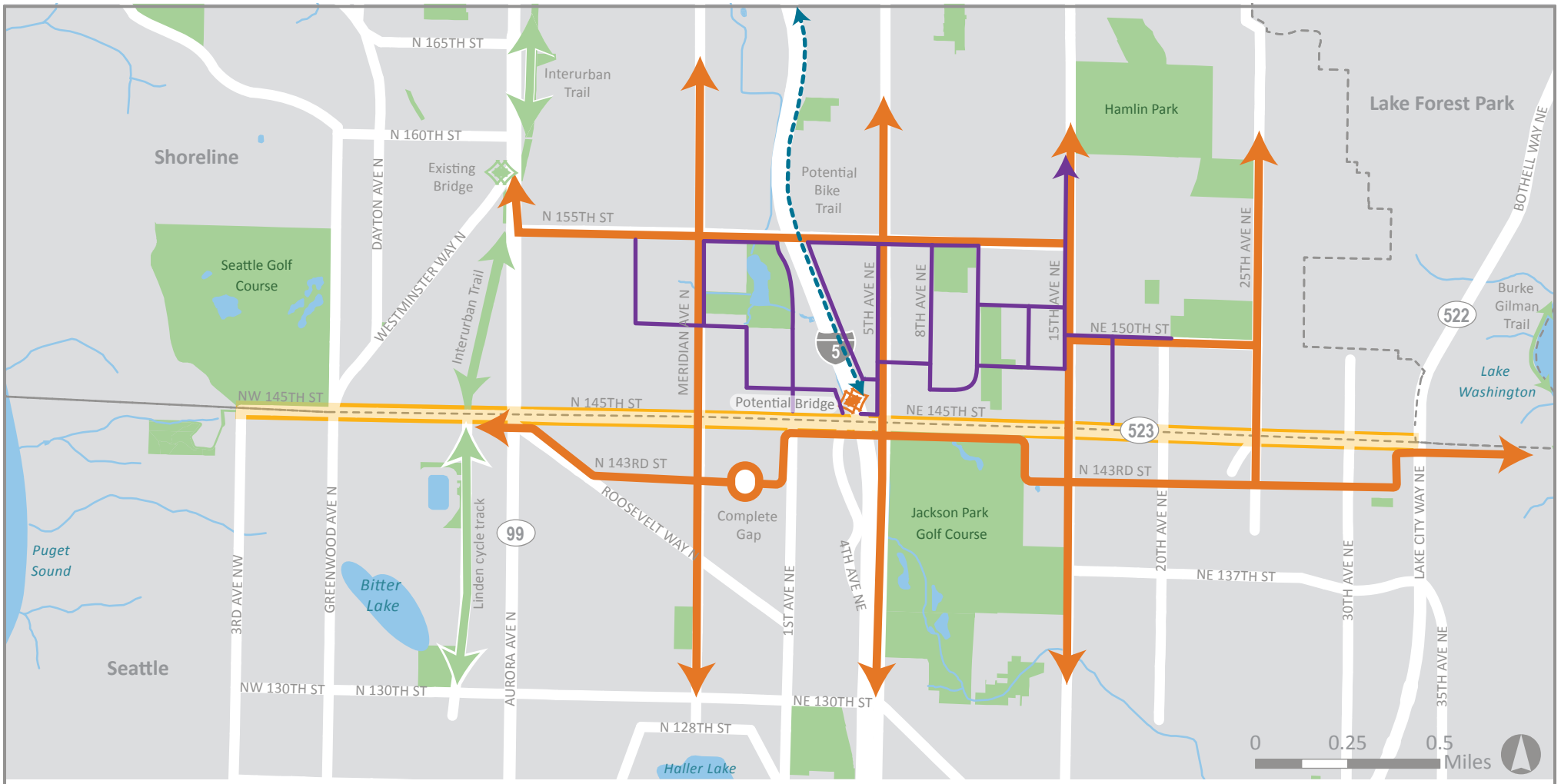


Greenwood Ave to Lake City Way



Aurora to Lake City Way





Study Corridor

Park/Trail

Proposed Bike Network

N 145th St Station Subarea Potential Green Network Concept

Waterbody

City Boundary

Sound Transit Lynnwood Link Potential Bike Trail

OFF CORRIDOR BIKE NETWORK STUDY CONCEPT 2

145TH STREET
Multimodal Corridor Study

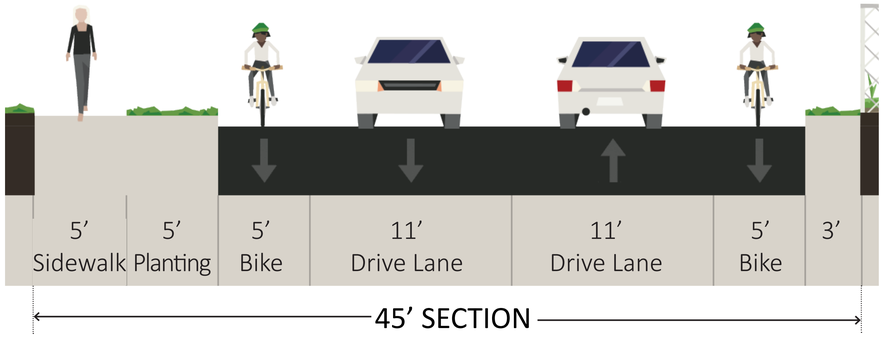
CITY OF SHORELINE

CONCEPT 3: LOOKING WEST

- 4 Travel lanes with two-way left turn lane
- No bus lanes
- 5’ Amenity zones/planter
- 13’ Sidewalks includes 5’ striped directional bike lane each side
- Utility poles in amenity zone (relocated at intersections)

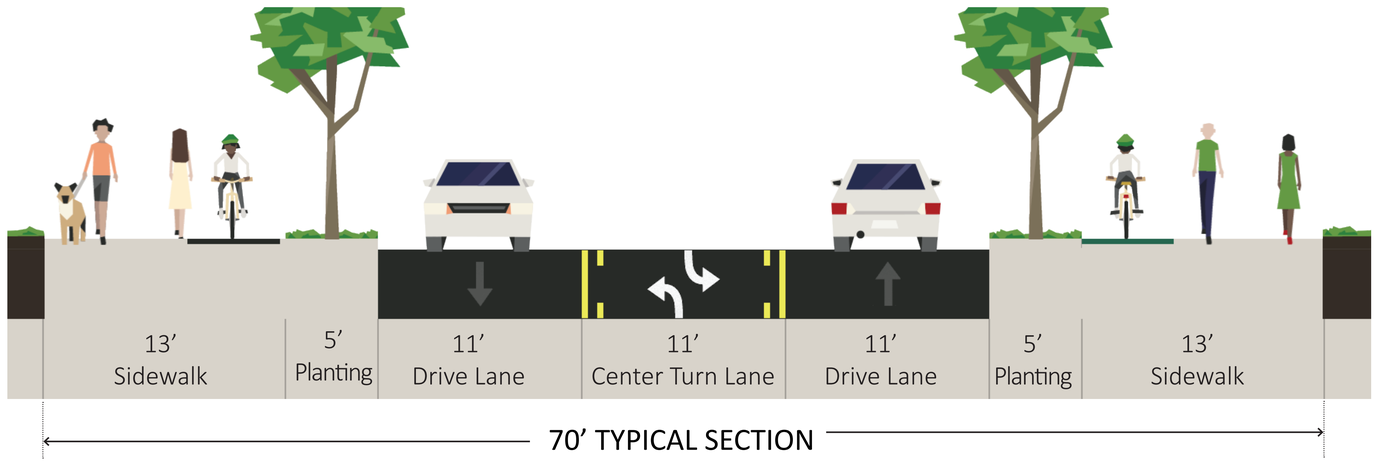
CONCEPT 3: SECTIONS

3rd Ave to Greenwood Blvd



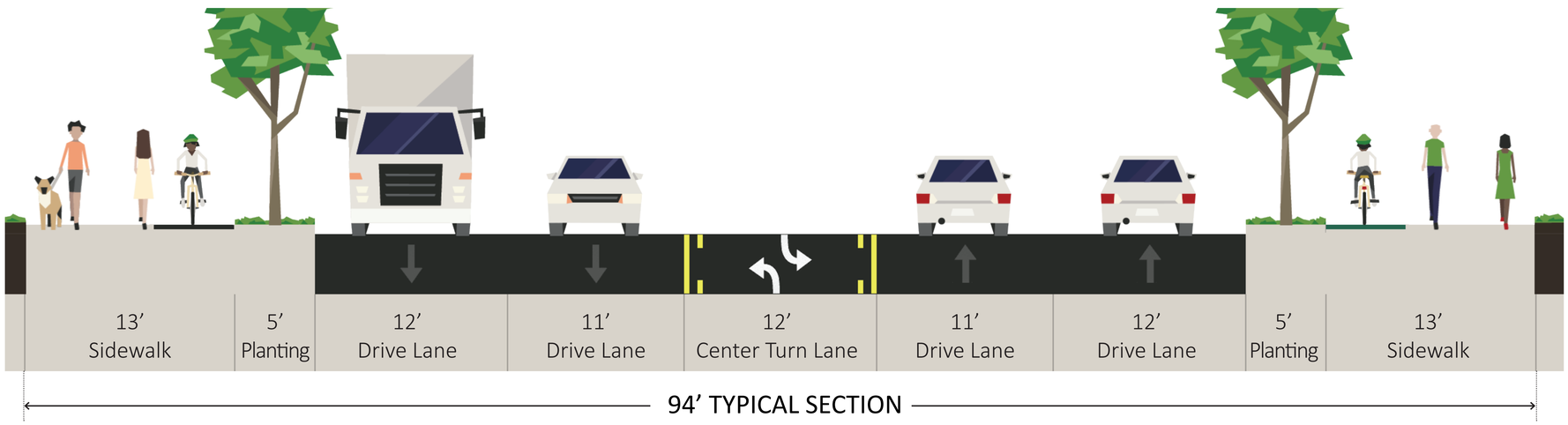
40’ EXISTING RIGHT-OF-WAY

Greenwood Blvd to Aurora



60’ EXISTING RIGHT-OF-WAY

Aurora to Lake City Way



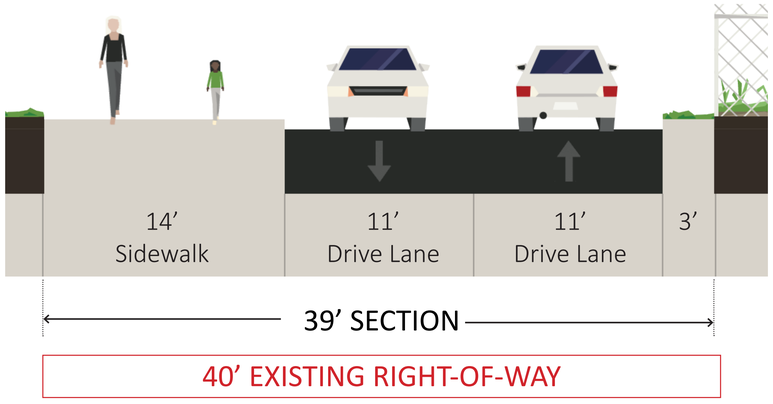
60’ EXISTING RIGHT-OF-WAY

CONCEPT 4: LOOKING WEST

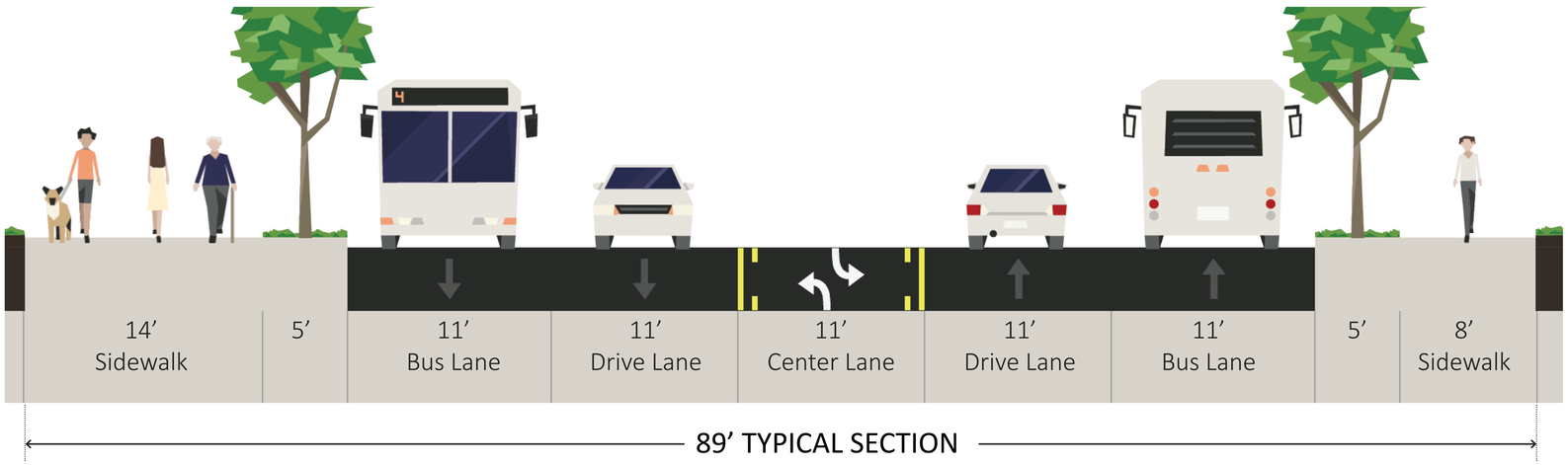
- 4 Travel lanes
- Restricting left turns and u-turns for greater vehicular efficiency
- Bus lanes / right turn lanes
- 8’ Sidewalks with 5’ amenity zones/planter on one side
- Shared bicycle and pedestrian path on one side
- Utility undergrounding

CONCEPT 4: SECTIONS

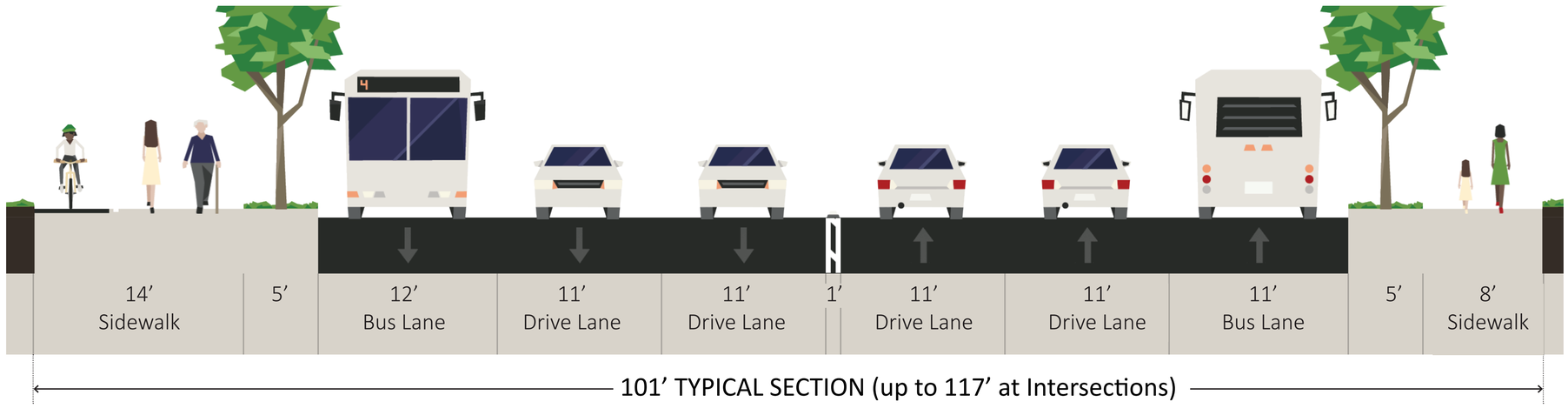
3rd Ave to Greenwood Blvd



Greenwood Blvd to Aurora



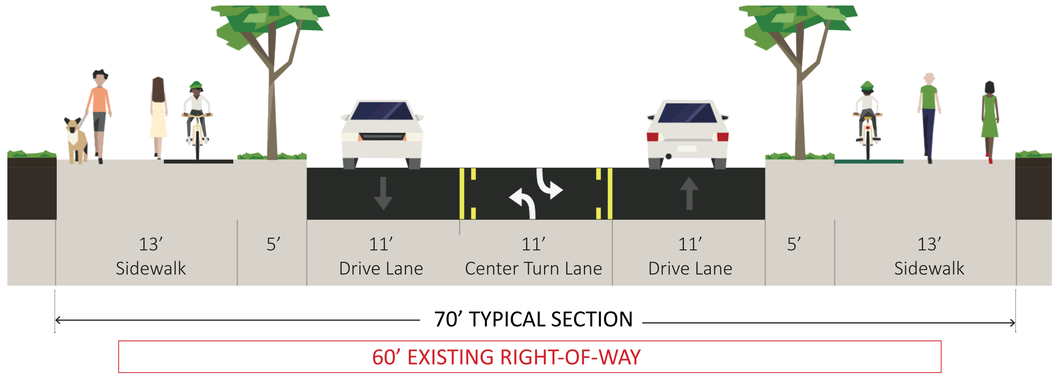
Aurora to Lake City Way



ADDITIONAL STUDY CONCEPTS

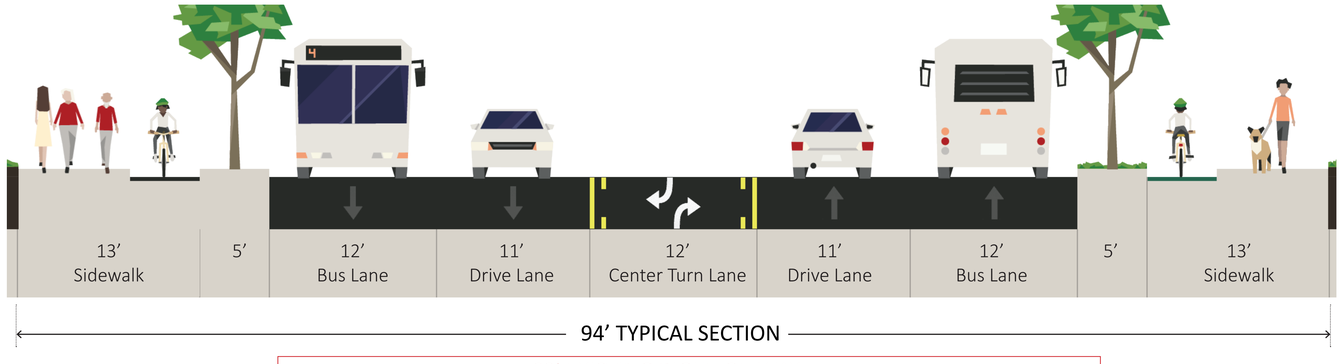
Concept 3A Variation: "Road Diet"

Aurora to Lake City Way



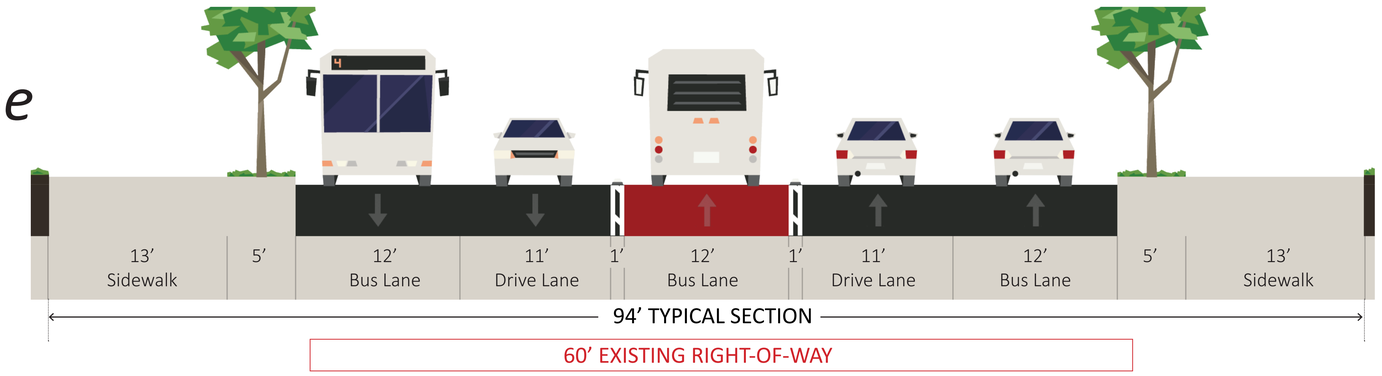
Concept 3B Variation: with BAT Lanes

Aurora to Lake City Way



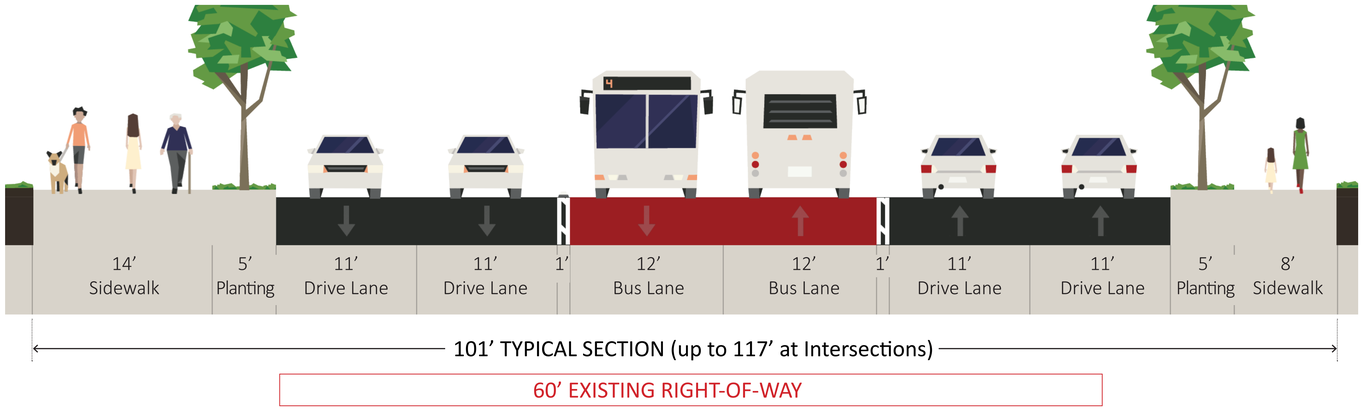
Concept 3C Variation: with Reversable Bus Lane

Aurora to Lake City Way



Concept 4A Variation: with Center Two-Lane Bus Way

Aurora to Lake City Way



From I-5 to Lake City Way

LEGEND:
○ Least or worst
● Most or best

	Study Concept 1 No Action	Study Concept 2 4 Lanes, Bikes Off-Corridor	Study Concept 3 5 Lanes with Two-Way LTL	Study Concept 4 6 Lanes with BAT Lanes
BENEFITS MEASURES	**I-5 to Lake City Way (SR 522)**			
1 **IMPROVED PEDESTRIAN SAFETY AND ACCESS** How well does the study concept improve safety, mobility, accessibility for Pedestrians	○ - Several barriers for pedestrian travel remain	- Removes existing sidewalk barriers, keeps poles in sidewalk - 6' sidewalk, does not meet City standard - No buffer provided between pedestrians and vehicles - 5-6 lane crossing distance at signalized intersections	- New sidewalks, removes pedestrian barriers - 13' sidewalk, meets City Standard - 5' to 10' separation with vehicles creates safe buffer and comfort for pedestrians - 5 - 6 lane crossing distance at signalized intersections	- New sidewalks, removes pedestrian barriers - 13' sidewalk, meets City Standard - 5' separation with vehicles creates safe buffer and comfort for pedestrians - 7 lane crossing distance at signalized intersections
2 **IMPROVED TRANSIT SPEED, RELIABILITY, AND QUALITY** How well does the study concept improve Transit performance in the corridor?	○ - Lack of transit zones and transit service - 9.5 minute estimated transit travel time thru section - Most bus stops are not wheelchair accessible	- Minimal transit zone enhancements - 30% reduction in transit travel time - Buses can get trapped in bus pull-outs	- Wide sidewalks provide comfortable environment for transit users - 27% reduction in transit travel time - In-lane bus stops	- Transit zone enhancements and wide sidewalks provide comfortable environment - 45% reduction in transit travel time (best) - BAT lanes provide in-lane bus stops - Transit benefits are provided regardless of congestion in general purpose lanes
3 **IMPROVED BIKE SAFETY AND MOBILITY** How well does the study concept improve safety, mobility, accessibility for bike riders?	○ - No bike facilities through the corridor	- Off-corridor bike facilities through green network provides pathways on lower speed streets - No on-corridor bike pathways - Shoreline side routing is indirect, up to several blocks from the 145th corridor	- Buffered directional bike lanes on corridor provides separation from vehicles - Intersection designed to reduce bike-vehicle conflicts at intersections - Bike lanes are one-way, both sides of roadway, requiring crossing of 145th to access lanes	- Multi-use trail along the corridor - Shared path, one side of roadway, could present bike-pedestrian conflicts - Bike pathway is two-way
4 **IMPROVED VEHICLE SAFETY AND MOBILITY** How well does the study concept improve safety and mobility for vehicles and freight?	○ - No mobility improvements - No safety improvements - Does not meet LOS standards	- Signal timing and intersection capacity are improved - Meets LOS standards - Access management - c-curb, provides improved safety for turning conflicts	- Signal timing and capacity improvements - Meets LOS standards - Two-way left turn lane does not resolve mid-block turning conflicts, collisions	- Signal timing and capacity improvements - Meets LOS standards - BAT lanes increase roadway capacity - Access management and u-turns privided, improves safety for turning conflicts
5 **CONSISTENCY WITH REGIONAL PLANS** How well does the study concept integrate with other capital projects including the proposed light rail station and future improvements to the Interstate-5 interchange?	○ - Not improving the corridor is not consistent with plans for the LRT station as well as the City of Shoreline Comp Plan goals.	- Improves non-motorized access to station - Consistent with SDOT Bike Master Plan - Does not meet City standards for sidewalks	- Integration with ST LRT Station - Aesthetic improvements consistent with neighborhood character - Integration with bike master plans	- Integration with ST LRT Station - Integration with ST and KCM long range plans - Highest level of landscaping/urban design elements and utilty undergrounding consistent with neighborhood character - Integration with modal plans for Seattle and Shoreline
6 **OPPORTUNITIES FOR ENVIRONMENTAL ENHANCEMENT** How well does the study concept enhance the environment and mitigate impacts to critical areas? How well does the study concept provide for opportunities to upgrade stormwater quality?	○ - No impacts to existing critical areas - Does not improve or enhance	- Potential to minimize impacts to critical areas	- Potential for low impact development (LID) - Potential for stormwater improvements - Potential to enhance critical areas - Adds trees and landscaping	- Potential for low impact development (LID) - Potential for stormwater improvements - Potential to enhance critical areas - Adds trees and landscaping
7 **SUPPORTS ECONOMIC DEVELOPMENT** How well does the study concept encourage and support private reinvestment in the corridor through improvements such as transit, upgraded utilities and enhanced aesthetics?	○ - No improvements	- Improves traffic capacity - Improves access to transit	- Improves roadway frontages with sidewalk and landscaping - Maintains neighborhood character - Improves traffic capacity and non-motorized mobility - Improves access to transit	- Highest quality landscaping/urban design improvements including utility undergrounding - Highest potential for transit oriented development, supportive of high capacity transit in corridor - Highest increase in traffic capacity
8 **FUNDING FEASIBILITY** How well will the study concept support the ability to compete for grant funding or secure direct funding? How well do the improvement elements align with grant funding criteria, such as multimodal improvements, transit, and livability?	◑ -N/A	- Lowest cost alternative - Provides some mobility improvements for pedestrians - Does not provide significant transit benefits	-Higher cost than Concept 2, lower than Concept 4 - Improves safety and mobility for pedestrians and bikes - Does not provide significant transit benefits	- Highest cost of alternatives - Improves local and regional mobility - Improves safety for all users - Provides most opportunity for funding partnerships
TRADE OFFS				
8 **PROPERTY IMPACTS** How well does the study concept minimize impacts to property and business owners by limiting right-of-way acquisition, avoiding existing structures and improvements or maintaining access?	● - No property impacts	- Impacts up to 68% of parcels along the corridor	- Impacts up to 100% of parcels along the corridor	○ - Impacts up to 100% of parcels along the corridor - Highest area of right of way required
9 **CAPITAL COST** What is the relative capital cost?	● - No implemenation costs - On-going maintenance costs	Lowest cost of the study concepts	- Higher cost than Concept 2, lower than Concept 4	○ - Highest cost of alternatives

From Aurora Avenue to I-5

EVALUATION RESULTS

LEGEND:
○ Least or worst
● Most or best

	Study Concept 1 No Action	Study Concept 2 4 Lanes, Bikes Off-Corridor	Study Concept 3 5 Lanes with Two-Way LTL	Study Concept 4 6 Lanes with BAT Lanes
BENEFITS MEASURES	**Aurora Avenue (SR99) to I-5**			
1 **IMPROVED PEDESTRIAN SAFETY AND ACCESS** How well does the study concept improve safety, mobility, accessibility for Pedestrians	○ - Several barriers for pedestrian travel remain	◔ - Removes existing sidewalk barriers, keeps poles in sidewalk - 6' sidewalk, does not meet City standard - No buffer provided between pedestrians and vehicles - 5-6 lane crossing distance at signalized intersections	● - New sidewalks, removes pedestrian barriers - 13' sidewalk, meets City Standard - 5' to 10' separation with vehicles creates safe buffer and comfort for pedestrians - 5 - 6 lane crossing distance at signalized intersections	◔ - New sidewalks, removes pedestrian barriers - 13' sidewalk, meets City Standard - 5' separation with vehicles creates safe buffer and comfort for pedestrians - 7 lane crossing distance at signalized intersections
2 **IMPROVED TRANSIT SPEED, RELIABILITY, AND QUALITY** How well does the study concept improve Transit performance in the corridor?	○ - Lack of transit zones and transit service - 7.3 minute estimated transit travel time thru section - Most bus stops are not wheelchair accessible	◑ - Minimal transit zone enhancements - 28% reduction in transit travel time - Buses can get trapped in bus pull-outs	◑ - Wide sidewalks provide comfortable environment for transit users - 38% reduction in transit travel time - In-lane bus stops	● - Transit zone enhancements and wide sidewalks provide comfortable environment - 49% reduction in transit travel time (best) - BAT lanes provide in-lane bus stops - Transit benefits are provided regardless of congestion in general purpose lanes
3 **IMPROVED BIKE SAFETY AND MOBILITY** How well does the study concept improve safety, mobility, accessibility for bike riders?	○ - No bike facilities through the corridor	◑ - Off-corridor bike facilities through green network provides pathways on lower speed streets - No on-corridor bike pathways - Shoreline side routing is indirect, up to several blocks from the 145th corridor	● - Buffered directional bike lanes on corridor provides separation from vehicles - Intersection designed to reduce bike-vehicle conflicts at intersections - Bike lanes are one-way, both sides of roadway, requiring crossing of 145th to access lanes	◔ - Multi-use trail along the corridor - Shared path, one side of roadway, could present bike-pedestrian conflicts - Bike pathway is two-way
4 **IMPROVED VEHICLE SAFETY AND MOBILITY** How well does the study concept improve safety and mobility for vehicles and freight?	○ - No mobility improvements - No safety improvements - Does not meet LOS standards	◔ - Signal timing and intersection capacity are improved - Meets LOS standards - Access management - c-curb, provides improved safety for turning conflicts	◔ - Signal timing and capacity improvements - Meets LOS standards - Two-way left turn lane does not resolve mid-block turning conflicts, collisions	◔ - Signal timing and capacity improvements - Meets LOS standards - BAT lanes increase roadway capacity - Access management and u-turns privided, improves safety for turning conflicts
5 **CONSISTENCY WITH REGIONAL PLANS** How well does the study concept integrate with other capital projects including the proposed light rail station and future improvements to the Interstate-5 interchange?	○ - Not improving the corridor is not consistent with plans for the LRT station as well as the City of Shoreline Comp Plan goals.	◔ - Improves non-motorized access to station - Consistent with SDOT Bike Master Plan and Shoreline greenway network - Does not meet City standards for sidewalks	◔ - Integration with ST LRT Station - Sidewalk/aesthetic improvements consistent with neighborhood character goals - Integration with bike master plans for Seattle and Shoreline	◔ - Integration with ST LRT Station - Highest level of landscaping/urban design elements and utilty undergrounding consistent with neighborhood character - Integration wth modal plans for Seattle and Shoreline
6 **OPPORTUNITIES FOR ENVIRONMENTAL ENHANCEMENT** How well does the study concept enhance the environment and mitigate impacts to critical areas? How well does the study concept provide for opportunities to upgrade stormwater quality?	○ - No impacts to existing critical areas - Does not improve or enhance	◔ - Potential to minimize impacts to critical areas	● - Potential for low impact development (LID) - Potential for stormwater improvements - Potential to enhance critical areas - Adds trees and landscaping	◔ - Potential for low impact development (LID) - Potential for stormwater improvements - Potential to enhance critical areas - Adds trees and landscaping
7 **SUPPORTS ECONOMIC DEVELOPMENT** How well does the study concept encourage and support private reinvestment in the corridor through improvements such as transit, upgraded utilities and enhanced aesthetics?	○ - No improvements	◑ - Improves traffic capacity - Improves access to transit	◔ - Improves roadway frontages with sidewalk and landscaping - Maintains neighborhood character - Improves traffic capacity and non-motorized mobility - Improves access to transit	● - Highest quality landscaping/urban design improvements including utility undergrounding - Highest potential for transit oriented development, supportive of high capacity transit in corridor - Highest increase in traffic capacity
8 **FUNDING FEASIBILITY** How well will the study concept support the ability to compete for grant funding or secure direct funding? How well do the improvement elements align with grant funding criteria, such as multimodal improvements, transit, and livability?	◑ -N/A	◑ - Lowest cost alternative - Provides some mobility improvements for pedestrians - Does not provide significant transit benefits	◔ -Higher cost than Concept 2, lower than Concept 4 - Improves safety and mobility for pedestrians and bikes - Does not provide significant transit benefits	◔ - Highest cost of alternatives - Improves local and regional mobility - Improves safety for all users - Provides most opportunity for funding partnerships
TRADE OFFS				
8 **PROPERTY IMPACTS** How well does the study concept minimize impacts to property and business owners by limiting right-of-way acquisition, avoiding existing structures and improvements or maintaining access?	● - No property impacts	◑ - Impacts up to 66% of parcels along the corridor	◔ - Impacts up to 100% of parcels along the corridor	○ - Impacts up to 100% of parcels along the corridor - Highest area of right of way required
9 **CAPITAL COST** What is the relative capital cost?	● - No implemenation costs - On-going maintenance costs	◑ - Lowest cost of the study concepts	◔ - Higher cost than Concept 2, lower than Concept 4	○ - Highest cost of alternatives

145TH STREET Multimodal Corridor Study

CITY OF SHORELINE

Greenwood Avenue N to Aurora Avenue N

EVALUATION RESULTS

LEGEND:
○ Least or worst
● Most or best

	Study Concept 1 No Action	Study Concept 2 4 Lanes, Bikes Off-Corridor	Study Concept 3 3 Lanes with Two-Way LTL	Study Concept 4 5 Lanes with Two-Way LTL
BENEFITS MEASURES	**Greenwood Avenue to Aurora Avenue (SR99)**			
1 **IMPROVED PEDESTRIAN SAFETY AND ACCESS** How well does the study concept improve safety, mobility, accessibility for Pedestrians	- Several barriers for pedestrian travel remain	- Removes existing sidewalk barriers, keeps poles in sidewalk - 6' sidewalk, does not meet City standard - No buffer provided between pedestrians and vehicles - 4-5 lane crossing distance at signalized intersections	- New sidewalks, removes pedestrian barriers - 13' sidewalk, meets City Standard - 5' to 10' separation with vehicles creates safe buffer and comfort for pedestrians - 3- 4 lane crossing distance at signalized intersections	- New sidewalks, removes pedestrian barriers - 13' sidewalk, meets City Standard - 5' separation with vehicles creates safe buffer and comfort for pedestrians - 5 lane crossing distance at signalized intersections
2 **IMPROVED TRANSIT SPEED, RELIABILITY, AND QUALITY** How well does the study concept improve Transit performance in the corridor?	- Lack of transit zones and transit service - 4.1 minute estimated transit travel time thru section - Most bus stops are not wheelchair accessible	- Minimal transit zone enhancements - 22% travel time savings	- Wide sidewalks provide comfortable environment for transit users - 30% transit travel time savings	- Transit zone enhancements and wide sidewalks provide comfortable environment - 48% transit travel time savings
3 **IMPROVED BIKE SAFETY AND MOBILITY** How well does the study concept improve safety, mobility, accessibility for bike riders?	- No bike facilities through the corridor	- Off-corridor bike facilities through green network provides pathways on lower speed streets - No on-corridor bike pathways - Shoreline side routing is indirect, up to several blocks from the 145th corridor	- Buffered directional bike lanes on corridor provides separation from vehicles - Intersection designed to reduce bike-vehicle conflicts at intersections - Bike lanes are one-way, both sides of roadway, requiring crossing of 145th to access lanes	- Multi-use trail along the corridor - Shared path, one side of roadway, could present bike-pedestrian conflicts - Bike pathway is two-way
4 **IMPROVED VEHICLE SAFETY AND MOBILITY** How well does the study concept improve safety and mobility for vehicles and freight?	- No mobility improvements - No safety improvements - Does not meet LOS standards	- Signal timing and intersection capacity are improved - Meets LOS standards - Access management - c-curb, provides improved safety for turning conflicts	- Signal timing and capacity improvements - Meets LOS standards - Two-way left turn lane does not resolve mid-block turning conflicts, collisions	- Signal timing and capacity improvements - Meets LOS standards - Two-way left turn lane does not resolve mid-block turning conflicts, collisions
5 **CONSISTENCY WITH REGIONAL PLANS** How well does the study concept integrate with other capital projects including the proposed light rail station and future improvements to the Interstate-5 interchange?	- Not improving the corridor is not consistent with plans for the LRT station as well as the City of Shoreline Comp Plan goals.	- Improves non-motorized access to station - Consistent with SDOT Bike Master Plan and Shoreline greenway network - Does not meet City standards for sidewalks	- improves non-morotized connectivity to LRT - Sidewalk/aesthetic improvements consistent with neighborhood character goals - Integration with bike master plans for Seattle and Shoreline	-Improves non-morotized connectivity to LRT - Highest level of landscaping/urban design elements and utilty undergrounding consistent with neighborhood character - Integration wth modal plans for Seattle and Shoreline
6 **OPPORTUNITIES FOR ENVIRONMENTAL ENHANCEMENT** How well does the study concept enhance the environment and mitigate impacts to critical areas? How well does the study concept provide for opportunities to upgrade stormwater quality?	- No impacts to existing critical areas - Does not improve or enhance	- Potential to minimize impacts to critical areas	- Potential for low impact development (LID) - Potential for stormwater improvements - Adds trees and landscaping	- Potential for low impact development (LID) - Potential for stormwater improvements - Adds trees and landscaping
7 **SUPPORTS ECONOMIC DEVELOPMENT** How well does the study concept encourage and support private reinvestment in the corridor through improvements such as transit, upgraded utilities and enhanced aesthetics?	- No improvements	- Improves traffic capacity	- Improves roadway frontages with sidewalk and landscaping - Maintains neighborhood character - Improves traffic capacity and non-motorized mobility	- Highest quality landscaping/urban design improvements including utility undergrounding - Highest increase in traffic capacity - Most property impacts
8 **FUNDING FEASIBILITY** How well will the study concept support the ability to compete for grant funding or secure direct funding? How well do the improvement elements align with grant funding criteria, such as multimodal improvements, transit, and livability?	-N/A	- Lowest cost alternative - Provides some mobility improvements for pedestrians - Does not provide significant transit benefits	-Higher cost than Concept 2, lower than Concept 4 - Improves safety and mobility for pedestrians and bikes - Provides most opportunity for funding partnerships	- Highest cost of alternatives - Improves mobility - Improves safety for all users
TRADE OFFS				
8 **PROPERTY IMPACTS** How well does the study concept minimize impacts to property and business owners by limiting right-of-way acquisition, avoiding existing structures and improvements or maintaining access?	- No property impacts	- Impacts up to 74% of parcels along the corridor	- Impacts up to 100% of parcels along the corridor	- Impacts up to 100% of parcels along the corridor - Highest area of right of way required
9 **CAPITAL COST** What is the relative capital cost?	- No implemenation costs - On-going maintenance costs	- Lowest cost of the study concepts	- Slightly higher cost than Concept 2, lower than Concept 4	- Highest cost of alternatives

3rd Avenue NW to Greenwood Avenue N

EVALUATION RESULTS

LEGEND:
○ Least or worst
● Most or best

	Study Concept 1 No Action	Study Concept 2 Intersection Improvements only	Study Concept 3 Bike Lanes and New Sidewalk	Study Concept 4 Shared Path
BENEFITS MEASURES	**3rd Avenue W to Greenwood Avenue**			
1 **IMPROVED PEDESTRIAN SAFETY AND ACCESS** How well does the study concept improve safety, mobility, accessibility for Pedestrians	- Existing sidewalk on south side of road. No walkway on north side of road.	- Limited improvements proposed except ADA upgrades where necessary	- New sidewalk, souuth side only - 10' sidewalk, meets City Standard - 5' separation with vehicles creates safe buffer and comfort for pedestrians	- New shared path sidewalk on south side
2 **IMPROVED TRANSIT SPEED, RELIABILITY, AND QUALITY** How well does the study concept improve Transit performance in the corridor?	- Limited transit service through this section of 145th Street - 4.1 minute estimated transit travel time thru section	- 22% travel time savings (through intersection capacity improvement)	- 30% transit travel time savings (through intersection capacity improvement)	- 48% transit travel time savings (through intersection capacity improvement)
3 **IMPROVED BIKE SAFETY AND MOBILITY** How well does the study concept improve safety, mobility, accessibility for bike riders?	- No bike facilities through the corridor	- No on-corridor bike pathways	- Bike lanes on roadway - No separation of bikes with vehicles	- Multi-use trail along the corridor - Shared path, one side of roadway, could present bike-pedestrian conflicts - Bike pathway is two-way
4 **IMPROVED VEHICLE SAFETY AND MOBILITY** How well does the study concept improve safety and mobility for vehicles and freight?	- No mobility improvements - No safety improvements - Does not meet LOS standards	- Signal timing and intersection capacity are improved - Meets LOS standards	- Signal timing and capacity improvements - Meets LOS standards	- Signal timing and capacity improvements - Meets LOS standards
5 **CONSISTENCY WITH REGIONAL PLANS** How well does the study concept integrate with other capital projects including the proposed light rail station and future improvements to the Interstate-5 interchange?	- Not improving the corridor is not consistent with plans for multimodal access to the LRT station as well as the City of Shoreline Comp Plan goals.	- Improves traffic congestion - Does not meet City standards for sidewalks	- Improves non-morotized connectivity along the corridor - Sidewalk/aesthetic improvements consistent with neighborhood character goals - Integration with bike master plans for Seattle and Shoreline	- Improves non-morotized connectivity to LRT - Integration wth modal plans for Seattle and Shoreline
6 **OPPORTUNITIES FOR ENVIRONMENTAL ENHANCEMENT** How well does the study concept enhance the environment and mitigate impacts to critical areas? How well does the study concept provide for opportunities to upgrade stormwater quality?	- No impacts to existing critical areas - Does not improve or enhance	- No impacts to existing critical areas - Potential for stormwater improvements at intersection	- Potential for low impact development (LID) - Potential for stormwater improvements - Adds trees and landscaping	- Potential for low impact development (LID) - Potential for stormwater improvements
7 **SUPPORTS ECONOMIC DEVELOPMENT** How well does the study concept encourage and support private reinvestment in the corridor through improvements such as transit, upgraded utilities and enhanced aesthetics?	- No improvements	- Improves traffic capacity	- Improves roadway frontages with sidewalk and landscaping - Maintains neighborhood character - Improves traffic capacity and non-motorized mobility	- Improves roadway frontages with sidewalk and landscaping - Maintains neighborhood character - Improves traffic capacity and non-motorized mobility
8 **FUNDING FEASIBILITY** How well will the study concept support the ability to compete for grant funding or secure direct funding? How well do the improvement elements align with grant funding criteria, such as multimodal improvements, transit, and livability?	-N/A	- Lowest cost alternative - Provides some mobility improvements for pedestrians - Does not provide significant transit benefits	- Highest cost of alternatives - Improves mobility - Improves safety for all users	- Slightly less cost than Concept 3 - Improves mobility - Improves safety for all users
TRADE OFFS				
8 **PROPERTY IMPACTS** How well does the study concept minimize impacts to property and business owners by limiting right-of-way acquisition, avoiding existing structures and improvements or maintaining access?	- No property impacts	- No property impacts	- Impacts up to 53% of parcels - Highest area of right of way widening required	- Impacts up to 53% of parcels
9 **CAPITAL COST** What is the relative capital cost?	- No implemenation costs - On-going maintenance costs	- Lowest cost of the study concepts	- Highest of the study concepts	- Higher than Concept 2, slightly less than Concept 3