



The Seattle Department of Transportation

SEATTLE BICYCLE MASTER PLAN

Implementation Plan 2015 - 2019



City of Seattle

Edward B. Murray, Mayor

Department of Transportation

Scott Kubly, Director

March 27, 2015

Honorable Tom Rasmussen
Transportation Committee Chair
Seattle City Council
City Hall, 2nd Floor

Dear Councilmember Rasmussen:

I am pleased to transmit the March 2015 update of the Bicycle Master Plan Implementation Plan. This implementation plan describes an ambitious set of projects and programs that will make significant progress towards the Bicycle Master Plan (BMP)'s vision to make *riding a bicycle is a comfortable and integral part of daily life in Seattle for people of all ages and abilities*. The actions and investments in the plan will advance this vision through new bicycle infrastructure, bicycle parking and other end-of-trip facilities, and programs to enhance safety, maintain facilities, and encourage more people to ride bicycles.

This is an update of the October 2014 Implementation plan and, as such, makes relatively minor changes to that plan. Changes include adding several new projects, an updated funding table, and more readable maps. In a separate transmittal, we will share the 2014 Bicycle Master Plan progress report, which describes the projects and programmatic work undertaken in 2014.

The BMP calls for a citywide network of trails, protected bicycle lanes, and neighborhood greenways. When fully implemented over five years, this plan will build more than 35 miles of protected bicycle lanes and more than 50 miles of neighborhood greenways throughout the city. While this implementation plan is specific to the Bicycle Master Plan, it reflects and supports Seattle's Vision Zero commitment to eliminate fatal and serious collisions by 2030.

Thank you for your support for bicycling in Seattle. I look forward to celebrating the opening of new facilities with you in the near future.

Sincerely,

Scott Kubly
Director, Seattle Department of Transportation

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INTRODUCTION

Seattle's Bicycle Master Plan (BMP) identifies projects and programs to be implemented over the next 20 years, to meet the vision of making riding a bike a comfortable and integral part of daily life in Seattle for people of all ages and abilities.

As part of this, the BMP calls for a connected network that includes approximately 100 miles of protected bicycle lanes and nearly 250 miles of neighborhood greenways. The BMP also identifies programs such as maintenance of

existing facilities, bicycle parking, and programs to encourage more people to ride.

When fully funded and combined with existing facilities, the projects and programs identified in this implementation plan will result in approximately one-third of the protected bicycle lanes and one-quarter of the neighborhood greenways in the plan being complete, and will make significant progress towards implementing other aspects of the BMP.

PURPOSE

This implementation plan describes the work that the Seattle Department of Transportation (SDOT) and its partners will undertake to implement the Bicycle Master Plan (BMP) over the next five years. The implementation plan will be updated every year and is intended to:

- Serve as an accountability and reporting tool
- Provide predictability for stakeholders by including a multi-year project list
- Guide future budget requests

UPDATES AND REPORTING

Consistent with Council Resolution 31515, SDOT will update the implementation annually, by March 31 of each year. As part of the update, we will make adjustments to the project lists and maps to reflect changes in project schedules, project types, and to add or remove projects. For example, as noted in the BMP's project delivery discussion, after evaluating a protected bicycle lane recommended in the BMP for a particular street, SDOT may determine that a different facility type, such as a buffered bicycle lane or a parallel neighborhood greenway, would be preferable.

This Implementation Plan is intended to reflect new projects planned for the next five years. Projects that are not in the Implementation Plan may be built to take advantage of leveraging or

other opportunities, such as the opportunity to coordinate with a paving, utility or private development project that was not anticipated at the time the Implementation Plan was updated. Such projects would follow the project development and outreach process outlined in the BMP.

Also consistent with Council Resolution 31515, as part of the annual implementation plan update, SDOT will prepare and submit to the City Council a progress report, reviewed and endorsed by the Seattle Bicycle Advisory Board (SBAB), covering the prior year's achievements. SDOT will also provide updates to the City Council and SBAB every six months on the status of projects, programs, and actions in the implementation plan.

PRIORITIZATION

We developed the project lists included in this plan using the prioritization criteria and methodology defined in the BMP. The BMP process includes quantitative scoring based on the plan's five themes (with corresponding weighting factors):

- Safety – 40 points
- Connectivity – 25 points
- Equity – 20 points
- Ridership – 10 points
- Livability – 5 points

Based on these scoring criteria, the prioritization process assigns a point value to each project segment. Projects are then grouped into priority tiers: Tier 1 is made up of the highest scoring twenty percent, Tier 2 is the next twenty percent, and so on. The priority tier for each project is shown on the project lists.

The BMP also provides criteria for qualitative evaluation, including:

- Potential to leverage other projects
- Policy directives
- Community interest
- Geographic balance

In addition to the quantitative and qualitative criteria, the BMP also identifies as near-term priorities:

- High-demand segments of the citywide network, specifically in, and connecting to, the Center City area
- Neighborhood greenways in all neighborhoods

Other priorities reflected in this implementation plan are:

- Coordinating with other modal plans and resurfacing projects
- Building network connectivity
- Implementing programs

All of these factors were considered in developing the project lists for this implementation plan. The project lists are organized by facility type, including protected bicycle lanes, neighborhood greenways, other on-street projects, off-street (trails) and catalyst projects. The project lists will evolve as we accelerate or decelerate projects based on changing conditions or opportunities. Project types may change within a corridor – for example, due to grades or other constraints, a corridor might have a protected bicycle lane on one side of the street and a buffered bicycle lane on the other.

PROJECT DELIVERY, PROGRAM DELIVERY AND PUBLIC ENGAGEMENT

The project delivery process will follow the steps outlined in the BMP, which include evaluating alternatives, conducting a Complete Streets review, applying the Race and Social Justice Initiative equity toolkit, and engaging the public. The BMP established where bicycle facilities are needed and what type of facility is appropriate. Public outreach and engagement going forward will focus on soliciting community input to ensure that projects balance community interests.

SDOT has developed an effective public engagement process for neighborhood greenways and will adapt this process for other types of projects to be implemented as part of this plan.

The greenways process is built around two public meetings. Meeting invitations are mailed to residents and businesses in the project area and sent to local media outlets and community groups. At the first meeting, SDOT:

- Describes Seattle's safety goals
- Defines the features of a typical greenway
- Shares traffic data about local streets
- Identifies general greenway route possibilities
- Gathers input from community members

At the second meeting, SDOT:

- Reviews project goals and objectives
- Shares the most promising route and the proposed safety improvements
- Gathers community input
- Describes next steps

Following the second public meeting, SDOT designs and builds the project. During the design phase, some additional smaller meetings may be held to address location-specific issues. Prior to construction, SDOT notifies adjacent properties of potential construction impacts.

This process has worked well for neighborhood greenways. We will be adapting it for protected bicycle lanes and other projects. Projects that are particularly complex may require additional work with stakeholders, but the goal is to be able to take full advantage of the useful insights and perspectives that result from good public engagement, while also meeting our ambitious implementation goals.

The Second Avenue Protected Bicycle Lane Demonstration Project is an example of a project that was identified in the BMP and quickly implemented with paint, delineator posts, and signal changes. By working collaboratively with stakeholders along the corridor, SDOT was able to address issues related to loading, valet services, and transit operations during design. Once the project was implemented, SDOT monitored the corridor and made rapid adjustments to address safety and operational issues.

The strategies and programs in Appendix 5, including bicycle parking, education and encouragement programs, maintenance, and others, will include public engagement as appropriate.

FUNDING ASSUMPTIONS

The work planned for 2015 is fully funded based on the amount in the adopted budget, combined with projected funds to be carried forward from 2014, and anticipated grants. For 2016 and beyond, the difference between estimated costs and total funding is shown in Appendix 1. Bicycle Master Plan implementation has historically been funded largely by the Bridging the Gap (BTG) levy, which expires at the end of 2015. Actual funding levels for future years will vary depending on the passage and priorities associated with

a replacement funding source; the funding assumptions and work plan will be adjusted in future updates to reflect new information.

This plan assumes a mix of implementation strategies – for example, some protected bicycle lane projects will be implemented with paint and delineator posts and some will involve more permanent infrastructure. These decisions will be based primarily on funding availability and leveraging opportunities.

STAFFING

The Bicycle Master Plan calls for SDOT to evaluate the need for a bicycle coordinator position (Action 7.2.1). SDOT is addressing this by hiring Nicole Freedman to lead the Active Transportation Program, including launching the new Summer Parkways Program and working on expanding the bikeshare system.

Nicole most recently served as the Director of Bicycle Programs for the City of Boston. The program is part of Mayor Walsh's vision for healthy, sustainable communities and neighborhoods. During her tenure, she has helped transform Boston from the worst cycling

city in the country to a recognized leader in cycling. Under her leadership, the city created 92 miles of bike lanes and implemented a successful bikeshare system. Nicole attended MIT before graduating with a degree in Urban Planning from Stanford University. Prior to working for Boston, Nicole competed professionally in bike racing from 1994-2005, winning two national championships and competing for the United States in the 2000 Olympics in Sydney. Nicole's first day will be April 22, 2015.

No staffing changes beyond hiring the Active Transportation Program Manager are planned.

GUIDE TO APPENDICES

Appendix 1: Costs and Funding Summary

This appendix includes a summary of planned spending and available funding. The “total cost estimate” line includes new bicycle facilities, as well as other projects and programs identified in this implementation plan such as bicycle parking, bicycle facility maintenance, spot improvements, and other work to advance the strategies in Appendix 5. Some projects that start in 2015 will carry forward into 2016.

Appendix 2: Project and Program Delivery Summary

This appendix summarizes the project and program deliveries by year.

Appendix 3: Implementation Maps

These maps show the projects planned for implementation in 2015 through 2019.

Appendix 4: Project Lists

The project lists are sorted by project type and include each project’s location, length, priority tier, and planned implementation year.

As noted above, adjustments will be made to the projects lists and maps as part of the annual update process to reflect changes in project schedules, project types, and to add or remove projects. Project schedules can be affected by coordination with other projects, environmental review, and myriad other factors. Project types may change based on the initial evaluation and outreach for a particular corridor, and some projects may begin one year and continue into the next.

Appendix 5: Strategies and Programs

This appendix shows the programmatic actions SDOT will undertake starting in 2015 and continuing into future years, and the status of each.

Appendix 6: Project Changes in this Update

This appendix shows the changes made to the project lists and maps, relative to the October 2014 Implementation Plan.

APPENDIX 1: COSTS AND FUNDING SUMMARY

Note regarding 2016-2019 BMP Implementation Funding: Historically funded largely by the BTG Levy, the future funding for this CIP project is unknown due to Levy expiration at the end of 2015, and therefore is not included in this table.

COST ESTIMATE						
	2015	2016	2017	2018	2019	5 YEAR TOTAL
Total Cost Estimate (1)	\$19.5	\$12.8	\$17.6	\$13.8	\$14.8	\$78.5

FUNDING PLAN						
	2015	2016	2017	2018	2019	5 YEAR TOTAL
Funding from TC366760 BMP Implementation						
BMP Proposed CIP Budget	\$6.5	\$1.3	\$1.2	\$1.2	\$1.2	\$11.4
2014 Carry Forward into 2015	\$6.5	\$0.0	\$0.0	\$0.0	\$0.0	\$6.5
Anticipated Grant Utilization	\$0.2	\$3.1	\$2.7	\$0.0	\$0.0	\$6.0
Total	\$13.2	\$4.4	\$3.9	\$1.2	\$1.2	\$23.9
Funding from Other CIP Projects - BMP Impacting Dollars (2)						
TC367070 - Cheshiahud Lake Union Trail (3)	\$0.5	\$2.0	\$0.0	\$0.0	\$0.0	\$2.5
TC367250 - Neighborhood Large Projects	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.6
TC367240 - Broadway Streetcar Extension (4)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
TC367670 - PMP School Safety	\$0.0	\$0.4	\$0.0	\$0.0	\$0.0	\$0.4
TC367330 - Waterfront Improvement Project (5)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
TC367420 - 23rd Ave Corridor Improvements	\$4.2	\$0.0	\$0.0	\$0.0	\$0.0	\$4.2
TC367350 - Sound Transit N Link Bike & Ped	\$0.0	\$0.0	\$0.0	\$0.0	\$1.9	\$1.9
Total	\$5.3	\$2.4	\$0.0	\$0.0	\$1.9	\$9.6
Funding from Other O&M Projects - BMP Impacting Dollars (2)						
Bike Share	\$0.6					\$0.6
Anticipated Low Income Bike Share Grant	\$0.4					\$0.4
Total	\$1.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.0
Total Funding	\$19.5	\$6.8	\$3.9	\$1.2	\$3.1	\$34.5
Annual Estimated Funding/Cost Variance(6)	\$0.0	(\$6.0)	(\$13.7)	(\$12.6)	(\$11.8)	(\$44.1)
Cumulative Funding/Cost Variance	\$0.0	(\$6.0)	(\$19.7)	(\$32.3)	(\$44.1)	(\$44.1)

(1) Total Cost Estimate includes infrastructure and programs.

(2) Dollars stated represent only the bike facility portion of each Capital Improvement Project listed.

(3) Westlake Cycle Track Project - miles (1.24) are included in 2015; the project is underfunded by \$2.3M per current cost estimates.

(4) Broadway Streetcar Bike Facilities - miles (0.57) are included in plan, costs and funding to be added when known

(5) Waterfront Improvement Project - miles (0.84) are included in plan, costs and funding to be added when known

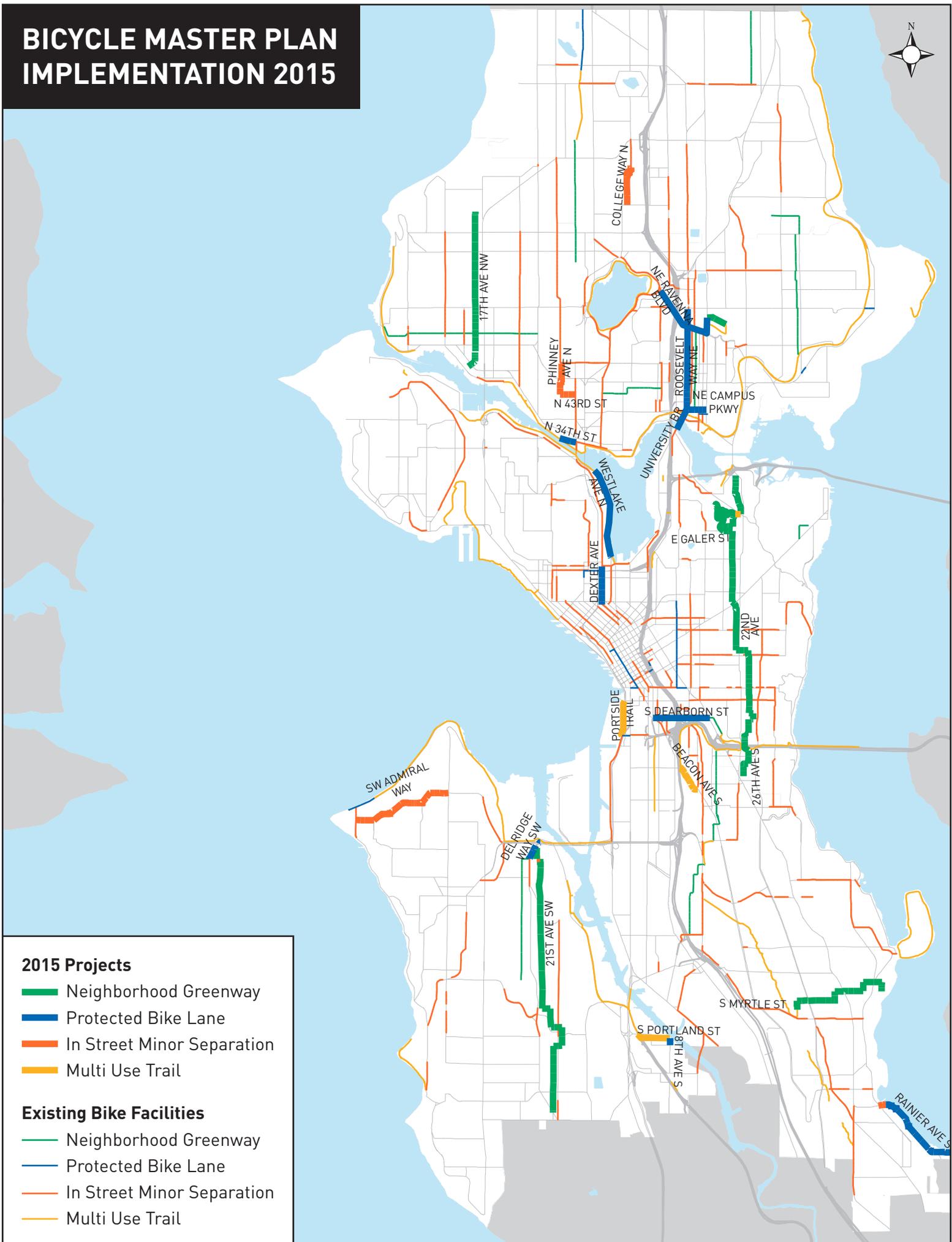
(6) Cost variance in 2016 has increased since last update; driven by correcting a 2016 budget overstatement (\$1M), reflecting current cost estimates for Westlake Cycle Track, adding an additional 0.4 PBL miles, and revising the drawdown on grant funds to match construction timing.

APPENDIX 2: PROJECT AND PROGRAM SUMMARY

PROJECTS AND PROGRAMS	2015	2016	2017	2018	2019	5-YEAR TOTAL
Protected Bicycle Lanes	7.5	9.4	6.1	5.8	7.8	36
Neighborhood Greenways	12.6	4.1	15.6	10.9	9.5	52
Education (schools reached)	12	14	16	18	20	80
Bike racks	225	200	175	150	125	875
Bike corrals	15	20	25	30	35	125
Wayfinding (miles)	25	25	25	25	25	25
Spot improvements	10	10	10	10	10	50

APPENDIX 3: IMPLEMENTATION MAPS

BICYCLE MASTER PLAN IMPLEMENTATION 2015



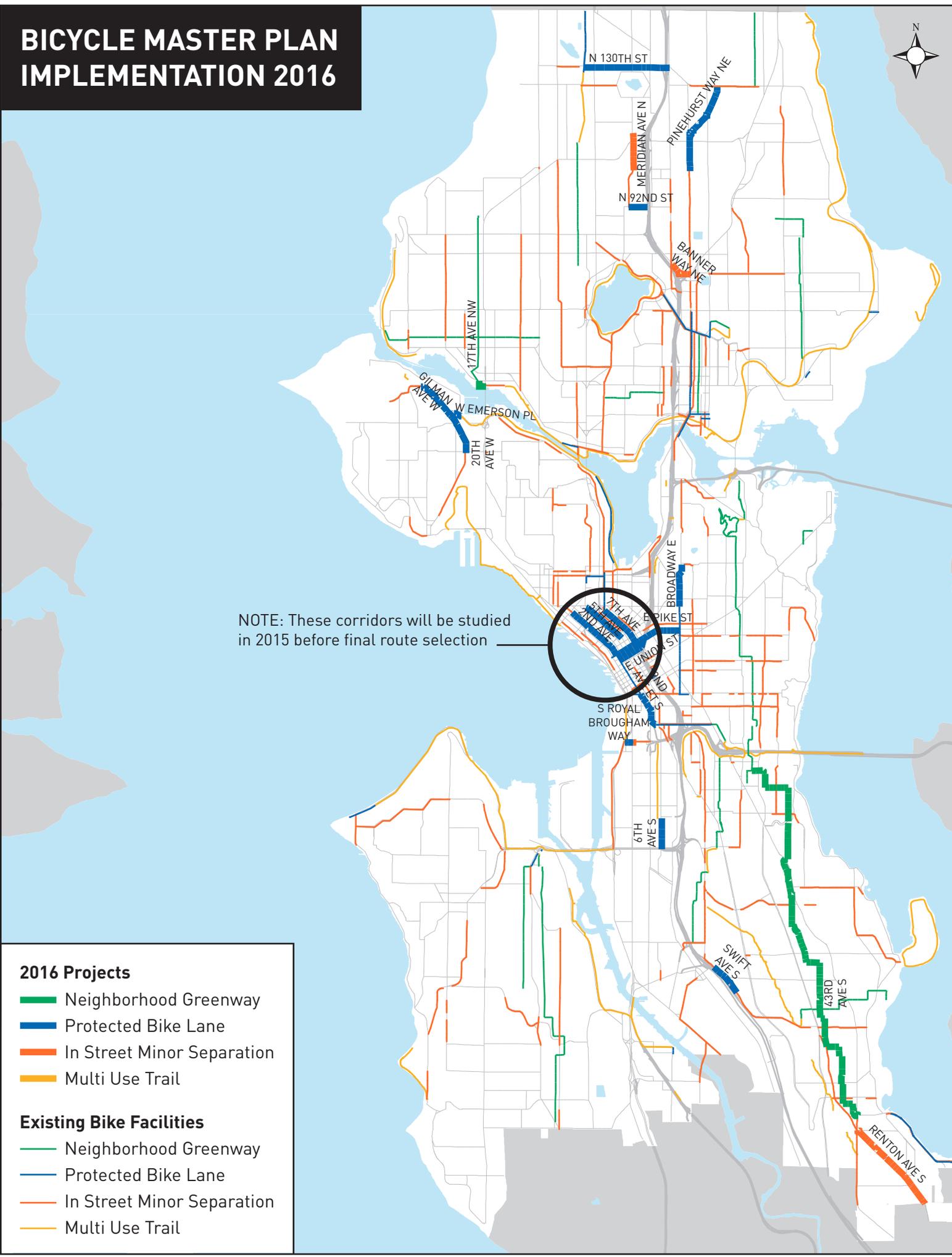
2015 Projects

- █ Neighborhood Greenway
- █ Protected Bike Lane
- █ In Street Minor Separation
- █ Multi Use Trail

Existing Bike Facilities

- █ Neighborhood Greenway
- █ Protected Bike Lane
- █ In Street Minor Separation
- █ Multi Use Trail

BICYCLE MASTER PLAN IMPLEMENTATION 2016



NOTE: These corridors will be studied in 2015 before final route selection

2016 Projects

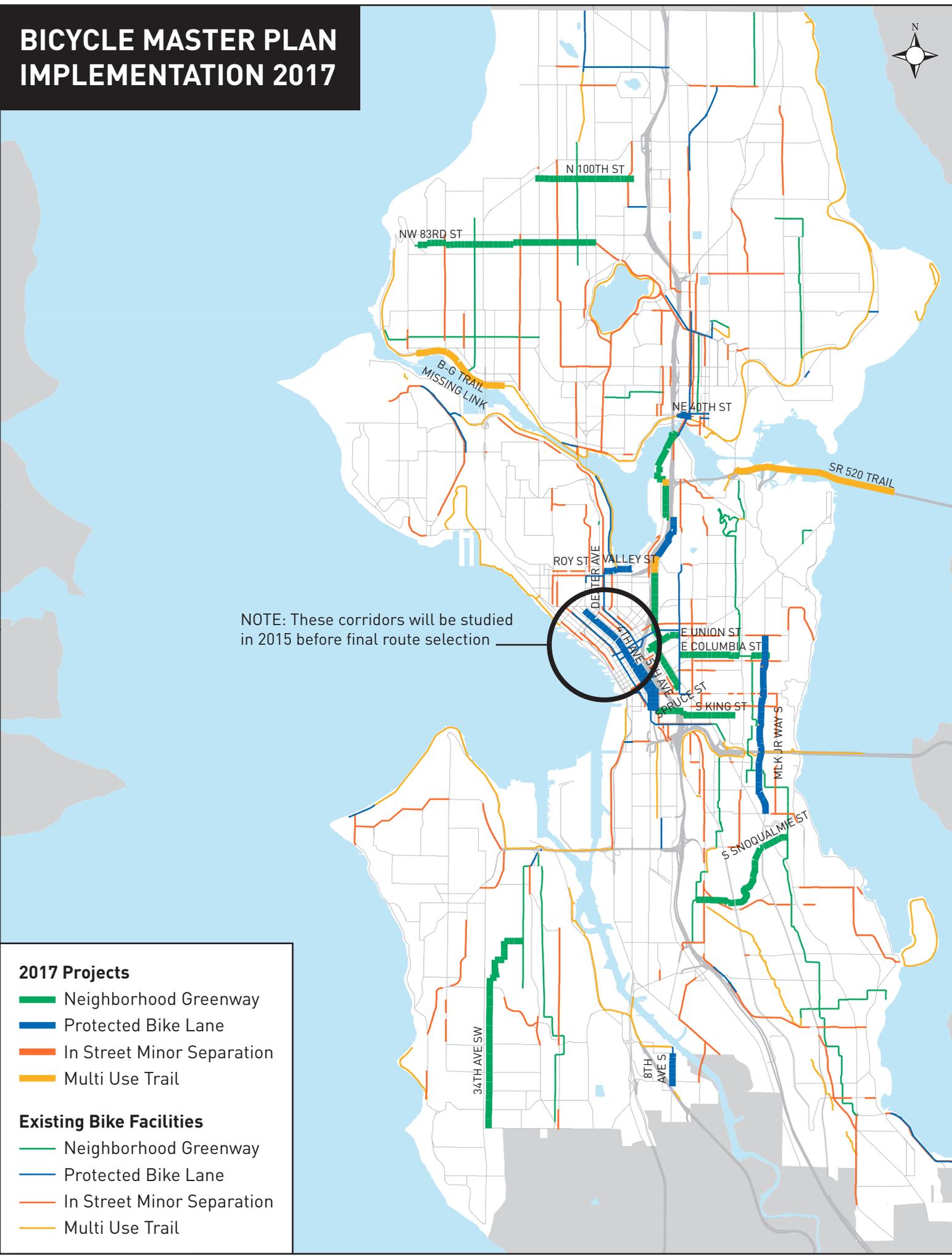
- Neighborhood Greenway
- Protected Bike Lane
- In Street Minor Separation
- Multi Use Trail

Existing Bike Facilities

- Neighborhood Greenway
- Protected Bike Lane
- In Street Minor Separation
- Multi Use Trail

Multi Use Trail

BICYCLE MASTER PLAN IMPLEMENTATION 2017



NOTE: These corridors will be studied in 2015 before final route selection

2017 Projects

- █ Neighborhood Greenway
- █ Protected Bike Lane
- █ In Street Minor Separation
- █ Multi Use Trail

Existing Bike Facilities

- █ Neighborhood Greenway
- █ Protected Bike Lane
- █ In Street Minor Separation
- █ Multi Use Trail

BICYCLE MASTER PLAN IMPLEMENTATION 2018



NOTE: These corridors will be studied in 2015 before final route selection

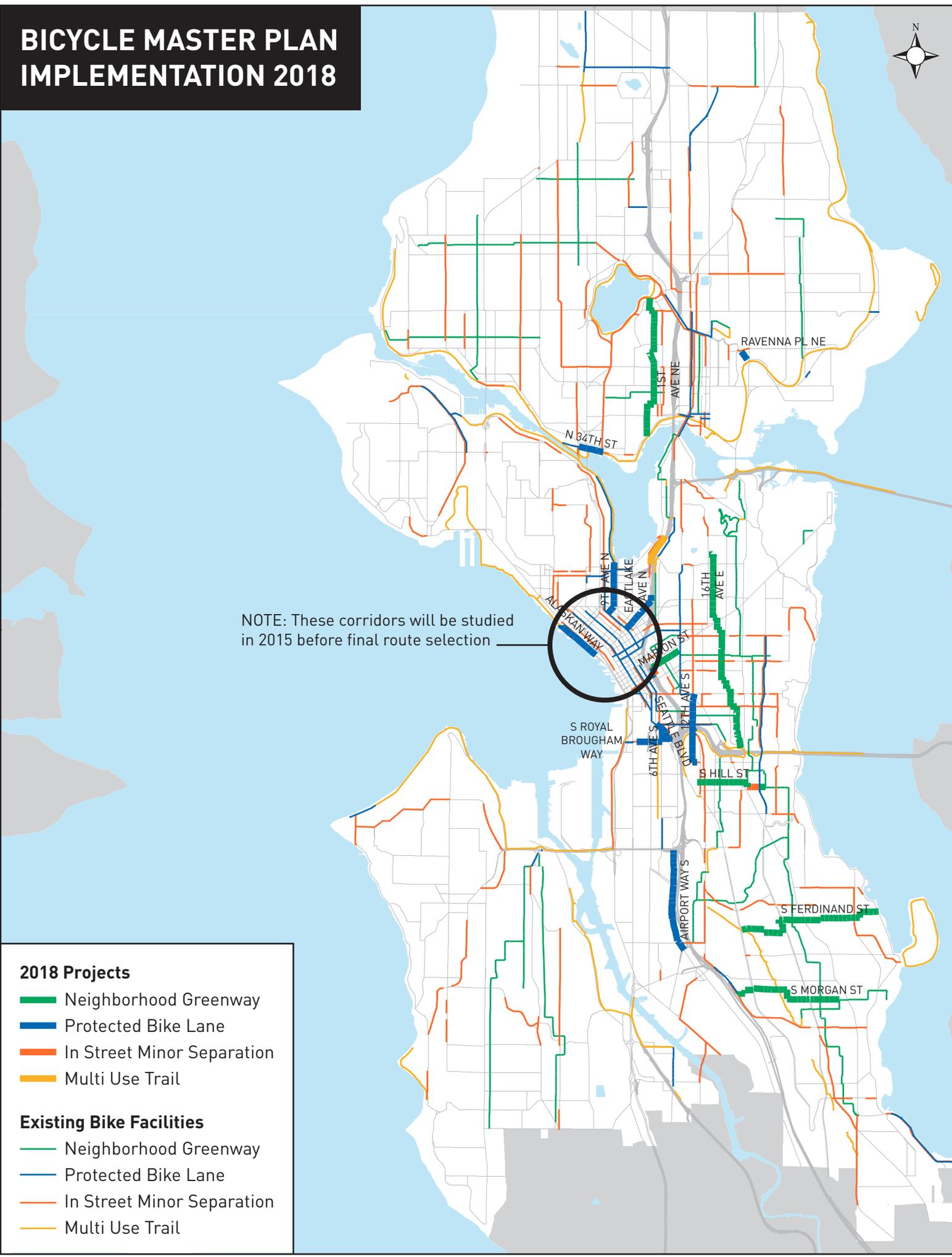


2018 Projects

- █ Neighborhood Greenway
- █ Protected Bike Lane
- █ In Street Minor Separation
- █ Multi Use Trail

Existing Bike Facilities

- █ Neighborhood Greenway
- █ Protected Bike Lane
- █ In Street Minor Separation
- █ Multi Use Trail



BICYCLE MASTER PLAN IMPLEMENTATION 2019



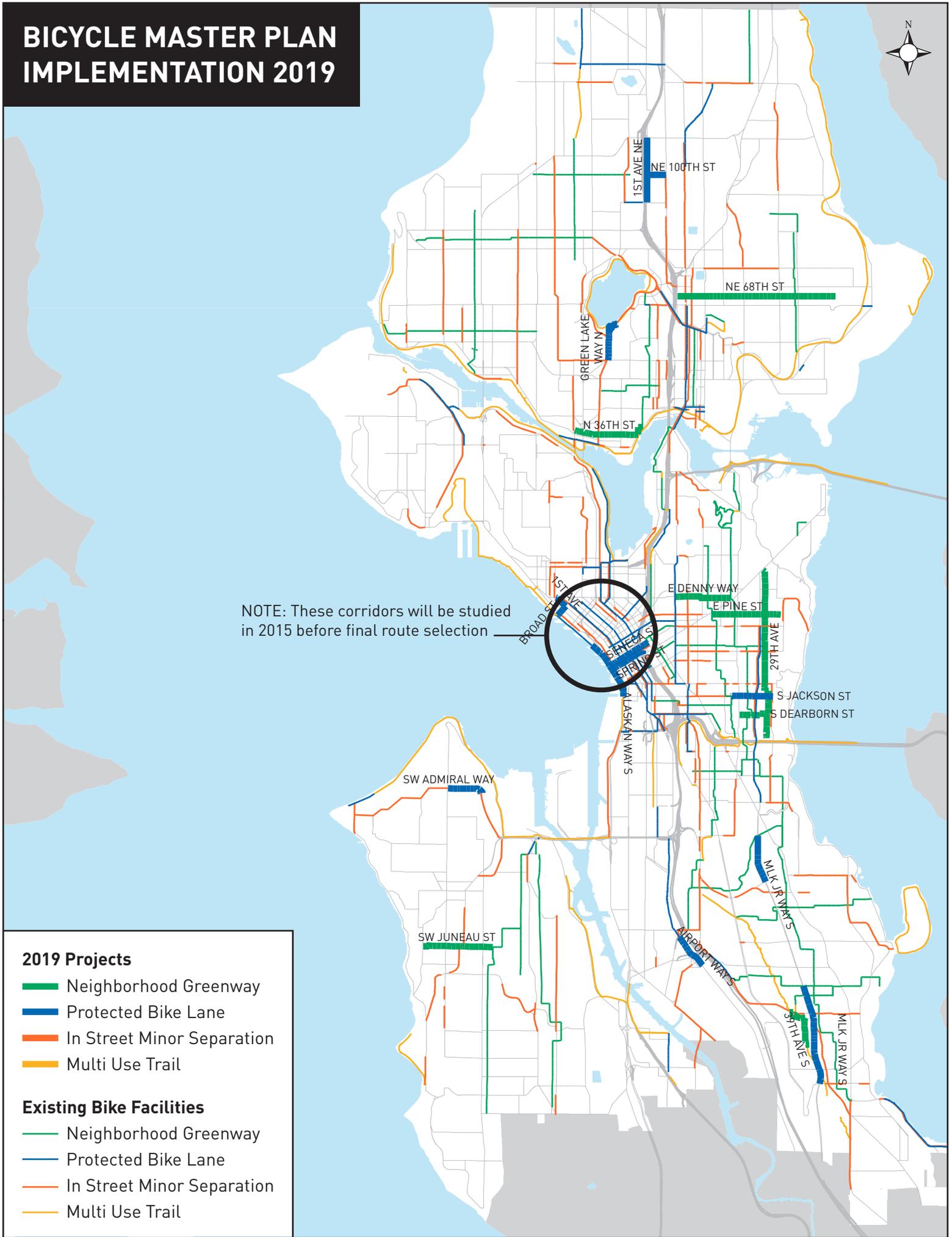
NOTE: These corridors will be studied in 2015 before final route selection

2019 Projects

- █ Neighborhood Greenway
- █ Protected Bike Lane
- █ In Street Minor Separation
- █ Multi Use Trail

Existing Bike Facilities

- █ Neighborhood Greenway
- █ Protected Bike Lane
- █ In Street Minor Separation
- █ Multi Use Trail



APPENDIX 4: PROJECT LISTS

Note that “Year” indicates planned construction year. Construction for some projects may span multiple years.

PROTECTED BIKE LANES				
Primary Street	Project Extents	Total Project Length	Year	Tier
8TH AVE S	S Kenyon St to S Portland St	0.10	2015	3
DELRIDGE WAY SW	SW Andover St to West Seattle Bridge	0.25	2015	1
DEXTER AVE/Roy St	Mercer Ave to 7th Ave	0.45	2015	2
N 34TH ST	Fremont Ave N to Phinney Ave N	0.23	2015	1
NE RAVENNA BLVD/COWEN PL NE	E Greenlake Way N to NE 62nd St	1.10	2015	1
RAINIER AVE S	Ithaca Pl S to city limits	1.40	2015	1
ROOSEVELT WAY NE	NE 40th St to NE 45th St	0.30	2015	2
NE CAMPUS PKWY	University Way NE to Eastlake Ave NE	0.34	2015	4
ROOSEVELT WAY NE	NE 42nd St	0.05	2015	2
ROOSEVELT WAY NE	NE 45th St to NE 65th St	1.00	2015	2
S DEARBORN ST	Rainier Ave S to 5th Ave S	0.76	2015	1
UNIVERSITY BR	NE Campus Parkway to Fuhrman Ave E	0.35	2015	1
WESTLAKE AVE N	W Raye St to Valley St	1.24	2015	2
5th AVE*	Denny Way to Olive Way	0.60	2016	2
SWIFT AVE S	S Warsaw to 19th Ave	0.30	2016	3
W EMERSON PL	Gilman Ave W to 21st Ave W	0.16	2016	1
6TH AVE S	S Forest St to S Spokane St	0.41	2016	3
S ROYAL BROUGHAM WAY	E Frontage Rd S to Occidental Ave S	0.15	2016	3
2ND AV ET S*	Yesler Way to S Jackson St - connection to S Dearborn St TBD	0.21	2016	1
PIKE ST*	2nd Ave to 9th Ave	0.43	2016	2
UNION ST and CONVENTIONAL PL*	2nd Ave to Pike St	0.46	2016	2
PINEHURST WAY NE	NE 103rd St to NE 125th St	1.20	2016	3
E PIKE ST*	9th Ave to Broadway	0.51	2016	1
GILMAN AVE W and 20TH AVE W	32nd Ave W to Thorndyke Ave W	1.41	2016	3
BROADWAY E	E Denny Way to E Aloha St	0.57	2016	1
7TH AVE*	Dexter Ave to Union St	0.69	2016	2

PROTECTED BIKE LANES				
Primary Street	Project Extents	Total Project Length	Year	Tier
2ND AVE*	Broad St to Pike St	0.81	2016	1
N 130TH ST	Linden Ave N (Interurban Trail) to 5th Ave NE	1.15	2016	1
N 92ND ST	Wallingford Ave N to 1st Ave N	0.40	2016	3
DEXTER AVE N	Mercer Ave to Roy St and Roy St to 9th Ave	0.18	2017	2
5th AVE*	Spring St to S King St	0.68	2017	1
M L KING JR WAY	E Union St to S McClellan St	2.42	2017	1
8TH AVE S	S Kenyon St to S Trenton St	0.50	2017	1
4TH AVE*	Cedar St to S King St/2nd Ave Ext S	1.67	2017	1
NE 40TH ST	Brooklyn Ave NE to 7th Ave NE	0.41	2017	1
VALLEY ST	9th Ave N to Fairview Ave N	0.25	2017	2
S ROYAL BROUGHAM WAY	S Occidental St to 6th Ave S	0.34	2018	3
STEWART ST and EASTLAKE AVE E	7th Ave to Eastlake Ave E and Stewart St to Thomas St	0.57	2018	2
4TH AVE S and SEATTLE BLVD S and AIRPORT WAY S	2nd Ave Ext S to I-90	0.51	2018	1
ALASKAN WAY	Broad St to Virginia St	0.62	2018	1
AIRPORT WAY S	S Spokane St to Corson Ave S	1.37	2018	1
N 34TH ST	Fremont Ave E to Stone Way N	0.34	2018	1
6TH AVE S	S Dearborn St to S Royal Brougham St	0.17	2018	3
9TH AVE N and BELL ST*	Westlake Ave N to 7th Ave	0.70	2018	1
12TH AVE S and S MASSACHUSETTS ST	I-90 to S Massachusetts St and 12th Ave S to 13th Ave S	0.48	2018	1
12TH AVE S	E Yesler Way to Golf Dr S	0.53	2018	1
RAVENNA PL NE	NE 55th St to Burke-Gilman Trail	0.17	2018	2
AIRPORT WAY S	S Corson St to S Hardy St	0.50	2019	1
1ST AVE*	E Denny Way to Broad St	0.18	2019	2
BROAD ST*	Alaskan Way to 1st Ave	0.22	2019	2
SPRING ST*	Alaskan Way to 7th St	0.49	2019	2
SENECA ST*	Alaskan Way to 9th Ave	0.61	2019	2
ALASKAN WAY	Virginia St to S Jackson St	0.84	2019	1
M L KING JR WAY S	S Holly St to S Henderson St	1.36	2019	1
M L KING JR WAY S	S Walden St to S Oregon St	0.65	2019	1
EAST GREEN LAKE WAY N	N 50th St to Kenwood Pl N	0.56	2019	1
S JACKSON ST	20th Ave S to 31st Ave S	0.64	2019	1
SW ADMIRAL WAY	California Ave SW to SW Olga St	0.61	2019	1
1ST AVE NE	NE 92nd St to N Northgate Way	0.90	2019	2
NE 100TH ST	1st Ave NE to 5th Ave NE	0.30	2019	3

* Note that the Center City projects will be evaluated in 2015 before selecting final routes.

IMPLEMENTATION YEAR	TOTAL MILES
2015	7.57
2016	9.46
2017	6.11
2018	5.8
2019	7.86

NEIGHBORHOOD GREENWAYS				
Primary Street	Project Extents	Total Project Length	Year	Tier
S MYRTLE ST	37th Ave S/Chief Sealth Trail to Seward Park Ave S/Martha Washington Park	1.58	2015	1
22ND AVE (CANG Ph 1)	S Jackson St to E John St	1.70	2015	1
17TH AVE NW	NW 90th St to Ballard Ave NW	2.10	2015	1
E GALER ST (CANG Ph 3)	E John to E Roanoke St	2.00	2015	1
26TH AVE S (CANG Ph 2)	S Jackson St to Rainier Ave S	1.30	2015	2
21ST AVE SW	W Seattle Bridge Trail to Delridge Ave SW	4.00	2015	5
17TH AVE NW	Ballard Ave NW to NW 45th St	0.20	2016	1
43RD AVE S/RAINIER VALLEY	I-90 Trail to Barton Pl S	3.90	2016	1
E UNION ST	Broadway to 9th Ave	0.51	2017	1
SPRUCE ST	Broadway to Eastlake Ave E (3.5 mile long north-south greenway linking First Hill and Eastlake)	3.50	2017	1
N 100TH ST	4th Ave NW to College Way N/North Seattle College	1.10	2017	1
E COLUMBIA ST	Broadway to 29th Ave	1.21	2017	1
S KING ST	5th Ave S to 20th Ave S	1.26	2017	1
S SNOQUALMIE ST	13th Ave S to 34th Ave S	2.60	2017	1
34TH AVE SW	SW Roxbury St to 26th Ave SW	3.00	2017	1
N 83RD ST	Loyal Way NW to Aurora Ave N	2.50	2017	1
S MORGAN ST	Beacon Ave S to 46th Ave S	2.10	2018	1
MARION ST	7th Ave to Broadway	0.50	2018	1
1ST AVE NE	E Greenlake Way N to N 36th St	2.10	2018	1
S HILL ST	13th Ave S to 28th Ave S	1.00	2018	1
S FERDINAND ST	Beacon Ave S to Lake Washington Blvd	2.40	2018	1
16TH AVE E	Volunteer Park to Judkins Park	2.80	2018	1

NEIGHBORHOOD GREENWAYS

Primary Street	Project Extents	Total Project Length	Year	Tier
S DEARBORN ST/29TH AVE	23rd Ave S to E Madison St	2.80	2019	1
E DENNY WAY	Broadway to 21st Ave E	0.80	2019	1
39TH AVE S	S Myrtle Pl to S Kenyon St	1.00	2019	1
SW JUNEAU ST	48th Ave SW to 34th Ave SW	0.90	2019	1
NE 68TH ST/NE 66TH ST	8th Ave NE to 50th Ave NE	2.20	2019	1
E PINE ST	17th Ave E to 33rd Ave E	0.90	2019	1
N 36TH ST	Fremont Ave N to Corliss Ave N	0.90	2019	1

IMPLEMENTATION YEAR	TOTAL MILES
2015	12.68
2016	4.1
2017	15.68
2018	10.9
2019	9.5

IN-STREET PROJECTS

Primary Street	Project Extents	Total Project Length	Year	Tier
PHINNEY AVE N	N 43rd St to N 50th St	0.50	2015	1
N 43RD ST	Phinney AVE N to Fremont Ave N	0.11	2015	3
RAINIER AVE S	Ithaca Pl S to Seward Park Ave S	0.11	2015	2
SW ADMIRAL WAY	California Ave SW to SW 63rd St	1.15	2015	3
COLLEGE WAY N	N 92nd St to N 103rd St	0.52	2015	1
RENTON AVE S	51st Ave S to S 112th St	1.30	2016	3
MERIDIAN AVE N	N 103rd St to N 112th St	0.90	2016	3
BANNER WAY NE	Roosevelt Way NE to 5th Ave NE	0.31	2016	2

OFF-STREET FACILITIES

Primary Street	Project Extents	Total Project Length	Year	Tier
BEACON AVE S	14th Ave S to S Holgate St	0.350	2015	1
PORT SIDE TRAIL (west side)	S King St to S Atlantic St	0.616	2015	2
DUWAMISH TRAIL (S Portland St)	W Marginal Way to 8th Ave S	0.560	2015	3
B-GT "Missing Link" (pending outcome of EIS process)	11th Ave NW to Chittenden Locks	1.363	2017	2
SR-520 Bridge Trail	Montlake Blvd E to Eastside of water	2.182	2017	5

CATALYST PROJECTS

Project Extents	Year	Tier
Chelan Ave SW/W Marginal Way/Alki Trail/SW Marginal Way/Delridge ST/SR-99 intersection - first phase	2015	N/A
University Bridge - north leg to Roosevelt Way NE/11th Ave NE and the University of Washington	2015	N/A
S Holgate St across I-5	2016	N/A

APPENDIX 5: STRATEGIES AND PROGRAMS

CHAPTER 4: THE BICYCLE NETWORK

BMP Strategy	Activity	Status
4.1 – 4.6 Implement the bicycle facilities	See project lists for projects that will be studied, designed, and implemented in 2015-2019. SDOT will continue to research and incorporate best practices, partner with other modes, and develop educational tools.	SDOT is on track to meet 2015 work plan targets.
4.7 Implement upgrades of existing bicycle facilities	Bicycle facilities upgrade projects will be identified through BMP project prioritization, and through safety corridor projects. Refer to strategy 7.3 and 7.13 for related work.	SDOT is on track to meet 2015 work plan targets.
4.8 Install bicycle detection at traffic signals in every new bicycle facility, as well as with all street replacement projects	SDOT will develop consistent bicycle detection standards by bicycle facility type, inventory existing detection on high priority bike facilities to determine upgrade needs, and develop a prioritized work plan for implementation.	SDOT is currently recommending appropriate bike detection on a case-by-case basis, and will start developing standards based on facility type and intersection geometry in 2015.
4.10 Design all bicycle facilities to meet or exceed the latest federal, state and local guidelines	This is SDOT's standard practice. In addition, the update of the Seattle Right-of-Way Improvements Manual will include bicycle facility design guidelines.	SDOT is currently updating the Right-of-Way Improvement Manual (ROWIM), which will include bicycle design guidelines.
4.11 Improve bicycle safety and access at railroad and rail transit crossings and parallel facilities	SDOT will conduct an inventory of all locations where bicycle facilities cross railroad and rail transit (streetcar and Link light rail) lines in 2015, and create a prioritized list of spot improvement projects.	SDOT has initiated the Trails Upgrade and Maintenance Plan, which will help prioritize spot improvements at railroad crossings.
4.12 – 4.15 Multimodal corridor development	SDOT's Multimodal Corridor Development Program will begin assessment of ten corridors in 2014-2015.	SDOT is currently updating the Multimodal Corridors work plan to better align with the newly released Move Seattle document.
4.16 Update the curb space allocation priorities in the Comprehensive Plan update	SDOT will work with the Department of Planning and Development (DPD) as the Comprehensive Plan is updated.	SDOT is currently conducting a curbspace management study and working with DPD on the Comprehensive Plan update.

CHAPTER 5: END-OF-TRIP FACILITIES

BMP Strategy	Activity	Status
5.1 Update the Seattle Municipal Code (SMC) bicycle parking requirements	SDOT will work with DPD to review the existing language and identify proposed changes.	This work is planned for later in 2015.
5.2 Develop a bicycle parking implementation program	SDOT will develop a methodology to identify and prioritize highdemand locations for bicycle parking in 2015, and will complete a Client Assistance Memo (CAM) for installation of private bicycle racks in the public right-of-way.	SDOT is currently working with students from the University of Washington to help prioritize bike parking locations. Internal guidelines for private bicycle rack installation in the public right-of-way have been developed and a CAM will be developed later in 2015.
5.5 Provide short- and long-term secure bicycle parking at high-capacity transit stations, transit hubs, and heavily-used bus stops	SDOT will partner with other agencies to coordinate the development of long-term secure bicycle parking.	SDOT is currently working with Sound Transit on Northgate Link Light Rail Extension to provide sufficient covered bicycle parking.

CHAPTER 6: PROGRAMS

BMP Strategy	Activity	Status
<p>6.1 and 7.9 Develop a bicycle safety education program</p>	<p>SDOT will continue to build upon existing safety educational and encouragement programs, and create new programs. As part of this SDOT will:</p> <ul style="list-style-type: none"> • Expand school bicycle safety education to two more schools per year (12 total in 2015) • Assess feasibility and cost of including middle school and high school roadway safety education (as part of the School Road Safety plan) • Research and assess the feasibility of laws requiring that all driver training and driver's license renewal processes cover bicycle facilities and safety • Develop and distribute bicycle education materials to encourage a wide range of current and new riders throughout the city • Engage with Seattle Public Schools to continue Safe Routes to School partnerships for traffic safety education and encouragement of walking and biking to school 	<p>In Fall 2015, SDOT will expand the SRTS program to two more schools.</p> <p>In 2015, SDOT started implementing a plan to reach all elementary schools between 2015-2018. Pending the success of the elementary school program and funding availability, SDOT will expand the education program to middle and high school students in 2019.</p> <p>Later in 2015, SDOT will evaluate how this may fit into our existing work load.</p> <p>In 2015, SDOT will continue to publish education and encouragement materials, including an updated bike map, Seattle by Bike brochures, and Bikelife magazine.</p> <p>SDOT will continue engaging with Seattle Public Schools to promote walking and biking to school.</p>
<p>6.3 Support improved access to bicycles and encouragement of bicycling opportunities</p>	<p>SDOT will develop a methodology to identify and prioritize highdemand locations for bicycle parking in 2015, and will complete a Client Assistance Memo (CAM) for installation of private bicycle racks in the public right-of-way.</p>	<p>SDOT is currently working with students from the University of Washington to help prioritize bike parking locations. Internal guidelines for private bicycle rack installation in the public right-of-way have been developed and a CAM will be developed later in 2015.</p>

CHAPTER 7: IMPLEMENTATION APPROACH

BMP Strategy	Activity	Status
<p>7.1 and 7.2 Develop and strengthen procedures and processes for bicycle project delivery</p>	<p>SDOT has a well-developed evaluation, design and public engagement process for neighborhood greenways. In 2015, SDOT will continue to use and refine this process, and will adapt it for other projects types such as protected bicycle lanes. In addition, SDOT will:</p> <ul style="list-style-type: none"> • Collect before and after data and complete perception surveys • Developing guidelines for “pop-up” bicycle facilities • Enhance data collection program by incorporating new technology 	<p>SDOT will continue to conduct data-driven planning processes, collecting quantitative “before” data and administering perception surveys as funding allows.</p> <p>SDOT has developed “pop-up” neighborhood greenway guidelines and guidelines for Parking Day installations.</p> <p>The Center City Bike Network study will utilize GPS ridership data via Strava to identify the most commonly utilized routes in the center city. In addition, SDOT is currently testing new micro radar detection for counting bikes on protected bike lanes.</p>
<p>7.3 And 7.13 Review bicycle-related collisions, collision rates and frequencies over time and identify and implement safety strategies. Improve bicycle facilities as needed, based on performance criteria.</p>	<p>SDOT will build on the existing collision review program and will:</p> <ul style="list-style-type: none"> • Analyze bicycle-involved collisions per facility type to identify trends, behaviors, and engineering solutions • Create a data-driven process to identify spot and/or corridor improvement projects • Develop a prioritized list of spot improvement projects 	<p>SDOT is initiating a Bicycle and Pedestrian Safety Analysis to address these concerns. The draft report is expected by the end of 2015 and will help prioritize spot improvements in 2016.</p>
<p>7.14 And 7.5 Create a multi-use trails upgrade and maintenance plan. Negotiate maintenance agreements with partners.</p>	<p>SDOT will develop a trails upgrade and maintenance plan in 2015, which will guide future upgrades to the multi-use trails.</p>	<p>SDOT is initiating a Trails Upgrade and Maintenance Plan to guide future investments. The draft report is expected by the end of 2015.</p>

CHAPTER 7: IMPLEMENTATION APPROACH

BMP Strategy	Activity	Status
<p>7.10 – 7.12 Maintain on-street and off-street bicycle facilities. Consider maintenance costs, procedures, and long-term funding mechanisms are a part of all new bicycle facility projects. Encourage people to report improvements requests to SDOT.</p>	<p>To address maintenance, SDOT will:</p> <ul style="list-style-type: none"> • Create life-cycle costs per bicycle facility to better understand and gauge current and future maintenance needs • Coordinate projects with Street Maintenance Paving plan • Evaluate additional bike facility sweeping as part of the SPU/SDOT street sweeping program • Complete 10 bike spot improvements in 2015 • Continue to promote existing ways for people to report maintenance and improvements requests 	<p>As we continue to build protected bike lanes, tracking maintenance costs will be important. SDOT is currently researching best practices from peer cities.</p> <p>As part of the Complete Streets framework, SDOT is working to coordinate upcoming paving projects and proposed bicycle facilities.</p> <p>As the city builds a critical mass of protected bike lanes, SDOT will identify the most cost effective way to sweep bicycle facilities.</p> <p>SDOT is on track to complete 10 bike spot improvements in 2015. The upcoming Trails Upgrade and Maintenance Plan and Bicycle and Pedestrian Safety Analysis will help prioritize bike spot improvements beginning in 2016.</p> <p>SDOT and the Mayor’s Office are continuing to promote the web-based, Find It, Fix It, application to improve reporting of maintenance requests.</p>
<p>7.17 Establish a broad-based funding approach</p>	<p>SDOT will continue to research and pursue grants, and other funding opportunities.</p>	<p>SDOT recently announced a proposal for a new levy to replace Bridging the Gap, which expires at the end of 2015.</p>

OTHER RELATED STRATEGIES AND ACTIONS

BMP Strategy	Activity	Status
<p>Develop and implement a process to evaluate turn on red restrictions, dual turns, and speed limit changes.</p>	<p>This will be addressed as part of road safety work starting in late 2014 and continuing into 2015 and beyond.</p>	<p>Vision Zero identifies data-driven pedestrian safety enhancements including lower speed limits, leading or lagging pedestrian intervals, protected turn phases, elimination of dual turn lanes, signal improvements and no turns on red. In 2015, SDOT is evaluating safety improvements at the following locations downtown: 5th Ave at Union, University, Spring, and Seneca Streets; 6th Ave at Pike, Spring, Cherry, James, and University Streets; and 7th Ave and Olive Way.</p>

APPENDIX 6:

PROJECT CHANGES IN THIS UPDATE

1. Projects added to the Implementation Plan as part of the March 2015 update:
 - a. In 2015, the existing bike lanes on College Way N, between N 92nd St and N 103rd St will be upgraded to buffered bike lanes (0.52 miles).
 - b. A bike lane on Meridian Ave N, between N 103rd St and N 112th St (0.9 miles), has been added to the 2016 project list, in order to coordinate with the paving project.
 - c. A PBL on 5th Ave, between Denny St and Olive St (0.6 miles), will be evaluated in 2015 as part of the Center City network development process.
 - d. A PBL on Swift Ave S, between S Warsaw St and 19th Ave S, has been added to the 2016 project list. (This project was mapped but not listed in the October 2014 Implementation Plan.)
 - e. A bike lane on Renton Ave S, between 51st Ave S and S 112th St (1.3 miles), has been added to the 2016 project list, in order to coordinate with the paving project.
 - f. A bike lane on Banner Way N, between Roosevelt Way NE and 5th Ave NE (0.31 miles), has been added to the 2016 project list.
 - g. A PBL on Airport Way S, between S Corson St and S Hardy St (0.5 miles), has been added to the 2019 project list. (This project was mapped but not listed in the October 2014 Implementation Plan.)
 - h. A PBL on the University Bridge, from NE Campus Pkwy to Fuhrman Ave (0.35 miles), has been added to the 2015 project list and will be installed in 2015-2016 as part of the Roosevelt Paving and Safety Project.
 - i. A PBL on Roosevelt Way NE, from NE 45th St to NE 65th St (1.0 miles), has been added to the 2015 project list and will be installed in 2015-2016 as part of the Roosevelt Paving and Safety Project.
 - j. Based on community support and engineering feasibility, the Pinehurst Way NE PBL project limits will now span NE 103rd St to NE 125th St (1.2 miles). The previous project extents were Roosevelt Way NE to NE 117th St (0.5 miles).
 - k. A PBL on N 92nd St, between Wallingford Ave N and 1st Ave N (0.4 miles), has been added to the 2016 project list, in order to coordinate with the paving project.
 - l. A PBL on 1st Ave NE, between NE 92nd St and N Northgate Way (0.9 miles), has been added to the 2019 project list, in order to coordinate with the Sound Transit Northgate Station construction.
 - m. A PBL on NE 100th St, between 1st Ave NE and 5th Ave NE (0.3 miles), has been added to the 2019 project list, in order to coordinate with the Sound Transit Northgate Station construction.

2. Projects previously in the Implementation Plan that have been modified to create more logical project limits or remedy inconsistencies:
 - a. NE Campus Pkwy PBL project now spans from Eastlake Ave NE/Roosevelt Way NE to University Way NE and includes a block of Brooklyn Ave NE (NE Campus Pkwy to NE 40th St) to better integrate the existing network and provide access to the B-GT detour and University of Washington campus. The project length has also been corrected.
 - b. 0.3 miles of the planned 0.35 miles of the Roosevelt Way NE protected bike lanes between NE 40th St and NE 45th St were constructed in 2015. The remaining 0.05 miles of PBL at NE 42nd St will be constructed as part of the AAC project in 2015 – 2016.
 - c. The 2nd Ave Extension S PBL project from S Yesler St to S Jackson St will likely be extended to connect to the planned protected bike lane on S Dearborn St; the alignment will be determined as part of the Center City Bike Network process.
 - d. Based on community outreach and engineering judgment, the S Myrtle St neighborhood greenway planned route deviates from the route shown in the BMP. The planned route connects Martha Washington Park and John C Little, Sr., Park and is 1.58 miles long.
 - e. The 17th Ave NW neighborhood greenway will connect Whitman Middle School (NW 90th St) with Ballard Ave NW (2.1 miles) in 2015. In 2016, SDOT will extend the project to the Ballard Bridge and NW 45th St (0.2 miles).
 - f. The S Hill St neighborhood greenway route has been reduced to 1.0 miles (between 13th Ave S and 28th Ave S), as the Rainier Valley North-South (43rd Ave S) neighborhood greenway project extents will include the rest of S Hill St project (0.7 miles). The Rainier Valley North-South project is planned for 2016 implementation.
 - g. In order to coordinate with the Sound Transit Roosevelt Station plans, the NE 68th St neighborhood greenway project limits have been extended 0.7 miles to 8th Ave NE / Weedin Pl NE.

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