



Clark County Bicycle and Pedestrian Master Plan

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Presented by

Gary Albrecht, Planner II

Clark County Community Planning

History

- 1972 Bicycle Plan
- 1996 Clark County Bicycle Commute Plan
- 2010 Clark County Bicycle and Pedestrian Master Plan



Bike and Ped Plan Overview

- Eight Chapters
 - Introduction
 - Existing Conditions
 - Recommended Policies
 - Recommended Prioritized Network
 - Bicycle Parking Standards and Guidelines
 - Design Program
 - Education and Outreach Efforts
 - Implementation Plan



Vision Statement

- Clark County Bicycle and Pedestrian Plan envisions an interconnected transportation system where:
 - People can bicycle or walk safely and conveniently to all destinations within reasonable walking or bicycling distance;
 - Schoolchildren will have safe routes to walk and cycle to school;
 - People can walk or ride to and from their transit stops and have a comfortable and convenient place to wait or transfer;



Vision Statement

- Bicyclists and Pedestrians can enjoy Clark County's natural beauty;
- Appropriate transportation choices are available to all; and
- Transportation facilities are designed to encourage active transportation;
- Clark County will promote the economic development opportunities related to bicycling



Key components of the plan

- Bicycle & Pedestrian Supportive Policies
- Funding Strategies
- Inventory of Existing Bicycle & Pedestrian Facilities
- Bicycle & Sidewalk Project Lists
- Bicycle Parking Recommendations
- Work Program for Plan Implementation



Challenges

- I-5 and I-205 major barriers for walking and biking
- Existing network discontinuous in places
- Funding
- Most roads have been built; requirements of bike and ped facilities would develop in existing right of way



Providing service within constraints

- Balanced approach: provide transportation choices for all modes of travel
- Bicycle and Pedestrian Advisory Plan committee recommendations: how do we implement?
- Example: Bicycle and Pedestrian education in the schools
- Partnerships: In this example, staff and members of the citizens are working with Vancouver and Evergreen School District
- Grant funding: Washington Bikes, Kaiser Permanente



Funding

- Staff needs to aggressively pursue grant opportunities, per the recommendation of the Bicycle and Pedestrian Advisory Committee
- According to State law, 0.5% of gas tax revenue must be used for special projects such as, bike ways. This funding could be used for matching funds (Source: County TIP, page 19)
- The cost of adding bicycle lanes, signage, and stencils are relatively low, compared to pedestrian projects where right-of-way must be purchased



Cost Examples:

In 2010, Full Bikeway Treatment on 7.7 miles of county road is approximately \$6,600. Sidewalk construction for one mile of sidewalk is approximately \$32,000. Breakdown of striping costs are listed below.

Travel Direction	Feet	Miles	Treatment	Number	Cost
Northbound	20,221	3.8	Striping		\$574
			Bike Lane Symbols	10.1	\$1,365
			Signs	10.1	\$1,365
					\$3,304
Southbound	20,221	3.8	Striping		\$574
			Bike Lane Symbols	10.1	\$1,365
			Signs	10.1	\$1,365
					\$3,304
Northbound & Southbound	40,442	7.7	Striping		\$1,149
			Bike Lane Symbols	20.2	\$2,730
			Signs	20.2	\$2,730
			Total Cost		\$6,609



Bicycle and Pedestrian Advisory Committee

- Implements the vision of the Clark County Bicycle and Pedestrian Master Plan
- Bylaws
- Bicycle and Pedestrian web page



Prioritization Criteria

Criteria	Comments
Closing Gaps	To what degree does the project fill a missing gap or overcome a barrier in the current system? Does it improve significant crossings?
Safety & Comfort	Can the project improve walking and bicycling conditions at locations with perceived or documented safety issues? Does the project make cycling and walking appealing to all users?
Access & Mobility/Land Use	How many user generators does the project connect within a reasonable walking or cycling distance? Are adjacent land uses supportive of walking and bicycling? To what degree will the project generate users?
Multi-modal Connections	To what degree does the project integrate walking and cycling into the existing transit system? Does the project enable the use of multiple active transportation modes?
Implementation	What is the ease of implementation? Is funding available? Is additional right-of-way required? Are negotiations required over parking availability, signage, etc.?
Community Benefit	To what degree does the project offer potential benefits to the regional community by offering opportunities for increased connectivity to parks, natural scenic beauty, and activity centers?
Health Outcomes	To what extent does the project increase physical activity, regardless of travel purpose? To what extent does the project improve other determinants of health?

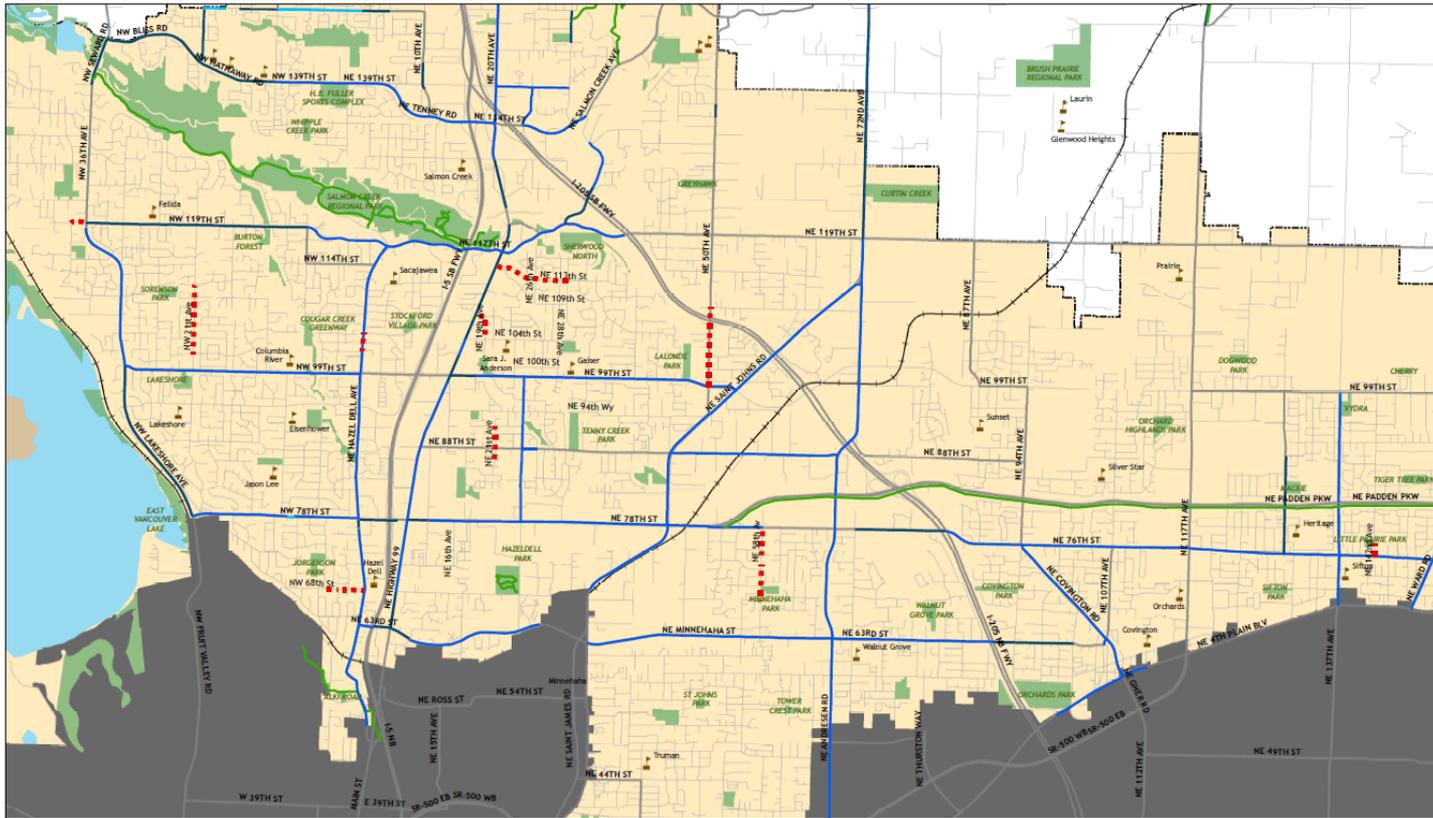


Priority Sidewalk Projects

Street	From - To	Length (miles)	Closing Gaps	Land Uses	Safety and Comfort	Community Benefits	Implementation	Multi-Modal	Health Outcomes	Planning-Level Cost Estimate [†]
Hazel Dell Ave	NE 105 th Ave - NE 102 nd St	0.12	25	4	6	1	4	15	15	\$57,000
NE 142nd Ave	Little Prairie Park - NE 76th St	0.09	25	10	8	10	4	15	10	\$43,000
NW 119th St [†]	NW 36 th Ave - NW 38 th Ave	0.23	25	4	6	4	4	15	15	\$110,000
NE 19th Ave/ /NE 107 th St	NE 104 th St - Hwy 99	0.16	25	10	12	4	4	15	10	\$76,000
NE 21st Ave	NE 91 st St - NE 86 th Cit	0.24	25	10	8	8	4	15	10	\$115,000
NE 50th Ave	NE 99 th St - NE 109 th St	0.54	25	10	6	8	4	15	10	\$258,000
NE 58th Av	NE 78th St - NE 69 th St	0.44	25	10	6	10	4	15	12	\$210,000
NE Parkview Dr/ NE 113th St	NE Hwy 99 - NE 30 th Ave	0.51	25	10	12	4	4	15	10	\$244,000
NW 21st Ave	NW 111 th St - NW 101 st St	0.47	18	7	6	8	4	15	15	\$4225,000
NW 68th St	NW 3 rd Ave - Hazel Dell Ave	0.25	25	10	6	8	4	15	10	\$119,000
Total Sidewalk Projects		3.05								\$1,457,000



Priority Sidewalk Projects



Map 4. Priority Sidewalk Projects

Clark County
 Bicycle and Pedestrian Master Plan
 Source: Adapted from Clark County
 Author: HWK
 Date: September 2010

- Priority Sidewalk Projects
- Off-Street Trail
- Bike Lane
- Bike Lane One-Side
- Shoulder Bikeway
- Railroad
- School
- Parks
- Urban Growth Boundary



Prioritized On-Street Bikeway Projects

Table 8. Top Prioritized On-Street Bikeway Projects*

Street	From - To	Length (miles)	Closing Gaps	Land Uses	Safety and Comfort	Community Benefits	Implementation	Multi-Modal	Health Outcomes	Type	Planning-Level Cost Estimate [†]
NE 13th Ave	NE 88th St - NE 78th St	0.50	25	10	6	8	4	15	16	Shared Lane Markings	\$116,000
NE 179th St	NE 29th Ave - NE 102nd Ave	4.61	25	10	6	8	4	15	16	Bike Lane	\$1,071,000
NE 50th Ave	NE 119th St - NE Saint Johns Rd	1.23	25	10	6	10	4	15	16	Bike Lane	\$286,000
NE 94th St	NE 15th Ave - NE 25th Ave	0.50	25	10	8	10	4	15	19	Shared Lane Markings	\$116,000
NE 94th St	NW 21st Ave - NE 5th Ave	1.28	25	10	6	10	4	15	19	Shared Lane Markings	\$297,000
NE Delfel Rd	NE 199th St - NE 179th St	1.02	25	10	6	8	4	15	16	Bike Lane	\$237,000
NE/ NW 199th St	NW 11th Ave - NE 112th Ave	6.01	25	10	8	10	4	15	12	Bike Lane	\$1,396,000
NW 11th Ave [‡]	NW 199th St - Salmon Creek Greenway	3.56	25	10	6	10	4	15	16	Bike Lane	\$827,000
NW 21st Ave	NW 119th St - NW 78th St	2.01	25	10	6	10	4	15	14	Bike Lane	\$467,000
NW 2nd Ave/ NE 132nd St /	NW 139th St - NE 16th Ave	1.28	25	10	6	10	4	15	11	Shared Lane Markings	\$297,000

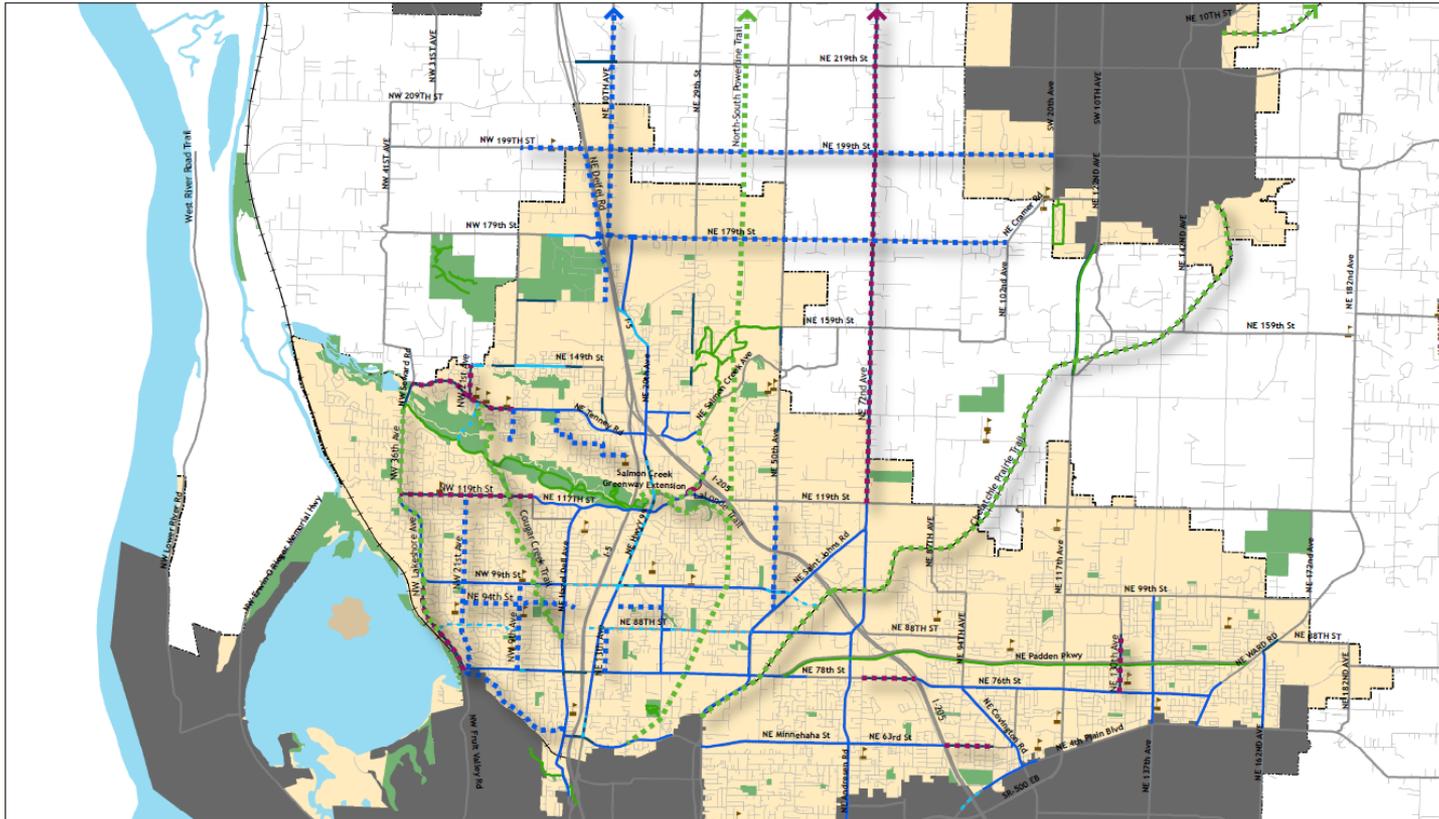


On-Street Bikeway continued

Street	From - To	Length (miles)	Closing Gaps	Land Uses	Safety and Comfort	Community Benefits	Implementation	Multi-Modal	Health Outcomes	Type	Planning-Level Cost Estimate [†]
NE 129th St											
NW 9th Ave	NW 99th St - NE 78th St	0.98	25	10	6	10	4	15	14	Bike Lane	\$228,000
NW Sluman Rd/ NW Overlook Dr/ NW Hazel Dell Way	NW 78th St/ NW Bacon Rd - NE Hazel Dell Ave	1.46	25	10	6	10	4	15	16	Bike Lane	\$339,000
NE 10 th Ave	NE Carty Rd – NE 179 th St	3.11	25	10	6	8	4	15	12	Bike Lane	\$723,000
Total On-Street Bikeways		27.55									\$6,400,000



Bikeway and Trail Projects



Map 5. Top Tier Bikeway and Trail Projects

Clark County
Bicycle and Pedestrian Master Plan
Source: Data obtained from Clark County
Author: 10/09
Date: September 2010

- - - Planned projects
- - - Bikeway projects
- - - Restriping bike lane projects
- - - Trail and pathway projects
- Off-Street trails and pathways
- Bike lane
- Bike lane one-side
- Shoulder bikeway
- Railroad
- School
- Parks
- Urban growth boundary



0 0.5 1 Miles



Bicycle Re-Striping Projects

Table 10. Top Prioritized Roadway Restriping Projects

Street	From - To	Length (miles)	Closing Gaps	Land Uses	Safety and Comfort	Community Benefits	Implementation	Multi-Modal	Health Outcomes	Planning-Level Cost Estimate*
NE 10 th Ave	NE 259 th St – NE Carty Rd	0.89	25	10	8	1	5	1	10	\$282,000
NE 130 th Ave	NE 89 th St - NE 78 th St	0.67	25	10	8	10	5	15	13	\$212,000
NE 63 rd St	I-205 - NE 102 nd Ave	0.55	25	10	6	4	5	15	16	\$174,000
NE 78 th St	NE 72 nd Ave - I-205	0.61	25	10	6	15	5	4	16	\$2,211,000
NE 72 nd Ave	NE 259 th St - NE 119 th St	6.98	25	10	6	10	5	15	10	\$193,000
NE Edmunds Rd	NE 174 th Ct - NE 29 th St	0.57	25	10	12	10	5	15	10	\$181,000
NE Salmon Creek Ave	NE 125 th St - NE 117 th St	0.45	25	10	6	10	5	15	19	\$143,000
NW 119 th St	NW 36 th Ave - NW 21 st Ave	1.50	25	10	6	10	5	15	12	\$475,000
NW 21 st Ave	NE 149 th St - NW Bliss Rd	0.37	25	10	6	10	5	15	14	\$117,000
NW Bliss Rd/ NW Hathaway Rd/ NW 139 th St	NW Seward Rd - NW 11 th Ave	1.26	25	10	6	10	5	15	14	\$399,000
NW Lakeshore Ave	NW 99 th St - NW 78 th St	1.17	25	7	6	10	5	15	14	\$371,000
Total Roadway Restriping Projects:		13.31								\$4,476,000



Trail Projects

Table 12. Priority Trail Projects*

Trail	From - To	Type	Length (miles)	Closing Gaps	Land Uses	Safety and Comfort	Community Benefits	Implementation	Multi-Modal	Health Outcomes	Planning-Level Cost Estimate† (millions)
NE 119 th St/ NE Salmon Creek Ave	Highway 99 - WSU	Side Path	25	10	10	10	10	3	15	19	\$2.0
NW 36th Ave	Salmon Creek Greenway Trail - NW 88th St	Side Path	2.7	25	10	15	10	1	15	17	\$3.3
Chelatchie Prairie Trail	Vancouver City Line - Battle Ground City Line	Shared -use	9.3	25	10	15	8	3	15	20	\$11.2
Chelatchie Prairie Trail	Yacolt City Line - Battle Ground City Line	Shared -use	11.5	25	10	15	10	3	1	13	\$13.8
Chelatchie Prairie Trail	Yacolt City line - county line	Shared -use	19.5	8	10	15	10	3	1	13	\$23.2
Salmon Creek Greenway	Eastern Kline line pond - 119 th St	Shared -use	0.3	25	10	15	10	1	15	20	\$0.4
North South Powerline Trail	NE Cedar Creek Rd - NE 63 rd St	SUP	17.9	25	10	15	10	1	15	16	\$8.4
Cougar Creek Trail	NW 139th St - NE Hazel Dell Ave	Trail	3.2	25	10	15	10	1	15	20	\$3.8
LaLonde Trail	NE Hwy 99 - North-South Powerline Trail	Trail	1.6	25	10	15	10	1	15	20	\$0.7
Total Trail Projects			66.7								\$80.1



Trail Project Connections

Table 13. Priority Trail Project Connections

Trail	From - To	Bikeways	Schools	Parks	Transit	Other
NE 119 th St/ NE Salmon Creek Ave	Highway 99 - WSU	<ul style="list-style-type: none"> • NE 29th Ave • WSU Trail • Salmon Creek Greenway 	<ul style="list-style-type: none"> • WSU • Pleasant Valley Elem & Jr. High 	<ul style="list-style-type: none"> • Pleasant Valley Park • Salmon Creek Park 	<ul style="list-style-type: none"> • Hwy 99 	<ul style="list-style-type: none"> • Provides on-street connection from regional trail to WSU
NW 36 th Ave	Salmon Creek Greenway Trail - NW 88 th St	<ul style="list-style-type: none"> • NW Lakeshore Ave • NW 119th St • NW 99th St 	<ul style="list-style-type: none"> • Felida Elem • Lakeshore Elem 		<ul style="list-style-type: none"> • NW 199th St 	
Chelatchie Prairie Trail	Vancouver City Line -Battle Ground City Line	<ul style="list-style-type: none"> • NE St. Johns Rd • NE 72nd Ave • SR 509 Trail 	<ul style="list-style-type: none"> • Laurin Elem 	<ul style="list-style-type: none"> • Brush Prairie 	<ul style="list-style-type: none"> • NE St. James Rd • NE 78th St • NE 117th Ave/NE Caples 	<ul style="list-style-type: none"> • Connection to Vancouver, Battle Ground,
Chelatchie Prairie Trail	Yacolt City Line - Battle Ground City Line	<ul style="list-style-type: none"> • Battle Ground Lake trails 	<ul style="list-style-type: none"> • Yacolt Elem 	<ul style="list-style-type: none"> • Battle Ground Lake • Lucia Falls Park • Moulton Falls Park 		<ul style="list-style-type: none"> • Connection to Battle Ground, Yacolt
Chelatchie Prairie Trail	Yacolt City line - county line		<ul style="list-style-type: none"> • Yacolt Elem 	<ul style="list-style-type: none"> • Siouion Regional Park 		<ul style="list-style-type: none"> • Connection to Yacolt
Salmon Creek Greenway	Eastern Kline line pond - 119 th St	<ul style="list-style-type: none"> • Salmon Creek Greenway 			<ul style="list-style-type: none"> • Salmon Creek Greenway 	<ul style="list-style-type: none"> • Across Hwy 99
North South Powerline Trail	NE Cedar Creek Rd - NE 63 rd St	<ul style="list-style-type: none"> • NE Minnehaha St • NE 88th St, NE 99th St, NE 119th St 	<ul style="list-style-type: none"> • Gaiser Jr. High • Pleasant Valley Jr. High 	<ul style="list-style-type: none"> • East Fork Lewis River Greenway 	<ul style="list-style-type: none"> • NE 99th St 	<ul style="list-style-type: none"> • Provides north-south connectivity across the county
Cougar Creek Trail	NW 139 th St - NE Hazel Dell Ave	<ul style="list-style-type: none"> • Salmon Creek Greenway 	<ul style="list-style-type: none"> • Columbia River High • Eisenhower Elem 	<ul style="list-style-type: none"> • Salmon Creek Greenway 	<ul style="list-style-type: none"> • Transit station on Hazel Dell Ave 	<ul style="list-style-type: none"> • crossing over Salmon Creek
LaLonde Trail	NE Hwy 99 - North-South Powerline Trail	<ul style="list-style-type: none"> • NE 117th St • Salmon River Greenway 		<ul style="list-style-type: none"> • Sherwood North Park • Salmon Creek 	<ul style="list-style-type: none"> • NE Hwy 99 	<ul style="list-style-type: none"> • Will connect to proposed North-South Powerline Trail



Funding

- Regional Transportation Council
- 6-year Transportation Improvement Program
- 20-year Comprehensive Growth Management Plan



End of Review – Questions?



webpage

<https://www.clark.wa.gov/community-planning>

