



**EXHIBIT “D”
2014 ANNUAL AMENDMENT**

Amendments to the Comprehensive Plan

These amendments show all of the changes to the *existing* text of the Comprehensive Plan. The sections included are only those portions of the Plan that are associated with these amendments. New text is underlined and text that is deleted is shown in ~~strikethrough~~.

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Commute Trip Reduction

Policy Intent

As required by the Commute Trip Reduction Efficiency Act of 2006 (RCW 70.94.521-551) and the associated Washington Administrative Code WAC 468-63, the Tacoma City Council adopted the Commute Trip Reduction Plan on July 10, 2007 (Resolution No. 37220) and adopted the Commute Trip Reduction Ordinance into the Tacoma Municipal Code Chapter 13.15 on December 9, 2008 (Ordinance No. 27771).

The City's CTR Plan is an evolving document that is frequently updated and provides guidelines for the City and major employers affected by the State law to implement effective strategies to achieve the trip reduction goals of 10% reduction in drive-alone trips and 13% reduction in vehicle miles traveled by 2014. The CTR Ordinance

establishes requirements for affected employers, including an appeals process, and procedures for the City for program administration, monitoring, enforcement and intergovernmental coordination.

The CTR Plan and Ordinance are designed to achieve the following objectives: improve air quality, reduce traffic congestion, and reduce the consumption of petroleum fuels. With the focus on employer-based programs that encourage the use of alternatives to driving alone for the commute trip, CTR represents a centerpiece of the overall strategy of Transportation Demand Management (TDM).

~~In addition to the mandated program activity, the City of Tacoma is also participating in a voluntary, pilot program encouraged and funded by the State, whereby Downtown Tacoma is designated as a Growth and Transportation Efficiency Center (GTEC). More aggressive CTR strategies will be implemented within the GTEC, involving selected target audiences besides the CTR-affected employers. Expected outcomes of the pilot program are the reduction of auto-dependent trips and the alleviation of the burdens on State highway facilities within and between GTECs. The GTEC program was effective from July 2008 through June 2012. The City used State GTEC funds and partnered with Pierce Transit and the Tacoma-Pierce County Chamber of Commerce to create the City's first transportation demand management association, Downtown on the Go (DTOG).~~

In addition to the mandated CTR activities, the City of Tacoma is also committed to participating in voluntary, innovative trip reduction pilot programs as approved by the Washington State Department of Transportation (WSDOT). These pilots allow for designing customized strategies for a given boundary or target audience. The City of Tacoma will embark on its first residential outreach efforts as part of WSDOT's CTR Pilot Alternative Plan from July 2013 – June of 2015. Commute Trip Reduction is now also referred to as Community Trip Reduction to more broadly refer to a variety of travel destinations beyond employment.

And between July 2008 to June 2012, Tacoma participated in the Growth and Transportation Efficiency Center pilot that enabled the development of Tacoma's first Transportation Management Association called Downtown On

the Go (DOTG). This innovative effort to target downtown trip reduction was created in partnership with Pierce Transit and the Tacoma Pierce County Chamber of Commerce. DOTG focuses trip reduction efforts in downtown Tacoma which has the highest employment and residential densities in the city.

DOTG has a Board made up of downtown businesses and local transportation agencies. Its purpose is to be the transportation advocate for anyone whose daily life is downtown by:

- Advocating for transportation choices and land use policies that promote a vibrant and integrated downtown; and
- Educating and encouraging downtown employers, employees and residents about transportation choices other than driving alone such as transit, ridesharing, biking, walking, and flexible work arrangements.

There are a number of Comprehensive Plan policies and strategies that are supportive of CTR and TDM, including policies contained in the Transportation Element, transportation-efficient land use policies contained in the Generalized Land Use Element, and traffic management strategies contained in the Neighborhood Element. The following policies are intended to provide additional tools to ensure the successful implementation of the CTR Plan and Ordinance, and contribute to accomplishing the City's strategic goals of healthy environment, sustainable economy and livable community.

Policies

T-CTR-1 Comprehensive Planning and CTR

Incorporate Commute Trip Reduction in the planning for land use, transportation, housing, capital facilities, environmental protection, open space and recreation facilities, neighborhoods and communities, and other applicable disciplines of comprehensive planning. This will be accomplished by promoting CTR related and supportive policy aspects, such as those listed below:

- Promote transit-oriented development;
- Encourage maximum parking requirements for new development;
- Require active transportation connections between retail, living and work places;
- Evaluate land use changes to the Comprehensive Plan and determine how the development furthers the goals of CTR;
- Realize the Complete Street concept;

- Strive for job-housing balance;
- Support an integrated, regional high capacity transit system;
- Enhance walking and bicycling environment;
- Require parking for bicycles where applicable; ~~and~~
- Ensure that connectivity, accessibility and transferability among multiple modes of transportation are adequate, efficient, safe and friendly for pedestrians and bicyclists.

T-CTR-2 Funding for CTR

Assign higher funding priority to and actively pursue funding opportunities for improvement projects and programs that are related to, supportive of, or integrated with Commute Trip Reduction.

T-CTR-3 Collaboration on CTR

Join force with appropriate jurisdictions and organizations to coordinate the Commute Trip Reduction program efforts; to best utilize and multiply each others' resources, success stories and innovative practices; and to ensure that fair and consistent services are provided to employers across jurisdictions and employers with worksites located in more than one jurisdiction.

T-CTR-4 Climate Change and CTR

Integrate the Commute Trip Reduction program efforts into the work program of the Office of [Environmental Policy and Sustainability](#) and the Sustainable Tacoma Commission on Climate Change (established pursuant to City Council Resolution No. 37631, adopted on October 21, 2008) to effectively reduce carbon emissions and improve air quality.

T-CTR-5 Innovation and Expansion of CTR

Pursue innovative measures of Commute Trip Reduction beyond the statutory suggestions and endeavor in expanding the scope of CTR beyond the statutory requirements, in order to maximize the effects of CTR. [Focus efforts on personal trips as well as commute trips with an emphasis on active transportation for short travel distances.](#)

T-CTR-6 Monitoring and Evaluation of CTR

Continually monitor and evaluate the effectiveness of employers' Commute Trip Reduction programs and the City's CTR policies, and implement changes needed to achieve and exceed the statutory goals.

T-CTR-7 Leadership in CTR

The City of Tacoma as an employer should take the leadership role and set a positive example by maintaining a strong Commute Trip Reduction program for its employees.

Environmental Stewardship

Policy Intent

The City of Tacoma recognizes that environmental stewardship must be a central focus in establishing a transportation system that serves today's users and future generations. This is consistent with the City of Tacoma's compliance with the Washington Clean Air Act, the Commute Trip Reduction Law, the National Environmental Policy Act, and the State Environmental Policy Act. It also supports the City's interest in reducing stormwater and air pollution by lessening the use of petroleum fuel vehicles.

Section II – Mobility Master Plan

Policy Intent

The Mobility Master Plan Section of the Transportation Element provides a vision, policies and an implementation plan for how the City of Tacoma can improve conditions for pedestrians and bicyclists citywide over the next fifteen years. This section was distilled from Tacoma's 2010 Mobility Master Plan Study. It moves the City towards social, economic and environmental sustainability and serves as a cornerstone for Tacoma's climate action diminution strategies. A sustainable non-motorized transportation network is vital for Tacoma to achieve a substantial reduction in carbon emissions, as well as to provide a healthier environment for its residents.

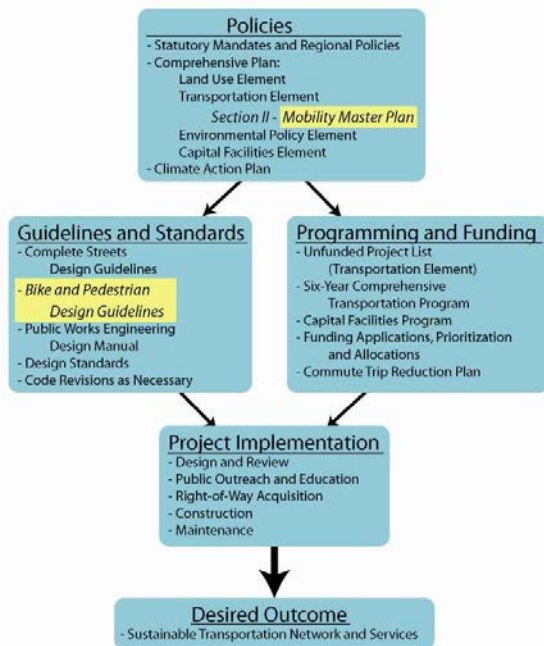
The Mobility Master Plan Section envisions an interconnected bicycle and pedestrian network that provides safe routes to neighborhoods, schools, transit, business districts recreational facilities, and other destinations.

The implementation of a new set of mobility policies will improve Tacoma residents' health, enhance their quality of life, help protect the City's natural resources and be a source of pride to the community. It will also lead toward the goal of achieving "Bicycle Friendly Community" status by the League of American Bicyclists.

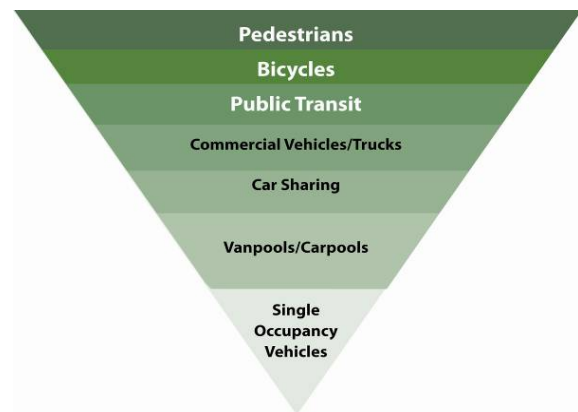
The Mobility Master Plan Section is consistent with the City's Complete Streets policy and its associated design guidelines. The Mobility Master Plan Design Guidelines (Appendix E of the 2010 Mobility Master Plan Study) provide a comprehensive set of tools for designing and implementing pedestrian and bicycle infrastructure. Tacoma's streets vary significantly in width, speed and usage and the Design Guidelines provide a wide array of options to make them more user-friendly.

Prioritizing Transportation Investment

The 'Green Transportation Hierarchy' is a recent movement that recognizes transportation modes that have the least environmental impact and greatest contribution to livability. Intended as a prioritization strategy, the Green Transportation Hierarchy promotes funding and development of facilities for modes that affordably enhance access for the majority of Tacoma residents, rather than using level of service standards focused on vehicle movement. The hierarchy gives precedence to pedestrians, then to bicyclists and public transit. Commercial vehicles and trucks are also recognized as having priority over passenger vehicles.



Mobility Master Plan integration with City Policies



Implementation

The recommended pedestrian and bicycle network improvements were developed with a thorough analysis of existing conditions utilizing a variety of methodologies, including the Pedestrian Zone Analysis, Pedestrian Crash Analysis, Bikeway Quality Index and Cycle Zone Analysis. Detailed descriptions of existing conditions analyses can be found in Appendix D of the *2010 Mobility Master Study*. The recommended pedestrian network improvements should be consistent with the City of Tacoma's *2008 ADA Transition Plan*. This Plan outlines the City's strategic priorities for curb ramp and sidewalk improvements.

The following table lists the criteria used to evaluate potential projects for the pedestrian and bicycle networks. These criteria, listed in the order of importance, were developed with input from public workshops and the Steering Committee.

Table 1. Infrastructure Project Evaluation Criteria

Criterion	Measurement
Enhances system connectivity/Closure of critical gap	To what degree does the project fill a missing gap in the bicycle and/or pedestrian system? How well does the project overcome a barrier in the current bicycle and pedestrian network?
Interface with other transportation modes (e.g., transit)	To what degree does the project connect to transit facilities?
Geographic distribution of City coverage	To what degree does the project offer potential benefits to the wider, regional community by offering opportunities for increased connectivity to surrounding communities, other regional walkways/bikeways etc.?
Cost Effectiveness	How difficult will it be to implement the project? This criterion takes into account constraints like topography, existing development, presence or lack of available right-of-way, and environmental and political issues.
Suitability for bicycling and/or walking with improvements	Does the route have potential to be safe and/or comfortable for bicycling after improvements have been made?
Destinations served	Does the project provide connectivity to key destinations, including schools, parks, employment, commercial centers, and civic centers?
Improvement that serves an immediate safety need	Can the project potentially improve bicycling and walking at locations with perceived or documented safety issues? This criterion takes into account available crash data as well as feedback from the Steering Committee and Tacoma residents.
Integration into the existing local and regional bikeway/walkway system	How many user generators does the project connect to within reasonable walking or bicycling distance, such as schools, parks, Downtown, colleges and universities, etc.?
Projected reduction in vehicle trips and vehicle miles traveled	To what degree will the project likely generate transportation or recreational usage based on population, corridor aesthetics, etc.? Does the project serve transportation needs, reducing the need for drive-alone trips, and promoting bicycling as a viable alternative to driving?

Table 2. Short Term Bicycle Project Priority List¹

Priority	Street	From-To	Length (miles)	Cost ² Estimate	Facility Type
Completed and Underway Projects					
Complete	Tyler St	S 60th St – S Manitou Wy	1.46	\$275,000	Bike Lane
Construction Phase	S Park Ave	S 40th St – E 96th St	3.66	\$177,000	Bicycle Boulevard
Construction Phase	S 40th St	S Park Ave – S G St	0.06	\$11,000	Bike Lane
Construction Phase	Delin St/S G St/S 36th St/Tacoma/S 38th St	S 25th St – S 48th St	1.73	\$312,000	Bike Lane
Construction Phase	Fawcett Ave/S 25th St	6th Ave – Tacoma	1.51	\$84,000	Bicycle Boulevard
Construction Phase	6th Ave	S G St – Fawcett Ave	0.10	\$4,000	Sharrow ³
Construction Phase	S G St	Division Ave – 6th St	0.39	\$19,000	Bicycle Boulevard
Construction Phase	Division Ave/Wright Park	Yakima Ave – N G St	0.07	\$20,000	Shared-Use Path
Construction Phase	N 23th/N 24th/Yakima Ave	Highland – Division Ave	3.39	\$164,000	Bicycle Boulevard
Construction Phase	N Highland St	N 23rd St – N 21st St	0.11	\$5,000	Bicycle Boulevard
Construction Phase	N 26th St	N Stevens St – Pearl St	0.79	\$143,000	Bike Lane
Complete	N 26th St	N Proctor – Alder	0.50	\$90,000	Sharrow/Bike Lane
Construction Phase	S 37th St.	A St – S Hosmer St	1.55	\$75,000	Bicycle Boulevard
Complete	S Alaska St	S 38th St – S 37th St	0.10	\$19,000	Bike Lane
Complete	N 30 th St	Alder St – McCarver St	0.59	\$110,000	Bike Lane/Sharrow
Construction Phase	Historic Water Ditch Trail – Phase 2	S 80 th / S Tacoma Way – S 72 nd and S 60 th – S 56 th Streets	1.82	\$488,000	Shared-Use Path
Total Completed and Underway			17.83	\$1,996,000	
Short Term					
1	N Stevens St	N 46th St – N 37th	0.62	\$118,000	Bike Lane
1 ⁴	Stevens/ Tyler St	6th Ave – S Wright Ave	1.76	\$332,000	Bike Lane
2	S 47th St/S 48th St/E C St/E 46th St/E E St	S Tacoma Wy – McKinley Ave	3.20	\$603,000	Bike Lane
3	Puyallup Ave	Pacific Ave – City Line	1.71	\$322,000	Bike Lane
4	Orchard	S19th – N 26 th	1.70	\$307,000	Bike Lane
5	N 1st St/Broadway	N Tacoma Ave – Prairie Line Trail	1.43	\$69,000	Bicycle Boulevard
6	NE Nassau Ave	Browns Pt Blvd – NE Northshore Pkwy	1.06	\$200,000	Bike Lane
7	S 11th St	Ferry St – Pacific Ave	1.25	\$236,000	Bike Lane
8	S 12th St	S Jackson Ave – S Union Ave	2.51	\$473,000	Bike Lane

¹ All improvements to a WSDOT facility must be coordinated with and approved by WSDOT Olympic Region Development Services

² Cost estimates in 2010 dollars

³ Sharrow = Shared Lane Marking used in situations where bicyclists share the travel lane with motor vehicles

⁴ Projects have the same priority number when they are part of a continuous corridor

Priority	Street	From-To	Length (miles)	Cost ² Estimate	Facility Type
9	6th Ave	Ainsworth Ave – E Broadway	0.87	\$165,000	Bike Lane
9	Ainsworth Ave	N Steele St – 6th Ave	0.49	\$24,000	Bicycle Boulevard
9	N 11th St	N Pearl St – N Steele St	2.25	\$109,000	Bicycle Boulevard
10	S Washington	S 60 th – S 43 rd (S Tacoma Way)	1.20	\$230,000	Bike Lane
11	S 66 th St	Orchard St – Tacoma Mall Blvd	2.14	\$317,000	Lanes/Sharrows/ Bike Boulevard
12	N Alder/N Cedar St	N 22nd St – SR 16	2.79	\$527,000	Bike Lane
12	S Oakes St/S Pine St	SR16 – S 74th St	3.11	\$587,000	Bike Lane
13	Historic Water Ditch Trail	Pine – C St	2.78	\$745,000	Shared-Use Path
14	Schuster Parkway Trail	S 7 th – Ruston Way	1.50	TBD	Trail
15	Pipeline Road Trail	E 40th St – Waller Rd and 72 nd	2.31	\$618,000	Shared-Use Path
15	E I St/E K St/E Wright Ave /Pipeline Rd	D St at Tacoma Dome/McKinley Park/Pipeline Road Trail	1.20	\$58,000	Bicycle Boulevard
15	Sheridan Ave	6th St – S 25th St	1.37	\$66,000	Bicycle Boulevard
15	S 25th St	S State St/Scott Pierson Trail – Sheridan Ave	0.21	\$40,000	Bike Lane
16	Prairie Line Trail (Hood Street)	Foss Waterway to S 17 th to S 25 th St	0.80	-TBD	Shared-Use Path
17	S 64 th St	S Alaska Way – Waller Rd	3.31	\$160,000	Bicycle Boulevard
18	S 43 rd St/E E St/E 40 th St	A St – Portland Ave	1.90	\$92,000	Bicycle Boulevard
19	S 37 th St/Sprague Ave	Water Ditch Trail – S Steele St	0.87	\$165,000	Bike Lane
20	NE 51 st St/NE Northshore Pkwy	NE Harbor View Dr – Hoyt Rd	2.07	\$391,000	Bike Lane
20	NE Slayden Rd	NE Marine View Dr – NE Harbor View Dr	0.41	\$15,000	Sharrow
21	N Baltimore St	N 46 th – N 26 th St	1.67	\$81,000	Bicycle Boulevard
22	N Pearl St/Ferry Landing	N 51 st St – Ferry Station	0.50	\$18,000	Sharrow
23	S 80 th /82 nd St	S Hosmer – McKinley Ave	2.07	\$100,000	Bicycle Boulevard
24	S Alaska St	S 56 th – 96 th St S	2.51	\$473,000	Bike Lane
25	S Mildred St	S 12 th St – S 19 th St	0.50	\$94,000	Bike Lane
26	Dock St	S Schuster Pkwy – E D St	1.62	\$59,000	Sharrow
26	N 51 st St/Gallagher Dr	N Vassault St – Ruston Way	1.15	\$218,000	Bike Lane
26	Ruston Way	N 49 th St – Schuster Parkway	2.37	\$87,000	Sharrow
27	S Oxford St/S 8 th St/S Meyers St/S 15 th St	N Skyline Dr – S 19 th St	1.15	\$56,000	Bicycle Boulevard
28	N 37 th St	N Shirley St – N Orchard St	0.27	\$73,000	Shared-Use Path
29	E Side Foss (D Street)	Murray Morgan Bridge to E 3 rd St	0.42	\$113,000	Shared-Use Path
30	S A St	E 96th St – E 37th St	3.78	\$183,000	Bicycle Boulevard
31	Pearl St	N 11 th – N 9 th (Scott Pierson)	0.20	\$53,000	Shared-Use Path
32	Jackson St	N 10 th St – Scott Pierson Trail	0.10	\$18,000	Bike Lanes
33	Dome District to Puyallup Connection	Analysis for best route to River Road/Pioneer from Dome District and reverse direction	.25/TBD	TBD	Bike Lanes
Total Short Term			65.13	\$8,595,000	

Implementation Costs

Tacoma has the potential to build on the existing walkway and bikeway networks and transform itself into a community where walking and bicycling for transportation and recreation are popular activities. This section lays out the approximate cost for completing the system. This network builds upon previous and on-going local and regional planning efforts and reflects the extensive input offered by City staff, the Mobility Master Plan Steering Committee, bicycle and pedestrian stakeholder groups and Tacoma residents.



2009 City Council and Planning Commission
Bike Ride on the Scott Pierson Trail

The charts below show the total projected mile of new facilities as well as the approximate cost. ~~All cost estimates include only the pedestrian and bicycle facility treatment and not any additional costs of roadway expansion or improvement. Please note: these cost figures and those provided in the charts below are in 2010 dollars.~~

~~The time frames are as follows: short term is 1-5 years, medium term 6-10 and long term, 11-15 years. The total implementation cost of the Tacoma Mobility Master Plan is estimated at approximately \$42.2 million, as shown in Table 7. Approximately 11% (\$4.6 million) of the total build-out is in planning/construction phase or has been completed. Short-term recommendations account for approximately \$15.3 million.~~

Table 6. Tiered Facility Lengths

Facility Type	Completed/ Underway	Short Term	Medium Term	Long Term	Total
Bicycle Boulevards	10.61	22.76	12.18	5.57	51.12
Bike Lanes	5.23	29.19	31.83	10.18	76.43
Sharrows	0.10	4.90	1.38	0.00	6.38
Cycle Tracks	0	0	3.84	0.00	3.84
Sidewalks	3.30	8.33	4.33	0.00	15.96
Shared-Use Paths	1.89	6.78	5.66	25.92	40.25
Total	21.13	71.96	59.22	41.67	193.98

Table 7. Summary of Construction Costs for Recommended Projects

Facility Type	Completed/ Underway	Short-Term	Medium-Term	Long-Term	Total
Bicycle Boulevards	\$524,000	\$1,101,000	\$590,000	\$270,000	\$2,485,000
Bike Lanes	\$960,000	\$5,499,000	\$5,840,000	\$1,835,000	\$14,134,000
Shared Lane Markings	\$4000	\$179,000	\$51,000	\$0	\$234,000
Cycle Tracks	\$0	-\$0	\$1,029,000	\$0	\$1,029,000
Sidewalks	\$2,384,000	\$6,454,000	\$3,381,000	\$0	\$12,219,000
Intersection Improvements	\$210,000	\$210,000	\$714,000	\$84,000	\$1,218,000
Shared Use Paths*	\$508,000	\$1,816,000	\$1,517,000	\$7,055,000	\$10,896,000
Total	\$4,590,000	\$15,259,000	\$13,122,000	\$9,244,000	\$42,215,000

* Costs do not include projects programmed in the FY 2010-2015 Capital Facilities Program, including the Historic Water Ditch Trail and Pipeline Road Trail. Projected costs are approximate and based on a simple 10' asphalt path with two feet of crushed gravel on either side. This may not be an adequate width to accommodate the growing number of users in many instances.

Table 7. Estimated Cost Range for Bicycle Facilities

Facility	Approximate Cost per Mile (low end)	Approximate Cost per Mile (high end)
Off Street	\$1,456,000	\$1,573,000
Cycle Track	\$1,546,000	\$1,894,000
Bike Boulevard	\$659,000	\$925,000
In Street, Minor Separation (bike lanes or buffered bike lanes)	\$321,000	\$574,000
Shared Street	\$48,000	\$48,000

Source: Cost estimates for bike facilities derived from the Seattle Bicycle Master Plan. Costs estimates include the facility treatment and not any additional costs of roadway expansion or improvement. Costs are in 2013 dollars. All cost estimates include only the pedestrian and bicycle facility treatment and not any additional costs of roadway expansion or improvement. Intersection cost estimates are based on the average cost of installing eight new ADA ramps and four crosswalks per intersection. Additional work may be required at some intersections to make them ADA accessible to make them per federal regulations, safe for cyclists and pedestrians. Table 8 provides an estimate of maintenance costs for the recommended projects. Maintenance costs do not include sweeping and other repair that is part of regular street maintenance activities. Maintenance costs are estimated annually, with the overall cost amortized by the frequency of maintenance tasks.

Table 8. Summary of Maintenance Costs for Recommended Projects

Facility Type	Completed/ Underway	Short-Term	Medium Term	Long-Term	Total
Bicycle Boulevards	\$4,700	\$10,200	\$5,500	\$2,500	\$22,900
Bike Lanes	\$128,700	\$718,200	\$754,200	\$250,700	\$1,851,800
Sharrows (or Shared Lane Markings)	\$100	\$4,100	\$1,100	\$0	\$5,300
Cycle Tracks	N/A	\$0	\$130,000	\$0	\$130,000
Shared-Use Paths	\$64,000	\$229,400	\$191,600	\$891,300	\$1,376,300
Total	\$197,500	\$961,900	\$1,082,400	\$1,144,500	\$3,386,300

Table 9. Short Term Project Costs

Street	From - To	Length (Miles)	Construction Cost	Maintenance Estimate ¹
Bicycle Boulevards				
Ainsworth Ave	N Steele St – 6th Ave	0.49	\$24,000	\$200
E I St/E Wright Ave/E K St/Pipeline Rd	McKinley Park – Pipeline Road Trail	1.20	\$58,000	\$500
N 11th St	N Pearl St – N Steele St	2.25	\$109,000	\$1,000
N 1st St/Broadway	N Tacoma Ave – Prairie Line Trail	1.43	\$69,000	\$600
N Baltimore	N 46th – N 26th St	1.67	\$81,000	\$800
S 43rd St/E E St/E 40th St	S A St – Portland Ave	1.90	\$92,000	\$900
S 64th St	S Alaska Way – Waller Rd	3.31	\$160,000	\$1,500
S 66th St	Orchard St – Tacoma Mall Blvd	2.14	\$103,000	\$1,000
S 80th/82nd St	S Hosmer – McKinley Ave	2.07	\$100,000	\$900
S A St	E 96th St – E 37th St	3.78	\$183,000	\$1,700
S Oxford St/S 8th St/S Meyers St/S 15th St	N Skyline Dr – S 19th St	1.15	\$56,000	\$500
Sheridan Ave	6th St – S 25th St	1.37	\$66,000	\$600
Bike Lanes				

¹ Maintenance costs include re-striping, signage replacement, and roadway patching depending on facility type. Estimates do not include sweeping and other repair that is part of regular street maintenance activities. Estimated maintenance costs are presented on an annual basis, however the overall cost has been amortized by the frequency of maintenance tasks. For example, the need for re-striping is estimated to occur every other year, so the total cost (\$4.50 per LF) is divided in half for the annual estimate.

Street	From - To	Length (Miles)	Construction Cost	Maintenance Estimate ¹
6th Ave	Ainsworth Ave – E Broadway	0.87	\$165,000	\$21,500
N 51st St/Gallagher Dr	N Vassault St – Ruston Way	1.15	\$218,000	\$28,400
N Alder/N Cedar St	N 30th St – SR 16	2.79	\$527,000	\$68,700
N Stevens St	N 46th St – N 37th	0.62	\$118,000	\$15,400
NE Nassau Ave	Browns Pt Blvd – NE Northshore Pkwy	1.06	\$200,000	\$26,100
NE 51st St/NE Northshore Pkwy	NE Harbor View Dr – Hoyt Rd	2.07	\$391,000	\$50,900
Orchard	S 19th – N 26th	1.70	\$307,000	\$41,900
Puyallup Ave	Pacific Ave – City Line (bike lane only)	1.71	\$322,000	\$42,000
S 11th St	Ferry St – Pacific Ave	1.25	\$236,000	\$30,800
S 12th St	S Jackson Ave – S Union Ave	2.51	\$473,000	\$61,700
S 25th St	S State St/Scott Pierson Trail – Sheridan Ave	0.21	\$40,000	\$5,200
S 37th St/Sprague Ave	Water Ditch Trail – S Steele	0.87	\$165,000	\$21,500
S 47th St/S 48th St/E C St/E 46th St/E E St	S Tacoma Wy – McKinley Ave	3.20	\$603,000	\$78,600
S Alaska	S 56th – 96th St S	2.51	\$473,000	\$61,700
S Mildred St	S 12th St – S 19th St	0.50	\$94,000	\$12,200
S Washington St	S 60th – S 43rd (S Tacoma Way)	1.20	\$230,000	\$29,500
S Oakes St/SPine St	SR 16 – S 74th St	3.11	\$587,000	\$76,500
Stephens/ Tyler St	6th Ave – S Wright Ave	1.76	\$332,000	\$43,200
Jackson St	N 10th – Scott Pierson Trail	0.10	\$18,000	\$2,500
Sharrows²				
Dock St	S Schuster Pkwy – E D St	1.62	\$59,000	\$1,400
N Pearl St/Ferry Landing	N 51st St – Ferry Station	0.50	\$18,000	\$400
NE Slayden Rd	NE Marine View Dr – NE Harbor View Dr	0.41	\$15,000	\$300
Ruston Way	N 49th St – Schuster Parkway	2.37	\$87,000	\$2,000
Sidewalks				
S 76th St	Alaska Ave – Pacific Ave	0.89	\$698,000	
NE 51st St	Slayden Rd – Browns Point Blvd	0.35	\$274,000	
S 66th St	S Verde St Aly – South Tacoma Wy	0.60	\$433,000	
S 64th St	E J St – E N St	0.42	\$329,000	
S 66th St	S Junett St – Wapato	0.30	\$217,000	
S 84th St	Tacoma Mall Blvd – S Alaska St	0.41	\$321,000	
N Vassault, E	N 26th St – N 24th St	0.09	\$71,000	
S 92nd Ave	S Hosmer – S D St	0.91	\$713,000	
S L St	South End Neigh. Center – S 80th St	0.18	\$141,000	
N 24th St	N Narrows Dr – Lenore Dr	0.22	\$172,000	
NE Harbor View Dr/NE 49th St	NE 51st St – Browns Point Blvd	0.90	\$705,000	
S Wapato	S 64th St – S 68th St	0.51	\$400,000	
S 64th St	S Orchard St – Tyler St	1.16	\$909,000	
S 80th St	S Sheridan Ave – S Tacoma Ave	1.09	\$854,000	
McKinley Ave	E D St – Wright St	0.30	\$217,000	
Intersection Project Improvements				
S I St & Division Ave			\$42,000	
Tacoma Ave S & S 9th St			\$42,000	
Division St & Sprague & 6th Ave			\$42,000	
Tacoma Mall Blvd & S 48th St			\$42,000	
S J St & S 19th St			\$42,000	
Shared-Use Paths³				

² Sharrows, or Shared Lane Markings, are roadways marked with a bicycle symbol and chevrons where cars and bicycles share the same space. The Sharrow delineates the area where the cyclist is safest riding.

³ Costs for the N 37th St Trail and Pipeline Road Trail have been allocated into the FY 2010-2015 CIP and are not included in cost estimate totals. Projected costs for trails are approximate and based on a simple 10' asphalt path with two feet of crushed gravel on either side. This may not be an adequate width to accommodate the growing number of users.

Street	From - To	Length (Miles)	Construction Cost	Maintenance Estimate ¹
E Side Foss (D Street)	Murray Morgan Bridge – E 3rd St	0.42	\$113,000	\$14,200
Pearl Street	N 11th – N 9th (Scott Pierson)	0.20	\$53,000	\$6,800
N 37th St ³	N Shirley St – N Orchard St	0.27	\$73,000	\$9,200
Pipeline Road Trail ³	E 40th St – Waller Rd	2.31	\$618,000	\$78,100
Prairie Line Trail	Pacific Ave to Water Ditch Trail	0.80	\$214,000	\$27,000
Total Short Term Projects		71.96	\$15,259,000	\$962,000

Table 10. Medium Term Project Costs

Street	From - To	Length (mile)	Construction Cost	Maintenance Estimate ¹
Bicycle Boulevards				
Court D/St Helens Ave	S G St – S 9 th St	0.64	\$31,000	\$300
J St	N 3 rd St – S 27 th St	1.87	\$91,000	\$800
J St	S 37 th St – S 84 th St	3.05	\$148,000	\$1,400
N 37 th St	N Orchard St – N Proctor St	0.78	\$38,000	\$300
N 45 th St/N Verde St/N 45 th St	N Baltimore St – N Stevens St	0.57	\$28,000	\$300
N 7 th St	N Orchard St – N Pine St	1.48	\$72,000	\$700
N Highland St	N 23 rd St – N 21 st St	0.11	\$5,000	\$0
S 56 th St	S Washington St – S State St	1.16	\$56,000	\$500
Skyline Dr	N 17 th /Westgate Blvd – N 11 th St	0.36	\$17,000	\$200
State St	S 25 th St – N Grant Ave	1.53	\$74,000	\$700
Upper Park St/E 29 th St/E L St	E 26 th St to McKinley Park	0.63	\$30,000	\$300
Bike Lanes				
Center St	S Orchard St – S 25th St	3.44	\$649,000	\$84,600
E 11th St/Taylor Way	SR 509 – Marine View Dr	2.76	\$521,000	\$67,900
E 38th St	A St – Portland Ave	1.11	\$210,000	\$27,400
E McKinley Ave	S 72nd St – E D St	3.17	\$598,000	\$78,000
Jackson Ave	SR 16 – S 12th St	0.60	\$114,000	\$14,800
Marine View Rd	SR 509 – NE Slayden Rd	0.51	\$97,000	\$12,600
McCarver St/Tacoma St	N Schuster Pkwy – S Tacoma Ave	1.50	\$283,000	\$36,900
N 17th St/Westgate Blvd/N 21st St	N Narrows Dr – N Proctor St	2.23	\$420,000	\$54,800
N 21st St/N I St/S I St	N Alder St – Division Ave	1.66	\$313,000	\$40,800
N 46th St	N Vassault St – N Baltimore St	0.61	\$116,000	\$15,100
NE 49th Ave	NE 45th Ave – NE 33rd St	0.70	\$155,000	\$21,000
N Ferdinand St	Ruston Way – N 46th St	0.49	\$93,000	\$12,100
N Highland	N 21st – N 11th	0.51	\$110,000	\$14,000
NE Norpoint Way	Marine View Dr – NE 29th St	1.20	\$58,000	\$15,100
Puyallup Ave	Holgate – Pacific Ave	0.10	\$18,000	\$2,300
S 19th St	Mildred – Yakima Ave	3.80	\$716,000	\$93,400
S 35th St	S Pine St – S Sprague St	0.43	\$82,000	\$10,700
S 56th St	S State St – Pipeline Trail	2.90	\$547,000	\$71,300
S 56th St	S Orchard St – S Washington St	0.96	\$181,000	\$23,600

¹ Maintenance costs include re-striping, signage replacement, and roadway patching depending on facility type. Estimates do not include sweeping and other repair that is part of regular street maintenance activities. Estimated maintenance costs are presented on an annual basis, however the overall cost has been amortized by the frequency of maintenance tasks. For example, the need for re-striping is estimated to occur every other year, so the total cost (\$4.50 per LF) is divided in half for the annual estimate.

Street	From - To	Length (mile)	Construction Cost	Maintenance Estimate ¹
S Yakima Ave /Thompson Ave	S 27th St – S 56th St	2.28	\$430,000	\$56,100
Tacoma Ave	N 3rd St – S 2nd St	0.30	\$65,000	\$7,500
Yakima Ave	Wright Park – S 27th St	1.49	\$282,000	\$36,700
Sharrows²				
Five Mile Dr/N 51st St	N Vassault St – N 54th St	0.48	\$18,000	\$400
Ruston connection	N 51st St – Ferry Landing Road	0.53	\$19,000	\$400
S 96th St	Park – Pacific	0.37	\$14,000	\$300
Cycle Tracks				
SR 509	Pacific Ave – Marine View Dr	3.84	\$1,029,000	\$130,000
Sidewalks				
S 58th St	S Durango St – S Tacoma Way Aly	0.43	\$337,000	
S Adams St	S 56th St – S 66th St	0.80	\$627,000	
N 21st St	W of N Pearl St – Highland St	0.07	\$55,000	
Union Ave	Center – S 19 th St	0.20	\$144,000	
S Pine St/S Cedar St	S 19th – Hood St	0.80	\$627,000	
N 11th St	N Highland St – N Orchard St	0.32	\$251,000	
S 62nd St	S Clement Ave – S Wapato St	0.61	\$478,000	
N 11th St	N Adams St – N Union Ave	0.27	\$212,000	
S M St	S 84th St – S 88th St	0.34	\$266,000	
S 56th St	Tacoma Mall Blvd – S Alaska St	0.49	\$384,000	
Intersection Improvements				
A St & S 38th St			\$42,000	
E 56th & E McKinley Ave			\$42,000	
E Portland Ave & E 29th St			\$42,000	
S 74th St & Tacoma Mall Blvd			\$42,000	
S 72nd St & Hosmer			\$42,000	
I-5 NB off-ramp terminus at Portland Ave/E 28th St			\$42,000	
S 38th St & Pacific Ave			\$42,000	
S 38th & McKinley Ave			\$42,000	
E Portland Ave & E 32nd St			\$42,000	
N 11th & N Pearl			\$42,000	
S 84th & Pacific Ave			\$42,000	
S 96th St & Pacific Ave			\$42,000	
S Hosmer St & S 84th St			\$42,000	
S Puget Sound Ave & S 56th St			\$42,000	
S Steele St & S 96th St			\$42,000	
Tacoma Ave & N 1st St			\$42,000	
S 54th & Tacoma Mall Boulevard			\$42,000	
Shared-Use Paths				
Pipeline Trail Connection	Collaborate with neighboring jurisdictions for connectivity	0.97	\$260,000	\$32,900
Schuster Parkway Trail	Cost is for 10' asphalt trail alone and does not include slope stabilization or other infrastructure	1.30	\$349,000	\$44,000
Total Medium-Term Projects:		56.75	\$12,432,000	\$1,010,200

² Sharrows, or Shared Lane Markings, are roadways marked with a bicycle symbol and chevrons where cars and bicycles share the same space. The Sharrow delineates the area where the cyclist is safest riding

Table 11. Long Term Project Costs

Street	From - To	Length (mile)	Construction Cost	Maintenance Estimate ¹⁰
Bicycle Boulevards				
Cheyenne St	N 46th – 6th	2.46	\$119,000	\$1,100
N Fife St/N 15th St/N Pine	N Yakima Ave – S 12th St	1.86	\$90,000	\$800
S 18th St	S Puget Sound Ave – S Pine St	0.40	\$20,000	\$200
S 43 rd St	Park Ave – A St	0.50	\$110,000	\$1,100
S Puget Sound Ave	N 7th St – S 18th St	0.85	\$41,000	\$400
Bike Lanes				
N Baltimore St	N 49th St – N 46th St	0.29	\$55,000	\$7,200
Portland Ave	Puyallup Ave – S 72nd St	3.52	\$665,000	\$86,700
Proctor St	N 37th St – S 19th St	2.67	\$504,000	\$65,700
Regents St/Center St	Princeton – Tyler St	1.29	\$243,000	\$31,700
S 11th St	Dock St – E Portland Ave	0.85	\$161,000	\$21,000
S 25th St	S Sheridan Ave – MLK Jr Way	0.21	\$40,000	\$5,200
S 66th St/S 64th St Bridge	Tacoma Mall Blvd – S Alaska St	0.20	\$37,000	\$4,900
Uphill Bike Lanes				
6th Ave	S Walters Rd – S Jackson Ave	1.15	\$130,000	\$28,300
Intersection Improvements				
N 26th & N Pearl St			\$42,000	
S 56th St & Pacific Ave			\$42,000	
Shared-Use Paths				
E Side Foss	S 11th – Waterway Park	1.65	\$443,000	\$56,000
Garfield/Ruston Way	Garfield Gulch – Ruston	0.76	\$204,000	\$25,800
Puyallup River Levee Trail	City Limits – 11th St	2.1	\$670,000	\$84,600
Point Defiance Trail (Metro)	Point Ruston – Vashon Ferry	2.26	\$605,000	\$76,500
Dome to Pt. Defiance	Foss Esplanade to Pt. Ruston	6.2	Unknown	TBD
President's Ridge Trail	SR 7 – Jennie Reed – S. 34 th St	2.95	\$790,000	\$99,800
West Slope Trail	Pt. Defiance /Titlow/S. 19 th St	6.03	\$1,616,000	\$204,100
Trails with undetermined alignment. Coordination with neighboring jurisdictions critical for connectivity.				
Trail to Mountain Corridor	Tacoma Dome to Mt. Rainier	TBD	Unknown	TBD
Tacoma Dome to Sumner	Tacoma Dome to Sumner	TBD	Unknown	TBD
Total Long Term Projects		38.2	\$6,627,000	\$801,100

¹⁰ Maintenance costs include re-striping, signage replacement, and roadway patching depending on facility type. Estimates do not include sweeping and other repair that is part of regular street maintenance activities. Estimated maintenance costs are presented on an annual basis, however the overall cost has been amortized by the frequency of maintenance tasks. For example, the need for re-striping is estimated to occur every other year, so the total cost (\$4.50 per LF) is divided in half for the annual estimate.