ID	Big Picture Topical Areas	PERFORMANCE MEASURES	MEASURES OF SUCCESS	DATA SOURCE	ACTIONS	RECOMMENDATION
1	Multimodal System	Mode split	Decrease in SOV mode share	PSRC: RGCs and MICs Work Trip Mode Shares	Monitor PSRC data every five years or as updates are available	Convert to TARGET MS2 and make consistent with Page 123 Existing and Recommended Commute Trip Mode Splits.
2				American Community Survey: Citywide Commute Mode Shares	Monitor ACS data every five years or more frequently if desired	Convert to TARGET MS1 and make consistent with Page 123 Existing and Recommended Commute Trip Mode Splits.
3				PSRC Household Travel Survey: All Trips	Monitor PSRC data every 7-8 years or as updates are available	Remove Action - Measurement is consistentwith new TARGET MS1 and MS2.
4	_	VMT	Decrease in VMT per capita	WSDOT Highway Performance Monitoring System (HPMS) or establish city survey	Monitor WSDOT data every two years	Remove - VMT data is reliant on traffic model update and maintenance, which is not programmed at this time.
5		CTR / TMA Participation	Participation Growth in number of participants	WSDOT, Pierce Trips, Downtown: On the Go!, other TMAs	Monitor every two years	Convert to TARGET MS3, which is consistent with Environmental Action Plan (EAP)
6	_	Bicycle Friendly Community Status	Upgrade in status from League of American Bicyclists	League of American Bicyclists	Monitor every two years	Convert to TARGET MS4, which is consistent with Environmental Action Plan (EAP)
7	Equity	Investment per community	Percent of need met within 1/4 mile of disadvantaged communities, such as those with low income or many zero-car households	City / Census data	Monitor every two years	Convert to TARGET E1 and modify to track increase in the number of projects complete in areas with 25% or greater poverty or minority (as designated in WSDOT ALPACA)
8			Percent of need met per Neighborhood Council District	City	Monitor every two years	Remove - The focus of equity in the City has shifted to income and race, not geographical. The introductory statement describing equity will need to be amended.
9		Investment per mode	Dollars spent per mode per year	City	Monitor every two years	Convert to Action TMP1. Staff is proposing to track dollars spent on active transportation projects; rather than spent on mode. Several capital arterial or freight projects will include accomodations for pedestrians and bicycles and it will be difficult to seperate out certain modal costs. Staff could assume a flat cost per linear foot of improvements (sidewalk & bikes), as linear miles of sidewalk and bicycle facilities will be tracked.*
10			Percent of modal priority network built	City	Monitor every two years	Conver to TARGET E2 and modify to focus on the number of projects built in areas of 25% or greater poverty and minority (as designated in WSDOT ALPACA)

ID	Big Picture Topical Areas	PERFORMANCE MEASURES	MEASURES OF SUCCESS	DATA SOURCE	ACTIONS	RECOMMENDATION
11			Miles of facilities built per year	City	Monitor every two years	Convert to TARGET HE1 and HE2 for miles of sidewalk and miles of bicycle facilities built.
12	Safe Travel for All People / Modes	Crash reduction	Total number, per capita, and per million VMT crashes	WSDOT	Monitor every two years	Convert to TARGET ST2 and modify to track the total number of crashes for youth (18 years and under), which is consistent with the Safe Routes to School (SRTS) Implementation Plan
13			Total number, per capita, and per million VMT injury / fatality crashes	WSDOT	Monitor every two years	Covnert to TARGET ST1 and modify to track the total number of bicycle and pedestrian fatalities citywide, which will be an element of Vision Zero.
14			Total number, per capita, and per million VMT pedestrian / bicycle crashes	WSDOT	Monitor every two years	Remove action as it is similar to TARGET ST1 above.
15	Health / Environment	Physical activity	Miles of added pedestrian and bicycle facilities within 1/4 mile of schools	City	Monitor every two years	Convert to ACTION TMP5 and make consistent with SRTS Implementation Plan for engineering actions.
16			Percent of K-12 students who have a comprehensive Safe Routes to School program at their school	Tacoma School District	Monitor every two years	Convert to ACTION TMP6 and make consistent with SRTS Implementation Plan for engineering actions.
17			Number of housing units / jobs within 1/4 mile of transit stop or bicycle facility	City / Census Data	Monitor every two years	Remove - Buffer around transit stops and bicycle facilities was fairly encompassing and not necessarily consistent with Zoning, e.g. Park Ave is a Bike Boulevard with Single-Family designation. Staff recommends creating an action TMP8 that references development of Subarea Plan.
18		Air quality	Decrease in VMT per capita	WSDOT Highway Performance Monitoring System (HPMS) or establish city survey	Monitor every two years	Convert to TARGET HE3 and make consistent with Environmental Action Plan for fossil fuel consumption. An action could be included to track VMT through the WSDOT Highway Performance Monitoring System in the future.
19	System Preservation	Pavement quality	Pavement quality model	City	Monitor every two years	Convert to TARGET SP1 and use the Pavement Condition Index system, which is consistent with the 2017-2018 Bienniel Budget.
20			Number and percentage of TacomaFIRST 311 pavement maintenance requests filled	City	Monitor every two years	Convert to ACTION TMP8 that tracks the number of requests recevied through Tacoma311. Street Operations policy is to fill all pothole reqests within ten business days.
21			Miles of lanes restriped	City	Monitor every two years	Remove action - this program is funded to restripe at least half of the city each year. The measure and data will not change much every two years.

DRAFT PERFORMANCE MEASURES STATUS

ID	Big Picture Topical Areas	PERFORMANCE MEASURES	MEASURES OF SUCCESS	DATA SOURCE	ACTIONS	RECOMMENDATION
22		streetlights	Number / percent of backlog of signal heads and streetlights replaced	City	Monitor every two years	Convert to TARGET SP2 to track the percentage of replaced and maintained reported streetlight infrastructure. The focus will be streetlights, which has the largest backlog.
23		funding	Percent of investments / dollars spent on maintenance projects	City	Monitor every two years	Remove action - TARGETS and ACTIONS TMP8, SP1, and SP2 are measures of maintenance operations.
24			Reduction in maintenance backlog	City	Monitor every two years	Convert to TARGET FS2 to track progress of Street Iniative funds and ensure consistency with proposition intent/information.
25		Leveraging additional funds		City	Monitor every two years	Convert to TARGET FS1.
26			Number of constructed projects that were on other Capital Facilities Plan lists	City	Monitor every two years	Convert to ACTION TMP9 and modify to completion of projects in the TMP Project List.
27	Congestion		Limited increase in congestion on key routes for vehicular mobility	City	Monitor every two years	Convert to TARGET C1 and modify to track signal timing optimization to reduce delay time and improve corridor efficiency.
28		goods	Increase in number of people and / or volume of goods moving through arterials	City	Monitor every two years	Remove action as it conflicts with multimodal targets. TARGET C1 appears to meet the intent of reducing delays.

PERFORMANCE MEASUREMENT & PROJECT PRIORITIZATION

As described in the goals and policies section, the system completeness LOS standard enforces the build out of Tacoma's transportation system concurrent with development; however, prioritizing which projects to include in the city's 25-year project list will require a careful balance of many considerations, including:

- Multimodal System: safe and welcoming travel by all modes
- Equity: an equitable system both geographically and in its treatment of modes, with special attention that prioritizes given to areas historically underserved communities
- · Safety: safe travel
- **Health/Environment:** physical health of users and environmental protection
- System Preservation: preserving existing transportation assets
- Financial Stewardship: effective leveraging and expenditure of funds
- Congestion: managing congestion on critical corridors

Evaluating projects according to their contributions to each of these seven city priorities should guide project prioritization and regular transportation system performance monitoring. Each city goal has specific measures that help quantify priorities and track progress over time. The City of Tacoma currently tracks some of these performance measures while others will require initial benchmarking and repeated data collection in the future. The table Targets and Actions

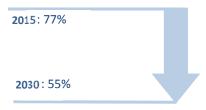
on the next page presents the components of Tacoma's biannual transportation report card. Some of these measures may fluctuate over time rather than changing steadily so the City will have to track overall trends as it collects more data points over multiple bienniums.

System completeness is a major policy shift for Tacoma. This new standard moves beyond prescribing that a certain speed or intersection delay threshold be met. Instead project evaluation and prioritization will be multimodal and guided by performance measures discussed in this section.

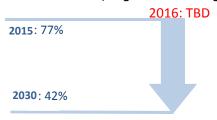
TARGETS

Multimodal System (Mode Split and Investment per Mode)

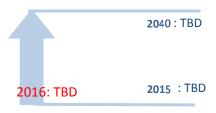
MS1: Decrease single occupancy vehicle trips citywide by 22% of 2015 levels (American Community Survey). 2016: 84%



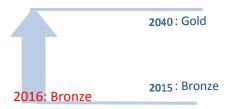
MS2: Decrease single occupancy vehicle trips in Downtown Tacoma Regional Growth Center by 35% of 2015 levels (Puget Sound Regional Council).



MS3: Increase the number of employers participating in the Commute Trip Reduction program by 25% of 2015 levels.

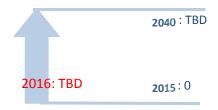


MS4: Upgrade status from League of American Bicyclists to Gold status by 2040.



Equity (Investment per Community and Investment per Mode)

E1: Complete 50% of Transportation Master Plan projects in areas with 25% or greater minority, according to WSDOT ALPACA survey by 2040.



E2: Complete 50% of Transportation Master Plan projects in areas with 25% or greater poverty, according to WSDOT ALPACA survey by 2040.



Safe Travel for All People/Modes (Crash Reduction)

ST1: Reduce bicycle & pedestrian fatalities by 100%.

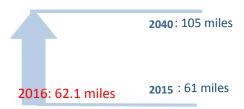


ST2: Reduce bicycle and pedestrian youth (18 years of age and under) collisions by 100% of 2015 collisions.

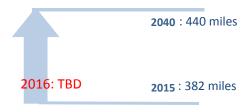


Health/Environment (Physical Activity and Air Quality)

HE1: Increase miles of bicycle infrastructure by 65% of 2015 miles.



HE2: Increase miles of missing link sidewalks installed by 15% of 2015 levels.

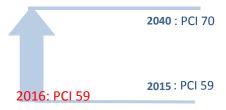


HE3: Decrease fossil fuel use by 30% of 2014 levels.



System Preservation (Pavement Quality and Streetlights)

SP1: Increase Tacoma's Overall Pavement Condition Index (PCI) from 59 (Marginal) to 70 (Good) by 2040.

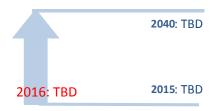


SP2: Increase percentage of replaced and maintained reported streetlight infrastructure each year.

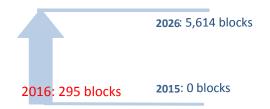


Financial Stewardship (Maintenance Funding and Leveraging of Funds)

FS1: Increase non-Public Works dollars leveraged for capital project delivery.

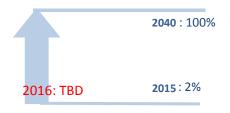


FS2: Complete residential maintenance of 5,614 blocks as identified in the Streets Initiative Report.



Congestion (Vehicle Delay)

C1: Increase signal timing optimization by 100% of 2015 levels.



ACTIONS

	ACTION	PROGRE SS RATING (1-5)	2016 STATUS
TMP1	Advocate for dollars spent on active transportation projects.	2	The Transportation Commission oversees the Tacoma Streets Initiative capital funds to ensure projects meet the goals of the TMP, specifically for active transportation.
TMP2	Establish dedicated and stable funding for active transportation education, encouragement, safety programs, and infrastructure improvements.	3	Through the Tacoma Streets Initiative, \$2.5 million/year is dedicated to active transportation.
TMP3	Synchronize and recalibrate the timing of traffic signals on all Tacoma arterials. Repair, improve, or upgrade infrastructure as needed to maximize signal efficiency.	2	Acquired grant funding to synchronize ~10% of the City's traffic signals. Have acquired no dedicated funding for infrastructure specific to traffic signal efficiency upgrades.
TMP4	Become a Bicycle Friendly Silver Community by implementing the next 5 prioritized Mobility Master Plan roadway projects and next 32 trail projects.	2	Grant funding received to implement several Mobility Master Plan projects in 2018.
TMP5	Identify infrastructure needs at school via community meetings and/or walking audits.	1	The Safe Routes to School (SRTS) Implementation Plan will be finalized in August 2017. Lister ES and First Creek MS will conduct walking audits in Fall 2018 as part of the SRTS grants received. Two additional schools will be reviewed as part of the \$500k allocation in the 2017-2018 Biennial Budget.
TMP6	Develop and implement a project-based curriculum for teachers to integrate active transportation into lessons	1	The City was not awarded a Washington Traffic Safety Commission grant to work with elementary and middle school teachers on developing a curriculum.
TMP7	Develop sidewalk, curb ramp and crosswalk inventories to prioritize future investments, as part of a Pedestrian Mobility Strategy.	2	Draft sidewalk inventory data completed June 2017. Public Works partnered with UWT to develop an app allowing City inspectors to inventory and provide conditions on curb ramps. Over 20 locations were inventoried in the pilot program.
TMP8	Support fulfillment of pothole requests submitted through Tacoma311 within seven business days.	TBD	TBD

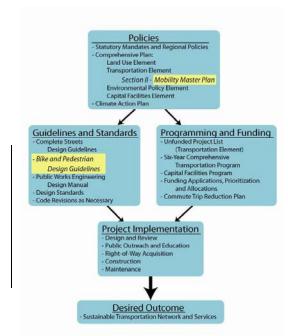
^{1:} None 2: Little Progress 3: Some Progress 4: Good Progress 5: Completed

Appendix C – Mobility Master Plan UpdateBicycle Implementation Strategies

Policy Intent

The Mobility Master Plan Update provides a vision, policies, and implementation supplem to the City's Transportation Master Plan (TMP) for how the City of Tacoma can improve conditions for pedestrians and bicyclists citywide ever the next twenty years. This section was updated from Tacoma's 2010 Mobility Master Plan and Transportation Element. It moves the City towards social, economic, and environmental sustainability and serves as a cornerstone for Tacoma's climate action diminution strategies. A sustainable active 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 Update envisions an interconnected bicycle and pedestrian network that provides safe routes to neighborhoods, schools, transit, business districts and



recreational facilities.

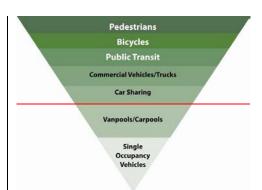
The implementation of a new set of mobility policies can improve Tacoma residents' health, enhance their quality of life, help protect the City's natural resources, and be a source of pride to the community. It also supports the City's "Bicycle Friendly Community" status, as recognized by the League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

The Mobility Master Plan Update is consistent with the City's Complete Streets policy and its associated design guidelines. The Mobility Master Plan Design Guidelines provide a comprehensive set of tools for implementing pedestrian and bicycle infrastructure design. 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

As discussed in the TMP, 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. While 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.

This hierarchy defines pedestrians as including individuals using assistive devices for mobility and sensory disabilities including walkers, wheelchairs, scooters, service animals, and canes. Throughout the Mobility Master Plan Update, the term "pedestrian" refers to a person moving from place to place, on foot and/or with the use of an assistive mobility device (when that person has a disability and/or medical condition). "Walking" or "to walk" are the terms used to describe this movement of a pedestrian.



The City of Tacoma's TMP draws on this model as a conceptual tool for elevating pedestrians, bicycles, and public transit in the planning and design of streets in a manner that is consistent with the City's Complete Streets policy and the City's Climate Action Plan. It gives recognition to the city's most vulnerable users of the streets: pedestrians and bicyclists of all ages and abilities.

Chapter 5 Implementation discusses funding strategies to build out the City's transportation system. To successfully achieve the City's vision and goal, a unique set of specific strategies is required that goes beyond construction of infrastructure. This Appendix identifies methods for strengthening execution of the recommendations and ensuring that bicyclists are top priorities in transportation planning.

Guiding Principles

The guiding principles were established by the Mobility Master Plan Steering Committee to serve as a statement of values and to convey the impact they want this Plan to have on Tacoma's future. The principles stand as a guide for policy, development, and implementation of this plan — answering the questions of what we do, why we do it, and how we do it.

- Accessibility Incorporate the needs of people with disabilities into planning, design, construction, and maintenance of the transportation system.
- Connectivity Prioritize projects that connect multi-use residential centers, transportation hubs, activity districts, and downtown.

- People Prioritize movement of people as a measure of mobility over movement of cars.
- •Equity Establish geographic and modal equity across Tacoma.
- Safety Prioritize safety and a low stress environment for pedestrians and bicyclists on all Tacoma streets
- Sustainability Develop a comprehensive bicycle and pedestrian network as a critical step in realizing a sustainable and livable Tacoma.
- Multimodal Make multiple travel modes safe and available to all users.

Vision and Policies

The Vision establishes the overarching concept that acts as a source for future inspiration in Tacoma's transportation planning. The policies help guide the city towards fulfilling the vision. The Vision and a new set of mobility policies support and bolster the active transportation policy intent of Tacoma's Transportation Master Plan. Tacoma's Transportation Master Plan. Tacoma's Transportation Master Plan is the document with comprehensive planning, implementation, and funding strategies that complements the policies in this section. The TMP and this Mobility Master Plan Update clarify how the policies, recommended notworks, and implementation strategies were derived and how they can be advanced.

Vision

Tacoma is a world-class walking and biking community in which pedestrians and bicyclists are top priorities in transportation planning. Tacoma's transportation system is useable and welcoming to people of all abilities. Streets accommodate bicyclists in large numbers, sidewalks are user-friendly, and residents share the road safely and are fully mobile without an automobile.

Goals

 Achieve "Bicycle Friendly Community" silver status as designated by the League of American Bicyclists by 2018 by developing and enhancing the six Es: Engineering, Education, Evaluation, Enforcement, Encouragement, and Equity.

- Complete a safe and low stress bicycling system that connects all parts of the city (north to south/east to west) and accommodates all types of cyclists by 2025
- Complete an accessible network of pedestrian-supportive infrastructure, including sidewalks, curb ramps, accessible pedestrian signals, and shared-use paths, in high priority pedestrian areas
- Create a safer street environment that reduces intermodal crashes involving bicyclists, pedestrians, and motor vehicles by at least 10% from 2015 rates by 2020 and work to meet Washington State's Target Zero goal of eliminating fatal and serious injuries by 2030.
- Increase the active transportation mode split to the levels specified in the TMP by 2030 and continue gains thereafter in order to aid in the Climate Action Plan goal of reducing greenhouse gases emissions from transportation sources
- Increase transit use by enhancing pedestrian access and bicycle support facilities through the development of bikeways and walkways that serve transit hubs
- Implement a benchmarking and measurement system to gauge success for pedestrian and bicycle infrastructure improvements and usage
- Apply implementation and maintenance strategies that expand and sustain Tacoma's pedestrian and bicycle infrastructure
- Promote healthy lifestyles by offering improved opportunities for active living for people of all abilities through the development of robust pedestrian, bicycle, and transit networks, including bikeways, sidewalks, and linear parks.

Policies

Bicycling and walking are low-cost and effective of transportation that are non-polluting, energy efficient, versatile, healthy, and fun-Combined with transit they add to the efficiency the local transportation system. The Transportation Master Plan lays out strategies for system-wide expansions and improvements. The Plan specifies how building out the transportation network can help achieve the City's goals of becoming a better and more accessible walking, bicycling, and transit community and reduce greenhouse emissions. Tacoma is in an excellent position to capitalize on existing pedestrian- and bicyclefriendly attributes, to increase the number of residents and visitors who travel by foot, bicycle, and transit, and to increase the transportation options for people with disabilities. Tacoma can take advantage of the anticipated population growth in high-density centers, existing education programs, and high-quality multimodal connections to develop a world class system of bikeways and walkways.

A number of the 2010 Mobility Master Plan policies have been adopted into the TMP, including:

- T-MMP-1 Implementation TMP Policies 2.4/
- T-MMP-2 Livability TMP Policy 6.3
- T-MMP-3 Environmental Sustainability TMP Policies 2.4 / 3.3 / 4.4
- T-MMP-4 Transit Integration TMP Policies 1.4 / 3.13
- T-MMP-5 Connectivity and Access TMP
 Policy 3.6
- T-MMP-6 Maintenance TMP Policy 3.1
- T-MMP-7 Education and Encouragement TMP Policy 5.8
- T-MMP-8 Health and Safety TMP Policies 2.3 / 2.4
- T-MMP-9 Engineering TMP Policies 3.9 / 3.10
- T-MMP-10 Enforcement TMP Policy 1.6

T-MMP-11 Evaluation - TMP Policy 3.4

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 as well as the Steering Committee.

Table 1. Infrastructure Project Evaluation Criteria

Criterion	Measurement
Enhances system	To what degree does the project fill a missing gap in the bicycle
connectivity/Closure of critical	and/or pedestrian system? How well does the project overcome a
gap	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	Does the route have potential to be safe and/or low stress for
walking with improvements	bicycling and/or walking 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	How many user generators does the project connect to within
local and regional	reasonable walking or bicycling distance, such as schools, parks,
bikeway/walkway system	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?



Bike Commuters from UW-Tacoma Summer 2008



Mobility Master Plan Public Workshop at South Park September 2009

Demonstration Projects

In addition to the proposed bicycle and pedestrian-improvements, the City should start with a few demonstration projects to get momentum going. These projects will also serve to develop enthusiasm and interest from Tacoma residents, and to draw attention to the City's support for active transportation options. Demonstration projects include:

- Install wayfinding signage throughout the City indicating to pedestrians and bicyclists their direction of travel, location of destinations, and the walking or riding time/distance to those destinations.
 Wayfinding signs increase users' comfort and accessibility of the bicycle system and also visually cue motorists that they are driving along a bicycle route and should use caution.
- Hold a Sunday Parkways event at other locations throughout the city to encourage community members and families to become familiar with bicycling in Tacoma.
- Safe Routes programs provide education and encouragement programming and infrastructural improvements so people can more safely and conveniently access destinations via walking, bicycling and transit.
- Expand the Safe Routes to School program to work with interested schools of all levels citywide.
- Establish a Safe Routes to Employment program with a focus on larger employment centers and downtown.
- Establish a Safe Routes to Parks program with a focus on Regional, Signature, and Community Parks as defined by Metro Parks Tacoma.
- Establish Safe Routes to Transit programs for improved access to Sound Transit, Pierce Transit, and Amtrak facilities.
- Use Arterial retrofits, also known as road diets, to implement bike facilities on key streets.
- Implement Downtown Improvements, including bicycle facilities connecting destinations around downtown as well as coming from areas outside of downtown.



Tandem Recumbent Cyclists in front of the University of Puget Sound

Bikeway Recommendations

Tacoma's bikeway implementation projects would primarily occur through roadway restriping, which may require lane narrowing, parking reduction, or removal of a center turn lane. Depending on funding or other constraints, bike facility project implementation could occur in multiple phases. When there is an elimination of parking the City will work with the Commission on Disabilities to determine how best to mitigate the loss for people with disabilities.

The Bicycle Priority Network map in the TMP outlines the improved bicycling network.

It is important to note that bicycles are permitted on all public roads in the State of Washington, except where prohibited, such as on interstates in urban areas like Tacoma. As such, Tacoma's entire street network is effectively the community's bicycle network, regardless of whether or not a bikeway stripe, stencil, or sign is present on a given street. The designation of certain roads as bike routes is not intended to imply that these are the only roadways intended for bicycle use, or that bicyclists should not be riding on other streets. Rather, the designation of a network of on-street bikeways recognizes that certain roadways are preferred bicycle routes for most users, for reasons such as directness or access to significant destinations, and allows Tacoma to then focus resources on building and maintaining this primary network.

As part of the Bicycle Priority Network, bike boulevards are an effective and necessary facility to creating a complete network. Bike Boulevards are typically located on residential streets with lower traffic speed and volume. Because of this, they are attractive routes for cyclists of all

ages and abilities On Bike Boulevards, motorists and cyclists share the road. For this reason, pavement markings, wayfinding signage, bike route signage, traffic calming, and intersection control are key components to a bike boulevard...

Pedestrian Recommendations

The Transportation Master Plan adopts the 20-Minute Neighborhood approach to pedestrian recommendations due to its focus on making existing activity zones conducive to walking.

The 20-Minute Neighborhood approach identifies areas that are good candidates for walking based on three of the Ds of built environment that influence travel: density, distance, and destinations. Each of these factors has its own components, which are measured as follows:

Density

Population density by housing units per acre

Distance

- Intersection density
- Topography
- Distance to transit

Destinations

- Major employers
- Schools
- Parks
- Libraries
- Grocery stores

20-Minute Neighborhoods

Within the 20-Minute Neighborhoods, the TMP recommends that the City adopt the yellow standard as its accommodation goal for pedestrian facilities. The standards also break out the Pedestrian Priority Areas, as identified by the 20-Minute Neighborhood Analysis, from other areas of Tacoma.

Table 1. Pedestrian Accommodation Goals - Sidewalks

Quality of Facility	Within 20-Minute Neighborhoods	Other Areas
High	Complete sidewalks with buffers on both sides of arterials and collectors	Complete sidewalks on both sides of arterials and collectors
Acceptable	Complete sidewalks without buffers both sides of arterials and collectors	Sidewalks present
Needs Improvement	Incomplete or no sidewalk	Incomplete or no sidewalk

For the sidewalk accommodation goal, buffering between sidewalks and travel lanes can be accomplished through landscaping, amenity zones, parking, or any other measure beyond a curb that separates pedestrians from moving vehicles. The group also felt that while sidewalks may be recommended on local streets to address specific safety concerns, they need not be required for all local streets.

Intersection Recommendations

The City of Tacoma will use the Pedestrian Crossing Improvement Project (completed 2014) for identifying intersection projects. The Pedestrian Crossings Improvement Project provides for the identification, evaluation, and construction of pedestrian crosswalks, and associated facilities, at intersections citywide. While the primary motivation for the project is the installation of marked crosswalks, other improvements will be installed to enhance the marked crossings.

Crosswalks should be present every other block or 600 feet, whichever is lesser, in Pedestrian Priority
Areas to meet the yellow standard, which the TMP recommends for the pedestrian accommodation goal.
Crosswalks should be present in other areas of the city in order to meet the yellow standard.

Table 2. Pedestrian Accommodation Goal - Crosswalks

Quality of Facility	Within 20-Minute Neighborhoods	Other Areas
High	Crossing every 300 feet in pedestrian activity area or downtown that meets Tacoma's current best design practice	Existing marked crossings meet Tacoma's current best design practice
Acceptable	Crosswalks present every 600 feet	Crosswalks present
Needs Improvement	No crosswalks within 600 feet	No crossings present

Sub-Area Plan Recommendations

There are certain areas of the city that pose the greatest challenges to pedestrian and bicycle movement where more intensive analysis is warranted. The following areas recently (Fall 2014) had sub-area plans completed:

- South Downtown
- North Downtown

Hilltop

Key pedestrian and bicycle recommendations from those sub-area plans include:

South Downtown

- Designate South Jefferson Avenue between 21st and 25th; 25th Street between I-705 and Fawcett Avenue; East C Street; and South C Street as primary pedestrian streets
- As appropriate, carry out planning, design, and construction of proposed open space projects including the Prairie Line Trail, Foss Waterway Esplanade, Central and Waterway parks on the Foss, bridge to the south end of the Foss, UWT central open space and stairs, Hillside shared-use street, Hillside-to-Brewery District pedestrian corridor, and others
- Implement Complete Streets reconfigurations of Puyallup Avenue, Jefferson Avenue, and South C Street, in that order of priority.

North Downtown

- A goal of maintaining and enhancing the existing development fabric and capitalizing on local and regional transit resources within the Subarea while supporting walkability, a variety of transportation modes, and future infrastructure improvements
- o Complete the Stadium to Schuster pedestrian connection
- Establish a citywide policy that prioritizes projects to improve active transportation access to Link stations
- Implement the Schuster Parkway Promenade multimodal corridor project, including key connections to and along the waterfront
- Implement the City's proposed pedestrian corridor projects in North Downtown as identified in the Mobility Master Plan

Hilltop

- A goal of creating a village that promotes walking, biking, and transit as a means of transportation in addition to vehicular.
- Expand pedestrian networks within Hilltop and with the rest of the city. Top priority locations include South 19th Street, South 11th Street, and South 6th Avenue.
- Implement Tacoma's Complete Streets typologies in Hilltop

The following areas are recommended for sub-area plans to determine best active transportation routes and access:

- Tacoma Mall (in progress August 2014-December 2016)
- NE Tacoma
- TCC and its associated transit hub
- Tideflats (Port)

Implementation Strategies

Implementation strategies and their related action items support the goals and policies of the Transportation Master Plan. The strategies and actions shown in the following table are organized according to the six goals in the TMP.

Ī	Goal	Strategy		Action
		1.1 Collaborate with neighboring jurisdictions on active transportation projects	1.1.1	Collaborate with state, regional and federal partners to reform system performance measures and mobility standards in order to reflect the movement of persons rather than vehicles and to favor transportation modes that have the least environmental impact and greatest contribution to livability.
			1.1.2	Work cooperatively with adjoining jurisdictions on bicycle and pedestrian connections and trail projects to ensure regional links for commuters and recreational users in and outside of Tacoma.
			1.2.1	Commence a TMP Implementation Committee to provide oversight and direction for the implementation of the Plan.
		1.2 Strengthen Active Transportation project and program delivery processes	1.2.2	Develop a pilot program for temporary implementation of bicycle facilities. Experiment and test improvements of a bicycle facility in order to determine traffic operation pros and cons and/or modal trade-offs associated with the incorporation of the bicycle facility prior to final design and implementation.
	1. Intergovernmental		1.2.3	Provide training of city staff, including DOT and Police Department. Training can include best practice facility design, safety countermeasures, maintenance/new materials capabilities, and bicycle detection and count technology. Include training that pertains to active transportation-related research and studies such as, economic, safety, perception surveys, etc.
	Coordination and Citizen Participation	1.3 Work cooperatively with adjoining jurisdictions and transit agencies to coordinate active transportation planning and implementation activities.	1.3.1	Coordinate with Sound Transit and Pierce Transit to expand pedestrian, bicycle, and transit mobility through the integration of active transportation facilities with the transit and streetcar systems.
			1.3.2	Support a frequent and convenient bus, rail, and streetcar network to magnify the impact of planning for movement as pedestrians and bicyclists.
			1.3.3	Consider incorporating bikeways in transit projects that include exclusive transit use of a right-of-way, such as bus mall, bus rapid transit or streetcar.
			1.3.4	Provide safe and accessible routes and intersections to transit for pedestrians of all abilities.
·			1.3.5	Provide safe end-of-trip facilities (bike parking, bike lockers, etc) at all streetcar stations and transit facilities served by four or more routes.
		1.4 Enhance safety for all road users through increased traffic enforcement on city streets, walkways, and bikeways.	1.4.1	Enforce traffic laws consistently for all users through collaboration with the Tacoma Police Department.
			1.4.2	Collaborate with law enforcement and the courts system on the development of a traffic skills education course aimed to reduce aggressive and/or negligent behavior among drivers, bicyclists and pedestrians by providing the option of taking a traffic skills education course in lieu of fines for traffic violations.
			1.4.3	Develop and promote efficient mechanisms for reporting behaviors and conditions that endanger cyclists and pedestrians to law enforcement.

Comment [KJ1]: The Commission and BPTAG act in this capacity.

Comment [KJ2]: Move to Peds

		2.1 Implement the Transportation Master Plan's recommendations for developing an active transportation network that reduces auto travel, increases the number of pedestrians, bicyclists, and transit riders of all ages and abilities, and improves the health of our people and local ecology	2.1.1	Complete the connected network of sidewalks, trails, bike lanes, bike boulevards, shared lane markings, and protected bike lanes throughout the city that serves all bicycle user groups. Phase development of the network.
	2. Community / Environment	2.12 Promote active lifestyles by working with Pierce County Health Department (TPCHD) to provide education programs and safe and accessible routes for bicyclists and pedestrians of all ages and abilities.	2.2.1	Collaborate with the Tacoma-Pierce County Health Department on active living and active transportation projects that address and seek to reduce health-related issues such as obesity.
			2.3.1	Install traffic calming facilities where necessary for improved safety and active transportation travel.
1		2.23 Apply high-quality engineering and design to physical infrastructure.	2.3.2	Use current best engineering practices for minimizing and mitigating conflicts between bicycles, pedestrians, and motor vehicles.
			2.3.3	Reduce barriers and hazards to active transportation users by ensuring safe and sufficient crossings of major roadways and by providing routes that minimize steep slopes.
			3.1.1	Increase pedestrian trips and bicycle ridership with a system that provides facility types and designs that are low stress for pedestrians and bicyclists of all ages and abilities. Inexperienced are most likely to use high quality bike boulevards, shared use trails, and cycle tracks.
			3.1.2	Prioritize pedestrian and bicyclist safety during construction and maintenance activities, and ensure that the City's accessibility guidelines are followed.
			3.1.3	Create safe and accessible active transportation facilities through regular inspection and maintenance.
			3.1.4	Develop an on-going city-wide maintenance strategy for active transportation facilities.
1				When prioritizing projects or evaluating new future projects the following guidance should be used:
	3. Multimodal System	3.1 Ensure active transportation facilities are clean, safe, and, accessible, and promote active use.	3.1.5	2.3.1 Install traffic calming facilities where necessary for improved safety and active transportation travel. 2.3.2 Use current best engineering practices for minimizing and mitigating conflicts between bicycles, pedestrians, and motor vehicles. 2.3.3 Reduce barriers and hazards to active transportation users by ensuring safe and sufficient crossings of major roadways and by providing routes that minimize steep slopes. 3.1.1 Increase pedestrian trips and bicycle ridership with a system that provides facility types and designs that are low stress for pedestrians and bicyclists of all ages and abilities. Inexperienced are most likely to use high quality bike boulevards, shared use trails, and cycle tracks. 3.1.2 Prioritize pedestrian and bicyclist safety during construction and maintenance activities, and ensure that the City's accessibility guidelines are followed. 3.1.3 Create safe and accessible active transportation facilities through regular inspection and maintenance. 3.1.4 Develop an on-going city-wide maintenance strategy for active transportation facilities. When prioritizing projects or evaluating new future projects the following guidance should be used: 1. Projects that provide the greatest connectivity to the greatest number of people or neighborhoods 2. Projects that provide connections to transit 3. Projects that provide safe routes to school 4. Projects that provide safe routes to school

Comment [KJ3]: This is captured in the proposed Targets

Comment [KJ4]: The TMP contains specific criteria for project selection

		3.1.6	Increase the number of multimodal trips that include traveling as a pedestrian or bicyclist for at least one trip segment by improving and simplifying connections and transfers.
		3.2.1	Monitor the implementation progress of the Transportation Master Plan.
		3.2.2	Track citywide trends in bicycle usage through the use of Census data, biannual user surveys, annual bicycle counts, and PierceTrips.com.
	3.2 Establish benchmarks measurements and	3.2.3	Monitor bicycle collision data with the goal of reducing bicycle-related collisions.
	monitor the effectiveness of the Transportation Master Plan on a biannual basis.	3.2.4	Produce a regular report card tracking bicycling and walking trends in Tacoma including percent of the system that has been completed, funds invested, identification of ongoing problems, public feelings of safety, status of reaching Health and Safety goals, and educational outreach efforts.
		3.2.5	Track citywide implementation of improved and increased walkway and bikeway facilities, ADA accessible features, and amenities with supervision of the Implementation Committee.
	3.3 Apply high-quality engineering and design to	3.3.1	Design all pedestrian facilities to meet or exceed the latest federal, state, and local standards so that there is universal access for all users of the system.
	pedestrian physical infrastructure.	3.3.2	Install signal prioritization for active transportation users in appropriate locations.
		3.3.3	Ensure that all new facilities are ADA-compliant to provide access for pedestrians of all abilities.
	3.4 Apply high-quality engineering and design to bicycle physical infrastructure.	3.4.1	Design all bicycle facilities to meet or exceed the latest federal, state, and local standards so that there is universal access for all users of the system.
		3.4.2	Install signal prioritization for active transportation users in appropriate locations.
		3.4.3	Install bicycle detection mechanisms at signalized intersections.
		3.4.4	Install separated bicycle facilities where bike lane striping does not provide appropriate riding conditions.
		3.4.5	Prioritize the completion of proposed shared-use paths that maximize access to key recreational and transportation destinations in order to encourage recreational and commute trips.
	4.1 Establish Vehicle Miles Traveled Goal	4.1.1	Work with the City's Commute Trip Reduction Coordinator, Puget Sound Clean Air Agency, Puget Sound Regional Council, or other relevant agencies to set biannual per-capita vehicle-miles-traveled goals that will encourage residents to drive less.
	4.2 Pursue a dedicated source of funding to implement the expansion and enhancement of walkways and bikeways in Tacoma. Supplement dedicated funds with other funding sources.	4.2.1	Prioritize funding and construction of active transportation facilities in recognition of the livability, environmental, and health benefits these forms of mobility provide.
		4.2.2	Pursue state, regional, and federal grant funding for shared-use paths and other active transportation facilities.
4. Environmental and Fiscal Stewardship		4.2.3	Work with the Implementation Committee Transportation Commission, Bicycle & Pedestrian Technical Advidory Group, advocates, and elected officials to identify and pursue multiple strategies to increase funding for green transportation.
		4.2.4	Dedicate a percentage of the City's overall transportation budget to active transportation projects.
		4.2.5	Leverage investments made in road improvement projects by installing improved bicycle and pedestrian projects simultaneously regardless of the priority previously placed upon the bike or pedestrian facilities.
		4.2.6	Pursue establishment of a new dedicated source of funding for active transportation improvements, such as a portion of an additional locally determined vehicle tab tax, impact fees, street utility tax, and levy lid lift.
		monitor the effectiveness of the Transportation Master Plan on a biannual basis. 3.3 Apply high-quality engineering and design to pedestrian physical infrastructure. 3.4 Apply high-quality engineering and design to bicycle physical infrastructure. 4.1 Establish Vehicle Miles Traveled Goal 4.2 Pursue a dedicated source of funding to implement the expansion and enhancement of walkways and bikeways in Tacoma. Supplement	3.2 Establish benchmarks measurements and monitor the effectiveness of the Transportation Master Plan on a biannual basis. 3.2.4 3.2.5 3.3 Apply high-quality engineering and design to pedestrian physical infrastructure. 3.4 Apply high-quality engineering and design to bicycle physical infrastructure. 3.4.1 3.4.2 3.4.3 3.4.4 3.4.5 4.1 Establish Vehicle Miles Traveled Goal 4.2.1 4.2.2 4.2.2 4.2.3 4.2.3 4.2.4 4.2.4 4.2.5

Comment [KJ5]: Move to Peds

Comment [KJ6]: Move to Peds

	4.3 Encourage and improve the appeal of modes of transportation with negligible carbon emissions, such as walking, biking, and use of assistive devices, thereby reducing the miles traveled by single occupancy vehicles.	4.3.1	Support Tacoma's Climate Action Plan by developing a comprehensive pedestrian and bicycle network. Assist in realizing the goal of reducing Tacoma's greenhouse gas emission levels to 40 percent below 1990 levels by 2020, and 80 percent below 1990 levels by 2050.
		5.1.1	Educate the general public on bicycle and walking safety issues and encourage active transportation with programs that target pedestrians, bicyclists and motorists.
		5.1.2	Educate the general public about linking trips (trip-chaining) to reduce the number of trips taken per day.
		5.1.3	Encourage active transportation through City-sponsored events and expanded Bike Month activities.
		5.1.4	Educate school children on safe pedestrian and bicycle behavior.
	5.1 Increase the public's awareness and usage of the bicycle and pedestrian network in Tacoma	5.1.5	Educate the general public on bicycle and pedestrian laws and regulations via the City's website and other education programs.
5. Transportation Demand	through targeted education and encouragement programs	5.1.6	Educate drivers (transit drivers, delivery drivers, etc.) on bicyclist rights and safe motoring behavior around bicyclists. Provide appropriate materials to pedestrians, motorists, and cyclists convicted of specified violations.
Management		5.1.7	Establish Safe Routes to School Programs in collaboration with Tacoma schools. Apply for Safe Routes to Schools grants through the Washington Department of Transportation.
		5.1.8	Educate bicyclists and pedestrians on proper and safe behavior for biking and walking via the City's website and other education programs.
		5.1.9	Improve the general public's awareness of the transportation needs and requirements of people with a variety of mobility and sensory disabilities via the City's website and other education programs.
	5.2 Provide and encourage amenities that support active transportation.	5.2.1	Give incentives for bicycle storage, locker rooms, and shower facilities for all major office building construction and remodeling projects in the downtown core.
		5.2.2	Install wayfinding signage in proximity to active transportation facilities and destinations.
	delive transportation.	5.2.3	Install bike racks, accessible parking and other support infrastructure at destinations citywide, including transit stations, retail area, parks, public facilities, and other high-traffic areas
	6.1 Prioritize infrastructure improvements that	6.1.1	Coordinate with local business associations, Tacoma-Pierce County Chamber of Commerce, neighborhood groups and other active associations to encourage and support local retail and services for residents.
6. Land Use and Transportation	connect residential areas to local retailing, business, and community services, so residents can access more of the services they need close to	6.1.2	Encourage and support the development of "20 minute neighborhoods" where goods and services can be obtained within short distances via active transportation modes, thereby reducing the need for automobile trips.
	home by walking, biking, and use of assistive devices	6.1.3	Identify opportunities to encourage and support the development and re-development of businesses and urban spaces in Tacoma into bicycle- and pedestrian-accessible commercial nodes.
		6.1.4	Ensure that bicycle and pedestrian facilities connect residential areas to goods and services that are often needed on a daily basis.

Comment [KJ7]: Move to Peds

		6.2.1	Provide height bonuses and other incentives to developments that promote walkability and that provide amenities such as weather protection, seating, and improve pedestrian connectivity.
old framewacterspring and redevelopment and	6.2.2	Support changing parking policies to prioritize on-street parking only where needed to support local business while recognizing the need to provide accessible parking.	
	ways that create street connectivity and access for active transportation users	6.2.3	Conduct regular reviews of the Municipal Code sections that pertain to the rules of the road and to new development to identify changes that would facilitate better bicycling and walking conditions.
		6.2.4	Enhance mobility in existing cul-de-sac development with shared-use paths for through access for pedestrians and bicyclists to adjacent street corridors.

Appendix D – <u>Pedestrian</u> <u>Implementation Action</u> <u>Strategies</u><u>Mobility Master</u> Plan Update

Policy Intent

<u>Prioritizing Transportation</u> Investment

As discussed in the TMP, 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. While 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.

This hierarchy defines pedestrians as including individuals using assistive devices for mobility and sensory disabilities including walkers, wheelchairs, scooters, service animals, and canes. Throughout Appendix D, the term "pedestrian" refers to a person moving from place to place, on foot and/or with the use of an assistive mobility device (when that person has a disability and/or medical condition). "Walking" or "to walk" are the terms used to describe this movement of a pedestrian.

The City of Tacoma's TMP draws on this model as a conceptual tool for elevating pedestrians, bicycles, and public transit in the planning and design of streets in a manner that is consistent with the City's Complete Streets policy and the City's Climate Action Plan. It gives recognition to the city's most vulnerable users of the streets: pedestrians and bicyclists of all ages and abilities.

20-Minute Neighborhoods

Chapter 5 Implementation discusses funding strategies to build out the City's transportation system. To successfully achieve the City's vision and goal, a unique set of specific strategies is required that goes beyond construction of infrastructure. This Appendix identifies methods for strengthening execution of the recommendations and ensuring that pedestrian are top priorities in transportation planning.

Pedestrian Recommendations

The Transportation Master Plan adopts the 20-Minute Neighborhood approach to pedestrian recommendations due to its focus on making existing activity zones conducive to walking.

The 20-Minute Neighborhood approach identifies areas that are good candidates for walking based on three of the Ds of built environment that influence travel: density, distance, and destinations. Each of these factors has its own components, which are measured as follows:

Density

 Population density by housing units per acre

Distance

- Intersection density
- Topography
- Distance to transit

Destinations

- Major employers
- Schools
- Parks
- Libraries
- · Grocery stores

Within the 20-Minute Neighborhoods, the TMP recommends that the City adopt the yellow standard as its accommodation goal for pedestrian facilities. The standards also break out the Pedestrian Priority Areas, as identified by the 20-Minute Neighborhood Analysis, from other areas of Tacoma.

Table 1. Pedestrian Accommodation Goals - Sidewalks

Quality of Facility	Within 20-Minute Neighborhoods	Other Areas						
High	Complete sidewalks with buffers on both sides of arterials and collectors	Complete sidewalks on both sides of arterials and collectors						
Acceptable	Complete sidewalks without buffers both sides of arterials and collectors	Sidewalks present						
Needs Improvement	Incomplete or no sidewalk	Incomplete or no sidewalk						

For the sidewalk accommodation goal, buffering between sidewalks and travel lanes can be accomplished through landscaping, amenity zones, parking, or any other measure beyond a curb that separates pedestrians from moving vehicles. The group also felt that while sidewalks may be recommended on local streets to address specific safety concerns, they need not be required for all local streets.

Intersection Recommendations

The City of Tacoma will use the Pedestrian Crossing Improvement Project (completed 2014) for identifying intersection projects. The Pedestrian Crossings Improvement Project provides for the identification, evaluation, and construction of pedestrian crosswalks, and associated facilities, at intersections citywide. While the primary motivation for the project is the installation of marked crosswalks, other improvements will be installed to enhance the marked crossings.

Crosswalks should be present every other block or 600 feet, whichever is lesser, in Pedestrian Priority Areas to meet the yellow standard, which the TMP recommends for the pedestrian accommodation goal. Crosswalks should be present in other areas of the city in order to meet the yellow standard.

Table 2. Pedestrian Accommodation Goal - Crosswalks

Quality of Facility	Within 20-Minute Neighborhoods	Other Areas		
High	Crossing every 300 feet in pedestrian activity area or downtown that meets Tacoma's current best design practice	Existing marked crossings meet Tacoma's current best design practice		
Acceptable	Crosswalks present every 600 feet	Crosswalks present		
Needs Improvement	No crosswalks within 600 feet	No crossings present		

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Sub-Area Plan Recommendations

There are certain areas of the city that pose the greatest challenges to pedestrian and bicycle movement where more intensive analysis is warranted. The following areas recently (Fall 2014) had sub-area plans completed:

- South Downtown
- North Downtown
- Hilltop

Key pedestrian recommendations from those sub-area plans include:

- South Downtown
 - Designate South Jefferson Avenue between 21st and 25th;
 25th Street between I-705 and Fawcett Avenue; East C Street;
 and South C Street as primary pedestrian streets
 - As appropriate, carry out planning, design, and construction of proposed open space projects including the Foss Prairie Line Trail, Waterway Esplanade, Central and Waterway parks on the Foss, bridge to the south end of the Foss, UWT central open space and stairs, Hillside shared-use street, Hillside-to-Brewery District pedestrian corridor, and others
 - Implement Complete Streets reconfigurations of Puyallup Avenue, Jefferson Avenue, and South C Street, in that order of priority.

North Downtown

 A goal of maintaining and enhancing the existing development fabric and capitalizing on local and regional transit resources within the Subarea while supporting walkability, a variety of transportation modes, and future improvements

- Complete the Stadium to Schuster pedestrian connection
- Establish a citywide policy that prioritizes projects to improve active transportation access to Link stations
- D Implement the Schuster Parkway Promenade multimodal corridor project, including key connections to and along the waterfront
- Implement the City's proposed pedestrian corridor projects in North Downtown as identified in the Transportation Master Plan

Hilltop

- A goal of creating a village that promotes walking, biking, and transit as a means of transportation in addition to vehicular.
- Expand pedestrian networks within Hilltop and with the rest of the city. Top priority locations include South 19th Street, South 11th Street, and South 6th Avenue.
- Implement Tacoma's Complete Streets typologies in Hilltop

The following areas are recommended for subarea plans to determine best active transportation routes and access:

- Tacoma Mall (in progress August 2014-December 2017)
- NE Tacoma
- TCC and its associated transit hub
- Tideflats (Port)

Pedestrian Crossing Improvements Project -Summary

Overview

The Pedestrian Crossing Improvements Project provided for the identification, evaluation, and construction of pedestrian crosswalks, and associated facilities, at intersections citywide. While the primary motivation for the project was the installation of marked crosswalks, other improvements were identified to enhance the marked crossings.

The first phase of the project included approximately \$2.5 million on planning, designing, and constructing pedestrian crossing improvements throughout the City: \$300,000 allotted to each council district and \$1 million to the Downtown area (as defined by zoning). This project also investigated opportunities to extend the effectiveness of other programs, such as the Hazardous Sidewalk Replacement program, City Safety grants, and the implementation of the City's American with Disabilities Act Transition Plan. additional \$1.5 million was allocated for the 2015-2016 biennium to continue the work begun in 2014.

This project included a robust public outreach effort to identify potential improvement locations, and received over 650 responses from the public pertaining to over 300 locations throughout the City. These locations were evaluated using a prioritization framework developed by Tacoma staff and the public.

Engineers later developed preliminary cost estimates that were used in packaging the locations for construction.

Data Collection

The project team collected input from a variety of sources regarding the potential locations for pedestrian crossing improvements and the criteria to be used in prioritizing these locations. Crossina improvement locations were identified through a rigorous public input process and current City documents, including the 2009 Mobility Master Plan. In-person meetings and an online survey were tools used to collect data, in addition to letters and emails received from Neighborhood Council representatives. Parent Teacher Associations, local businesses, nonprofit organizations, as well as the general public.

Evaluation

The public process identified the following criteria that were used to evaluate potential projects:

- Pedestrian and vehicle counts
- Proximity to schools
- Vehicle/pedestrian collision history
- Proximity to parks
- Proximity to hospitals
- Proximity to bus stops
- The number of times a location was identified through this project's outreach process, regardless of other characteristics
- Proximity to major employers and commercial centers
- Proximity to bicycle/trail systems
- Proximity to libraries
- Proximity to senior centers/senior housing

These criteria were weighted based on responses by people completing the online survey and people attending the public meetings. The evaluation criteria were then used to identify top ranking locations for pedestrian improvements.

Engineering and Construction

The project team worked sequentially

through the top ranked projects in each Council District and the Downtown Area using the following evaluation process:

- In-House Review: the project team worked with key City staff to review existing transportation documents on identified crossing improvement locations, aerial imagery, and comments received to determine the appropriate treatment for top ranked locations.
- Field Review: City staff and the project team visited crossing improvement locations to evaluate site specific elements that would impact project implementation and cost. This included reviewing existing curb ramp construction and field review of utilities, such as lighting and traffic signals, including yehicle detection.

Relation to the Transportation Master Plan

The Transportation Master Plan places a priority on pedestrian mobility, and assumes that all streets will accommodate pedestrians to some degree. Because local

connections and crosswalks are integral components of pedestrian safety and mobility, it is critical that the City develop a process for systematically addressing the need for this type of improvement. While the TMP includes a recommendation for conducting an inventory of sidewalk infrastructure, and then subsequently identifying necessary improvements to the sidewalk network, this process will not necessarily satisfy all of the pedestrian improvements which will be needed to support the transportation system envisioned in the TMP.

The Pedestrian Crossing Improvements Project identified extensive throughout the City, and created a process for prioritizing those needs. While the City has made significant strides toward addressing the needs identified during this process, there are many needs which are still unmet, and many more which were not identified during the public outreach process for this project. The City should build on the work done as part of the Pedestrian Crossing Improvement Project developing a process for updating the list of pedestrian crossing projects, and by updating the prioritization process to ensure it satisfies the community's identified priorities and the goals and policies within the TMP.

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Implementation Strategies

Implementation strategies and their related action items support the goals and policies of the Transportation Master Plan. The strategies and actions shown in the following table are organized according to the six goals in the TMP.

<u>Goal</u>	<u>Strategy</u>		<u>Action</u>
	1.1 Collaborate with neighboring jurisdictions on active transportation projects	1.1.1	Collaborate with state, regional and federal partners to reform system performance measures and mobility standards in order to reflect the movement of persons rather than vehicles and to favor transportation modes that have the least environmental impact and greatest contribution to livability.
		1.1.2	Work cooperatively with adjoining jurisdictions on bicycle and pedestrian connections and trail projects to ensure regional links for commuters and recreational users in and outside of Tacoma.
	-	1.2.2	Develop a pilot program for temporary implementation of pedestrian facilities. Experiment and test improvements of a pedestrian facility in order to determine traffic operation pros and cons and/or modal trade-offs associated with the incorporation of the pedestrian facility prior to final design and implementation.
1. Intergovernmental Coordination and Citizen Participation		1.2.3	Provide training of city staff, including DOT and Police Department. Training can include best practice facility design, safety countermeasures, and maintenance/new materials capabilities. Include training that pertains to active transportation-related research and studies such as, economic, safety, perception surveys, etc.
	1.3 Work cooperatively with adjoining jurisdictions and transit agencies to coordinate active transportation planning and implementation activities.	<u>1.3.1</u>	Coordinate with Sound Transit and Pierce Transit to expand pedestrian, bicycle, and transit mobility through the integration of active transportation facilities with the transit and streetcar systems.
		1.3.2	Support a frequent and convenient bus, rail, and streetcar network to magnify the impact of planning for movement as pedestrians and bicyclists.
		1.3.3	Consider incorporating bikeways in transit projects that include exclusive transit use of a right-of-way, such as bus mall, bus rapid transit or streetcar.
		1.3.4	Provide safe and accessible routes and intersections to transit for pedestrians of all abilities.
	1.4 Enhance safety for all road users through	1.4.1	Enforce traffic laws consistently for all users through collaboration with the Tacoma Police Department.

	increased traffic enforcement on city streets, walkways, and bikeways.	1.4.2	Collaborate with law enforcement and the courts system on the development of a traffic skills education course aimed to reduce aggressive and/or negligent behavior among drivers, bicyclists and pedestrians by providing the option of taking a traffic skills education course in lieu of fines for traffic violations.
		1.4.3	Develop and promote efficient mechanisms for reporting behaviors and conditions that endanger cyclists and pedestrians to law enforcement.
-	-	-	-
2. Community / Environment	2.1 Promote active lifestyles by working with Pierce County Health Department (TPCHD) to provide education programs and safe and accessible routes for bicyclists and pedestrians of all ages and abilities.	2.2.1	Collaborate with the Tacoma-Pierce County Health Department on active living and active transportation projects that address and seek to reduce health-related issues such as obesity.
		2.3.1	Install traffic calming facilities where necessary for improved safety and active transportation travel.
	2.2 Apply high-quality engineering and design to physical infrastructure.	2.3.2	Use current best engineering practices for minimizing and mitigating conflicts between bicycles, pedestrians, and motor vehicles.
		2.3.3	Reduce barriers and hazards to active transportation users by ensuring safe and sufficient crossings of major roadways and by providing routes that minimize steep slopes.
-	-	-	-
	3.1 Ensure active transportation facilities are clean, safe, and, accessible, and promote active use.	3.1.1	Increase pedestrian trips and bicycle ridership with a system that provides facility types and designs that are low stress for pedestrians and bicyclists of all ages and abilities. Inexperienced are most likely to use high quality bike boulevards, shared use trails, and cycle tracks.
3. Multimodal System		3.1.2	Prioritize pedestrian and bicyclist safety during construction and maintenance activities, and ensure that the City's accessibility guidelines are followed.
		3.1.3	Create safe and accessible active transportation facilities through regular inspection and maintenance.
		3.1.4	Develop an on-going city-wide maintenance strategy for active transportation facilities.

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		Increase the number of multimodal trips that include traveling as a pedestrian or bicyclist for at least o
	3.1.5	trip segment by improving and simplifying connections and transfers.
	224	Maritary the invalence station recovered of the Transportation Marter Disc
	3.2.1	Monitor the implementation progress of the Transportation Master Plan.
3.2 Establish benchmarks measurements and	3.2.3	Monitor pedestrian collision data with the goal of reducing bicycle-related collisions.
monitor the effectiveness of the Transportation		Produce a regular report card tracking bicycling and walking trends in Tacoma including percent of the
Master Plan on a biannual basis.	<u>3.2.4</u>	system that has been completed, funds invested, identification of ongoing problems, public feelings of
		safety, status of reaching Health and Safety goals, and educational outreach efforts.
	225	Track citywide implementation of improved and increased walkway and bikeway facilities, ADA accessi
	3.2.5	features, and amenities with supervision of the Implementation Committee.
		Design all pedestrian facilities to meet or exceed the latest federal, state, and local standards so that the
	3.3.1	is universal access for all users of the system.
3.3 Apply high-quality engineering and design to	2.2.2	
pedestrian physical infrastructure.	3.3.2	Install signal prioritization for active transportation users in appropriate locations.
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	<u>3.4.1</u>	is universal access for all users of the system.
3.4 Apply high-quality engineering and design to	3.4.2	Install signal prioritization for active transportation users in appropriate locations.
pedestrian physical infrastructure.	3.4.3	Install ADA compliant facilities at signalized intersections.

		3.4.5	Prioritize the completion of proposed shared-use paths that maximize access to key recreational and transportation destinations in order to encourage recreational and commute trips.
-	-	_	Work with the City's Commute Trip Reduction Coordinator, Puget Sound Clean Air Agency, Puget Sound
	4.1 Establish Vehicle Miles Traveled Goal	4.1.1	Regional Council, or other relevant agencies to set biannual per-capita vehicle-miles-traveled goals that will encourage residents to drive less.
		4.2.1	Prioritize funding and construction of active transportation facilities in recognition of the livability, environmental, and health benefits these forms of mobility provide.
	4.2 Pursue a dedicated source of funding to implement the expansion and enhancement of walkways and bikeways in Tacoma. Supplement dedicated funds with other funding sources.	4.2.2	Pursue state, regional, and federal grant funding for shared-use paths and other active transportation facilities.
		4.2.3	Work with the Transportation Commission, Bicycle & Pedestrian Technical Advisory Group, advocates, and elected officials to identify and pursue multiple strategies to increase funding for green transportation.
4. Environmental and Fiscal Stewardship		4.2.4	Dedicate a percentage of the City's overall transportation budget to active transportation projects.
		4.2.5	Leverage investments made in road improvement projects by installing improved bicycle and pedestrian projects simultaneously regardless of the priority previously placed upon the bike or pedestrian facilities.
		4.2.6	Pursue establishment of a new dedicated source of funding for active transportation improvements, such as a portion of an additional locally determined vehicle tab tax, impact fees, street utility tax, and levy lid lift.
	4.3 Encourage and improve the appeal of modes of transportation with negligible carbon emissions, such as walking, biking, and use of assistive devices, thereby reducing the miles traveled by single occupancy vehicles.	4.3.1	Support Tacoma's Climate Action Plan by developing a comprehensive pedestrian and bicycle network. Assist in realizing the goal of reducing Tacoma's greenhouse gas emission levels to 40 percent below 1990 levels by 2020, and 80 percent below 1990 levels by 2050.
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	5.1 Increase the public's awareness and usage of	5.1.1	Educate the general public on bicycle and walking safety issues and encourage active transportation with programs that target pedestrians, bicyclists and motorists.
5. Transportation Demand Management	the bicycle and pedestrian network in Tacoma through targeted education and encouragement	5.1.2	Educate the general public about linking trips (trip-chaining) to reduce the number of trips taken per day.
	programs	5.1.3	Encourage active transportation through City-sponsored events and expanded Bike Month activities.
		5.1.4	Educate school children on safe pedestrian and bicycle behavior.

			<u>5.1.5</u>	Educate the general public on bicycle and pedestrian laws and regulations via the City's website and other education programs.
			<u>5.1.6</u>	Educate drivers (transit drivers, delivery drivers, etc.) on bicyclist rights and safe motoring behavior around bicyclists. Provide appropriate materials to pedestrians, motorists, and cyclists convicted of specified violations.
			5.1.7	Establish Safe Routes to School Programs in collaboration with Tacoma schools. Apply for Safe Routes to Schools grants through the Washington Department of Transportation.
			<u>5.1.8</u>	Educate bicyclists and pedestrians on proper and safe behavior for biking and walking via the City's website and other education programs.
			5.1.9	Improve the general public's awareness of the transportation needs and requirements of people with a variety of mobility and sensory disabilities via the City's website and other education programs.
	5.2 Provide and encourage amenities that support active transportation.	<u>5.2.1</u>	Give incentives for locker rooms, and shower facilities for all major office building construction and remodeling projects in the downtown core.	
		<u>5.2.2</u>	Install wayfinding signage in proximity to active transportation facilities and destinations.	
			<u>5.2.3</u>	Install bike racks, accessible parking and other support infrastructure at destinations citywide, including transit stations, retail area, parks, public facilities, and other high-traffic areas
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			<u>6.1.1</u>	Coordinate with local business associations, Tacoma-Pierce County Chamber of Commerce, neighborhood groups and other active associations to encourage and support local retail and services for residents.
	6.1 Prioritize infrastructure improvements that connect residential areas to local retailing, business, and community services, so residents can access more of the services they need close to home by walking, biking, and use of assistive devices 6.2 Plan new development and redevelopment in ways that create street connectivity and access for	6.1.2	Encourage and support the development of "20-minute neighborhoods" where goods and services can be obtained within short distances via active transportation modes, thereby reducing the need for automobile trips.	
		6.1.3	Identify opportunities to encourage and support the development and re-development of businesses and urban spaces in Tacoma into bicycle- and pedestrian-accessible commercial nodes.	
		6.1.4	Ensure that bicycle and pedestrian facilities connect residential areas to goods and services that are often needed on a daily basis.	
		<u>6.2.1</u>	Provide height bonuses and other incentives to developments that promote walkability and that provide amenities such as weather protection, seating, and improve pedestrian connectivity.	
		active transportation users	<u>6.2.2</u>	Support changing parking policies to prioritize on-street parking only where needed to support local business while recognizing the need to provide accessible parking.

		6.2.3	Conduct regular reviews of the Municipal Code sections that pertain to the rules of the road and to new development to identify changes that would facilitate better bicycling and walking conditions.
		6.2.4	Enhance mobility in existing cul-de-sac development with shared-use paths for through access for pedestrians and bicyclists to adjacent street corridors.
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