

Chapter 6. Goals, Implementation

Objective 4: Secure funding and implement bicycle improvements.

Implementation of this Plan will be a collaborative effort between a variety of city departments and agencies and several outside organizations. SDOT will lead this effort, so all SDOT staff should be aware of the Plan recommendations and seek to implement them as a part of their regular work. The SDOT Pedestrian and Bicycle Program will provide technical expertise on issues related to bicycling and ensure that implementation of the Plan moves forward.

Key divisions within SDOT for planning and implementing bicycle improvements include:

- Traffic Management
- Street Maintenance
- Capital Projects and Roadway Structures
- Major Projects
- Policy and Planning

Progress on implementing the Plan will be monitored on an annual basis with the goal of completing most of this Plan by 2016.

Every transportation project offers an opportunity to implement a piece of this Master Plan. Therefore, institutionalizing bicycle improvements will be essential for successful implementation of this Plan. Seattle's Transportation Strategic Plan states that bicyclists' needs should be considered in the planning, design, construction, and maintenance of all transportation projects in the city.

Action 4.1: Provide bicycle facilities as a part of all transportation projects.

In accordance with the City of Seattle's Complete Streets Policy, the city will to the maximum extent possible:

- Accommodate bicycles as a part of all new roadway projects.
- Provide bicycle facilities as a part of all bridge projects (replacement and major retrofit), on the bridge structure and on bridge access ramps and approaches.
- Incorporate requirements for bicycle facilities in the city Right-of-Way Improvements Manual, standard specifications, and standard plans.
- Actively seek opportunities to provide bicycle lanes, shared lane markings, and other on-road bicycle facilities as a part of repaving projects. (This includes roadways in the Bicycle Facility Network as well as other roadways.)
- Develop trails in conjunction with the installation of underground cable, water, sewer, electrical, and other public or private efforts that utilize or create linear corridors.
- Continue to develop trails in railroad corridors no longer needed for railroad purposes. Where appropriate, develop trails adjacent to trails (e.g. sections of the Elliott Bay and Burke Gilman Trails). Continue to develop trails along utility corridors (e.g. Chief Sealth Trail).



A bicycle lane was striped on Roy Street when the roadway was repaved.



The I-90 bridge trail was constructed as part of the bridge project. A similar trail will be provided on the SR-520 Bridge when it is replaced..

- Leverage other types of projects that could potentially include bicycle facilities (e.g., building construction, property redevelopment, utility maintenance, etc.).
- Provide special appropriations or funding to fill in key gaps in the Bicycle Facility Network.
- Fix potholes, surface hazards, sight distance obstructions, and other maintenance problems on a regular basis.

Routine accommodation of bicycles should also apply to Washington State DOT, Washington State Ferries, Port of Seattle, KC/METRO, and Sound Transit projects within the city.

City of Seattle Complete Streets Policy

Ordinance Number 122386, Adopted by Seattle City Council on April 30, 2007

Guiding Principle: To design, operate and maintain Seattle's streets to promote safe and convenient access and travel for all users--pedestrians, bicyclists, transit riders, and people of all abilities, as well as freight and motor vehicle drivers.

Full text of the Complete Streets Policy is available online from the City of Seattle Legislative Information Service: <http://clerk.ci.seattle.wa.us/~public/CBOR1.htm>

Action 4.2: Dedicate funding for high-priority bicycle project planning and implementation.

The city should take advantage of existing funding provided through the general fund, “Bridging the Gap” initiative and other public and private sources, and dedicate portions of this funding to critical bicycle projects. Some of the most significant connections that are needed in Seattle, such as bicycle and pedestrian bridges and multi-purpose trails, will not be implemented through routine roadway repaving and reconstruction projects and will instead require an independently-funded capital improvement. In addition, there are a number of street retrofit projects that are important bicycle routes but hard to fund from traditional sources and in need of a separate, dedicated funding source. The city may be able to obtain funds for these projects by pursuing federal and state grants, seeking special appropriations or including them in future levy and bond initiatives.

Examples of these projects include (note that this list is similar higher-cost project list as provided at the beginning of Chapter 3):

- Re-construct Linden Avenue North between N 130th and N 145th Streets. with bike lanes, sidewalks and new pavement.
- Provide a bicycle facility connection between Downtown Seattle and the UW Campus via Eastlake Avenue N.
- Construct a Chief Sealth Trail Crossing of I-5 between S Spokane Street and S Lucile Street (and provide a trail on the east side of I-5 between the Chief Sealth Trail and the I-90 Trail).
- Construct the Burke-Gilman Trail section between 11th Avenue NW and 17th Avenue NW.
- Construct a new bicycle and pedestrian bridge across I-5 between Wallingford and the University District.
- Provide a bicycle facility connection between the I-90 Trail and Downtown Seattle.
- Construct multi-purpose trail connections from the SR 520 Bridge to the UW Campus and to



Funding should be set aside to extend the I-90 Mountains to Sound Greenway Trail into Downtown Seattle.

- Downtown Seattle as a part of the bridge reconstruction project.
- Improve the bicycle lanes on Alaskan Way S/E Marginal Way S between S Spokane Street and Downtown and complete the E-3 Busway Trail between S Spokane Street and Downtown.
- Either Rehabilitate the existing Ballard Bridge or add a new bicycle and pedestrian bridge adjacent to the Ballard Bridge.

Action 4.3: Establish a bicycle facility grant match reserve fund.

The city will develop a bicycle facility grant match reserve fund. This source would make it possible for the city to have matching funds available to take advantage of state and federal grants, even if other city funding sources are not available. To develop this fund, the city could set aside a certain percentage (e.g., 5 percent) of money from current bicycle projects and raise funds from private individuals and organizations. The fund would be secured by the time the “Bridging the Gap” funding initiative is completed. After this investment period, the annual interest from the match reserve fund (3 to 4 percent) will be used to implement bicycle facility maintenance improvements.

Action 4.4: The SDOT Bicycle and Pedestrian Program should provide the necessary staff expertise and commitment to implement this Master Plan within the timeframe identified.

This Master Plan envisions a considerable acceleration in the pace of bicycle facility construction throughout the city. SDOT will hire three additional staff members in order to administer programs, design projects, monitor progress, conduct public outreach, and perform other new tasks related to implementation of this Bicycle Master Plan.

Action 4.5: Continue to make minor improvements for bicycling through the Bicycle Spot Improvement Program.

The SDOT Pedestrian and Bicycle Program currently constructs low cost improvements to enhance bicycle safety and convenience through the Bicycle Spot Improvement Program. This program has become a national model that has been emulated by many city and state DOT's around the country. SDOT should continue to make the following types of improvements through this program:

- Surface improvements (patch potholes, fill seams between concrete panels in the street, replace drain grates, etc.).
- Signing and striping (bicycle lane striping and stenciling, motor vehicle warning signs at trail crossings, etc.).
- Access improvements (adjust electronic detection for bicyclists at traffic signals, traffic island modification, etc.).
- Sidewalk bicycle rack installation.
- Other low cost bicycle improvements as appropriate.



SDOT field crew installs a bicycle lane marking.

SDOT has installed over 2,300 bicycle parking racks on sidewalks in business districts since September 1993.

Action 4.6: Continue to receive regular input and guidance from the Seattle Bicycle Advisory Board.

The Seattle Bicycle Advisory Board should continue to provide regular input and guidance to the Pedestrian and Bicycle Program on bicycle issues. This will include monitoring the progress of implementation.

"It is the intent of the City Council to create the Seattle Bicycle Advisory Board which shall advise the City Council, the Mayor, and all the departments and offices of the City on matters related to bicycling, and the impact which actions by the City may have upon bicycling, and shall have the opportunity to contribute to all aspects of the City's planning processes insofar as they may relate to bicycling."

--City of Seattle Resolution 25534, May 16, 1977

Action 4.7: Provide bicycle planning and facility design training for appropriate SDOT project-level staff and consultants, and encourage staff from other agencies to attend.

Staff and consultants working on projects that affect bicycle access, directly or indirectly, should be strongly encouraged to attend training sessions on bicycle planning and facility design. Staff at other agencies, such as Seattle Department of Parks and Recreation, KC/METRO, Sound Transit, Washington State Ferries, etc. should be invited as well. Training includes attending conferences such as Pro-Walk/Pro-Bike, courses offered through professional organizations such as ITE as well as formal and informal (sack lunch presentation) sessions delivered by the Pedestrian and Bicycle Program and/or consultants with an expertise in bicycle and pedestrian planning and engineering. Periodic training may focus on particular topics of importance, such as intersection design, trail design, or innovative design treatments.

Action 4.8: All divisions of SDOT should consult the Bicycle Master Plan when working on projects.

All SDOT divisions should consult this Plan to ensure that the recommended facilities and maintenance practices are implemented in accordance with this Plan and the city's Complete Streets Policy. For roadway repaving and reconstruction projects, the Bicycle Master Plan recommendation represents the first alternative that should be considered. However, further study and additional public involvement may ultimately result in an even better strategy to provide bicycle access. The SDOT Pedestrian and Bicycle Program should be consulted when technical guidance is needed on bicycle issues.

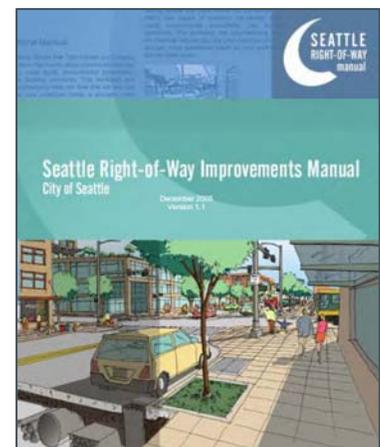
In addition, the Bicycle and Pedestrian program staff should review other city planning documents, including the Seattle Transit Plan, Freight Mobility Strategic Action Plan and the Pedestrian Master Plan (anticipated in 2008) when proposing implementation of the Bicycle Facility Network.

Action 4.9: Integrate the recommendations of the Bicycle Master Plan into other city ordinances, plans, and guidelines.

The recommendations of this Plan should be integrated into other city policy documents. This includes updating the Right-of-Way Improvements Manual, Transportation Strategic Plan, city ordinances, design guidelines, and other written policies (see Appendix N: Integration of Bicycle Recommendations into other Transportation Plans and Guidelines).

The SDOT Right-of-Way Improvements Manual will be updated with all bicycle design guidelines that are included in this Plan. All new bicycle design standards will be similarly incorporated into the SDOT Standard Specifications.

SDOT will redefine the city's bicycle classifications based on the systems identified in this plan. The Transportation Strategic Plan currently classifies bicycle facilities into urban trails and bicycle streets. These classifications of roadways and trails should be revised to include:



- Bicycle Facility Network
- Signed Bicycle Routes

Action 4.10: Coordination within SDOT and between SDOT and other agencies and organizations where necessary to implement the Bicycle Master Plan.

The SDOT Pedestrian and Bicycle Program should be included in the scoping and review of all plans, projects and programs that may provide opportunities to promote and implement recommendations of this Plan. In general, this includes most SDOT initiatives. Likewise, the Bicycle and Pedestrian Program should consult other SDOT modal programs and agencies when implementing its policies, plans, and programs.

Implementation of this Plan will require significant coordination between SDOT and other organizations. The roles of key partners are discussed in relation to specific recommendations in previous sections of this Plan, and are summarized below:

- Seattle Department of Parks and Recreation (trail development and maintenance of trails in parks).
- Seattle City Light (maintenance of trails in utility corridors)
- Seattle Public Utilities (drainage).
- Department of Planning and Development (bicycle parking and shower requirements).
- Puget Sound Regional Council (regional non-motorized planning, administration of federal and state funding for grant funded projects, regional wayfinding coordination, regional strategy for bicycle parking at transit hubs, incorporation of more detailed questions about bicycle and pedestrian trips in the regional transportation survey; and bicycle promotion).
- Transit Agencies (bicycle access to stations, space for bicycle storage at stations, bicycle facilities on transit vehicles, and bicycle-on-transit counts).
- Advocacy Organizations (bicycle education and encouragement).
- Seattle Police Department (enforcement of bicyclist and driver behavior).
- Health Agencies (encouragement and outreach to underserved populations; consultation regarding effective promotion, assessment, evaluation, and safety).
- Washington State DOT (WSDOT).

Action 4.11: Update the Bicycle Master Plan on a regular basis.

As the Plan recommendations are implemented, priorities for bicycle improvements may change and new needs and opportunities may be identified. The Bicycle Master Plan will be updated on a regular basis as a part of all Transportation Strategic Plan Updates (typically every five years). In addition, the list of short-term projects for implementation should be revised by SDOT on an annual basis, within the

framework of the overall Bicycle Master Plan.

Action 4.12: Evaluate new bicycle facility treatments.

New bicycle treatments should be evaluated to determine their effectiveness. Brief studies of these facility treatments should be done in the first three years after the Plan is adopted, and the results of these evaluations will be used to refine, adjust, and guide the future use (or discontinuation) of these treatments. This includes evaluating the following facilities (potential evaluation measures are shown in parenthesis):



The Citizens Advisory Board provided feedback throughout the planning process for this Bicycle Master Plan. Public input is essential for future plan updates.

- Shared lane and bicycle lane markings (evaluate their use by bicyclists, placement relative to parked cars and vehicles in travel lanes, maintenance needs, effects of any travel lane rechannelization and/or narrowing on the safety and comfort of all roadway users).
- Signage and wayfinding (assessment by stakeholders, use by bicyclists, interpretation of signs, effectiveness of sign and/or pavement marking placement).
- Roadway crossing treatments (use of right-of-way space, effectiveness of warning and regulatory signs, effectiveness of pavement markings).
- Bicycle boulevards (use by bicyclists, use of right-of-way space, change in traffic speeds, and effectiveness of pavement markings).

The brief studies should include behavioral observations (of bicyclists and other roadway users) and user surveys to gauge public understanding of and satisfaction with the new facilities. Results from these studies should be incorporated into Plan updates.

Action 4.13: Monitor progress using performance measures.

An important aspect of evaluating progress in implementing this Plan is to establish performance measures that are reported on a periodic basis. Measures are described in Chapter 7 to quantify the overall goals of the Plan and objectives described in each chapter. Several new performance measures have been established. For each of these new performance measures, SDOT will collect the data necessary to establish baseline measurements in 2007. It will be important to have adequate funding to collect the data required for these performance measures.

The performance measures should be evaluated on a bi-annual basis to ensure that they are the most appropriate, cost-effective measures for assessing progress towards the Plan goals. Performance monitoring will be led by the SDOT Policy and Planning Division, with support from the SDOT Pedestrian and Bicycle Program. Monitoring should be reported to the Seattle Bicycle Advisory Board on a periodic basis, depending upon the schedule for data collection.

SDOT's performance measures should be coordinated and integrated with external bicycle transportation monitoring efforts, such as a "Bicycle Plan Implementation Report Card". Outside groups may monitor progress on the Bicycle Master Plan goals (bicycle use and safety), facility network development, and people's perceptions of bicycling (from both bicyclists and non-bicyclists). These groups may gather this information through online surveys and random-phone surveys.

Bikeway Implementation Strategies

The following are implementation strategies for bikeways that are recommended in this Plan (See Bicycle Facility Network recommendations maps in binder):

Construct or Reconstruct

This category includes construction and reconstruction of roadways, multi-purpose trails, bridges, and pedestrian/bicycle overpasses and underpasses. Construction refers to projects that develop facilities that did not previously exist; reconstruction refers to changes to existing facilities.

In accordance with the Seattle Complete Streets Policy, bicycles should be accommodated any time a new road is constructed or an existing road is reconstructed. Seattle roadways should be designed according to the bicycle facility design guidelines in Appendix E: Bicycle Facility



Sections of the Chief Sealth Trail were constructed in December 2006.

Descriptions, Appendix F: Guidance for Retrofitting Seattle Streets to Create Dedicated Bicycle Facilities, and Appendix H: Roadway Crossing Design for Bicycles. This may involve adding pavement to the side of existing two-lane roadways that have informal parking in gravel areas adjacent to the roadway to provide shoulders or bicycle lanes and on-street parking pockets in appropriate locations. Since Seattle is a built environment, opportunities to provide this type of treatment are limited and will typically be found in the far northern and southern parts of the city where roadways have not been developed with curb and gutter.

All new or replacement bridges should be consistent with the complete streets ordinance (Council Bill # 115861) to accommodate bicycles with bicycle lanes on both sides of the bridge, or in some cases, a separated multi-purpose path. If the bridge is in a developed area or an area that may experience high pedestrian use in the future, separate facilities should be provided for bicyclists and pedestrians.

The current Federal law for bicycle and pedestrian access on bridges was established in the Transportation Equity Act for the 21st Century (TEA-21) and re-affirmed by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). This law states:

“In any case where a highway bridge deck is being replaced or rehabilitated with Federal financial participation, and bicyclists are permitted on facilities at or near each end of such bridge, and the safe accommodation of bicyclists can be provided at reasonable cost as part of such replacement or rehabilitation, then such bridge shall be so replaced or rehabilitated as to provide such safe accommodations.” (23 U.S.C. Section 217)

While opportunities to develop new multi-purpose trail corridors are limited by the existing built environment of the city, there are a number of gaps in existing trails and important trail extensions that should be completed as a part of this Plan. In addition, several new corridors have been identified for new trails to be constructed.

Add Pavement Markings

Some roadways can accommodate new bicycle lane stripes, bicycle lane markings, or shared lane markings without any other changes. While there are a limited number of locations throughout the city where it is possible to simply add striping or markings, this is a relatively low-cost treatment that can often be done quickly.



Travel Lane Narrowing

Some Seattle streets have travel lanes that can be narrowed to provide additional space for on-road bicycle facilities. Travel lanes can be narrowed during repaving projects or by grinding out existing markings and replacing them with new markings.

Repaving projects provide a clean slate for revising pavement markings. Consistent with the city's Complete Streets Policy, during road repaving projects, the roadway should be restriped to create bicycle lanes and shoulders (in some cases the city can narrow travel lanes to a minimum 10-foot width, depending on traffic speeds and composition). In addition, if a roadway does not have a curb and gutter and the roadway edge is relatively flat with few obstructions, the total pavement width can be widened to include paved shoulders or bicycle lanes. Accessible curb ramps must be added for pedestrians during repaving projects.

Grinding projects involve removing existing lane stripes as well as providing new striping for bicycle lanes, shared lane markings, or edgelines. Since there are many roadways that

will not be repaved in the next several years, existing markings will need to be removed through grinding in order to create the recommended bicycle facilities.

Lane Rechannelization

There are a number of streets in Seattle where space for bicycle lanes or other on-road bicycle facilities could be provided by removing existing travel lanes. This treatment is recommended for roadways where it is desirable to improve pedestrian crossings at multiple locations, add bicycle lanes and climbing lanes, and reduce rear-end and turning crashes. Travel lane rechannelization often involves converting an existing four-lane roadway to a two-lane roadway with a center-turn lane. This allows bicycle facilities to be installed as well as raised median islands or a crossing island. This treatment reduces bicycle and pedestrian crossing distance and exposure to vehicular traffic, and has been shown to improve motor vehicle flow and reduce rear-end and left-turning crashes when used in appropriate locations.

Removing travel lanes may or may not require tradeoffs between travel modes within a roadway corridor. An engineering and policy analysis must be conducted to evaluate the impact of removing travel lanes on all modes.

This includes considering factors such as:

- Pedestrian crossing opportunities and safety.
- Transit capacity and performance (additional transit operational analysis is needed for UVTN corridors).
- Bicycle network connectivity.
- Peak-hour motor vehicle capacity.
- Access to adjacent businesses.
- Opportunity to reduce crashes of all types.
- Opportunity to reduce vehicle travel speeds, thereby reducing injury severity to pedestrians and bicyclists involved in collisions.
- Roadway substructure (if part of the roadway that was formerly a median or streetcar lane is reconfigured to carry heavy trucks, there may be additional maintenance costs).



Rainier Avenue S was converted from a four-lane roadway to one travel lane in each direction, a center-turn lane, and bicycle lanes.

In UVTN corridors, transit speed and reliability is a priority consideration due to its existing and/or planned ability to move large numbers of people.

Consolidate On-Street Parking to One Side of the Roadway

Consolidating on-street parking to one side of the street provides additional space for bicycle lanes or climbing lanes. Since available on-street parking is limited in many neighborhoods, this action is recommended only in areas where significant excess capacity exists and where it does not cause too many people to have to cross the road to reach their parked cars.

Remove On-Street Parking from both Sides of the Roadway

Removing existing on-street parking provides additional space for bicycle lanes or climbing lanes. In some cases, parking removal is also needed to complete multi-purpose trails. This action is relatively rare. It is used only when the parking is under-utilized or it is long-term commuter parking (as opposed to residential or retail parking). The SDOT Transportation Strategic Plan (TSP) identifies strategies for managing parking wisely (see pages 93-98 of the TSP).

Allow Full-Time On-Street Parking

It is not possible to provide on-street bicycle facilities when on-street parking is restricted during peak hours, because the correct riding position for bicyclists changes depending on the presence of parked cars. Allowing full-time on-street parking can sometimes make it possible to provide bicycle lanes, climbing lanes, or shared lane markings adjacent to parked cars. In order to use this strategy, traffic patterns must be studied to determine if it is feasible to lift parking restrictions. An engineering analysis is needed for UVTN corridors to determine potential impacts to transit speed and reliability.



Curb extensions were constructed on SW Juneau Street to slow motor vehicles.

Calm Traffic on the Street

In order to create bicycle boulevards, non-arterial roadways will typically require traffic calming treatments to slow motor vehicle speeds and make bicycling conditions more comfortable. These treatments may include traffic circles, chicanes, traffic diverters, and other measures. Detailed information regarding the SDOT traffic control program can be found online at <http://www.seattle.gov/transportation/trafficcircles.htm>.



Speed cushions are used on Beach Drive SW to slow traffic on this popular bicycle route.

Post Bicycle Route Signs

This Plan recommends that the City of Seattle remove its existing signed bicycle routes and develop a new signage system to provide more direct bicycle connections between key destinations in the city. This new signage system should continue to be updated in the future to ensure that the signs are as effective as possible at helping people find destinations. The new signed bicycle route system is discussed in Chapter 3.



Cost Estimates

Rough cost estimates for implementing this Plan are provided in Appendix O: Cost Estimates. In many cases bicycle facility improvements can be provided as a part of larger transportation projects, such as a roadway corridor reconstruction project. The cost estimates for this Plan include both construction and design (see Appendix O: Cost Estimates).

Implementation Schedule

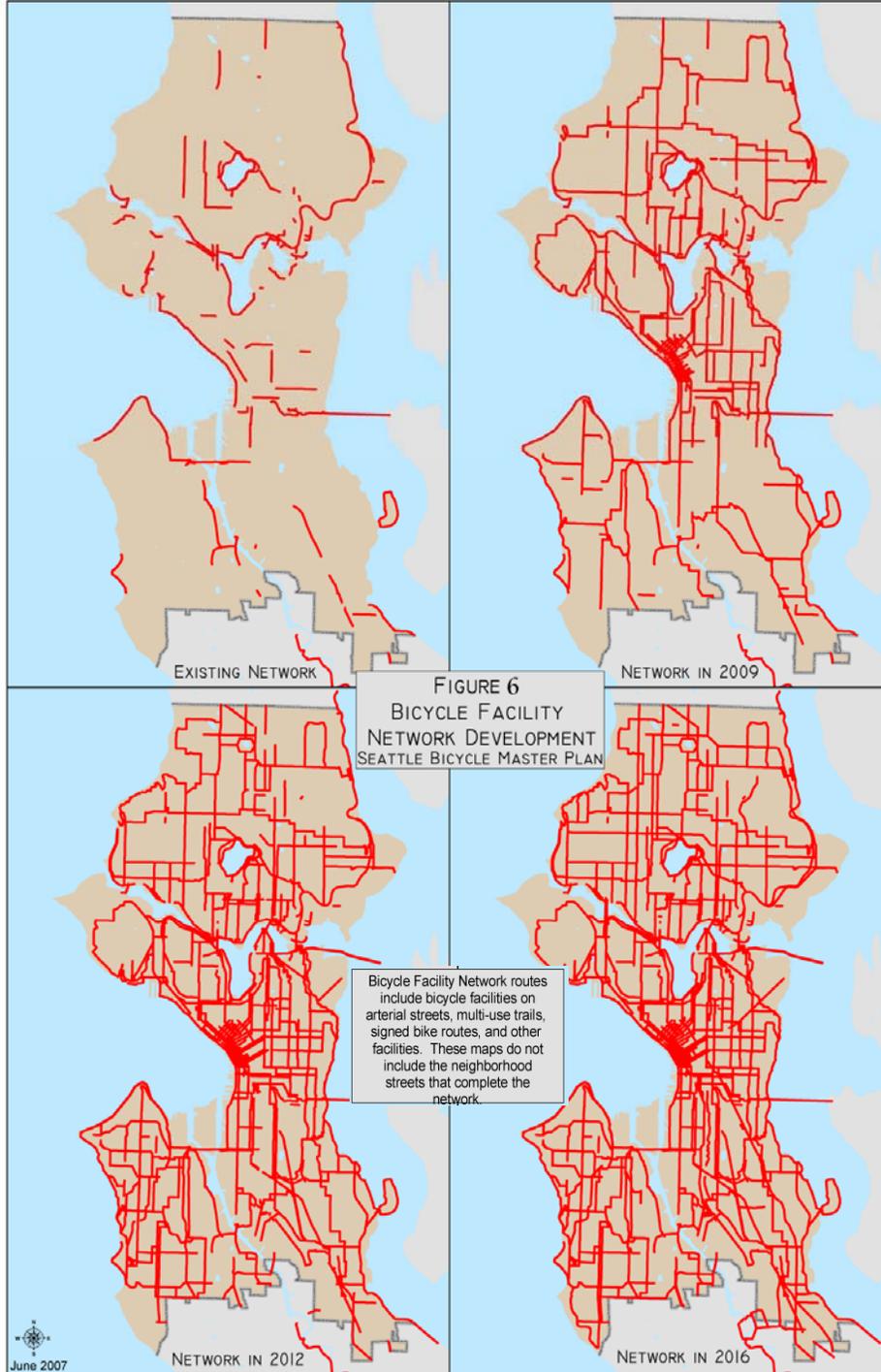
A majority of the Bicycle Master Plan recommendations will be implemented over the next 10 years. This includes recommendations for bicycle facilities, programs, and institutionalization. The implementation table summarizes the timing of the major recommendations of this Plan (see Table 6: Implementation Schedule).

Bicycle Facility Phasing

The bicycle facility improvements that are identified in this Plan will be constructed over the next 10 years. Some improvements will be made immediately after the Plan is adopted, while others will take longer to design and develop (see Figure 5: Bicycle Facility Network Development). Therefore, the recommendations are divided into four phasing categories (identified in the GIS database of Bicycle Facility Network recommendations):

- Short-Term (0 to 3 years after Plan adoption)
- Medium-Term (0 to 6 years after Plan adoption)
- Long-Term (0 to 10 years after Plan adoption)
- Future (0 to more than 10 years after Plan adoption)

Figure 6. Bicycle Facility Network



While a project may be included in the medium- or long-term category, the city should take advantage of opportunities that arise in the short-term to develop the project (e.g., grant funding, leveraging other projects, etc.). This is why all phasing categories begin immediately after the Plan is adopted.

Short-Term Recommendations (completed by 2009)

Short-term projects will help create early successes that will help build momentum for other recommendations of the Plan. Many of these projects will be completed where it is relatively easy to add bicycle lanes, climbing lanes, and shared lane markings to roadways. Wherever possible, bicycle route signs should be posted during this time period (for some routes, new signals and other crossing improvements will be needed before the signs can be installed). Short-term projects will also include several bicycle facilities that are more challenging to implement in places where critical Bicycle Facility Network gaps exist.

Medium-Term Recommendations (completed by 2012)

Medium-term projects tend to include more complex bicycle facility improvements as a part of capital projects. These include many projects that require repaving or reconstruction of roadways, as well as some re-stripping projects. Many of the Urban Trails should be completed within the medium-term timeframe.

Long-Term Recommendations (completed by 2016)

Long-term projects are capital projects that will require several years to program in the budget, design, and construct. These include Urban Trails that have not been funded or designed and some new bicycle and pedestrian bridges.

Future Recommendations (completed beyond the 10 year planning horizon)

There are several critical connections in the Bicycle Facility Network that will require significant planning, design, public involvement, capital investment, and construction time. These future category projects include new bicycle and pedestrian bridges, bicycle facilities that will be built as part of larger bridge rehabilitation or replacement projects and major roadway reconfigurations.

Future Vision

This Plan not only establishes the vision, but also very practical steps that are needed in the future to ensure that Seattle will become a world-class city for bicycling. This Plan is an important first step - much work lies ahead. By providing the necessary human and financial resources to accomplish this Plan, Seattle could very well exceed its goals to triple the amount of bicycling and reduce the bicycle crash rate by one-third. It will, therefore, be important in the future to measure progress, reassess priorities, and strive to further increase the use and safety of bicycle transportation as the city moves forward with the implementation of this Bicycle Master Plan.

Possibilities that have been suggested by citizens and should be considered as bicycling increases throughout the city are listed below:

- Increasing the number of neighborhood roadways designated as bicycle boulevards.
- Reconfiguring roadways with fewer travel and/or narrower lanes and more space for bicycle facilities.
- Making intersection improvements to allow bicyclists on non-arterial streets to safely cross arterial streets.
- Focusing on bridges so that over time, all bridges provide safe, convenient access for bicycles.



Chapter 6. Implementation

- Installing new types of bicycle facilities at intersections (more bicycle boxes, bicycle turn pockets, traffic signals for bicycles only, and special signal phasing for bicyclists).
- Providing more bicycle and pedestrian bridges and underpasses across freeways and other major roadways (this increases the number of route choices that are available to bicyclists)
- Converting on-street parking into space used for bicycle facilities.
- Encouraging commercial businesses to front on multi-purpose trails.
- Providing high-capacity bicycle parking in more retail areas, parks, schools, and public buildings such as libraries and community centers.
- Creating staffed bicycle facilities offering high-capacity parking, repairs, and rentals at more transit hubs.
- Ensuring that all new commercial, office, and industrial buildings are equipped with lockers and showers for bicyclists.



Implementing the recommendations of the Bicycle Master Plan is an important first step in an ongoing commitment that will help establish these future possibilities.



Table 6. Implementation Schedule (Part 1)

1. BICYCLE FACILITIES Recommendations	SDOT Partners	Implementation Schedule						
		Year 1	Year 2	Year 3	Year 4	Year 5	Years 6-10	Future Years
Short-Term Bicycle Facilities for Segments and Roadway Crossings	W, PR, B							
Medium-Term Bicycle Facilities for Segments and Roadway Crossings	W, PR, B							
Long-Term Bicycle Facilities for Segments and Roadway Crossings	W, PR, B							
Urban Trails and Bikeways Network	PR, W, B							
Signed Bicycle Routes	B, PR, PS							
Routine Bicycle Facility Maintenance	W, PR	(See Maintenance Text and Table)						
Spot Bicycle Facility Maintenance	W, PR	(Make Spot Improvements As Needed)						
Negotiate/Renegotiate Maintenance Agreements	PR, L							
Volunteer Assistance with Maintenance	BC, C, BU, S	(Assistance with Maintenance As Needed)						
Track Citizen Complaints and Maintenance Requests	PR, L							

B = Seattle Bicycle Advisory Board
 BC = Bicycle Clubs/Advocacy Organizations
 BU = Seattle businesses
 C = Community volunteer groups
 EO = Elected officials
 F = Washington State Ferries
 G = City of Seattle government agencies (all levels)
 HE = Local health organizations
 L = Seattle City Light

M = King County Metro Transit (METRO)
 N = Neighboring municipalities
 O = Outside contractors
 PD = Seattle Metropolitan Police Department
 PR = City of Seattle Parks and Recreation Department
 PS = Puget Sound Regional Council
 S = Seattle Public and Private Schools
 ST = Sound Transit
 T = Seattle tourism organizations
 W = Washington State Department of Transportation (WSDOT)

Table 6. Implementation Schedule (Part 2)

2. SUPPORTING BICYCLE FACILITIES Recommendations	SDOT Partners	Implementation Schedule						
		Year 1	Year 2	Year 3	Year 4	Year 5	Years 6-10	Future Years
Provide Bicycle Racks and Bicycle Lockers	M, ST, BU, S							
Strengthen Bicycle Parking Requirements	EO, BU							
Fund and Promote Staffed Bicycle Facilities	BU, PS, ST, M							
Improve Bicycle Access to Transit	ST, M, F, PS							
Improve Bicycle Storage at Transit Stations	ST, M, PS							
Accommodate More Bicycles on Transit	M, ST, F							

B = Seattle Bicycle Advisory Board
 BC = Bicycle Clubs/Advocacy Organizations
 BU = Seattle businesses
 C = Community volunteer groups
 EO = Elected officials
 F = Washington State Ferries
 G = City of Seattle government agencies (all levels)
 HE = Local health organizations
 L = Seattle City Light

M = King County Metro Transit (METRO)
 N = Neighboring municipalities
 O = Outside contractors
 PD = Seattle Metropolitan Police Department
 PR = City of Seattle Parks and Recreation Department
 PS = Puget Sound Regional Council
 S = Seattle Public and Private Schools
 ST = Sound Transit
 T = Seattle tourism organizations
 W = Washington State Department of Transportation (WSDOT)

Table 6. Implementation Schedule (Part 3)

3. BICYCLE PROGRAMS Recommendations	SDOT Partners	Implementation Schedule						
		Year 1	Year 2	Year 3	Year 4	Year 5	Years 6-10	Future Years
Support Efforts to Obtain Funding for Programs	BC, B, T, HE							
Update and Distribute Bicycle Map	BC, PR, BU, T, M, ST, F, HE							
Increase Enforcement Related to Bicycling	PD							
Develop Online Bicycle Route Wayfinding System	PS, BC							
Promote Bicycling through the Way To Go Program	BC, HE							
Provide Bicycle Safety Education/Training	BC, HE, N, PS, S							
Donate and Sell Bicycle Helmets	BC, BU, HE							
Provide Bicycle Commuter Assistance	BC, BU							
Expand Safe Routes To Schools Programs	S, BC, HE							
Provide Websites for Bicycle Education and Promotion	BC, HE							
Organize and Promote Bicycle to Work Day	BC, BU, HE, C, M, ST, F, W							
Promote Bicycling in Regional TDM Programs	BC, HE							
Organize and Promote Bicycle Saturdays and Sundays	PR, HE, BC							

B = Seattle Bicycle Advisory Board
 BC = Bicycle Clubs/Advocacy Organizations
 BU = Seattle businesses
 C = Community volunteer groups
 EO = Elected officials
 F = Washington State Ferries
 G = City of Seattle government agencies (all levels)
 HE = Local health organizations
 L = Seattle City Light
 M = King County Metro Transit (METRO)
 N = Neighboring municipalities
 O = Outside contractors
 PD = Seattle Metropolitan Police Department
 PR = City of Seattle Parks and Recreation Department
 PS = Puget Sound Regional Council
 S = Seattle Public and Private Schools
 ST = Sound Transit
 T = Seattle tourism organizations
 W = Washington State Department of Transportation (WSDOT)

Table 6. Implementation Schedule (Part 4)

4. PLAN FUNDING AND IMPLEMENTATION Recommendations	SDOT Partners	Implementation Schedule						
		Year 1	Year 2	Year 3	Year 4	Year 5	Years 6-10	Future Years
Establish Dedicated Bicycle Funding Sources	EO, B							
Add Staff to SDOT Pedestrian and Bicycle Program	EO, B							
Continue to implement Bicycle Spot Improvement Program	B							
Utilize Contractors for Bicycle Projects	O							
Receive Oversight from Bicycle Advisory Board	B							
Offer Bicycle Planning and Facility Design Training	W, M, N, ST, PS, O							
Review Bicycle Master Plan Recommendations for all Projects	O							
Consult Pedestrian and Bicycle Program on all Projects	O							
Integrate Plan Recommendations into Other Guidelines	EO, G							
Update Bicycle Master Plan	O, BC							
Evaluate New Bicycle Facility Treatments	O, B							
Monitor Progress Using Performance Measures	B, O	(See individual performance measures for data collection timing)						
Prepare Bicycle Benchmarking Report	B, O, BC							
Reconsider Performance Measures	B, O							

B = Seattle Bicycle Advisory Board
 BC = Bicycle Clubs/Advocacy Organizations
 BU = Seattle businesses
 C = Community volunteer groups
 EO = Elected officials
 F = Washington State Ferries
 G = City of Seattle government agencies (all levels)
 HE = Local health organizations
 L = Seattle City Light
 M = King County Metro Transit (METRO)
 N = Neighboring municipalities
 O = Outside contractors
 PD = Seattle Metropolitan Police Department
 PR = City of Seattle Parks and Recreation Department
 PS = Puget Sound Regional Council
 S = Seattle Public and Private Schools
 ST = Sound Transit
 T = Seattle tourism organizations
 W = Washington State Department of Transportation (WSDOT)