

## Chapter 4. Support Facilities

### Objective 2: Provide supporting facilities to make bicycle transportation more convenient.

This chapter describes the actions that will be necessary to improve support facilities to make bicycling efficient and convenient to all Seattle residents. In order for bicycling to be a fully viable form of transportation in Seattle, other programs and facilities are needed to complement the Bicycle Facility Network. This includes integrated bicycle and transit services, adequate bicycle parking at all destinations, showers at employment centers, convenient repair services, and coordination with a variety of other essential components of a multi-modal transportation system.

#### Connections between Bicycling and Transit

Consistent with the trend in other North American cities over the past twenty years, an increasing linkage has developed in Seattle and King County between bicyclists and transit agencies. While Seattle is served by a number of transit agencies, it is the relationship with King County Metro Transit (KC/METRO) and the newer regional Sound Transit agencies that most define the connection between bicycles and transit in the city. Details on the history of bicycle and transit integration in Seattle and opportunities for improving bicycle access to the KC/METRO and Sound Transit systems are discussed in Appendix J: Bicycle and Transit Integration in Seattle.



Approximately 10,000 bicycles were loaded on King County Metro buses per week throughout the region in August 2002.

#### *Sound Transit TOTAL Access Policy*

*In 1999, Sound Transit adopted general policies guiding development of service supporting bicycle access to regional transit service. Based on a concept of TOTAL Access (see below), the policies are intended to ensure that the unique characteristics of bicycling and long-haul high-capacity transit are utilized in an efficient manner that accommodates an increasing number of trips accessed by bike.*

*“Sound Transit is committed to encouraging and providing bicycle access and has adopted a policy of total access for cyclists on transit vehicles and at stations.”*

*--Sound Transit website*

*T: To the transit system*

*O: On the vehicles*

*T: Through and across barriers created by the system*

*A: At the stations*

*L: Low-cost, effective and efficient*

The actions in this section describe how bicycle access can be improved through a number of transit initiatives. Strengthening the connection between bicycling and transit will increase the utility of both transportation modes in Seattle.

### Action 2.1: Improve bicycle storage facilities at transit stations.

Bicycle parking improvements are needed at transit stations. This includes providing bicycle racks and lockers at existing transit stations and reserving adequate space during transit station construction to provide future bicycle racks and lockers. The following specific actions will be undertaken:

**Provide sufficient space for bicycle storage at transit stations and multimodal hubs.** SDOT will work with Sound Transit and KC/METRO to provide bicycle parking at existing transit stations and multi-modal hubs in downtown Seattle, such as Westlake, Colman Dock, King Street Station. These parking facilities should include both short-term and long-term parking and should meet the City of Seattle bicycle parking design standards. SDOT will help participate in the purchase of bicycle racks and lockers at these transportation centers. The PSRC studied transit hub locations in 2002 to determine bicycle parking demand, and this demand should be accommodated. Where space is limited, local transit agencies should consider the opportunities for high-capacity bicycle parking at stations. This type of facility utilizes space efficiently by allowing bicycles to be stacked on two levels.



*Adequate bicycle parking at transit hubs will help increase the attractiveness of bicycling in Seattle.*

**Bicycle parking needs should be considered at heavily-used bus stops.** This will require a separate study to determine if additional bicycle parking is needed at certain bus stops. This study could be conducted as a partnership between SDOT and KC/METRO.

**Provide sufficient space for bicycle storage at future transit stations.** As transit systems develop in the future, bicycle parking demand should be evaluated using the PSRC Regional BikeStation Project methodology to determine the amount of space that is needed for bicycle racks and lockers. Space for bicycle parking should be included in station designs from the onset of a project.

*The Montlake BikeStation project, scheduled for completion in late 2007, will provide lockers for a total of 54 bicycles and rack space for 42 bicycles.*

### Action 2.2: Continue to fund and promote the use of staffed bicycle facilities.

SDOT and KC/METRO provide funding support for the BikeStation Seattle® transportation center on 3rd Avenue S in Pioneer Square. This facility provides support services to bicyclists, including secure, staffed bicycle parking and resources for repairs, maps, and other information. It is located near the King Street Transit Hub, making it easy for bicyclists to make trips by linking bicycling and transit. Additional locations for staffed bicycle parking stations have been identified by PSRC in conjunction with the city and local transit agencies - funding and implementation of these facilities should continue to be pursued.<sup>1</sup>



*Bikestation Seattle® provides secure, staffed bicycle parking and other support services for bicyclists.*

<sup>1</sup> The Puget Sound Regional Council Destination 2030 (2001) early action strategy includes six commuter bicycle stations in the region. Two of these bicycle station locations are in the City of Seattle: the King Street Station and the Montlake Flyer stop on SR-520.

### Action 2.3: Improve bicycle access to transit stops, stations, and ferries.

SDOT, KC/METRO, and Sound Transit should increase efforts to work together in order to improve bicycle access to the transit system. This includes improving bicycle access to transit stops and stations, providing bicycle storage at stations, and accommodating bicycles on transit vehicles and ferries.

The new bicycle facilities that will be developed as a part of the Bicycle Facility Network will help improve the ability of bicyclists to connect to transit throughout the city. In particular, the signed bicycle route system recommended in this Plan includes connections from main bicycle routes to all existing and future Sound Transit light rail stations and other transit hubs. These bicycle facility improvements will increase accessibility within the catchment area for the transit system.

To complement this effort, coordination will be needed between SDOT and all local transit agencies to improve bicycle access and route information in order to make the transition between modes as seamless as possible. Specifically, the following actions are needed:

**Integrate bicycle route information into transit route maps and signs.** SDOT should partner with KC/METRO to distribute bike route maps at all locations where transit information is provided. Additionally, KC/METRO and SDOT should work together to develop wayfinding signs that provide information on nearby bike routes.

**Improve bicycle access and egress to and from rail stations.** SDOT should work with Sound Transit to improve bicycle access to trains in King Street Station and in other future rail stations.

**Provide bicycle access in proposed streetcar corridors.** The streetcar corridors under construction between Westlake Center and Lake Union include and intersect critical roadways for bicycle connectivity north of Downtown Seattle. As the city further develops its streetcar network, potentially with operations along the curb lane, there will be increased challenges for bicyclists to avoid the rail flangeway on these streets. Streetcar streets must be designed to facilitate bicycle travel in as safe a manner as possible. In addition, bicycles should be allowed on board streetcar vehicles so that bicyclists can bypass roadways with tracks. Where possible, on-road bicycle facilities should be incorporated into roadway redevelopment projects associated with streetcar development in South Lake Union and other locations.

**Design roadways so that bicycles and bus transit co-exist safely and efficiently.** Bikes and bus transit must be seen as compatible and not subject to design trade-offs. Bicycle lanes should not be removed under the assumption that this will improve bus service; if high-capacity transit is desired, a shared bus/bike facility should be considered. The E-3 Busway is an example where facilities for buses, light-rail transit, and bicycle and pedestrian access co-exist.

**Improve bicycle access and egress to and from Washington State Ferry terminals.** SDOT will strengthen efforts to further coordinate with Washington State Ferries. These efforts should:

- Improve bicycle access and egress to and from the Colman Dock Ferry Terminal when the electronic fare system is established. This includes providing designated bicycle waiting space and boarding space (e.g., striped lanes, pathways, and/or waiting areas to be used only for bicyclists). In addition, the loading procedure for bicycles could be modified to reduce conflicts between motor vehicles and bicyclists as they approach the loading area.

- Improve bicycle waiting areas and other facilities at the Fautleroy Ferry Terminal to increase the safety and convenience of bicycle access and egress to and from ferries.

*“One of the largest daily bicycle access points to Downtown Seattle is through Colman Dock—there are literally hundreds of bicyclists that use the ferry on a daily basis.” – Seattle resident*

### Action 2.4: Accommodate more bicycles on transit vehicles.

In cities where transit service is fully integrated with bicycle travel, bicyclists are able to bring their bicycles on board transit vehicles in order to use them when they disembark at their destination. While Seattle has one of the more bicycle-accessible transit systems in the nation, growth in the popularity of this “Bike & Ride” service has led to the identification of new service and facility needs. Some options include installing high-capacity bicycle racks on buses, increasing bus service frequency, accepting bicycles on buses at more bus stops, allowing bicycles on board light rail vehicles, and improving bicycle access on ferries.

#### Install racks that can hold three bicycles on the front of all buses.

KC/METRO has installed bike racks on the front of all its buses, allowing two bicyclists to load their bicycles on the bus at the same time. However, two-bicycle racks are often filled during rush hours and on rainy days. KC/METRO and other bus companies serving Seattle have already begun to add capacity for bicyclists by installing racks with space for three bicycles on their buses. KC/METRO should also consider providing additional space for bicycles on board buses that are used in the proposed Bus Rapid Transit (BRT) system. This may be done by providing special buses with additional rack capacity

or allowing seats to flip up and increase storage space for bicycles during times with low ridership. Local transit agencies should also consider allowing bicyclists to ride free on some heavily-traveled roadway corridors that do not have bicycle facilities.



*King County Metro bus bicycle racks currently have room for two bicycles.*

**Increase the frequency of bus service in corridors where bicycle-on-bus capacity is perceived as a problem.** Even with bicycle racks that hold three bicycles, some high-bicycle-use corridors may have filled racks during peak hours. Lack of space for bicycles on the bicycle racks can be mitigated if buses arrive more frequently. The Transit Now initiative adopted in King County may offer opportunities to increase the frequency of bus service in these corridors.

#### Facilitate safe and efficient bicycle loading onto transit vehicles in Downtown Seattle.

SDOT will work with KC/METRO to explore the possibility of allowing bicyclists to load their bicycles on buses within the Downtown Ride Free Area. While it may not be possible to allow bicyclists to load at all bus stop locations, there may be specific stops where bicycle loading can be permitted. Important considerations include bus headways, street slopes, and stop locations relative to bicycle facilities. In addition, safe and efficient bicycle access to Sound Transit vehicles should be facilitated in the Downtown Seattle Transit Tunnel. In all cases, signage should be provided to indicate when and where bicyclists may or may not load their bicycles.

*Bicyclists may load and unload their bicycles at any KC/METRO bus stop, except within the Ride Free Area in downtown Seattle, between 6 AM and 7 PM. This is a safety policy to reduce the potential of cyclists being between two buses in heavy downtown traffic. Consideration should be given to modifying this policy to allow bicyclists to board at certain designated stops in the Downtown area.  
(These could be stops located near bicycle route map kiosks.)*

**Accommodate bicycles on board Light Rail Transit and other regional transit vehicles.** Sound Transit access policy for bicycles includes accommodating bicyclists on transit vehicles and at transit stations. This applies to Link light rail, Sounder trains, and Sound Transit Express buses. The existing Link light rail system requires bicyclists to remain with their bicycles at all times on board Link trains. Bicyclists may not block stairs or aisles. They must yield priority seating to passengers with disabilities or senior citizens. Train operators may require bicyclists to wait for the next train due to overcrowding. Sound Transit should continue efforts to develop on board facilities to secure bicycles on light rail vehicles and to make bicycle access safe, convenient, and reliable whenever possible.



*MAX light rail cars in Portland, OR have designated space for handling bicycles.*

**Continue to count and report bicycle-on-transit ridership.** Bike-on-bus ridership should continue to be counted and recorded by KC/METRO with the purpose of tracking ridership growth over time. In addition, Sound Transit should begin to conduct bike-on-bus counts. The methodology used to count bicycles should count individual boardings. Bicyclist boardings should also be counted on a regular basis on the light rail system when service begins.

*Approximately 10,000 bicycles were loaded on KC/METRO buses per week throughout the region in August 2002.*

**Improve bicycle access on the Washington State Ferry System.** The city should work with Washington State Ferries to improve bicycle access on the ferries that serve Seattle. This includes providing racks, hooks, or other storage devices on the ferries to utilize space as efficiently as possible and to minimize risk of damage to bicycles and motor vehicles. SDOT should also work with Washington State Ferries to address issues related to bicycle loading and unloading.

**Allow bicycles on streetcars.** SDOT should work with local transit agencies to allow bicycles on board streetcars. Bicycles may be stored on the transit vehicles with bicycle hooks, bicycle racks, or in designated bicycle space.

**Encourage the use of bicycle racks on taxis.** Taxi companies are encouraged to install bicycle racks on their vehicle fleets to provide bicyclists with the option to use this private transportation service. This would extend the ability of bicyclists to reach destinations throughout Seattle.

### **Bicycle Storage**

Bicycle parking facilities are currently provided by local agencies in response to public requests and through the development process. The city provides bicycle racks through the SDOT Rack Program, and local transit agencies provide bicycle lockers at several transit hubs. Short- and long-term bicycle parking facilities are also required by the Seattle Municipal Code based on the size and type of new developments. In general, short-term parking is provided in commercial areas and in front of public buildings where bicycles are usually parked less than several hours. Long-term parking is generally provided at workplaces, residential areas, and transit access points where bicycles are usually parked for a day or longer. The actions below should be taken to improve bicycle storage in Seattle.

### Action 2.5: Increase the availability of bicycle parking throughout the city.

Secure bicycle parking located in close proximity to building entrances and transit entry points is essential in order to accommodate bicycling. Secure bicycle parking helps to reduce the risk of bicycle damage and/or theft.

SDOT's Bicycle Spot Improvement Program includes funding to provide bicycle racks on public property adjacent to commercial buildings, multi-family dwellings, and schools throughout the city. Through this program, racks are installed at the request of citizens, and business or property owners or managers (see Bicycle Rack Location Criteria on the following page). The Seattle Municipal Code requires a minimum number of bicycle parking spaces for different types of land uses. When new buildings are constructed or properties undergo other major changes, bicycle racks and lockers are included as a condition of development. Several strategies are needed to increase the availability of bicycle parking in Seattle.



#### *City of Seattle Bicycle Rack Location Criteria*

- *Racks are installed in public space within city of Seattle limits, usually on a sidewalk with six or more feet of clear sidewalk space remaining.*
- *Racks are placed at convenient, usable locations in close proximity to building entrances without impeding pedestrians.*
- *Racks are placed with adequate clearance from curb ramps and crosswalks, street furniture, driveways, and parked cars.*
- *Racks can be installed in bus stops or loading zones only if they do not interfere with boarding or loading patterns and there are no alternative locations.*
- *Racks on private property are usually paid for by the property owner. City racks are not available for purchase, but Bicycle Program staff can help property owners choose appropriate racks and installation locations.*

**Continue to provide bicycle racks through the Bicycle Spot Improvement Program.** Bicycle Spot Improvement Program funding should be increased so that more bicycle racks can be installed upon the request of citizens. In addition, this program should continue to be advertised through the bicycle program website, city brochures, and other sources to increase awareness of opportunities for installing new bicycle parking throughout the city.

#### **Re-establish a proactive bicycle rack installation program.**

A proactive bicycle rack installation program should be re-established to provide additional bicycle parking in Urban Villages, particularly on commercial and high-density residential blocks of Urban Village areas. Schools, libraries, and community centers should also be targeted for bicycle rack installation. It will be important to work closely with adjacent property owners to make sure that racks are properly located and do not interfere with loading zones and other business related activities.



**Strengthen legislation to require more bicycle racks and lockers as a part of new developments.** Currently, the city's bicycle parking requirements are included in Title 23 of the Seattle Municipal Code. Changes to this code were made in December 2006<sup>2</sup> (see Appendix K: City of Seattle Bicycle Parking Requirements).

<sup>2</sup> *Land Use Code Ordinance 122311, Adopted December 21, 2006*

The Code requires a minimum number of off-street bicycle parking spaces to be provided by office, retail, hotel, and residential developments in the Downtown Area<sup>3</sup>. It also sets minimum bicycle parking requirements for a wide variety of land uses in other parts of the city.

The changes listed in Table 5 should be made to the Seattle Municipal Code bicycle parking requirements. Table 5 includes recommendations that are above and beyond the requirements of the current Land Use Code (updated in December 2006).

*Table 5. Recommended Changes to Existing Bicycle Parking Requirements*

<i>Within Downtown Seattle</i>	
<i>Existing Requirement<sup>a, b</sup></i>	<i>Recommended Requirement</i>
Structures containing 250,000 square feet or more of office gross floor area shall include shower facilities and clothing storage areas for bicycle commuters. One shower per gender shall be required for every 250,000 square feet of office use.	Structures containing 100,000 square feet or more of office gross floor area shall include shower facilities and clothing storage areas for bicycle commuters. One shower per gender shall be required for every 100,000 square feet of office use.
<i>Outside Downtown Seattle</i>	
<i>Existing Requirement<sup>c</sup></i>	<i>Recommended Requirement</i>
1 long-term bicycle parking space for every 12,000 square feet of medical service, eating and drinking establishment, general sales and services, and entertainment building floor area.	1 long-term bicycle parking space for every 4,000 square feet of medical service, eating and drinking establishment, general sales and services, and entertainment building floor area/1 long-term bicycle parking space for every 2,000 square feet of medical service, eating and drinking establishment, general sales and services, and entertainment building floor area in Urban Center or Station Area Overlay District.
1 long-term bicycle parking space for every 4,000 square feet of heavy sales and services building floor area.	1 long-term bicycle parking space for every 2,000 square feet of heavy sales and services building floor area/1 long-term bicycle parking space for every 1,000 square feet of heavy sales and services building floor area in Urban Center or Station Area Overlay District.
1 long-term bicycle parking space for every elementary school classroom.	4 long-term bicycle parking spaces for every elementary school classroom.
2 long-term bicycle parking spaces for every middle school classroom.	6 long-term bicycle parking spaces for every middle school classroom.
1 long-term bicycle parking space for every 4 units of multi-family housing.	4 long-term bicycle parking spaces for every 4 units of multi-family housing.
1 long-term bicycle parking space for every 20 residents at congregate residences.	4 long-term bicycle parking spaces for every 20 residents at congregate residences.

<sup>a</sup>Existing requirements for Downtown Seattle reflect the Seattle Municipal Code adopted in April 2006.

<sup>b</sup>The Downtown bicycle parking regulations do not apply to the Pike Market Mixed Zone.

<sup>c</sup>Existing requirements for outside of Downtown Seattle reflect changes to the Seattle Municipal Code adopted in the commercial code section of the Land Use Code Ordinance 122311 (December 2006).

<sup>3</sup> The Downtown bicycle parking regulations do not apply to the Pike Market Mixed Zone.

Continue to utilize the PSRC bicycle parking demand estimation methodology to determine the amount of bicycle storage needed at transportation facilities. Sound Transit currently requires space for at least 40 long-term bicycle parking spaces to be provided at all rail transit facilities. More bicycle parking can be required based on area bicycle volumes and travel patterns, topography, nearby residential and employment density, proximity to the Urban Trails and Bikeways System and other existing and planned bicycle facilities, projected transit ridership, etc. In 2002, PSRC developed a methodology to estimate the potential demand for bicycle parking at transit hubs. This methodology should be used to establish appropriate requirements for rail and bus transit hubs, major transfer points, BikeStations, and park and ride lots in the city.



*Bicycle racks have been provided at the South Park Library.*

Increase the amount of bicycle parking provided at public parks, schools, community centers, and libraries. SDOT will work with the Seattle Parks and Recreation Department, Seattle Public Schools System, and Seattle Public Libraries to ensure that adequate bicycle parking is provided at important public destinations. These destinations include city parks, schools, community centers, and libraries.

Consider installing covered, on-demand, longer-term bicycle parking. SDOT will work with local transit agencies and the Seattle Parks and Recreation Department to examine the possibility of installing covered, on-demand, longer-term bicycle parking. Public agencies do not need to administer this bicycle parking program. Unlike locker facilities, this type of bicycle parking facility also has the advantages of not needing to be rented, not requiring keys, and not being a potential receptacle for trash. Certain types of covered, on-demand bicycle parking facilities can be locked with a padlock provided by the bicyclist.

Provide incentives for operators of private parking facilities to add secure, high-quality bike parking. It will be important for the city and transit agencies to maintain bicycle racks and lockers<sup>4</sup> and use enforcement to deter misuse of these facilities. Abandoned bikes and locks can make existing racks unusable. Other racks can be obstructed by planters, news boxes and other street furniture.

*“Required bicycle parking shall be provided in a safe, accessible and convenient location. Bicycle parking hardware shall be installed according to its manufacturer’s instructions and the Seattle Department of Transportation design criteria, allowing adequate clearance for bicycles and their riders. Directional signage shall be installed when bike parking facilities are not clearly visible from the street or sidewalk. When any covered automobile parking is provided, all required long-term bicycle parking shall be covered. When located off-street, bicycle and automobile parking areas shall be separated by a barrier or painted lines.”*

*--Seattle Municipal Code, 23.49.019*

<sup>4</sup>While the city will participate in helping to fund bicycle lockers, it does not currently manage or maintain bike lockers and is not likely to manage them in the future. Currently, only Metro provides lockers in the city.

**Action 2.6: Require office development and redevelopment projects to include shower and locker facilities.**



The city should amend its development ordinance to strengthen existing requirements for shower and locker facilities based on employment densities (see Table 5, above, for specific recommendations). For employees who are considering bicycling to work, such facilities make it possible to shower and change into work clothes after the commute.

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