

SECTION 7: PROGRAMMATIC ELEMENTS

PEDESTRIANS

AMERICANS WITH DISABILITIES ACT TRANSITION PLAN

Kirkland is steadily making walkways more accessible. Substandard facilities were identified in the 2004 sidewalk inventory and are gradually being replaced, while new construction complies with current standards. Most cities have adopted ADA transition plans as required by Title II of the Americans with Disabilities Act. Title II mandates that public agencies such as the City of Kirkland operate each service with accessibility to those with disabilities.

Title II also dictates that a public entity must evaluate its facilities and public areas to determine whether or not they are in compliance with the nondiscrimination requirements of the ADA. The regulations detailing compliance requirements were issued in July 1991. The requirements include completing a self-evaluation to identify any areas not within compliance of the ADA standards. Next, a transition plan is to be prepared describing any necessary structural or physical changes needed to make all required areas accessible and compliant with ADA.

Although the City of Kirkland has conducted most of the steps necessary to complete a transition plan, a formal plan has not been completed. In order to comply with regulations such a plan should be prepared and adopted. Goal G6 relates to this work.

WAYFINDING FOR PATHS AND TRAILS

As described in Sections 2 and 3, there are about 180 pathways and small connectors in Kirkland that are intended for use by pedestrians and cyclists. Many of these connections allow pedestrians to avoid sections of busy streets, shorten their trips, or go places that are accessible by streets. Sometimes these connections are unknown, particularly by those who live outside the vicinity of the connection. Wayfinding for these paths would remedy this situation. Objective G3.2 describes pedestrian wayfinding. A public process would be undertaken to determine the style and location of the signs.

OBSTRUCTIONS

Despite the programs described in Section 2, walkway obstructions due to brush, debris and recycling or waste containers are a common complaint among Kirkland's pedestrians. This Project would include some measure of the magnitude of the problem, i.e. what fraction of sidewalks are blocked at any given time, review the processes that are in place to assure clear sidewalks and develop strategies to increase the amount of clear walkways. Goal G6 with its associated objectives and strategies describes this work.

SAFETY AT INTERSECTIONS

Data show that most pedestrian crashes happen at intersections (see Figures 11 and 12 on Page 36). At signalized intersections, slightly more than half of the crashes involve turning vehicles. Many of these crashes could be avoided if pedestrians looked more carefully for turning vehicles and if drivers were more aware of the presence of pedestrians. Increasing the prevalence of these

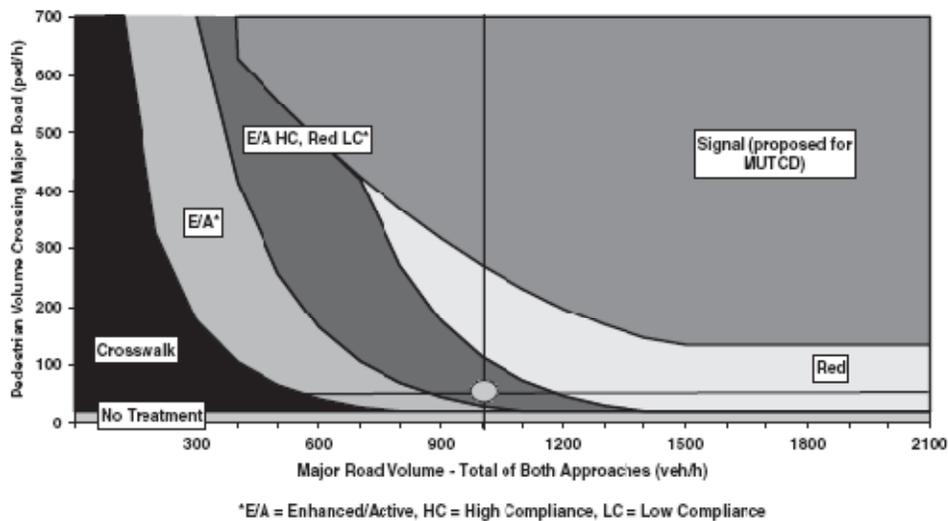
behaviors is not likely to be accomplished through traditional engineering measures. Instead, campaigns directed at changing behavior are more appropriate. An example of this type of effort is the “Take It to Make It” campaign that focused on getting pedestrians to use pedestrian flags. A similar program should be conducted to increase the number of pedestrians that look for turning vehicles. Emphasis should be placed on understanding why pedestrians don’t look for turning vehicles and developing strategies to overcome those barriers. The Take it to Make it effort was grant funded and it is likely that a program of this type would also require grant funding.

CROSSWALK SAFETY REVIEW

All uncontrolled crosswalks were reviewed in 2003. This review is discussed in Section 3. A ranking system that was new at the time was used to evaluate the risk of crashes at uncontrolled crosswalks. This evaluation was combined with actual crash data to develop a list of candidate improvements. Since 2003 two other evaluation criteria have been developed, the Pedestrian Intersection Safety Index²¹ and Guidelines for Pedestrian Crossing Treatments²²

The intersection safety index is a method that allows a specific number reflecting the safety potential of any crossing at an intersection. The Guidelines for Pedestrian Crossing Treatments goes beyond the 2003 analysis to identify the type of treatment that is best suited for a particular crosswalk. Potential Treatments may range from a marked crosswalk only to a traffic signal. Goal G5 supports crosswalk safety.

Figure 46 A sample chart from Guidelines for Pedestrian Crossing Treatments showing the relationship between street volume, pedestrian volume and treatment type.



²¹ Pedestrian and Bicyclist Intersection Safety Indices: User Guide, Publication No. FHWA-HRT-06-130, Federal Highway Administration, April 2007

²² National Cooperative Highway Research Project Report 562 Improving Pedestrian Safety at Unsignalized Crossings Transportation Research Board, 2006

BICYCLES

The programs in the following sections support Goal G8.

WAYFINDING SIGNS

Bicycle wayfinding signs are being installed by cities throughout the region. Wayfinding signs in Kirkland should be of the same style that is used by the City of Seattle, Bellevue and Redmond. There are two types of signs that will make up the signing system as shown in Figure 47. On streets that are part of the bicycle network and on other streets that intersect with streets on the bicycle network, signs will be placed that show the distance and direction to key destinations. On regional routes or trails with designated names (like the Lake Washington Loop or the future Cross-Kirkland Trail) a second type of route specific sign will be used to identify the trail and on other streets that intersect with the trail. On the order of 150 signs would be needed to sign the existing network.

Figure 47 Two types of bicycle wayfinding signs used communities surrounding Kirkland. The sign on the left is used at junctions on the bicycle network. The sign on the right is used on named routes, such as the Lake Washington Loop.



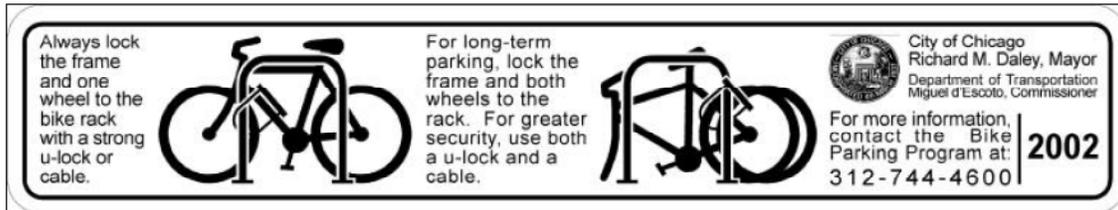
BICYCLE PARKING

Existing requirements for bicycle parking are discussed in Section 2. Based on the number of comments obtained in the bicycle survey and based on comments received prior to the survey, there is strong support for additional bicycle parking. Experts on bicycle parking agree that simple, "inverted U" shaped racks best meet the goals of effective bicycle parking; namely that the bicycle is supported in two places and that the racks are both secure and easy to use. In Kirkland, these racks could be incorporated on wide sidewalks between street trees and street lights. Another option is to convert street space into areas for storing multiple racks. The following tasks should be completed to improve bicycle parking in Kirkland. (See Goal G8).

- Identify where bicycle parking should be added. Candidates include Downtown, Juanita, Totem Lake, and/or other commercial areas. Special attention should be given to locating racks where they can be used by transit riders.
- Identify the amount of additional parking needed. This could be based on having parking available within a certain distance, on increasing the existing supply by a certain amount, on developing locations where parking can be easily located or on other factors
- Revise the zoning code to require bicycle parking as a part of right-of-way improvements

- Review existing zoning code requirements for bicycle parking
- Add specifications for bicycle rack design and installation to the Pre-Approved plans
- Create additional bicycle parking
- Explore requiring special events in Downtown to provide bicycle parking.

Figure 48 This information is printed on stickers and placed on bicycle racks in Chicago

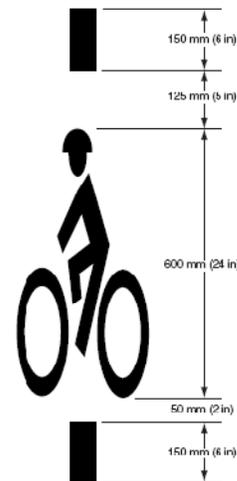


TRAFFIC SIGNALS

In Kirkland, most traffic signals are activated by loops buried in the pavement. The loops have an electric current passing through them making a circuit. When a vehicle passes over a loop the properties of the circuit change, the traffic signal equipment detects the change and the signal turns green for the direction where the vehicle is. Loops are most sensitive at their edges. Cars and trucks are large enough that they easily cover the loop and are therefore easy for the traffic signal equipment to detect them. Sometimes it's hard for cyclists to get a signal to respond because they don't know where to stop in order to activate the loop.

In order to make it easier for cyclists to activate the signals, markings like the one shown in Figure 49 will be placed to give cyclists a clear location of where to stop. About 275 markings will be needed. This work could likely be accomplished through the City's pavement marking program.

Figure 49 Marking that could be used at traffic signals to indicate where cyclists should stop



STREET SWEEPING

Kirkland's existing sweeping program is described in Section 2. A number of respondents to the survey cited increased sweeping of bicycle lanes as a measure that would improve their bicycling experience. A main purpose of street sweeping is to keep debris from clogging the stormwater system. Therefore, it's important to sweep both minor and major streets frequently. Increasing the sweeping of bicycle lanes by decreasing sweeping of other streets is not realistic. In order to sweep bicycle lanes more often, more person-hours would have to be added to the sweeping program. Given budget constraints this is probably not realistic. The spot sweeping of bicycle lanes is relatively inexpensive because the sweeper is out almost every day and can make a pass on the way to or from another job.

Two ideas should be considered to reduce debris in the bicycle lanes. One is the wider promotion of the fact that cyclists can call to get spot sweeping done and the other is the reconsideration of spreading sand for snow and ice control.

NE 116TH STREET/JUANITA DRIVE/98TH AVENUE NE INTERSECTION

This intersection was one that was viewed as difficult by both pedestrians and cyclists who responded to the survey. It is heavily traveled by cyclists connecting between Juanita Drive and downtown Kirkland on the popular Lake Washington Loop route, it's in the center of the Juanita Business district and used to connect to both Juanita Bay Park and Juanita Beach Park. It is also heavily traveled by motorists. There was one pedestrian crash and no bicycle crashes in the period 2003 to 2007.

In support of Goal G5, it is proposed that a Road Safety Audit (RSA) be conducted at this intersection. An RSA is a formal safety examination of an existing or future roadway that is conducted by a multidisciplinary (for example, traffic signal engineer, police officer, roadway designer, expert in disabled access, pedestrian safety expert, etc) team of people who don't work for the City and who were not involved with the development of the current configuration. The main objective of an RSA is to address the safe operation of roadways and crossings to ensure a high level of safety for all road users. RSAs are not intended to be a review of design standards or policies, but rather a review of site elements that, alone or combined, could contribute to safety concerns.²³

²³ Pedestrian Road Safety Audit Guidelines and Prompt lists. FHWA SA-07-007, USDOT FHWA July, 2007.