Chapter 3:

A Guide to Reducing Environmental Barriers to Physical Activity

Reducing environmental barriers to physical activity involves providing numerous safe and pleasant opportunities for people in the community to be active in their daily routines. The rationale is simple: citizens will be more likely to follow public health messages and integrate physical activity into their lives if their neighborhoods provide easy access to adequate sidewalks for walking and safe roads for bicycling.

The Active for Life™ (AFL) campaign took this rationale seriously when it incorporated advocacy for environmental change into the physical activity promotion strategies that it employed in Richmond, Virginia and in Madison, Wisconsin between 2002 and 2004. Throughout the two-year campaign, AARP and the Robert Wood Johnson Foundation (RWJF) tested the working hypothesis that dedicated citizens, working together, could improve the design of their communities so that those communities would more effectively promote such physical activities as walking and biking. Based on their experiences with Active for Life™, both AARP and RWJF identified five basic steps involved in coordinating such a community-based project. These steps include the following:

1. *Talking with local community residents* to determine how they perceive existing barriers to physical activity, their interest in removing those barriers, and the resources they can bring to the task.

2. *Increasing local interest in and awareness of* environmental barriers to walking and bicycling. This step will help local communities create forums for examining environmental issues and will provide an opportunity to recruit like-minded people to work on an environmental change project.

Copyright © 2007 by AARP. All rights reserved.
3. **Systematically assessing existing barriers to physical activity** by going into the community and studying the level and type of environmental barriers that residents face.

4. **Providing local officials, public committees and task forces with the information they need** to plan changes to the community environment that will foster increased levels of physical activity.

5. **Implementing actual changes** by removing environmental barriers to physical activity in the community.

In its efforts to carry out all five of these steps in Richmond and Madison, AFL sponsored several major environmental initiatives, which are described in this chapter. These initiatives include the **Pedestrian Flag Project**, which helped Madison pedestrians safely navigate busy intersections, and educated motorists about their responsibility to yield the right-of-way; the **PhotoJourney Project** in Richmond, which encouraged school-age children to catalog environmental barriers that they encountered in their school neighborhoods; the **Tour de Traffic** in Madison and the **Active Living Tour** in Richmond, which gave citizens and policy makers the opportunity to tour key city intersections and roadways and to formulate recommendations for mitigating environmental barriers to pedestrian and bicycle traffic; and a **Walking and Biking Suitability Assessment**, through which Madison and Richmond residents measured the ease or difficulty of walking or biking on city streets and sidewalks.

### Lessons Learned About Raising Local Awareness

**Lesson #1:**

*Successful environmental change projects will be conducted in collaboration with partners who can provide information about local environmental barriers and actively participate in removing those barriers.*
Some communities have been working for many years to assess and remove environmental barriers to physical activity. Other communities are thinking about environmental issues for the first time. In more active communities, newcomers to environmental advocacy process should seek out and join forces with the established organizations and individuals who are already working in this area. In less active communities, advocates should identify and make contact with people and organizations that might make good partners. These prospective partners might be friends and colleagues who are interested in the topic, or staff at the local departments of transportation, planning or health. It’s important also to talk with policy makers and advocacy groups, the local media and members of the 50+ population.

Anecdotal information suggests that bringing together local leaders to discuss environmental barriers to physical activity will increase the leaders’ awareness of these issues and encourage them to take action. In Madison, many of AFL’s environmental partners belong to a group called the Active Living Collaborative, which is helping Madison’s mayor oversee a physical activity initiative called Fit City Madison. One facet of the mayor’s program examines environmental barriers to physical activity. (For more information about AFL collaborations at the local level, see Chapter 2 of this guide.)

**Lesson #2:**

*Well-planned public events will attract prospective partners and volunteers to an environmental change project.*

One of the best ways to attract prospective partners and volunteers to an environmental change project is to hold public talks, workshops or outdoor activities that raise awareness of the local barriers to physical activity in the community. These public events don’t have to be large. Even a small group of interested people who are aged 50 years and older can have a major impact on the local community. After attending an “eye-opening” event organized by a community-based organization, these citizens will gain a new appreciation for their sidewalks, roads and local planning practices, and will begin to observe their local environment with an eye toward its walkability and bikeability.
During a public talk or workshop, for example, campaign organizers can educate people who want to know more about environmental change issues, and can provide a forum for discussing those issues. Event participants could be invited to talk about local roads and intersections that concern them. This is a good time to make citizens aware of the fact that local government departments are responsible for fixing environmental problems in the community but that these governmental departments often take action only after citizens draw attention to the problems. Participants might then be asked about their interest in identifying specific environmental barriers, ranking those barriers according to their severity, brainstorming solutions with professionals and eventually sharing their conclusions with elected officials.

Events that are visually dramatic also raise public awareness about the physical environment, create new working relationships with community partners, and help to break down environmental barriers. This finding was particularly evident in Madison, where AFL partnered with the Safe Community Coalition (SCC) of Madison and Dane County, a local public-private partnership of 300 organizations that works to reduce injuries and address traffic and pedestrian safety. AFL joined SCC’s ongoing efforts to introduce drivers and pedestrians to a unique technique designed to allow pedestrians to cross the street safely. In the process, AFL was able to bring long-lasting attention to its social marketing campaign.

The street-crossing technique, pioneered by cities as diverse as Kirkland, Washington and Salt Lake City, Utah, became known in Madison as The Pedestrian Flag Project. The concept was simple: pedestrians who wanted to cross one of 40 hard-to-navigate streets in the city held up bright red flags, which were stored in bins near the crosswalks. When drivers saw the red flags, they were reminded that the law required them to yield the right-of-way to pedestrians so they could cross safely. Once the pedestrians reached the other side of the intersection, they placed the flags in another container located there. The flags were then available for other pedestrians to use.

Becoming a partner in the Pedestrian Flag Project enabled AFL to work with an organization that already had good relationships with the city government and the media. The project also gave
AFL the opportunity to educate pedestrians and motorists about physical activity and pedestrian safety issues. AFL posted physical activity messages on project flag bins and distributed brochures about health and traffic safety to pedestrians. The campaign also used brochures and billboards to educate motorists about their responsibility to yield at pedestrian crossings. According to project leaders, motorists’ awareness of their responsibility to yield increased from 75 percent to 98 percent during the course of the AFL campaign.

Even Madison residents who never ventured into a flagged intersection learned about the city’s environmental barriers because pedestrians carrying red flags across intersections attracted the attention of the local media. AFL received good coverage for several months after it became involved in the Pedestrian Flag Project. This coverage was particularly useful to AFL and its partners, because it shed light on prominent environmental barriers at a time when Madison citizens were debating whether and how to improve walkability in the city.

Lesson #3:
Children can play an important role in educating the public and government officials about environmental barriers to physical activity.

While AFL was primarily interested in focusing attention on physical activity among the 50+ population, it did not ignore the needs of younger people. Grandparents, parents and youngsters attending five Richmond elementary schools worked together on two projects that were launched in 2003 to call attention to the need for safer routes to the city’s schools. During the first project, AFL and Safe Kids International helped young people, parents and grandparents assess the relative safety of existing walking routes to the five schools. Grandparents were encouraged to teach their grandchildren safer walking behavior, and young people received disposable cameras to document their walking routes. Then, on National Walk to School Day, adults aged 50 years and older accompanied children to school, helping to focus municipal and media attention on the need to improve the walking routes to community destinations for people of all ages.

These two projects led to a subsequent AFL/Safe Kids activity called the PhotoJourney, an
exhibit of pictures that school children took while walking to school and in the neighborhoods around their schools. The photographs, taken with disposable cameras donated by community organizations and local businesses, highlighted environmental barriers in such categories as “signs and lights,” “walking hazards,” and “street crossings.” Some children took photographs that explained what was special or especially scary about their walk through the neighborhood. Each photo was accompanied by a brief quote or journal entry, written by the young photographer, which explained why he or she had snapped the image. Community partners provided funds that were used to process the film, mount the pictures and purchase prizes for the winning photographers.

An exhibit of the photographs was displayed at various sites throughout Richmond, including the Virginia General Assembly Building; the Richmond City Hall; the May 2005 Governor’s Conference on Greenways, Blueways, and Trails; and the Children’s Museum of Richmond. The exhibit was unveiled during a special event at the museum, during which several of the entrants received recognition from a judges’ panel that included Richmond’s vice mayor, the state coordinator for Safe Kids, the AARP volunteer organizer for Richmond, and representatives from the departments of police and public works. The State Secretary of Health and Human Resources, a strong advocate for physical activity and walking, delivered the keynote address. The executive superintendent of elementary education represented the schools. To add a bit of flare to the presentation, the bike and pedestrian coordinator for the Virginia Department of Transportation handed out awards while dressed as an orange highway safety cone.

The PhotoJourney project helped raise awareness about environmental barriers among policy makers and members of the general public. The project also illustrated that barriers to physical activity can adversely affect people of all ages. Additionally, the project had a significant personal impact on students and teachers. Teachers at the participating schools reported increased physical activity levels among their students, who now asked to take repeated excursions into local neighborhoods. In addition, several teachers became physical activity advocates, teaching pedestrian safety lessons to students who participated in the PhotoJourney project and educating other students about the concept of walkability. Some teachers even began advocating in the community for improvements to the local walking environment. Soon after the
exhibit opened, the mayor of Richmond announced that all school zones would be marked with long-lasting paint to make them more visible to motorists. In addition, the police department announced plans to train new volunteers, most of whom were in the 50+ age group, to serve as crossing guards in school zones.

Lessons Learned About Assessing the Built Environment

Lesson #4:
An organized tour of a neighborhood—attended by citizens, advocacy groups and government officials—can raise awareness of environmental issues, generate recommendations for improvement and help build a coalition to work on change.

During early October 2002, AFL Madison took approximately 30 people on the Tour de Traffic—a five-hour bus-and-foot tour of key city intersections and roadways. The group was an eclectic one that included elected officials, government staff, members of community and neighborhood organizations, policy makers and managers, community residents, advocates and members of the media.

During the course of this half-day event, which took two months to plan, participants studied the effects of traffic and other issues on pedestrians and bicyclists in a variety of city locations. When the bus arrived at a specific location, participants disembarked and walked through the intersection or along the sidewalk to obtain a clear perspective of the area being studied. Tour guides described the existing physical activity barriers and answered questions. At the end of the tour, participants discussed their impressions of what they had seen. They then worked together to devise strategies to bring about change. Representatives of the media photographed the event and interviewed participants throughout the day.

Among the tour participants in each city were community leaders who could “make change happen.” These high-level participants helped the tours produce tangible results. For example, a transit official who participated in Madison’s event subsequently directed staff to install a
missing 30-foot section of sidewalk near a public transit station. The job was completed within a month of the Tour de Traffic. After Richmond’s Active Living Tour, one of the city’s neighborhood organizations decided to focus its efforts on improving walkability between a retirement housing development and a nearby shopping center.

Madison’s Tour de Traffic brought together numerous government partners, including the city Traffic Engineering Division, the Dane County Planning and Development Department, Wisconsin’s Department of Transportation, and its Department of Health and Family Services. The event also attracted other partners, including the Safe Community Coalition; Wisconsin Walks, an organization that promotes walking for transportation, health and recreation; and the Bicycle Federation of Wisconsin, a statewide nonprofit advocacy organization that works to make Wisconsin a better place for bike enthusiasts. In addition, numerous neighborhood associations joined in helping to plan and carry out the activity.

Decision makers were equally represented on Richmond’s Active Living Tour. That tour, organized at the suggestion of the director of the local Sierra Club, targeted local government leaders, heads of organizations, members of policy-change organizations and senior advocates. Partners for the event included the Sierra Club, the City of Richmond Department of Public Works, the city’s Department of Parks and Recreation, the bike and pedestrian coordinator for RideFinders, and members of the City Council. In addition, the mayor’s office became involved in planning many tour details and representatives of several city departments—including the traffic engineer—led discussions among participants at each tour stop.

Tours in both cities were praised for giving participants the opportunity to learn about environmental issues from one another and from key decision makers. A surprising number of Madison participants—even those who were already involved in bicycle and pedestrian issues—reported that the event introduced them to new policy and advocacy ideas, increased their awareness of these issues and sparked their interest in getting more involved. AFL organizers found these responses surprising because they had assumed that event participants were already very familiar with these issues and ideas. Organizers concluded that while many people in the community have environmental concerns, most are not sure how to move forward to act on those
concerns. Creating ongoing forums, such as the Active Living Collaborative in Richmond and Fit City Madison in Madison, can provide citizens, advocates, organizations and elected officials with the opportunity to work together to find creative ways to break down environmental barriers to physical activity.

Lesson #5:
The best neighborhood tours are professionally led, visually appealing and balanced in their presentation.

Communities that host a Tour de Traffic-like event should keep several “to dos” in mind when designing a tour:

• **Be sure to have an environmental-design specialist on board** who can point out features of the built environment along the tour route. AFL hired a consultant from the University of North Carolina School of Public Health to fill this role. The consultant brought research-based knowledge to the tour and helped participants understand aspects of the built environment that might have escaped their attention otherwise. The consultant also brought credibility to the entire assessment process.

• **Strive for balance when designing tour stops.** Make sure that the tour points out ways in which the built environment is already encouraging physical activity. By showing positive aspects of the environment, a tour can provide exemplary examples of how outdoor space can be developed so that it promotes, rather than restricts, physical activity. Such examples also help to acknowledge the efforts of the people who advocated for, designed and built those environments.

Your tour should highlight some environmental barriers that can be addressed quickly and easily, along with those that are more complicated and will take more time to address. Low-cost changes that can be implemented expeditiously might include clearing walkways and removing brush and dense plant growth that limit sidewalk access. Walking areas might be
spruced up with some paint, signage or striping. Safety might be improved by repairing bike lanes, especially to fill in dangerous potholes. More expensive and time-consuming changes that could be more difficult to implement might involve installing sidewalks in neighborhoods that lack them. Biking could be improved by adding bike racks, bike lanes and signage that identifies bike routes. Bus stops could be improved by adding benches and a rain cover or by adding additional stops along a bus route.

- Use the visual appeal of tours to attract local media attention to your cause. The Richmond Tour de Traffic was able to attract media attention by featuring such attention-getting visuals as city department heads maneuvering through intersections in wheelchairs.

**Lesson #6:**

*A Walking and Bicycling Suitability Assessment (WABSA) can provide block-by-block details about how conducive the built environment is to physical activity in a community.***

In order to improve the built environment, advocates must know where problem areas exist. To find this out, AFL in both Richmond and Madison conducted a block-by-block Walking and Bicycling Suitability Assessment (WABSA) Project to uncover important details about the communities’ physical structure.

Researchers from the School of Public Health at the University of North Carolina (UNC) developed, tested, evaluated and validated the tools that citizens used to measure walkability and bikeability in their communities. (A sample WABSA form can be found in Appendix A, located at the end of this chapter.) Volunteers in Richmond audited and mapped a 150-square-block neighborhood on the city’s East End. Madison volunteers used a similar tool to audit a smaller neighborhood of 30 residential streets and to produce maps of suitable walking routes for residents.
The assessment tool was extremely “user friendly,” which was especially important because the assessment process itself can be challenging to volunteers. That assessment process included the following basic steps:

1. **Volunteers were trained** so that they knew from the beginning what was expected of them and what their efforts were expected to produce. In Richmond and Madison, UNC consultants provided a training workshop for approximately 50 volunteers and professionals who were interested in learning how to conduct audits. The four-hour workshop provided conceptual information, on-the-street auditing practice and suggestions for how to make change happen. Trained residents were better able to understand how specific environmental components enable or restrict physical activity in a neighborhood.

2. **Volunteers were assigned to a group** with a trained leader who guided them and answered their questions.

3. **Volunteer groups walked through the neighborhood** to observe the environment and record their assessment of specific environmental features, such as sidewalks and intersections. In Richmond, volunteers mapped their assessment results on paper and used different color pencils to record different barriers. The color-coded system enabled people reviewing the maps to see problem spots more easily so they could set priorities for advocacy and utilization of funds.

**Lesson #7:**

*The WABSA auditing process can be useful to advocates but it is also a valuable and empowering educational tool for volunteers.*

The trained individuals who conducted the WABSA Project may have started out as inexperienced volunteers performing clerical tasks. By the end of the assessment, however, many of these volunteers had been transformed into confident spokespersons for environmental community change.
Many volunteers reported that their participation in the auditing process helped to increase their awareness of how the built environment can affect physical activity levels. They also reported gaining an appreciation for the type of community designs needed to create a walkable environment for people aged 50 years and older. In addition, the mapping process increased the volunteers’ awareness of the specific environmental improvements needed in their own communities.

Armed with this newfound knowledge and awareness, many WABSA volunteers became outspoken advocates for livable neighborhoods. Several auditors worked actively to apply WABSA concepts, the assessment instrument and the audit results to their own neighborhood improvement projects. They also gave presentations about livable communities to local planning committees and at public forums.

**Lesson # 8:**

*Some WABSA auditing tasks can be conducted simultaneously.*

The WABSA Project involved four tasks: (1) auditing roadways; (2) mapping audit results; (3) reviewing maps and setting priorities; and (4) advocating for change based on the audit findings.

The beauty of the process, AFL found, was that all four components could be implemented at the same time. There was no need to wait until one task had been completed in all sections of a neighborhood before volunteers moved on to the next task.

For example, volunteers could be auditing roads (Task 1) and mapping the results of the audits (Task 2) simultaneously during the same two-to-three-month period. As the audit data were being mapped, members of a WABSA planning group could be reviewing the maps and identifying trouble spots for walking and biking (Task 3). While the auditing process continued, some team members could begin advocating for simple and obvious improvements to the built environment (Task 4).
During early advocacy efforts, auditing teams can suggest improvements that are relatively inexpensive, like refreshing crosswalk striping or repairing broken pedestrian signals. Carrying out these improvements early in the process can often bring critical momentum and media attention to the project. More time will be required to identify recommendations for long-term action.

Lesson #9:

WABSA audit maps can be used successfully for both policy change and for individual change.

Once a community has produced audits of its major walking and biking routes, it’s time to have a discussion with city staff about the condition and safety of these routes. WABSA mapping can pinpoint specific problem areas, making it easy for city staff to evaluate and incorporate the data into city plans to improve the built environment.

Advocacy in Richmond

Many of the retired Richmond residents who had studied the WABSA maps with AFL staff quickly identified patterns of poor walkability between two elementary schools and many missing sidewalks near an area hospital. They also identified two, five-point intersections that presented challenges to both young and older pedestrians. AFL met with community residents to present its recommendations for improving these trouble spots. In addition, the AFL team made separate presentations to community organizations and city committees, including the East District Neighborhood Team; the City Council’s Transportation Committee; the Department of Public Works; and the Old South Neighborhood Team (OSNT), a neighborhood association. Good results came from these and other presentations:

- After hearing a presentation about the audit, a city councilwoman requested and obtained $50,000 from the City Council for a walkability audit of her entire district. Findings from that audit, which was conducted by the city’s Transportation Department, have been used to
support AARP requests that local government consider the needs of older people for safe, walkable neighborhoods.

- The chairperson of the East District Neighborhood Team pledged to use the audit data to prioritize spending of her annual allotment for sidewalk improvements.

- An AFL workshop for traffic engineers and community development planners explored ways to support citizen-initiated assessment projects that would help the city better understand and improve walkability. As a result of this outreach, the city installed signage to identify walking routes to a neighborhood park.

- The Richmond Regional Planning District Commission has incorporated the audit results into the work it is doing to develop safe routes to school. Information about the WABSA project is also included in the *Stepping Stones Toolkit for Safer and Healthier Kids*, produced by AARP and Richmond Area Safe Kids. Audit results are being incorporated into the city’s redevelopment plans for District 7 and are being used to support the Walk This Way Pedestrian Task Force, a partnership between AFL and the Department of Public Works.

**Advocacy in Madison**

In Madison, the mapping project helped the South Metropolitan Planning Council, a coalition of neighborhood associations, work on improving biking and walking in the city’s Park Street area. It also brought about the following developments:

- After hearing reports on the WABSA project, volunteers began conducting similar audits in the city’s Bay Creek neighborhood with help from AFL and the city’s bike-pedestrian coordinator.

- Audit maps helped AFL promote walking in many of Madison’s neighborhoods, where a large percentage of the city’s midlife and older population said they like to walk. Volunteer auditors created maps to show people where they could walk, what they would see on their walks, and the distances that they would be walking. Maps also helped provide information
to the city government about what could be done to improve walking routes in specific neighborhoods.

Lessons Learned About Influencing Public and Organizational Policy

Lesson #10:
Public committees and task forces are powerful vehicles for influencing policy decisions.

Committed advocates of physical activity should seek positions on a variety of public committees, task forces and boards whose decisions can either support or restrict citizens’ access to physical activity outlets. For example:

- Physical activity advocates who serve on the local planning board can ensure that the health perspectives of people aged 50 years and older are taken into consideration when new areas of a community are developed and when decisions are made about how that community will grow. Planning board members could also work to ensure that all community designs that come before the board include walking and bicycling opportunities.

- Many states have a Council on Physical Fitness that promotes physical activity events and educates the general public. Having an advocate serve on the local chapter of this council could help influence physical activity promotion activities at both the local and state levels.

- Many local municipalities or counties have a Bicycle and Pedestrian Committee, which works to improve walking and bicycling throughout the locality. Such a group would be a powerful force for influencing public policy and planning decisions in the area of physical activity. If your town doesn’t have such a committee, contact your state’s Department of Transportation to find out how to form one.

- A city or county can convene, or at least condone, a Fitness Leadership Council. The council could be comprised of high-level administrators and political officials from such diverse
fields as health, transportation, planning, parks and recreation, education, research and local government. This “think tank” could meet quarterly to explore inter-sector policy changes that could provide more physical activity opportunities for people aged 50 years and older.

- Madison and Richmond have both established formally appointed committees to influence public policies relating to the built environment. Madison volunteers continue to educate policy makers in surrounding towns and non-incorporated areas about the benefits of pedestrian-scale design and policies that support walkable communities. As a result, policy committees are being established in some of these townships. AFL Richmond volunteers and staff influenced the decision by the state’s Economic Development Committee to support pedestrian-scale design. They also have helped to influence design and procedural policies developed by the Department of Transportation and the Department of Public Works.

**Conclusion**

During the Active for Life™ campaign, the cities of Richmond and Madison responded positively to AFL recommendations for changes that would make the local environment more conducive to physical activity. In Richmond, for example, sidewalks and roadways were cleaned up to provide easier and safer access for walking and biking. AFL partners opened the city’s first walking park, and walking trails were developed on the grounds of a nursing home and on the campus of one of the area’s largest employers. The Richmond Department of Public Works expanded its crosswalk improvements to include all city schools and erected signs around schools to encourage motorists to drive slower. Richmond volunteers also helped develop transportation design suggestions for the city’s 2004 Capital Improvement Plan.

In Madison, AFL was involved in planning the Great Neighborhoods initiative, which aims to develop livable communities in the Madison region. During the Great Neighborhoods planning process, AFL was able to convince the initiative’s sponsors (Dane County, a Thousand Friends of Wisconsin, and Madison Gas and Electric) that the needs of the 50+ population must be taken into consideration when designing livable communities. The partners will educate planning
commissions, mayors, municipal administrators and elected officials about smart growth, and will offer technical assistance to communities that are trying to manage their growth.

Changing a community’s environment so that it will promote physical activity is not an easy or quick process. Those who look for quick fixes or who expect big results in a matter of weeks or months will be sorely disappointed and discouraged. However, a view to the long-term, and a perseverance that suggests that advocates are willing to stick with environmental issues until they receive satisfaction, will eventually result in communities that are designed and retrofitted to meet the physical activity needs of all their citizens.
Appendix A
Data Collector Name: ___________________________  Date:  _________________

Road Segment ID#:  ________    Road Name:  _____________________   Boundary Streets:  _____________________  AADT:  __________

<table>
<thead>
<tr>
<th>Annual Average Daily Traffic (AADT)</th>
<th>Posted Speed (mph)</th>
<th># of Thru Lanes</th>
<th>Sidewalk/Path Width</th>
<th>Material</th>
<th>Surface Condition</th>
<th>Sidewalk Width</th>
<th>Buffer Width</th>
<th>Curb Ramps</th>
<th>Adequate Lighting</th>
<th>Isolated Problem Spots?</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;8,000 = 0</td>
<td>&lt;30 = 0</td>
<td>&lt;3 = 0</td>
<td>Both sides continuous = 0</td>
<td>Asphalt = 0</td>
<td>Good = 0</td>
<td>8’ or more = -1</td>
<td>All = 0</td>
<td>Plenty = 0</td>
<td>Y = Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8,000-14,999 = 1</td>
<td>30-44 = 1</td>
<td>3-4 = 1</td>
<td>One side continuous and one side partial = 1</td>
<td>Concrete = 0</td>
<td>Fair = 1</td>
<td>5’ – 7” 11” = 0</td>
<td>Some = 2</td>
<td>Some = 0.50</td>
<td>N = No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15,000-24,999 = 2</td>
<td>45 or more = 2</td>
<td>5-8 = 2</td>
<td>One side continuous and one side partial = 2</td>
<td>Brick = 1</td>
<td>Poor = 4</td>
<td>4’ – 4’ 11” = 1</td>
<td>None = 4.25</td>
<td>Some = 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25,000 or more = 3</td>
<td></td>
<td></td>
<td>Both sides partial = 3</td>
<td>Sand/Dirt = 2</td>
<td></td>
<td>1’ &lt;4’ = 2</td>
<td>None = 1</td>
<td>None = 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>One side partial = 4</td>
<td>Gravel = 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>None = 99 (STOP HERE)</td>
<td>Woodchip = 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Do any busy intersections need marked crosswalks?  
Y [ ]  N [ ]  
Do any busy intersections need traffic signals lights?  
Y [ ]  N [ ]  
Do any busy intersections need pedestrian “Walk” signals?  
Y [ ]  N [ ]  
Do any wide intersections need a refuge island for safer crossing?  
Y [ ]  N [ ]

Use this table to record Intersection Details, Isolated Problem Spots, and General Comments about needed design improvements:

<table>
<thead>
<tr>
<th>Nearest Intersecting Street</th>
<th>Describe Intersection Details (from “Yes” checkboxes above)</th>
<th>Describe Isolated Problem Spots</th>
<th>General Comments (For example: How are transit stops? Is the walk pleasant? Etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>