Fieldwork

Walkability audit tool

This tool was prepared as part of the Healthier Worksite Initiative of the Centers for Disease Control and Prevention. While initially developed for employers, the concepts and tool are equally valuable for surveying the campus of a retirement community or the area surrounding a community center or wellness center.

Physical activity programs in active aging are directed to older adults. However, an increasing number of ICAA members are making the wellness program available to staff members because wellness programs can lower absenteeism and increase employee satisfaction. When using the walkability audit tool, consider both the client and the staff members.

You may also wish to adapt the tool and scoring system. For example, by adding restroom locations to the aesthetics rating or raising shade from low to medium importance because of the specific interests of older adults.

—Editor

Walkability is the idea of quantifying the safety and desirability of the walking routes. These can be streets and sidewalks in between buildings on your campus, city blocks if you work in a downtown area, or even walking or nature trails. Many people work or live on campuses that have more than one building, and they might work or live in one building and have meetings/activities in another.

Do employees and clients walk to those meetings, or drive? Do they walk for exercise or recreation at lunch or during breaks? Do they walk to restaurants or parks? Sometimes people don’t walk because they don’t feel that the walking routes are safe or convenient.

There is scientific evidence that providing access to places for physical activity increases the level of physical activity in a community (1). The Task Force on Community Preventive Services strongly recommends creating or enhancing access to places for physical activity, in conjunction with a well-run communication and marketing campaign. A typical study of an intervention to create or enhance access to places for physical activity reports a 25% increase in physical activity levels (2).

What is a walkability audit?

A walkability audit tool is designed to broadly assess pedestrian facilities, destinations and surroundings along and near a walking route and identify specific improvements that would make the route more attractive and useful to pedestrians. Using CDC’s Walkability Audit can help you assess the safety or attractiveness of the walking routes at your worksite (3).

The audit helps you map out the most commonly used walking routes, and helps you identify the most common safety hazards and inconveniences that can keep people from walking.

Continued on page 17
Continued from page 16

The language of walkability

Accessibility. Walking routes should be compliant with the Americans with Disabilities Act, and should take into account the needs of the disabled, such as curb cuts for easier wheelchair access to sidewalks.

Aesthetics. Walking routes that are visually attractive may be more appealing to walkers. Hardscaping, such as walls and walkways, and landscaping, such as trees and flowers, should be well maintained. Trees can help provide shade and improve the appearance of the property.

Connectivity. Connectivity means the extent to which the sidewalks and paths in an area connect to each other and to desirable destinations such as buildings, stores, parks, trails, etc. at convenient distances and without encountering major hazards (such as a busy street with no crosswalk). Typically streets with short block lengths connected in a grid pattern have higher connectivity than areas with cul-de-sacs and long block lengths.

Recreational potential. Walking routes at work can be used for more than just moving in between buildings. Walking for recreation or exercise is possible at many work sites, and even small improvements may encourage employees to view the walking routes as a way to increase their physical activity level.

Safety. In thinking about walkability, safety is of utmost concern. Generally, this involves assessing the facilities that separate cars and pedestrians, such as sidewalks, crosswalks, and signs and signals, and that walking surfaces are of high-quality and well maintained, to minimize the risk of injury to walkers.

Segments. It is often easier to identify and describe discrete portions of the area under study, rather than discuss the walkability of the whole campus, or city block. Identifying segments, or the most likely or useful pedestrian route between each location, can help gain a better understanding of which locations are sufficient and which need improvement.

Sample audit

Following is an example of what a completed worksite walkability audit might look like. This report contains the location of the site, a site summary, including issues related specifically to safety, accessibility and aesthetics, and identifies suggested improvements. Finally, a map is attached so that readers can easily see how each segment was rated.

Site summary

Company X’s facilities consist of several buildings on a five-acre site. Parking for employees and visitors is available in nearby parking decks located within walking distance. The campus is located in a transition zone between commercial retail properties and a low-density residential

Continued on page 21
Walkability audit tool

Directions

1. Obtain (or create, if necessary) a map of the campus or area that you wish to audit, including likely pedestrian destinations, such as parking lots, nearby restaurants, shops, parks, etc.

2. Decide, either by observation or inference, the most useful or likely pedestrian route between each location of interest on your map, eventually assembling a network of walking segments that make up the most common walking routes. Label these segments ‘A’, ‘B’, ‘C’ or 1, 2, 3 to identify one from the other. See the sample map on page 17.

3. Take the attached audit tool to the location under study. Take as many copies as you have identified segments on your map—for example, if you have 10 segments on your map, take 10 copies. You will use a copy of the audit tool to assess each segment individually. The tool assesses factors related to safety, aesthetics and recreational potential, with safety being the most important.

4. Begin with your first segment and rank each feature, using the description provided on the audit. There are no right or wrong answers, just pick the number that most accurately represents your understanding of the segment. Also answer the questions at the end of the audit tool, noting potential dangers and improvements.

5. Repeat step 4 for each segment of your map. Some segments may be very different from each other, and some may be very similar.

6. Once you have completed the audit form for all the segments on your map, use the formula in the box to create a numerical score for each segment. This score makes safety considerations the most important, followed by things like accessibility and aesthetics (medium importance) and finally shade (least important), and should range from 0-100. Calculate scores for all segments of your map.

7. Now input the scores from each segment on your map, and generate a report. If you like, you can follow the format of our sample report. We designated segments with scores of 0-39 points as high-risk and unattractive (red), scores of 40-69 as medium-risk and average or non-descript looking (yellow) and 70 and above as low-risk and pleasant. The questions you answer at the end of the audit tool can help prioritize needs and wants for improving the walking routes.

---

<table>
<thead>
<tr>
<th>Trail Segment</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>86</td>
<td>98</td>
<td>86</td>
<td>88</td>
<td>76</td>
<td>69</td>
<td>54</td>
<td>67</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Facilities</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Conflicts</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Crosswalks</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Maintenance</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Size</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Buffer</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Access</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Aesthetics</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Shade</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

*Trail segments A-D, I and J are safe and attractive for walking. Trail segments F-H are safe and attractive for walking. Trail segment E is hazardous for walking.*
Walkability audit tool

Location: ___________________________ Date: ___________________________

A. Pedestrian Facilities (High importance): presence of a suitable walking surface, such as a sidewalk or path.
   1. No permanent facilities; pedestrians walk in roadway or on dirt path
   2. Continuous sidewalk on both sides of road, or completely away from roads
   3. Sidewalk on one side of road; minor discontinuities that present no real obstacle to passage

B. Pedestrian Conflicts (High importance): potential for conflict with motor vehicle traffic due to driveway and loading dock crossings, speed and volume of traffic, large intersections, low pedestrian visibility.
   1. High conflict potential
   2. Low conflict potential

C. Crosswalks (High importance): presence and visibility of crosswalks on roads intersecting the segment. Traffic signals meet pedestrian needs with separate ‘walk’ lights that provide sufficient crossing time.
   1. Crosswalks not present despite major intersections
   2. No intersections on segment; or crosswalks are clearly marked

D. Maintenance (Medium importance): cracking, buckling, overgrown vegetation, standing water, etc. on or near walking path. Does not include temporary deficiencies likely to soon be resolved (e.g. tall grass).
   1. Major or frequent problems
   2. No problems

E. Path Size (Medium importance): measure of useful path width, accounting for barriers to passage along pathway.
   1. No permanent facilities
   2. < 3 feet wide, significant barriers
   3. > 5 feet wide, barrier free
Walkability audit tool

F. Buffer (Medium importance): space separating path from adjacent roadway.
   1. No buffer from roadway
   2.
   3.
   4. > 4 feet from roadway
   5. Not adjacent to roadway

G. Universal Accessibility (Medium importance): ease of access for the mobility impaired. Look for ramps and handrails accompanying steps, curb cuts, etc.
   1. Completely impassible for wheelchairs, or no permanent facilities
   2. Difficult or dangerous for wheelchairs (e.g. no curb cuts)
   3.
   4. Wheelchair accessible route available but inconvenient
   5. Designed to facilitate wheelchair access

H. Aesthetics (Medium importance): includes proximity of construction zones, fences, buildings, noise pollution, quality of landscaping, and pedestrian-oriented features, such as benches and water fountains.
   1. Uninviting
   2.
   3.
   4.
   5. Pleasant

I. Shade (Low importance): amount of shade, accounting for different times of day.
   1. No shade
   2.
   3.
   4.
   5. Full shade

Sum of High importance (A-C): _________ \times 3 = _________
Sum of Medium importance (D-H): _________ \times 2 = _________
Sum of Low importance (I): _________ \times 1 = _________
Total Score: _________ / 100
Continued from page 17

neighborhood. Surrounding streets are paved, and most have sidewalks and crosswalks. A small commercial district with several restaurants is located within walking distance, but is difficult to reach because the area lacks crosswalks.

• Hazards: because of low traffic volume and good facilities, the average hazard level to pedestrians is low. One segment does border a busy highway, but is separated from the road by a wide (>10 ft.) buffer. Sidewalks are lacking within the parking lots, presenting a hazard to pedestrians returning to their cars.

• Connectivity: generally good, with the exception of missing sidewalks mentioned above.

• Accessibility: Most of the campus reflects reasonable attempts to comply with ADA requirements. Hilly terrain may limit outdoor access to some parts of the campus.

• Aesthetics: varies widely. Some routes are pleasant and well-landscaped, while others border buildings and roads with little shade.

• Recreational Potential: several walking and running routes currently exist along established sidewalks and are regularly used by employees.

Suggested improvements

Potential improvements in walkability:

• Creating a pedestrian corridor through the parking lot (segment E) to protect employees who must park in that area.

• Creating a pedestrian corridor through the parking lot (segment G).

[end of sample report]

The Centers for Disease Control and Prevention (CDC) developed the Healthier Worksite Initiative (HWI) for its own employees with the vision of making CDC a worksite where “healthy choices are easy choices,” and sharing the lessons learned with other federal agencies. Since its inception, HWI has worked on a number of demonstration projects, policies and environmental changes. HWI’s activities are guided by an advisory committee made up of representatives from many CDC centers, institutes, offices and locations. The website is www.cdc.gov/nccdphp/dnpao/hwi/index.htm

Adapted from Worksite Walkability, Centers for Disease Control and Prevention, www.cdc.gov/nccdphp/dnpao/hwi/toolkits/walkability/index.htm

References

1. Creating or Improving Access to Places for Physical Activity is Strongly Recommended to Increase Physical Activity. The Task Force on Community Preventive Services. Available at www.thecommunityguide.org/pa/default.htm
2. Ibid

Resources

Assessing Walking Conditions With Audits Links to many audit tools Walkinginfo.org

Canada Walks Walkability toolkits, ratings www.canadawalks.ca


Jane’s Walk Walkability, checklist and slide show http://janeswalk.net/walkability/