

PRC-HAN Environmental Audit Tool - SEGMENT Tool, v. 9-3-09

Date: _____ Day of Week: _____
Start Time: _____ : _____ AM/PM

Auditor: _____

City: _____

Spatial/neighborhood audit, or

Route audit?

of segments in route: _____

Neighborhood or Route Id #: _____

Street Name: _____

Segment ID: _____

Cross-streets:

(1) _____

(2) _____

GPS coordinates at start point:

1. How is audit information collected?

- (1a) Foot (walked)
- (1b) Auto (drove)
- (1c) Both (walked & drove)
- (1d) Bicycle (rode)
- (1e) Wheelchair, assisted walking

LAND USE/DESTINATIONS

2. Area type:

- (2a) Town/city center/business district
- (2b) Thoroughfare/strip development
- (2c) Neighborhood/subdivision
- (2d) Isolated rural

3. What is the predominant land use?

Check one as appropriate

- (3a) Residential buildings/yards
- (3b) Commercial/office buildings
- (3c) Industrial buildings
- (3d) School/school yards/campus
- (3e) Parking lots or garages
- (3f) Undeveloped land/vacant lot
- (3g) Designated green space/park
- (3h) Agricultural or pasture
- (3i) Body of water, e.g., lake, river
- (3j) Other non-residential, specify _____

4. What other land uses are evident?

Select all that apply.

- (4a) Residential buildings/yards
- (4b) Commercial/office buildings
- (4c) Industrial buildings
- (4d) School/school yards/campus
- (4e) Parking lots or garages
- (4f) Undeveloped land/vacant lot
- (4g) Designated green space/park
- (4h) Agricultural or pasture
- (4i) Body of water, e.g., lake, river
- (4j) Other, specify _____

5. What types of residential uses?

Select all that apply

- (5a) Single family houses
- (5b) Multi-unit homes (duplex, 4-plex)
- (5c) Apartments or condominiums
- (5d) Apartments above street retail
- (5e) Retirement/senior living facility
- (5f) Other (mobile home, dormitory)

6. What parking spaces or facilities are present?

Select all that apply

- (6a) None
- (6b) On-street, parallel or angled parking
- (6c) Small lot or garage (<30 spaces)
- (6d) Medium to large lot or garage

Insert representative photo of segment

7. Check any of the following types of non-residential destinations present

a. Food-related destinations

- (7a1) Fast food (national or local chain, primarily sells burgers, fried chicken, pizza, or “Americanized” Mexican, Chinese, etc.)
- (7a2) Non-fast food restaurant
- (7a3) Café or coffee shop
- (7a4) Supermarket Grocery
- (7a5) Small grocery/corner store/liquor
- (7a6) Liquor store (primarily sells alcohol)
- (7a7) Bar, tavern, or nightclub
- (7a7) Convenience store with food (may or may not also be a gas station)
- (7a9) Other food establishment or specialty shop (e.g., ice cream parlor, juice bar, donut shop)
- Produce stand, farmers market

b. Retail and service-related destinations

- (7b1) Pharmacy or drug store
- (7b2) Single or multi-vendor department or “big box” store (e.g., Home Depot, Best Buy, Sears, Super Walmart, Target)
- (7b3) Strip mall or shopping center
- (7b4) Auto (e.g., gas station with no convenience store, car repair, car wash)
- (7b5) Bank or credit union
- (7b6) Hotel or motel
- (7b7) Newspaper stand/news rack or lockboxes

- (7b7) Entertainment (e.g., movie theatre, arcade)
- (7b9) Other service (e.g., beautician, lawyer, accountant, realtor, laundry/dry cleaner, commercial mailing service)
- (7b10) Other retail (e.g., books, clothing, hardware, video rental)

c. Public, community destinations

- (7c1) Health or social services (e.g., hospital, health department, community action agency)
- (7c2) Public library
- (7c3) Public post office
- (7c4) Police or fire department
- (7c5) School, college or university
- (7c6) Utility company
- (7c7) Transportation services (e.g., airport, train station, bus station)
- (7c7) Art gallery or museum
- (7c9) Senior center
- (7c10) Other community center (non-recreational)
- (7c11) Place of worship (e.g., church, synagogue, convent, mosque)
- (7c12) Other public (e.g., cemetery, prison, media center)

d. Other non-residential destinations

- (7d1) Office building
- (7d2) Warehouse, factory or industrial building
- (7d3) Other (specify): _____ (7d4)

e. Recreational facilities or destinations

- (7e1) Private indoor fitness facility
- (7e2) Community recreation center
- (7e3) Community garden
- (7e4) Park
- (7e5) Playground at park or school
- (7e6) Outdoor pool
- (7e7) Golf course
- (7e7) Sports/playing field or court (e.g., baseball or tennis at park or school)
- (7e9) Sports track
- (7e11) Body of water, e.g., lake, ocean
- (7e11) Other recreational facility (e.g., skating rink, miniature golf)

f. Other

- (7f1) Empty store front for sale/lease
- (7f2) Abandoned building
- (7f3) Unmaintained lot or field
- (7f4) Maintained green space (not a park or sports field, not a private yard; does include pastures and agricultural uses of space)
- (7f5) Undeveloped natural areas (woods, forest, desert, dunes, plains)

WALKWAYS

Most of these questions require you to assess features for each side of the road. Locate the north and/or east side and the south or west side, using a compass or map.

8. What walkways are available?

Sidewalk (a)	<input type="checkbox"/> None (1)	<input type="checkbox"/> N/E (2)	<input type="checkbox"/> S/W (3)
Trail or goat path (b)	<input type="checkbox"/> None (1)	<input type="checkbox"/> N/E (2)	<input type="checkbox"/> S/W (3)
Bike Lane (c)	<input type="checkbox"/> None (1)	<input type="checkbox"/> N/E (2)	<input type="checkbox"/> S/W (3)
Parking Lane (d)	<input type="checkbox"/> None (1)	<input type="checkbox"/> N/E (2)	<input type="checkbox"/> S/W (3)
Shoulder (e)	<input type="checkbox"/> None (1)	<input type="checkbox"/> N/E (2)	<input type="checkbox"/> S/W (3)
In street or roadway (f)	<input type="checkbox"/> None (1)	<input type="checkbox"/> N/E (2)	<input type="checkbox"/> S/W (3)

Questions 9 through 21 relate to features of walkways.

9. What is the width of the walkway?

North/East (9a)	South/West (9b)
<input type="checkbox"/> (1) < 4 feet	<input type="checkbox"/> (1) < 4 feet
<input type="checkbox"/> (2) ≥ 4 feet	<input type="checkbox"/> (2) ≥ 4 feet
<input type="checkbox"/> (3) ≥ 10 feet	<input type="checkbox"/> (3) ≥ 10 feet
<input type="checkbox"/> (4) Mixture	<input type="checkbox"/> (4) Mixture
<input type="checkbox"/> (5) Roadway	<input type="checkbox"/> (5) Roadway

10. What is the walking surface?

Please check all that apply

North/East (10a)	South/West (10b)
<input type="checkbox"/> (10a1) Dirt	<input type="checkbox"/> (10b1) Dirt
<input type="checkbox"/> (10a2) Gravel	<input type="checkbox"/> (10b2) Gravel
<input type="checkbox"/> (10a3) Asphalt	<input type="checkbox"/> (10b3) Asphalt
<input type="checkbox"/> (10a4) Concrete	<input type="checkbox"/> (10b4) Concrete
<input type="checkbox"/> (10a5) Stone	<input type="checkbox"/> (10b5) Stone
<input type="checkbox"/> (10a6) Grass	<input type="checkbox"/> (10b6) Grass
<input type="checkbox"/> Other	<input type="checkbox"/> Other

11. Walkway continuous within segment?

N/E (11a)	<input type="checkbox"/> Yes (1)	<input type="checkbox"/> No (2)
S/W (11b)	<input type="checkbox"/> Yes (1)	<input type="checkbox"/> No (2)

12. Walkway continuous between the segments at one or both ends?

N/E (12a)	<input type="checkbox"/> Both (1)	<input type="checkbox"/> One (2)	<input type="checkbox"/> Neither (3)
S/W (12b)	<input type="checkbox"/> Both (1)	<input type="checkbox"/> One (2)	<input type="checkbox"/> Neither (3)

13. Curb ramps, curb cuts, or mountable curbs connect at both ends of segment?

N/E (13a)	<input type="checkbox"/> Yes (1)	<input type="checkbox"/> No (2)
S/W (13b)	<input type="checkbox"/> Yes (1)	<input type="checkbox"/> No (2)

14. Poorly-maintained sections of the walkway constitute trip hazards?

(e.g., heaves, misalignment, cracks, weeds)

N/E (14a)	<input type="checkbox"/> None (1)	<input type="checkbox"/> A few (2)	<input type="checkbox"/> A lot (3)
S/W (14b)	<input type="checkbox"/> None (1)	<input type="checkbox"/> A few (2)	<input type="checkbox"/> A lot (3)

If no “poor maintenance” → skip to Q16.

15. Rate the extent of poor maintenance of the worst section of the walkway.

N/E (15a)	<input type="checkbox"/> Minor (1)	<input type="checkbox"/> Moderate (2)	<input type="checkbox"/> Major (3)
S/W (15b)	<input type="checkbox"/> Minor (1)	<input type="checkbox"/> Moderate (2)	<input type="checkbox"/> Major (3)

16. How steep is the walkway at the steepest point in the segment?

Rate the slope of the steepest part of the sidewalk in the segment by considering its impact on walking

N/E (16a)	<input type="checkbox"/> Level (1)	<input type="checkbox"/> Moderate (2)	<input type="checkbox"/> Steep (3)
S/W (16b)	<input type="checkbox"/> Level (1)	<input type="checkbox"/> Moderate (2)	<input type="checkbox"/> Steep (3)

17. Does the walkway have a cross-slope that affects walkers?

A cross-slope is a sideways slope, like a driveway that slopes through the sidewalk. Only evaluate cross-slope that is in the path of the walkway.

N/E (17a)	<input type="checkbox"/> Level (1)	<input type="checkbox"/> Sloped (2)	<input type="checkbox"/> Steep (3)
S/W (17b)	<input type="checkbox"/> Level (1)	<input type="checkbox"/> Sloped (2)	<input type="checkbox"/> Steep (3)

18. Permanent obstructions in walkway?

(e.g., telephone poles, trees) Only include obstructions if they narrow the walkway to less than four feet. Do not count items in the buffer zone between sidewalk and curb.

N/E (18a)	<input type="checkbox"/> None (1)	<input type="checkbox"/> Some (2)	<input type="checkbox"/> Many (3)
S/W (18b)	<input type="checkbox"/> None (1)	<input type="checkbox"/> Some (2)	<input type="checkbox"/> Many (3)

19. Temporary obstructions in walkway?

(e.g., sandwich board signs, private property overgrowth, parked cars, clippings, dumpsters)

N/E (19a)	<input type="checkbox"/> None (1)	<input type="checkbox"/> Some (2)	<input type="checkbox"/> Many (3)
S/W (19b)	<input type="checkbox"/> None (1)	<input type="checkbox"/> Some (2)	<input type="checkbox"/> Many (3)

20. Walkway slipping hazard?

(e.g., slick surface, loose gravel, wet leaves, etc.)

N/E (20a)	<input type="checkbox"/> None (1)	<input type="checkbox"/> Some (2)	<input type="checkbox"/> Severe (3)
S/W (20b)	<input type="checkbox"/> None (1)	<input type="checkbox"/> Some (2)	<input type="checkbox"/> Severe (3)

21. Is there a buffer present?

(separation between the walkway and road; does not apply to roadway walking)

N/E (21a)	<input type="checkbox"/> Yes (1)	<input type="checkbox"/> No (2)	<input type="checkbox"/> NA (3)
S/W (21b)	<input type="checkbox"/> Yes (1)	<input type="checkbox"/> No (2)	<input type="checkbox"/> NA (3)

22. Are pedestrians likely to be visible to motorists?

(e.g., telephone poles, trees, blind curves)

N/E (22a)	<input type="checkbox"/> Yes (1)	<input type="checkbox"/> No (2)
S/W (22b)	<input type="checkbox"/> Yes (1)	<input type="checkbox"/> No (2)

23. Are there areas where a railing is needed for safety?

<input type="checkbox"/> Not needed (1)	<input type="checkbox"/> Present (2)	<input type="checkbox"/> Missing (3)
--	---	---

TRAIL/GOATPATH ONLY (24-25)

If the trail/path is on one side of the street only, then only enter data for that side

24. Where is the trail or goatpath? Along:

N/E (24a)	<input type="checkbox"/> Road (1)	<input type="checkbox"/> Sidewalk (2)	<input type="checkbox"/> Other (3)
S/W (24b)	<input type="checkbox"/> Road (1)	<input type="checkbox"/> Sidewalk (2)	<input type="checkbox"/> Other (3)



Illustration of goat path (unplanned pathway tread by walkers)

25. Is the trail marked for multi-use? (see example below)

N/E (25a)	<input type="checkbox"/> Yes (1)	<input type="checkbox"/> No (2)
S/W (25b)	<input type="checkbox"/> Yes (1)	<input type="checkbox"/> No (2)



ROADWAY WALKING ONLY (26-28)

26. If there is a shoulder, how is it marked?

- (26a) Stripe (typically white or yellow)
- (26b) Different surface than roadway
- (26c) Different color than roadway

27. If walking in roadway, would a pedestrian need to step off if vehicles were approaching in both directions?

N/E (27a)	<input type="checkbox"/> Yes (1)	<input type="checkbox"/> No (2)
S/W (27a)	<input type="checkbox"/> Yes (1)	<input type="checkbox"/> No (2)

28. Is there consistently room to step off the roadway without stepping into a ditch or other hazard?

N/E (28a)	<input type="checkbox"/> Yes (1)	<input type="checkbox"/> No (2)
S/W (28b)	<input type="checkbox"/> Yes (1)	<input type="checkbox"/> No (2)



In-street walking; no sidewalks, trails or goatpaths

STREETSCAPE

Questions 29 through 38 require you to assess features for the entire segment. Combine observations for both sides of the street into a single evaluation.

29. Is there a public transit stop on this segment? *Check all that apply*

- (29a) None
- (29b) Bus stop
- (29c) Light Rail/Other Transit
- (29d) Senior transit/paratransit

If none → skip to Q43.

30. Is there a bench or covered shelter at the transit stop? *Check all that apply*

- (30a) None
- (30b) Bench
- (30c) Covered shelter

31. What type of road is present?

- (1) Divided highway ≥ 4 lanes
- (2) Undivided ≥ 4 lanes
- (3) 3 lanes (or two plus center turn lane)
- (4) 2 marked lanes
- (5) No marked lanes
- (6) Unpaved roadway

32. Rate the observed traffic volume.

- (1) None
- (2) Light
- (3) Moderate
- (4) Heavy

33. Is there a posted speed limit?

- (1) Yes Enter:
- (2) Yes, special zone (e.g. school zone) Enter:
- (3) None posted

34. What other features are present?

Check all that apply

- (34a) Cul-de-sac or dead end
- (34b) Traffic calming devices (e.g., speed bumps, speed humps, chicanes or other devices to reduce volume or speed)
- (34c) Roll-over curbs
- (34d) Directional signs for pedestrians
- (34e) Crosswalk, “Yield to Pedestrian”, or “Share-the-Road” type signage
- (34f) Mid-block crossings
- (34g) Bridges
- (34h) Facilities sited where people likely to cross

35. Are street lights installed?

- (1) None
- (2) Some (e.g., overhead street lights on utility poles with wide spacing)
- (3) Ample (e.g., regularly spaced pedestrian lampposts)

36. How many driveways or alleys are there on both sides?

- (1) None
- (2) 1 - 2
- (3) 3 – 5
- (4) 6 or more

37. If driveway or alley present, estimate the traffic volume entering or leaving all driveways or alleys on this block?

- (1) Light (e.g., residential alleys)
- (2) Moderate
- (3) Heavy (e.g., supermarket)
- (4) Sporadic (e.g., school-related)

38. Presence of Amenities *Check all that apply*

- (38a) Trees that offer shade
- (38b) Trash bins
- (38c) Benches or other places to sit
- (38d) Bicycle racks
- (38e) Working drinking fountain
- (38f) Working public telephones
- (38g) Available public restrooms (*do not include those inside private businesses*)

OTHER

39. Do you observe aesthetically pleasant features? (*e.g., fountains, vegetation, gardens*)

- Yes No
- (1) (2)

40. Are at least 75% of the buildings well maintained?

- Yes No No buildings
- (1) (2) (3)

41. Which of the following items are present? *Check all that apply*

- (41a) None
- (41b) Graffiti or tagging (not murals)
- (41c) Abandoned cars
- (41d) Buildings with broken or boarded windows
- (41e) Drug paraphernalia
- (41f) Broken glass; beer/liquor bottles/cans
- (41g) Litter in yards
- (41h) Litter in street/sidewalk

42. Rate the extent of physical disorder *(e.g., litter, graffiti, broken glass, abandoned cars)*

- (1) None
- (2) A little concentrated in 1-2 areas
- (3) A lot concentrated in 1-2 areas
- (4) A little that is widespread
- (5) A lot that is widespread

43. Rate the extent of social disorder *(e.g., stray dogs, gangs, prostitution, hostile behaviors, drug dealing, panhandlers)*

- (1) None
- (2) A little
- (3) Some
- (4) A lot

44. What opportunities exist for people to be seen when walking if they are in need? *Check all that apply*

- (44a) None
- (44b) Windows facing street
- (44c) Porches or places for sitting in front of homes or businesses
- (44d) Other _____ (4)

45. Which of the following applies to the people outdoors visible in the segment? *Check all that apply*

	People Present				
	None (1)	Children (2)	Teens (3)	Adults (4)	Older Adults (5)
a. Sitting/standing <i>(waiting for bus, sitting on patio)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Walking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Bicycling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Jogging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Competing use of walkways: <i>(Skateboarding, bicycling, etc.)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Other active behaviors <i>(gardening, playing, sports)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Talking or greeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Record time for completion of data collection for this segment:

Stop time: _____ : _____ AM/PM

46. What else did you observe? *Check all that apply*

- (46a) Air pollutants *(e.g., diesel fumes, factory emissions, hog lagoons)*
- (46b2) Heavy vehicle traffic
- (46c) High speed traffic *(speeds of 40 MPH or greater)*
- (46d) Loud ambient sounds *(e.g., trains, construction, factories, aircraft)*
- (46e) Highway nearby
- (46f) Railroad tracks
- (46h) Unfavorable weather *(e.g., rain)*
- (46i) Aggressive drivers

47. Overall rating of risk for walkers with limitations *(e.g., vision or mobility problems)*

Low (1) Moderate (2) Severe (3)

48. Notes/Comments

Summary Details

49. To what extent does the segment present barriers or hazards for walkers as follows?

	People...	Barriers or hazards			Rate the severity of the risk(s), if any			Comments
<i>a</i>	using assistive devices, e.g., walkers, wheelchairs, scooters	<input type="checkbox"/> None <i>(1)</i>	<input type="checkbox"/> Some <i>(2)</i>	<input type="checkbox"/> Many <i>(3)</i>	<input type="checkbox"/> Low <i>(1)</i>	<input type="checkbox"/> Moderate <i>(2)</i>	<input type="checkbox"/> High <i>(3)</i>	
<i>b</i>	who have problems with balance or ambulation	<input type="checkbox"/> None <i>(1)</i>	<input type="checkbox"/> Some <i>(2)</i>	<input type="checkbox"/> Many <i>(3)</i>	<input type="checkbox"/> Low <i>(1)</i>	<input type="checkbox"/> Moderate <i>(2)</i>	<input type="checkbox"/> High <i>(3)</i>	
<i>c</i>	with visual impairments	<input type="checkbox"/> None <i>(1)</i>	<input type="checkbox"/> Some <i>(2)</i>	<input type="checkbox"/> Many <i>(3)</i>	<input type="checkbox"/> Low <i>(1)</i>	<input type="checkbox"/> Moderate <i>(2)</i>	<input type="checkbox"/> High <i>(3)</i>	
<i>d</i>	with hearing impairments	<input type="checkbox"/> None <i>(1)</i>	<input type="checkbox"/> Some <i>(2)</i>	<input type="checkbox"/> Many <i>(3)</i>	<input type="checkbox"/> Low <i>(1)</i>	<input type="checkbox"/> Moderate <i>(2)</i>	<input type="checkbox"/> High <i>(3)</i>	
<i>e</i>	with cognitive impairments	<input type="checkbox"/> None <i>(1)</i>	<input type="checkbox"/> Some <i>(2)</i>	<input type="checkbox"/> Many <i>(3)</i>	<input type="checkbox"/> Low <i>(1)</i>	<input type="checkbox"/> Moderate <i>(2)</i>	<input type="checkbox"/> High <i>(3)</i>	
<i>f</i>	who tire easily & need to rest	<input type="checkbox"/> None <i>(1)</i>	<input type="checkbox"/> Some <i>(2)</i>	<input type="checkbox"/> Many <i>(3)</i>	<input type="checkbox"/> Low <i>(1)</i>	<input type="checkbox"/> Moderate <i>(2)</i>	<input type="checkbox"/> High <i>(3)</i>	

Add representative photos of problem areas below (with GPS coordinates if possible). If goal is to change the environment, complete a detailed photo audit of all problems, using photo audit module.