

San Diego State University, Children's
Hospital Seattle, Urban Design 4 Health

Microscale Audit of Pedestrian Streetscapes (MAPS)

Observational Audit Tool

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Date _____ Auditor ID# _____

Route # _____

Start Time: _____

End Time: _____

*Does this participant live in a Formal Community (i.e., planned housing development, Home Owners Association) or apartment/condo/townhouse complex?
 Yes No

If yes, take a picture and explain _____

Route:

Section: Land use/destinations

*Count both sides of the street

1. How is audit information collected?

- Foot (walked route)
- Auto (drove route)
- Both (walked & drove route)

2. What parking facilities are present?

Check all that apply

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

3. What types of residential uses?

Check all that apply

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

4. How many of the non-residential buildings are adjacent to the pedestrian walkway or sidewalk and/or street?

(Adjacent to sidewalk and street means that there is not a yard, parking lot or other space blocking entrances between the sidewalk and the building)

Count segment side of the street

- 0%
- 1-33% 34-66%
- 67-99% 100%
- N/A (all residential buildings)
- N/A (no pedestrian walkway/sidewalk)

5. How many of the non-residential buildings have parking lots or drives between the pedestrian walkway or sidewalk along the street and their entrances?

Count segment side of the street

- 0%
- 1-33% 34-66%
- 67-99% 100%
- N/A (all residential buildings)
- N/A (no pedestrian walkway/sidewalk)

6. How many of the following types of non-residential destinations are present? (Do not double count.)

Food-related land uses

a. Fast food restaurant (national or local chain, primarily sells burgers, fried chicken, pizza, or "Americanized" Mexican, Chinese, etc.)

- 0 1 2+

b. Sit-down restaurant

- 0 1 2+

c. Grocery/supermarket

- 0 1 2

d. Convenience store (may also be a gas station)

- 0 1 2+

e. Café or coffee shop

- 0 1 2+

f. Liquor/alcohol store (primarily sells alcohol, wine bar, strip club)

- 0 1 2+

g. Big box store (e.g., Home Depot, Best Buy, Sears, Super Walmart, Target)

- 0 1 2+

h. Specialty Food Store (e.g., ice cream, candy, bakery)

- 0 1 2+

Retail and service oriented land uses

i. Pharmacy or drug store

- 0 1 2+

j. Bank or credit union

- 0 1 2+

k. Health-related professional (e.g., chiropractor, Dr. office)

- 0 1 2+

l. Entertainment (e.g., movie theatre, arcade)

- 0 1 2+

m. Other service (e.g., salon, lawyer, accountant, realtor, laundry/dry cleaner, commercial mailing service)

- 0 1 2+

n. Other retail (e.g., books, clothing, hardware, video rental)

- 0 1 2+

Government or community land use

o. Health or social services (e.g., hospital, health department, community action agency, police/fire stations, city hall, etc.)

- 0 1 2+

p. Library/Museums

- 0 1 2+

q. Post office

- 0 1 2+

r. Senior center

- 0 1 2+

s. Place of worship (e.g., church, synagogue, convent, mosque, etc.)

- 0 1 2+

t. School

- 0 1 2+

Other land use

u. Warehouse/factory/industrial

- 0 1 2+

v. Abandoned building

- 0 1 2+

w. Unmaintained lot/field

- 0 1 2+

x. Casino

- 0 1 2+

Recreational land use

y. Community garden

- 0 1 2+

z. Private indoor (e.g., commercial gyms, dance clubs)

- 0 1 2+

aa. Public indoor (community centers)

- 0 1 2+

ab. Private outdoor (e.g., private golf course, commercial outdoor recreation)

- 0 1 2+

ac. Public outdoor pay (e.g., pool)

- 0 1 2+

ad. Public park

- 0 1 2+

7. Shopping Centers

Check all that apply

- Shopping Mall
- Strip Mall
- Shopping Arcade
- None of the above

Route

Section: Streetscape

**Count both sides of the street*

1. Number of public transit stops

If NO stops, skip to 3.

(a) Bus stops _____

(b) Senior transit/paratransit _____

2. What is available at each transit stop?

Only count benches that users could be easily identified by bus drivers as waiting to ride the bus.

Route # _____

Bench Covered Shelter Timetable

Route # _____

Bench Covered Shelter Timetable

Route # _____

Bench Covered Shelter Timetable

Route # _____

Bench Covered Shelter Timetable

3. Is there a posted speed limit along the route?

If multiple, select the highest

Regular

Yes _____ mph No

Special zone (*school, construction*)

Yes _____ mph No

4. What other street characteristics are present?

(specify # of each type)

Check all that apply

Traffic calming (signs, circles, speed tables, speed humps, curb extension) _____

Roll-over curbs _____ (if whole segment = 1)

Drainage ditches _____ (count one side of street)

Instructional signs for pedestrian's _____

Crosswalk signage or other pedestrian signage (for drivers) _____

None of the Above

5. Are street lights installed?

None

Some (*e.g., overhead street lights on utility poles with wide spacing*)

Ample (*e.g., regularly spaced pedestrian lampposts*)

6. How many driveways or alleys are there? (*Count only alleys that are wide enough to be used by cars or other vehicles that could impede pedestrian traffic.*)

None 1-2 3-5 6+

7. Presence of street amenities

Check all that apply

Building overhangs that provide shelter from inclement weather in public space (i.e. sidewalks)

Trash bins

Benches or other places to sit

Bicycle racks

Working drinking fountain

Working public telephones

Kiosks or information booths

None of the Above

8. Presence of any mid-segment street crossing, where an individual could safely cross (marked by sign or crosswalk)

Yes No

Section: Aesthetics and Social

**Count both sides of the street*

1. Do you observe pleasant hardscape features, such as fountains, sculptures, or art (public or private)?

Yes No

2. Do you observe softscape features such as gardens or landscaping (*e.g., Public: bodies of water, designated viewpoints; Private: retaining walls, bark, ponds*)

Yes No

3. Are there observable historic or cultural features along the route (*not further than one street segment away from route and can be seen from the route*)?

Yes No

4. Are the buildings well maintained?

0% 1-49% 50-99% 100%

5. Is landscaping well maintained?

0% 1-49% 50-99% 100%

6. Which of the following physical disorders are present?

Check all that apply

Graffiti/tagging (not murals)

Abandoned cars

Buildings with broken/boarded windows

Drug paraphernalia

Broken glass

Beer/liquor bottles/cans

Litter in yards

Noticeable/excessive litter in street/sidewalk

Neighborhood watch signs

Signage for commercial destinations or parks

None of these

7. Rate the extent of physical disorder (*question 6*) (*e.g., litter, graffiti, broken glass, abandoned cars*)

None

A little (physical/social disorder is present)

Some (disorder is very noticeable)

A lot (disorder is overwhelming)

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

None

A little (physical/social disorder is present)

Some (disorder is very noticeable)

A lot (disorder is overwhelming)

9. Other obstructions to walking

Check all that apply

Railroad tracks (must obstruct walkway)

Highway nearby (within one segment from walkway)

Other: _____

None

10. Presence of anyone walking?

Yes No

Segment: Walkway/Sidewalks

Segment ID# _____

Auditor ID # _____

Type: Residential / Commercial

Street _____ Side N S E W

Starting Cross-street: _____

Ending Cross-street: _____

1. Is a sidewalk present?

- Yes No

2. What is the width of the majority of the sidewalk?

- < 3 ft. 3-5 ft. > 5 ft. No sidewalk

3. (a) Is there a buffer present?

- Yes No

(b) How wide is the majority of the buffer?

- < 3 ft. 3-5 ft. > 5 ft. N/A

4. Is the sidewalk continuous within the segment?

- Yes No No sidewalk

5. Are there poorly maintained sections of the sidewalk that constitute trip hazards? (e.g., *heaves, misalignment, cracks, overgrowth*)

a. Minor - moderate

- None One A few A lot No sidewalk

b. Major

- None One A few A lot No sidewalk

6. (a) How steep is the sidewalk at the steepest point in the segment? (*Excluding heaves*)

- _____ degrees No sidewalk

(b) How much of the segment is at or near this level of steepness?

- Little (1-25%) Some (26-75%)
 Most or All (76-100%) No sidewalk

(c) If answer to 6(b) is "Little," provide a steepness measure that represents the majority of the segment

- _____ degrees No sidewalk N/A

7. What is the steepest unavoidable cross-slope that affects walkers? _____ degrees No sidewalk

8. Are there permanent obstructions in the sidewalk? (e.g., *telephone poles, trees, café tables, shrubs, basketball hoops*)

- None Some Many No sidewalk

9. Are the temporary obstructions in the sidewalk? (e.g., *parked cars, sandwich boards, garbage cans*)

- None Some Many No sidewalk

10. How many traffic lanes are present (include all lanes that traffic can use; choose most predominant)?

- 1 2 3 4 5 6 7+

11. Is the street predominantly one-way or two-way?

- 1-way 2-way

12. If no sidewalk, is there any other place to walk that is safe from traffic?

- Yes
 Unpaved pathway (goat path)
 Street shoulder
 Buffer
 No
 N/A Sidewalk present

13. If no sidewalk, what is the width of the place on which one could safely walk? (*Not in possible path of traffic*)

- None < 4 ft. ≥ 4 ft. N/A

14. Is there a marked bicycle lane marked with a line or a raised curb?

- Yes No

15. Are there any signs indicating bicycle use (share the road, etc.)?

- Yes No

16. Are there any signs or structures discouraging skateboard usage?

- Yes No

17. Is there an informal path (shortcut), not on a cul-de-sac, which connects to something else?

- Yes No

18a. Is this a dead-end street?

- Yes No

18b. Is there a paved or informal path at the end of the cul-de-sac or dead end street that connects to something else?

- Yes No N/A

19. Estimate the proportion of street segment that has ground floor or street-level windows within 40 feet of sidewalk/walkway (or street if no sidewalk/walkway)

- 1-25% 26-50% No windows
 51-75% 76-100%

20. How many different predominant building façade colors exist on the street segment? (*Count both sides of the street*)

- 1 2-3 4-6 >6 N/A

21. How many different building accent colors exist on the street segment? (*Count both sides of the street*)

- 1 2-3 4-6 >6 N/A

22. How many different predominant building materials (e.g., brick, concrete, steel, wood) exist along the street segment? (*Count both sides of the street*)

- 1 2-3 4-6 >6 N/A

23. How many trees exist within 5 feet of either side of the sidewalk/pathway (can be in buffer or setback; also count trees that are more than 5 feet away if they provide shade for the sidewalk/pathway)?

- 0 or 1 2-5 6-10 11-20 21+ N/A

24. How are the trees generally spaced?

- Evenly spaced Irregularly spaced N/A

25. What percentage of the length of the sidewalk/walkway is covered by trees, awnings or other overhead coverage?

- 1-25% 25-50% No coverage
 51-75% 76-100% N/A

26. What is the smallest building setback from the sidewalk?

- No building <10 feet 10-20 feet
 21-50 feet 51-100 feet >100 feet

27. What is the largest building setback from the sidewalk/walkway?

- No building <10 feet 10-20 feet
 21-50 feet 51-100 feet >100 feet

28. What is the average height of buildings? (*Count both sides of the street*)

- No building 1-2 stories 3-5 stories
 6-10 stories >10 stories

Crossings

Crossing ID# _____

Auditor ID# _____

Intersection of _____ &

Crossing from **N S E W** to **N S E W**

1. Intersection control

Check all that apply

- Yield signs
- Stop signs
- Traffic signal
- Traffic circle
- N/A – Unanticipated mid-segment crossing
- None of the Above

2. Number of legs at intersection

Check one

- T-intersection
- 4-way intersection
- > 4-ways
- N/A

3. Signalization

Check all that apply

- Green arrows for dedicated vehicle turn
- Pedestrian walk signals
- Push buttons
- Countdown signal
- Audible walk signal
- None of the Above

4. Crosswalk timing: _____ seconds

(Length includes white "walk" time + flashing red "don't walk" time)

- No crosswalk
- No signal

5. (a) Pre-crossing curb *(Even if there is no marked crosswalk, there is still a crossing)*

Check one

- Ramp lines up with crossing
- Ramp does not line up with crossing
- No ramp

(b) Post-crossing curb

Check one

- Ramp lines up with crossing
- Ramp does not line up with crossing
- No ramp

6. Gutters present in crossing

Within possible path of crossing pedestrians

- Yes
- No

7. Other characteristics of crossing

Check all that apply

- Steep slope or steep cross-slope at intersection
- Temporary obstructions
- Crossing aids (e.g., flags)
- None of the Above

8. Crosswalk treatment

Check all that apply

- Marked crosswalk
- High-visibility striping
- Stop lines on road or additional crosswalk warnings
- Raised crosswalk
- Different material than road
- None of the Above

9. Bike lane crosses the crossing?

- Yes
- No

10. Distance of crossing leg, including all potential parking and turn lanes

_____ lanes wide

11. Features

Check all that apply

- Specifically identified lanes **turning into crossing**
 - Right turn
 - Left turn
- Protected refuge islands
- One-way streets **through crossing**
- Curb extension
- None of the Above

12. Miscellaneous problems

Check all that apply

- Lack of lampposts or overhead street lamps
- Poor condition of crossing surface
- Poor visibility at corners
- Faded or worn crosswalk markings
- Unanticipated mid-segment crossing
- Reason: _____
- Other: _____
- None of the Above

Cul-de-sac

Culdesac ID# _____

Auditor ID# _____

Street name _____

In order for the cul-de-sac or street dead-end to be rated, it must be within 400 feet of the participants' home and will usually (but not always) be the dead-end part of the participants' street. The participant's home is considered to be at the mid-point along the sidewalk or pathway in front of the home (house or apartment building). The cul-de-sac opening is the point at which the street widens or bulbs out. The street dead-end opening is 50 feet from the end of the street or to the first driveway, whichever is furthest.

1. How close is the cul-de-sac or dead-end to the participants' home?

Check one

- On the cul-de-sac
- Adjacent to the cul-de-sac (one or two homes/houses removed from cul-de-sac opening)
- Non-adjacent, but less than 200 feet away
- More than 200 feet away

2. How big is the cul-de-sac or dead-end at its largest diameter?

Check one

- ≤ 50 feet
- 51 – 100 feet
- 101 – 200 feet
- > 200 feet

3. What is the incline/grade of the:

Cul-de-sac or dead-end at its steepest point:
_____ degrees

Street at the opening to the cul-de-sac or dead-end:
_____ degrees

4. What percentage of the cul-de-sac or dead-end is paved?

Check one

- <25%
- 25-50%
- 51-75%
- > 75%

5. For the paved part of the cul-de-sac or dead-end, how smooth is the pavement?

Check one

- Not smooth at all – a lot of bumps or cracks
- Somewhat smooth – a few major bumps or cracks
- Mostly smooth – minor bumps or cracks
- Very smooth – few or no bumps or cracks

6. What amenities exist at the opening to or along the cul-de-sac or dead-end portion of the street?

Check all that apply

- Basketball hoops _____ number
- Skateboard features (e.g., ramps) _____ number
- Streetlights _____ number
- Pedestrian or other safety signage (e.g., children at play)
- Other; describe _____
- None of the Above

7. Can most of the cul-de-sac or dead-end area be seen from the participant's home (using the most optimal viewpoint from the home, including higher story windows)?

- Yes No

8. Can most of the cul-de-sac or dead-end area be seen from other homes (using the most optimal viewpoint from the home, including higher story windows)?

- Yes No

9. _____ driveways enter into the cul-de-sac or dead-end area?

10. Is there an island in the cul-de-sac or dead-end area?

- Yes No

11. Is parking allowed (not prohibited) in the area?

- Yes No

12 (a). Is there access through the end of the cul-de-sac or dead-end street to another public street or area?

- Yes No **If no, done with section.**

12 (b). If yes, what type of access?

Check all that apply

- Formal: A planned formal path with a paved, marked or deliberate surface.
- Informal: An informal path that is unpaved, not marked and could be considered a shortcut.
- Informal, no path

12 (c). If yes, what is on the other side?

Check all that apply

- Another street
- A recreation or play area (can be part of a school)
- Open space
- Commercial or retail area
- Other _____