



# Microscale Audit of Pedestrian Streetscapes (MAPS), Abbreviated Version

## Training Manual & Picture Guide

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# I. Field Procedures

## a. Defining Participant Route

A **participant route** is approximately .25 mile route from the participant's home towards the nearest pre-determined destination. It begins on the neighborhood street nearest to a participant's home. In an apartment or condo complex, the rater will begin at the entrance to the complex on the main street. It is a route-level survey conducted for the entire route. The rater conducts the survey of the neighborhood environment by rating the neighborhood between the participant's home and the pre-designated ending destination. He/ she is not required to enter the grounds to locate the participant apartment/ condo unless necessary to identify the main entrance for the grounds. He/she also needs to complete a segment survey for each segment within the route and a crossing survey for each crossing within the route. The number of segments and crossings per route will vary.

A participant route will almost always start with a segment at the participant's house. When there is no sidewalk on the participant's side of the street, but there is one on the other side of the street, the route will start with a crossing. It is recommended that the rater complete the segments, crossings, and cul-de-sacs sections of the tool on his/her way to the ending location and then on the way back to the participant's house conduct the survey for the route section of the tool. It is necessary to walk on the same side of the street as for the segment(s) because there's a chance you may see something on the way back that you didn't catch the first time.

### Street Segments

Each route is made up of one or more segments. A **segment** is a section of street or road between two crossings or if the name of a street changes a new segment should begin although a crossing has not been made.

### Crossings

A **crossing** occurs when the rater must go through an intersection, whether a pedestrian crossing exists or not. Crossings are located between two segments. However, a driveway along a segment cannot be considered as a crossing. Many streets may not have any crossings (e.g., long suburban road).

### Cul-de-sac

A **cul-de-sac** or street dead-end must be within 400 feet of the participants' home and will usually (but not always) be the dead-end part of the participants' street.

## b. Commercial Cluster Route

A **commercial cluster route** consists of the road or street in front of a pre-determined cluster of commercial locations. The street address for one location within the cluster will be communicated to the rater. . He/she will then travel to the designated location and begin the rating the nearest street or road (as long as it also serves as the main entryway into the commercial property).

- If there is no entrance, the rater will identify the street or road that contains the entrance.
- If there is more than one entrance, the rater will select the most prominent (main entrance).
- If this is not obvious, the rater will select the one that is nearest to the identified location.

For each cluster, a route survey will be completed for the identified street/road that contains the entrance. This route will consist of one segment and two crossings on either end of the segment which will be completed in a straight line.

## c. Shared Segments and Crossings

Segments and crossings may be shared across multiple participant routes (e.g., neighbors one block apart may share most of the route). To prevent multiple ratings of the same segment or crossing, raters can fill in the heading information on a blank tool (i.e. streets, type, & side). The rest of the page can be left blank and used as a place holder. This should only be done for exact matches, so raters will need to verify that they are rating segments on the same side of the street and crossings which cross in the same direction. The Route section will never be shared.

## d. Rules for Side of Street Selection

1. Begin data collection on the same side of the street as the participant's point of origin.
2. If you encounter a segment on the walking route with no sidewalk, cross to the opposite side of the street only if a sidewalk exists. If before you begin the segment you can see up ahead that the sidewalk on your side of the street is non-continuous and there is a sidewalk on the other side of the street, you will complete a crossing and start a segment on the other side of the street.
3. If permanent or temporary obstructions in the pathway exist that forces you off the walkway, cross to the other side of the street.
4. Do not cross to the opposite side of the street more than twice in a one quarter mile route.

## e. In the Field

### *Requirements:*

- Binder with protocol and procedures
- Prepared route maps with participant addresses and drawn routes
- Participant Route folders
- Extra copies of observation surveys
- GPS, Thomas Guide/area map, or directions
- Camera
- Comfortable clothes & shoes
- Water bottle and snacks
- Cell phone
- Sun/rain protection, hat, umbrella & basic first aid kit

## f. Personal Safety

- Check weather conditions prior to beginning audit and prepare accordingly.
- Conduct during daylight hours.
- If raters feel threatened in any way, they should leave the area immediately and/or call police.

## g. Expectations

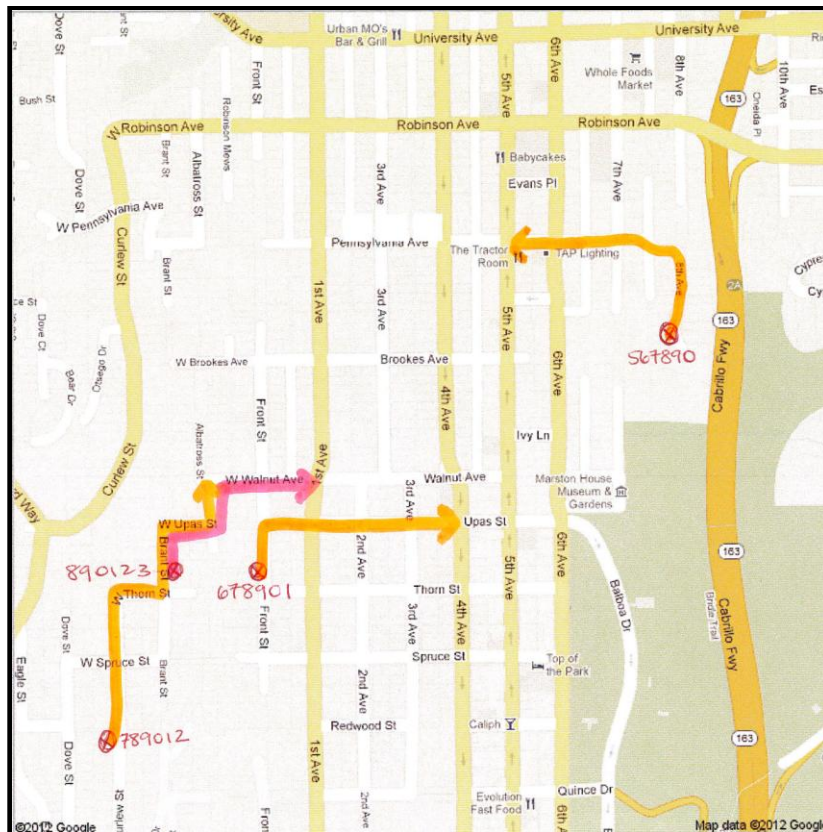
- Raters need to complete every route that they start, so they should pay attention to how much time is left before the end of their shift. If there isn't enough time to complete a participant route, don't start rating it.
- After completing, but before leaving a route, the rater should scroll through the tool again and be sure to fill in any blank fields before leaving the location.
- Rater should complete the tools in pen and make sure to write legibly.
- If a rater cannot find a place, gets lost, has questions on the end-point etc. they should call the office.
- Raters will also need to meet with the evaluator each shift to check in about the tools last completed. They should count on spending about 30 minutes debriefing.
- A weekly meeting is mandatory to discuss the week's issues and questions that have come up as a group. The meeting minutes from the previous week will be read/ discussed as a refresher and then each agenda item will be discussed. Post-meeting, the protocol will be updated, as necessary, and any decisions will be added to a comprehensive decisions document.
- Raters should turn in all tools and maps after each shift in the field whether they have been completed or not.

## h. Maps

The maps will come with a table that will already have the Route ID, starting address and ending address filled in. It is up to the rater to complete:

- The number of segments, crossings, and cul-de-sacs on each route.
- “Y” for yes or “N” for no under the shared column depending if there were shared segments, crossings, or cul-de-sacs on the route.

Route ID	Starting Address	Ending	Shared	Segs	Xings	CdS	Rte
567890	1780 8 <sup>th</sup> Ave	Pennsylvania Ave & 5 <sup>th</sup> Ave	N/A				
678901	2021 Front St	Upas St & 4 <sup>th</sup> Ave	N/A				
890123	2024 Brant St	W Walnut Ave & 1 <sup>st</sup> Ave					
789012	2312 Curlew St	Albatross St & W Walnut Ave					



## II. Survey protocol and picture guide

### MAPS Abbreviated Survey

#### **Level 1: Route**

When auditing the route portion of the microscale tool, count both sides of the street on the walking route.

- Exceptions: Streetscape
  - 1-2) Bus Stops: If a bus stop exists on both sides of the street, and the stops service the same exact routes, only count 1 bus stop.
  - 6) Driveways: Only count driveways that would be crossed by a pedestrian on the walking route.
- Items on the diagonal side of an intersection should not be counted in the route section.

There are 3 sections to the Route portion of the tool: Destinations & Land Use, Streetscape, and Aesthetics and Social. You do not need to complete these in an order; you will likely be tallying, making notes, and marking down items as you come across them.

#### ***a. Destinations and Land Use***

\*Be sure to rate both sides of the street for Destinations & Land Use Section\*

##### **1. Method of Data Collection**

How is audit information collected?

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

Raters should complete survey by foot whenever possible

##### **2. Residential Uses**

What types of residential uses? (*Check all that apply*)

- ☐ Single family houses
- ☐ Multi-unit homes (duplex, 4-plex, row house)
- ☐ Apartments or condominiums
- ☐ Apartments above street retail
- ☐ None



- a. **Single-family homes:** A structure designed to house only a single family.

**Single-family home**



- b. **Multi-unit homes:** Built for more than one family (duplexes, town homes, or row houses).

- i. **Row Houses:** One of a series of houses, often of similar or identical design, situated side by side and joined by common walls.

**Multi-unit home**

**Row Houses**



- ii. **Duplex:** Duplexes typically have different front doors for each unit and different main addresses.

**Duplex**





- c. **Apartments:** A room or suite of rooms designed as a residence and generally located in a building occupied by more than one household. Apartments typically have one main entrance, one main address with apartment numbers.

**Apartment**



**Condominium**



- d. **Apartments above street retail:** Apartments located above the street on top of commercial retail destinations.

### 3. Non-residential Uses

Land uses and elements should only be counted if they are along the route walked. ***Do not count land uses and elements beyond the route even if they can be seen from the route.***

Some establishments may serve 2 purposes (i.e., a convenience store and deli). In that case, select the predominant use of the establishment based on size (e.g., if there is a small café within a large market, indicate it is as a market). If they are separate businesses that just share a wall, they can be counted separately.

How many of the following types of non-residential destinations are present?

#### Reminder:

- Only count those land uses with entrances along your route.
- Do not double count the non-residential destinations

#### a. 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+



Anything with "liquor" or "alcohol" in the name should be counted

**g. Bank or credit union**

☐ 0   ☐ 1   ☐ 2+



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

☐ 0   ☐ 1   ☐ 2+



**i. Entertainment** (e.g., movie theatre, arcade)

☐ 0   ☐ 1   ☐ 2+



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

☐ 0   ☐ 1   ☐ 2+



Other examples

- Child care center out of someone's home
- UPS store
- Tanning salon
- Traffic School

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

☐ 0   ☐ 1   ☐ 2+



**l. Place of worship** (e.g., church, synagogue, convent, mosque, cemetery, etc.)

☐ 0   ☐ 1   ☐ 2+



**m. School**

☐ 0   ☐ 1   ☐ 2+



**COUNT**

- Any place that has school in the name (e.g. preschool)
- Church schools
- Learning Centers

**n. Private indoor recreation** (e.g., commercial gyms, dance clubs)

☐ 0   ☐ 1   ☐ 2+



**o. Public park** (Dog park, Equestrian trails)

☐ 0   ☐ 1   ☐ 2+



## **B. Streetscape**

**\*Be sure to rate both sides of the street for Streetscape Section\***

### **Public Transit Stops**

**1.** Number of public transit stops (*If NO stops, skip to 3*)

(a) Bus stops \_\_\_\_\_

(b) Senior transit/paratransit \_\_\_\_\_

Write in the number of stops on the line

**2.** What is available at the first 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 #: If the stop does not have its own individual number, list the routes that the stop serves.



- If there are 2 bus stops on either side of the street serving the same route, count it as 1 bus stop
- Combine the 2 stops in your ratings. For example, if one of them has a timetable and other has a shelter, mark both.

**Bus Stop**



**Senior Transit/Para transit**



**Bench**



**Covered Shelter**



**Timetable**



### 3. Street Characteristics

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 or both sides = 1)
- ☐ None of the above

#### **Traffic Calming:**

Infrastructure with the purpose of reducing vehicle speeds and improving safety for drivers and pedestrians (e.g., traffic calming signs, traffic circles, speed tables, speed humps, curb extensions). Designed measures compel drivers to slow down, or act to exclude or divert traffic altogether.

- Count each traffic calming indication separately  
Example: A speed bump accompanied by a sign indicating the bump would count as 2
- Dip in the road accompanied by a sign to alert drivers should be counted
- Dip in the road without a sign should not be counted
- A guardrail *does not* count as traffic calming



### Traffic Calming Sign



### Speed Hump + sign = 2 for traffic calming



### Speed table



### Traffic circle



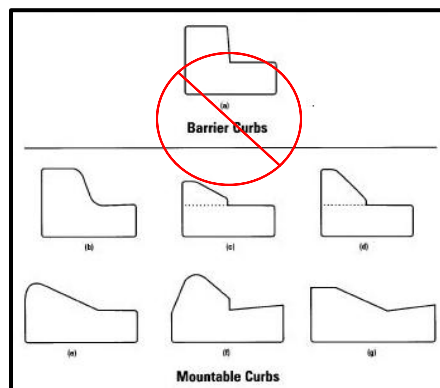
### Curb extension



#### a. Roll over Curbs:

Allow cars to drive up onto the sidewalk. It is not a 90 degree angled curb

- When counting roll-over curbs, count one for the whole segment
- Only count one side of the segment, if roll over curbs are on both sides
- If the majority of the segment has a roll over curb, count as 1



#### **4. Street lights**

Are street lights installed?

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

Select highest concentration of lighting available on route, even if it is not the majority

**No Lights**



**Some**



**Ample**



#### **5. Driveways or alleys**

How many driveways or alleys are there? Count only segment side of the street.  
(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+

#### **6. Street amenities**

Presence of street amenities

*Check all that apply*

- ☐ Building overhangs that provide shelter from inclement weather in public space (i.e. sidewalks)
- ☐ Trash bins (public)
- ☐ Benches or other places to sit
- ☐ Bicycle racks
- ☐ None of the above

**Building overhang**



**Trash bin**



- i). **Trash bins:** Must be for public (or pedestrian) use, not private residences' trash bins
- ii). **Benches or other places to sit:** Tables or benches outside of restaurants/café's do not count as a street amenity (places to sit). These need to be public seating areas.

- Only count benches in separate public seating.
- Do not double-rate bus stop benches they will be counted under the previous section on public transit stops.

**Bicycle Racks**



**Benches**



## C. *Aesthetics and Social*

### 1. **Pleasant Hardscape features**

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

☐ Yes    ☐ No

**Private fountain**



**Public art**



**Public sculpture**





## 2. Pleasant Softscape features

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

**Retaining wall**



**Community garden**



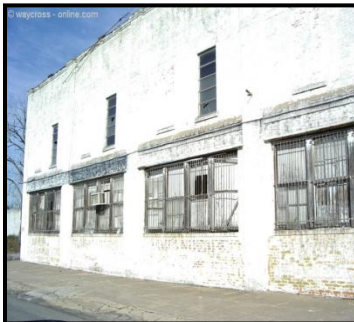
## 3. Building maintenance

Are the buildings well maintained?

☐ 0%    ☐ 1-49%    ☐ 50-99%    ☐ 100%

Buildings do not need to be brand new to get a 100% rating.  
They just need to be well kept and maintained

**0%**



**50-99%**



**100%**



#### 4. Landscaping maintenance

Is landscaping well maintained?

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

**0 %**



**100 %**



#### 5. Graffiti

Is graffiti/tagging (not murals) present?

☐ Yes      ☐ No



#### 6. Rate the extent of graffiti

- ☐ None
- ☐ A little (present)
- ☐ Some (very noticeable)
- ☐ A lot (overwhelming)

#### 7. Presence of walkers

Is there presence of anyone walking?




☐ Yes      ☐ No



Bikers do not count for this question.

## **Level 2: Segment**

**Segment:** A section of street or road between two crossings. If the name of the street changes, that segment should end and new segment should begin, although a crossing has not been made. When auditing the walkways/sidewalks portion of the microscale tool only those items on the immediate side of the walking route should be counted.

	<p><b>Housing Complex (Condo complex, apartment complex, etc)</b></p> <p>Start route at the main street entrance to the complex. Do not rate within the housing complex</p>
	<p><b>Gated communities</b></p> <p>Begin route from participants house i.e. from inside through a pedestrian gate (or without hopping fences or breaking the law). If not, start your route outside of the gate. Call the office to determine if you'll need to extend your route beyond what is indicated on the map.</p>
	<p><b>Private road</b></p> <p>If a rater comes across a private road that is part of their route, the route taken will need to be re-configured. Call the office to find out which way to go!</p>

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).

<b>Shared</b>	<ul style="list-style-type: none"> <li>• On each piece of the tool you should also circle either "Y" for yes (shared) or "N" for no (not shared) in the top right corner.</li> <li>• If it is shared you will also write in the route ID number that piece is shared with</li> </ul>
<b>Segment ID #</b>	<ul style="list-style-type: none"> <li>• The data manager will fill this in, as a rater, leave blank</li> </ul>
<b>Auditor ID #</b>	<ul style="list-style-type: none"> <li>• This is the rater ID number, which is unique to each rater.</li> </ul>
<b>Residential vs Commercial</b>	<ul style="list-style-type: none"> <li>• Is the segment predominantly comprised of residential housing or commercial buildings/non-commercial buildings?</li> </ul>
<b>Street</b>	<ul style="list-style-type: none"> <li>• The street name you begin walking on.</li> <li>• For all street names be sure to write Ave, St, Rd, etc. following the name</li> </ul>
<b>Starting Cross-Street</b>	<ul style="list-style-type: none"> <li>• If starting mid-segment or from a participant's house, use the address of the building. If starting the segment from an intersection, use the cross-street</li> </ul>



## A. Walkways/Sidewalks

### Side of Street

Mark the side of the street using your map, not the direction you are walking.

#### 1. Sidewalk

Is a sidewalk present?

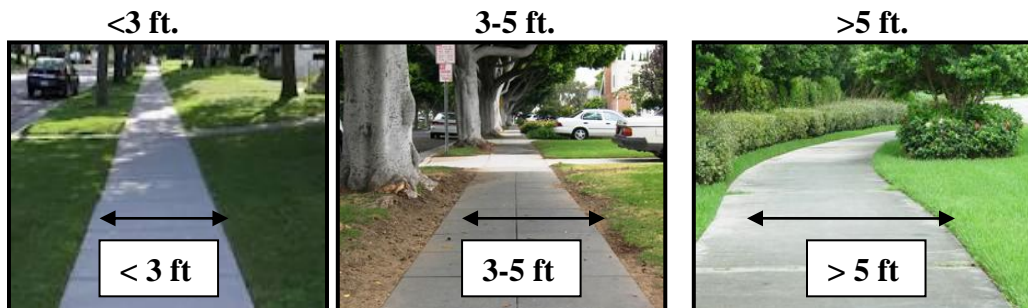
☐ Yes ☐ No

- A sidewalk need not be nicely paved walking path. As long as it is paved, it will count as a sidewalk
- Count all sidewalks along a segment whether they are short or long
- If no sidewalk present, check “no sidewalk” for questions 2, 4-5, question 3a = No, and 3b = N/A

#### 2. Sidewalk width

What is the width of the majority of the sidewalk?

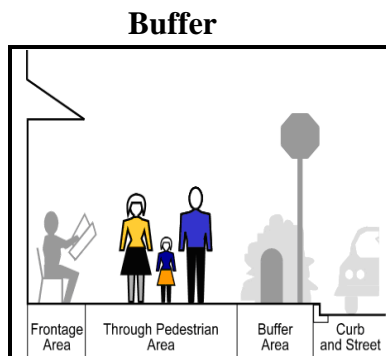
☐ < 3 ft. ☐ 3-5 ft. ☐ > 5 ft. ☐ No sidewalk



#### 3. Buffers

a. Is there a buffer present?

☐ Yes ☐ No



**Grass Buffer**



**Tree Buffer**



**Shrub Buffer**



**Buffer:** Separates vehicular and pedestrian zones parallel to the edge of paved roads. They often occupy space between traffic lanes and walking paths that is not intended for either vehicle traffic or walkers. Any buffer on a segment, no matter how long, will be counted.

- Tree plantings, telephone poles or parking meters should not be considered as a buffer if there is, on average, more than 20 feet between them along the street segment.
- A bike lane does not count as a buffer.
- Brick or other flat material alone next to a sidewalk would not be counted as a buffer because it is not inhibiting cars from coming onto the sidewalk.

**b.** How wide is the majority of the buffer?

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

**Buffer width:** This is measured by calculating the distance the buffer covers from the curb or edge of street segment to the primary walking surface. Variations in buffer width along a single street segment are common, so record the *most typical buffer width*.

#### **4. Continuous vs. non-continuous sidewalk**

Is the sidewalk continuous within the segment?

- ☐ Yes    ☐ No    ☐ No sidewalk

**a. Non-continuous sidewalk:** A sidewalk that stops mid-segment or is interrupted (i.e. by an alley).

**Continuous**



**Non-continuous**



## 5. Trip Hazards

**Trip Hazard:** An increased likelihood of tripping due to a raising or lowering in the walkway. A hazard could be due to plants, tree roots, or general erosion. Major trip hazards would require walkers to look down in order to avoid tripping.

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

☐ None   ☐ One   ☐ A few   ☐ A lot   ☐ No sidewalk

**One**



**Few**



**A lot**



**Heave:** Uneven or raised portion of the sidewalk that could be a trip hazard, usually caused by tree roots or soil expansion after a period of frost.



## 6. Traffic Lanes

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

☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   ☐ 7

**Number of traffic lanes:** Count center turn lanes and vehicle parking lanes

Examples of width: This question is trying to get at the size of the street, so if there is parking allowed on each side of the street and 2 cars can pass each other at the same time, this would be counted as 4. If 2 cars cannot pass each other with parking available on both sides of the street, it will be counted as 3 lanes.



**4 lanes including a turn & parking lane**



**8 lanes**



**6 lanes – residential**



## 7. Marked Bike Lane

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

☐ Yes    ☐ No

**Raised Curb**



**Marked with line**



**Raised Curb**



Marked bicycle lanes must be on the same side of the street that is being rated

## 8. Informal Path

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

☐ Yes   ☐ No

**Alley**



**Path between buildings**



**Informal path:** Must intersect the street segment and provide a path to a destination that is different and shorter than the network (e.g., alley, dirt path to a park, etc.). An informal path can be dirt; it doesn't need to be paved.

## 9. Trees

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

**Number of trees:** Trees planted in the buffer, walkway, or setback (within 5 feet of the sidewalk or pathway).

- Count trees that are more than 5 feet away if they provide shade for the sidewalk/pathway (i.e. at the edge of front yards).
- Questions 9-11 would be N/A if there is no sidewalk, buffer, walkway, or safe place to walk.

## 10. Evenly vs. Irregularly

How are the trees generally spaced?

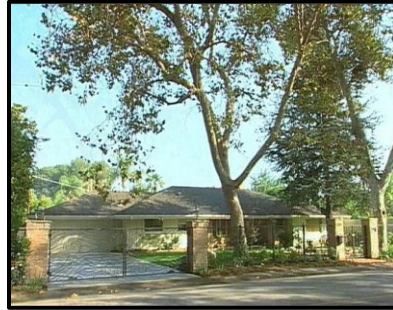
☐ Evenly spaced   ☐ Irregularly spaced   ☐ N/A

Mark N/A if 0-1 trees or no sidewalk/walkway

**Evenly**



**Irregularly**



- a. **Evenly spaced trees:** Trees are spaced in equal increments along the walkway or buffer – planted purposefully. If both options are available in the segment, select the “evenly spaced” option.
- b. **Irregularly spaced trees:** Trees are spaced in an uneven or random pattern – not purposeful for shade/aesthetics.

## 11. Tree Coverage

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%

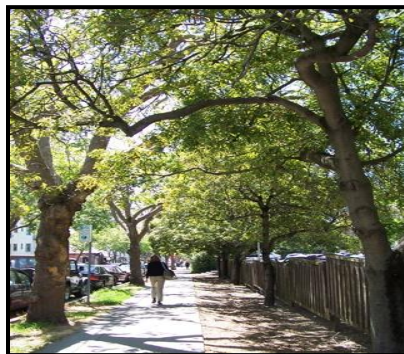
☐ 76-100%

☐ N/A

Mark N/A if no trees or no sidewalk/walkway

**Tree Coverage:** Tree Coverage is the percent of walkway covered by trees, awnings, or other structures providing shade to the walkway. It need not cover the entire width of the sidewalk. Depending on the time of the year, trees may lose their leaves, so make sure to visualize the trees with their full foliage.

### 76-100% coverage





## Setbacks

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

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

13. 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

<10 ft



>100 ft – large lot with house behind



**Building setback from the sidewalk/walkway:** The required separation between a lot line (and/or right-of-way line) and a building or structure. This could be any building (inhabited or not), or any vertical building face excluding gates and fences can be taken into consideration when calculating smallest and largest setback.

- Staggered homes/apartment buildings **would** count, but houses/buildings set directly behind one another **would not**. Raters can imagine shining a laser pointer toward the buildings, and any building face they hit will be taken into consideration.
- Use the “no building” answer choice only for segments which have no buildings at all. If there is an empty lot between houses and nothing behind it, use the >100 feet answer choice.
- If there is only 1 house on a block that house will most likely be the smallest and largest setback, unless there is a canyon or empty lot next to it.

## **Level 3: Crossing**

### ***a. Crossings and Intersections***

<b>Crossing</b>	<ul style="list-style-type: none"><li>Occurs when the rater must go through an intersection, whether a pedestrian crossing exists or not</li></ul>
<b>Segment ID #</b>	<ul style="list-style-type: none"><li>The data manager will fill this in, as a rater, leave blank</li></ul>
<b>Auditor ID #</b>	<ul style="list-style-type: none"><li>This is the rater ID number, which is unique to each rater.</li></ul>
<b>Intersection</b>	<ul style="list-style-type: none"><li>Record names of the 2 streets intersecting at the crossing.</li><li>If this is an unanticipated mid-segment crossing, write down the address of the house/building on either side.</li></ul>
<b>Crossing from</b>	<ul style="list-style-type: none"><li>Record side of the street you start on and then the side of the street you end on.</li></ul>

#### **If you have an unanticipated mid-segment crossing:**

- End your segment, complete a crossing survey, and begin a new segment on the other side of the street
- Fill in the cross streets with the address you started with and the address of the house/building that you're ending with



#### **1. Traffic Circle**

Is there a traffic circle?

☐ Yes   ☐ No



#### **Traffic circle**

- When traffic must travel in one direction around a central island

## 2. Signalization

Signalization

*Check all that apply*

- ☐ Pedestrian walk signals
- ☐ Push buttons
- ☐ Countdown signal
- ☐ None of the Above

**a. Pedestrian walk signals:** Some indication for pedestrians to know when to walk.

**b. Push button:** Actual button for pedestrians to push to indicate they are waiting to cross.



**c. Countdown Signal:** Both pedestrian triggered and automatic signaling systems are programmed to indicate safe crossing for specified periods of time.

### Countdown Signal & Pedestrian Walk signal



## 3. Ramps

**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

**Ramp lines up with crossing  
with crossing**



**Ramp does not line up  
with crossing**



**No ramp**



#### 4. Crossing aids Characteristics

Are crossing aids present?

- ☐ Yes   ☐ No

**Crossing aids**



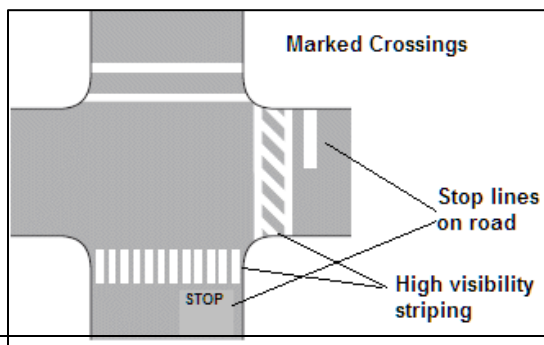
#### 5. Crosswalk Treatments

*Check all that apply*

- ☐ Marked crosswalk
- ☐ High-visibility striping
- ☐ Different material than road
- ☐ None of the Above

- a. Marked crosswalk:** A crosswalk is a designated point on a road at which some means are employed to assist pedestrians wishing to cross. They are designed to keep pedestrians together where they can be seen by motorists, and where they can cross most safely with the flow of vehicular traffic. Pedestrian crossings are often at intersections, but may also be at other points on busy roads that would otherwise be perilous to attempt to cross.

**Stop lines & marked crosswalk**



- b. High-visibility striping:** Usually indicated by ladder or diagonal striping or unique lighting, striping for the crosswalk that is more visible to drivers than simple parallel lines. (Example: 2 yellow lines would count here)

**Different material**



- c. Different Material than road:** Crosswalks characterized by variations in the material along the crosswalk that distinguishes it from the street portion dedicated to vehicular traffic.

**10. Curb extension**

Is a curb extension present?

☐ Yes   ☐ No



**Curb extensions**

Used at traffic calming, curb extensions are comprised of an angled narrowing of the roadway and a widening of the sidewalk.

**Level 4: Cul-de-Sacs**

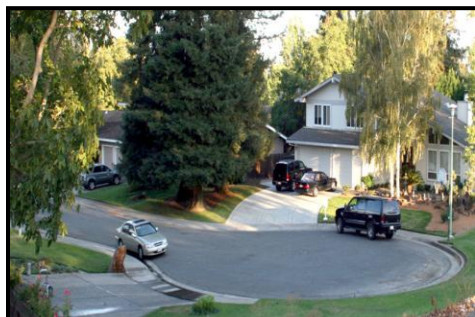
The cul-de-sac or street dead-end to be rated must be within 400 feet of the participants' home and will usually (but not always) be the dead-end part of the participant's street. The participant's home is considered to be at the mid-point along the sidewalk or pathway in front of the home (house or 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.

**Cul-de-sac/Court:** A dead-end street with only one inlet/outlet. They are created to limit through-traffic in residential areas. While some cul-de-sacs provide no possible passage except in and out of their road entry, others allow cyclists, pedestrians or other non-automotive traffic to pass through connecting easements or paths.



<b>Cul-de-sac ID#</b>	<ul style="list-style-type: none"> <li>The data manager will fill this in, as a rater, leave blank</li> </ul>
<b>Auditor ID #</b>	<ul style="list-style-type: none"> <li>This is the rater ID number, which is unique to each rate</li> </ul>
<b>Street Name</b>	<ul style="list-style-type: none"> <li>Rater should write down the name of the street that the cul-de-sac is on</li> </ul>

**Small cul-de-sac**



**Large cul-de-sac**



**Dead-end**



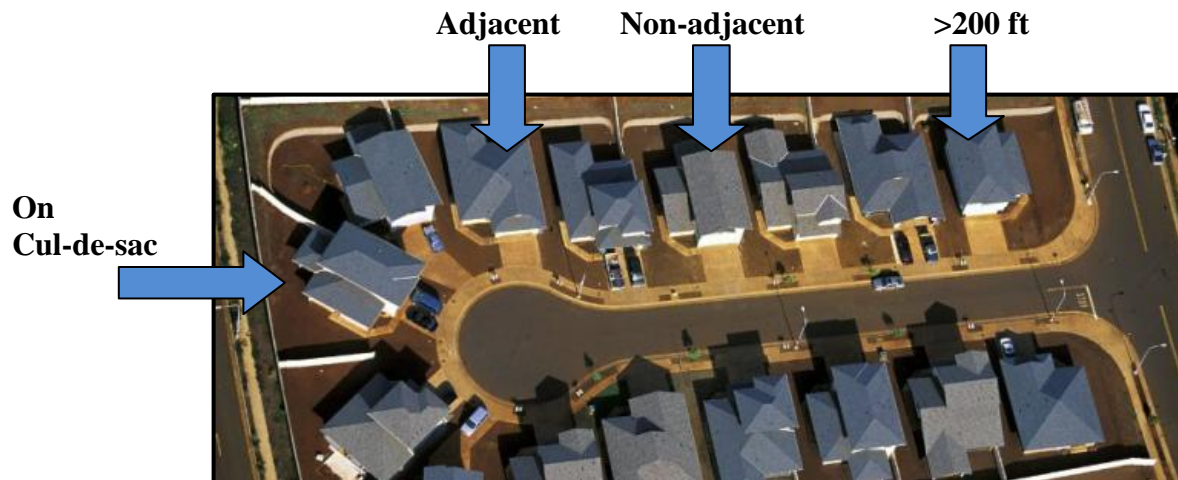
### 1. Proximity to participant

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. Cul-de-sac Amenities

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
- ☐ None of the Above

Amenities need to be at the opening to or in the cul-de-sac or dead-end portion of the street to be counted here. A basketball hoop that is a couple houses away from the opening will not count here because these are probably less communal, whereas an amenity on the cul-de-sac would be considered much more of a shared resource (e.g., anybody living on the cul-de-sac or near it can use it).

**Basketball hoop**



**Skateboard Feature**



### **3. Visibility of the cul-de-sac**

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

**Surveillance would be difficult**



**Surveillance would be easier**

