

Microscale Audit of Pedestrian Streetscapes (MAPS)

Training Manual & Picture Guide

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Microscale protocol and picture guide

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Participant Route

A “participant route” is approximately .25 mile route from the participant’s home toward a pre-determined destination. The “route” 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. The rater will not have to enter the grounds to locate the participant apartment or condo unless necessary to identify the entrance for that person (assuming multiple entrances). The rater will have an ending destination and will rate the neighborhood environment while traveling from the home to the ending destination. There will be a route-level survey that the rater completes for the entire route. Each route consists of a varying number of “segments” and “crossings”. The rater will also complete a segment survey for each segment within the route and a crossing survey for each crossing within the route.

A participant route will almost always start with a segment at the participant’s house. Exception to the rule of always starting with a segment: If there is not a sidewalk on the participant’s side of the street, but there is one on the other side of the street, you will start the route with a crossing because this is the only way we would know that the rater had to cross the street. It is recommended that you complete the segments, crossings, and cul-de-sacs necessary on your way to your ending location and then on the way back to the participant’s house do the Route section of the tool. You will walk on the same side of the street as you did 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

Crossings are located between segments. A **crossing** occurs when the rater must go through an intersection, whether a pedestrian crossing exists or not. A driveway along a segment would not be a crossing. It is possible to not have any crossings if all one does is walk down the street on which a participant lives (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.

TEAN Commercial Cluster Route

A “commercial cluster route” consists of the road or street in front of a pre-determined cluster of commercial locations. The commercial clusters will be communicated to the rater with an address of one location within the cluster. The rater will travel to the identified location and begin the rating on the nearest street or road (as long as it also serves as the main entryway into the commercial property). If there is not an entry, the rater will identify the street or road that contains the entrance. If there is more than one, the rater will select the most prominent (main entry). 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 so one segment survey and two crossings surveys will be completed in a straight line.

- If the commercial cluster address given is at the end of a block, you will still want to capture the entire block with the segment.
- If the main intersection has a driveway, do not complete a crossing survey.

Shared

Sometimes you’ll come across a segment or crossing that you have already done on a different participant route. You don’t have to do the rating all over again, but you will fill in the heading information on a blank tool (i.e. streets, type, & side). You can leave the rest of the page blank and use this as a place holder. Remember for segments you must be on the same side of the street and for the crossing you must be crossing the same way at the intersection for it to be shared. The Route section will never be shared.

TEAN:

On each piece of the tool you should also circle either “Y” for yes or “N” for no in the top right corner. If it is shared you will circle the “Y” for yes next to shared and then write in the route ID number that piece is shared with.

NIK:

If you have a shared segment, crossing, or cul-de-sac you should write “shared” at the top of the page and the Route ID number that the tool is shared with.

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.

In the Field

TEAN Bring:

- 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, or Directions
- Slope Measure-Inclinometer
- Stopwatch
- Camera
- Comfortable clothes & shoes
- Water bottle and snacks
- Cell phone
- Sun/rain protection, hat, umbrella & basic first aid kit

Personal Safety:

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

Expectations

- It is expected that each route will take approximately 30 minutes to complete. TEAN Commercial clusters should only take 10-15 minutes.
- 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.

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.

Microscale Survey

Level: Route

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

- Items on the diagonal side of an intersection would not be counted
 - 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.

There are 3 sections to the Route portion of the tool: 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.

Land use/Destinations

Be sure to rate both sides of the street for 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 data collection by foot whenever possible.

2. Parking

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

Many variations of designated parking areas may be found. There is “street” parking, parking structures, surface lots, metered parking, free parking, and pay lots.

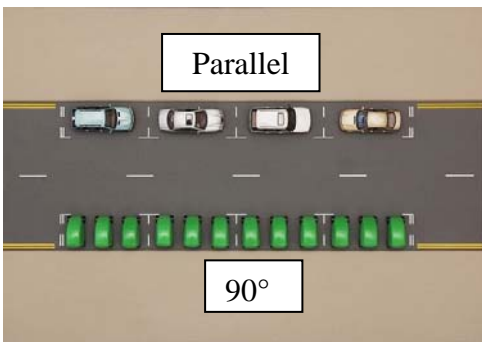
On-street parking: Vehicular parking that is accessed directly from travel lanes and shares the same surface area, unlike off-street parking, where vehicles must use a driveway that connects travel lanes and dedicated parking areas.

Parallel parking: Parallel to curb means the vehicle parks on the street facing the same direction that traffic flows.

On-street 90 degree: Vehicles must turn into the parking slip at a right angle.

Angled Parking: Vehicles parked in spaces at a 30 or 45 degree angle relative to the direction of travel lanes.

Parallel and 90 degree parking



Angled Parking



Parking garages: Enclosed structures designed for vehicular parking. They can be single or multi-storied structures. They may have simple and unassuming facades or decorative ones. A small lot has less than 30 spaces, while medium or large lots have more than 30 spaces.

Small Lot <30 spaces



Large lot >30 spaces

