

SITE OBSERVATION FORM

1. Instructions & Site ID

1.1 Preferred day of week: _____
[from Interview Form, Q 1]

[Match weekday or week end]

1.2 Preferred time of day: ____:____ am pm to ____:____ am pm
 hr: min hr: min
[from Interview Form, Q 1.1 and 1.2]

[On weekdays, match morning rush (7 to 9:30), day (9:30 to 3:30), afternoon rush (3:30 to 6), evening (6 to 10), night (10 to 7)]
[On weekends, match day (9 to 6), evening (6-10), and night (10 to 9)]

1.3 Sections of this form to complete for this site

- Instructions & Site ID**
- Off-road** if Question 11.2 = 1
if Question 11.2 = 2
- Road** if Question 11.2 = 3
if Question 11.1 = 1 and Question 11.2 = 2
- Intersection** if Question 11.1 = 2
- General Route Characteristics**
- Photographs**

} *Based on Interview Form, Question 11*

1.4 Find the site from the attached **photo** and **Interview Form question 11 & site diagram**. The following features should be indicated:

- Names of streets & other identifiable features
- The **cyclist's location** *[marked with an X]* including
 - o whether on the road, sidewalk, or path, and which side & which lane
 - o whether at an intersection or not
- The cyclist's **direction of travel** *[marked with an arrow, before and after the X]*

If the photo is incorrect (e.g. out of date), **modify photo** or **provide corrected sketch of site** with these features **on flip side of the photo**.

Site Observer: _____

Observation Day of Week: _____

Observation Date: ____ / ____ / ____
 DD MM YYYY

Observation Start: ____:____ am pm
 hr: min

2. INFRASTRUCTURE: OFF-ROAD

2.1 What type of route is this?

1. Pedestrian-only path, including most sidewalks
2. Multi-use path, for bikes, pedestrians, others
3. Bicycle-only path
4. No path (e.g., across field)

2.2 Was the cyclist travelling **beside** a road, but physically separated from vehicles?

0. No
1. Yes

[If yes]



2.2.1 If the cyclist was cycling beside the road, but physically separated from vehicles, what separated the cyclist from the road?

[check all that apply]

- Curb *[bicycle path or sidewalk above road]*
- Concrete barrier
- Fence or bollards
- Raised median
- Grass
- Parked cars
- Other *[specify: _____]*

2.3 What is the surface that the cyclist was cycling on?

[If unsure what surface, consider all surfaces within a 5 meter diameter of the site]

[check all that apply]

- Asphalt
- Concrete
- Cobblestones, bricks or paving stones
- Packed gravel or dirt
- Loose gravel or dirt
- Grass
- Other *[specify: _____]*

2.4 Is the traffic one-way or two-way?

1. One-way
2. Two-way, no lane demarcation
3. Two-way, line demarcating separate lanes
4. Two-way, barrier or curb demarcating separate lanes

2.5 What is posted speed limit for bicycles on the route?

_____ km/h

[Check back -100 meters of site, along cyclist's direction of travel. Can posted speed be seen from here?]

0. no posted speed limit

2.6 Are there cycling symbols on the route?

0. No
1. Yes, painted on the surface of the path
2. Yes, on signs posted beside the path
3. Yes, both

[Check back -100 meters of site, along cyclist's direction of travel. For signs only, can they be seen from here?]

2.7 How wide is this path?

_____ meters *[to 1 decimal place, measure with trundle wheel]*

[If there are lanes demarcated on path, measure only the portion designated for use, i.e., don't measure shoulder of path.]

0. no path

2.8 What is the traffic count on the **path** or **sidewalk** in 5 minutes?

_____ bicyclists

[total traffic in both directions; stand on one side of route, look across, count traffic passing through slice of route only; if no path/sidewalk, count a 5 meter wide slice across site]

_____ pedestrians

_____ other non-motorized wheeled transport

TYPE OF TRAFFIC

COUNT

Bicyclists, including electric bikes <i>[riding bike]</i>	
Pedestrians and other foot traffic <i>[including dismounted cyclists]</i>	
Other wheeled transport <i>[e.g., skateboarders, rollerbladers, wheelchairs, strollers]</i>	

3. INFRASTRUCTURE: ROAD

[If cyclist was at an intersection, this section applies to the road the cyclist was on prior to entering the intersection.]

- 3.1** What type of **road** was the cyclist travelling **on** or **beside**?
[If the type of road differs on each side of an intersection, indicate type based on section cyclist was on or beside prior to intersection.]
1. Back lane / alley
 2. Local street *[no centreline or marked lanes]*
 3. Collector or minor arterial road *[centreline only]*
 4. Major arterial road *[multiple through lanes each side of centreline]*
 5. Highway
 6. Expressway
- 3.2** Is this a bus or streetcar route?
[Are transit vehicles or stops present?]
0. No
 1. Yes
- 3.3** What is the **driving surface** of the **road**, within a 5 meter diameter of this site?
[check all that apply]
- Asphalt
 - Concrete
 - Cobblestones, bricks or paving stones
 - Packed gravel or dirt
 - Loose gravel or dirt
 - Grass
 - Other *[specify: _____]*
- 3.4** How is the **outer edge** of the **road** finished on the cyclist's side of the road within a 5 meter diameter of this site?
[check all that apply]
- Curb
 - Paved edge of a different surface type
 - Paved shoulder, marked with a line
 - Gravel or dirt shoulder
 - Grass shoulder
 - Ditch
 - Other *[specify: _____]*
- 3.5** Is the motor vehicle traffic one-way or two-way?
1. One-way traffic only
 2. Two-way traffic
- 3.6** How many **marked** motor vehicle **through lanes** are on the full width of the **road** at this site?
[If this changes at different times of day/week, consider injury trip time]
0. No lanes marked *[e.g., alleys, some local streets & collectors]*
 _____ lanes
- 3.7** Is parking allowed on this **road** within -100 meters of this site?
[If this changes at different times of day/week, consider injury trip time]
0. No
 1. Yes, on cyclist's side of the street only
 2. Yes, on opposite side of the street only
 3. Yes, on both sides of the street

- 3.8** Are parked motor vehicles present within -100 meters of this site, on the cyclist's side of the street?
0. No
1. Yes, less than half of spaces filled with vehicles
2. Yes, \geq half of the parking spaces filled with vehicles
- 3.9** Are cars parked in non-designated areas, such as a bike lane or a vehicle through lane?
0. No
1. Yes
- 3.10** Is there any bicycle infrastructure on the road within -100 meters of this site, on the cyclist's side of the road?
[check all that apply]
- [For signs only, can bicycle symbols be seen from here?]*
- [If dedicated bicycle lane, with solid line(s)]*
- 3.10.1** If there is a bicycle lane, is it
1. Between the edge of the road and moving vehicles
2. Between parked cars and moving vehicles
3. Between two lanes of moving vehicles
- 3.10.2** If there is a bicycle lane, what is its direction of travel?
1. One-way, same direction as vehicle traffic
2. One-way, opposite direction to vehicle traffic
3. Two-way, no lane demarcation for cyclists travelling in opposite directions
4. Two-way, line demarcating separate lanes for cyclists in each direction
5. Two-way, barrier or curb demarcating separate lanes
- 3.11** Are any of the following features present on the **road** within -100 meters of this site, or at the nearest intersection (nearest intersection must be within 200 m of site)?
[check all that apply;]
- Speed humps or bumps
 Rumble strips
 Raised within-block median *[including street car island]*
 Bike-permeable median at intersection
 Traffic circle or roundabout
 Traffic diverter, e.g., "right in, right out"
 Planters restricting road width
 Corner bulge, restricting road width
 Other *[specify: _____]*
 No, none of the above
- 3.12** What is posted speed limit on the road?
[Check back -100 meters of site, along cyclist's direction of travel.]
- _____ km/h *[if not posted, 20 km/h on back alleys, 50 km/h on local and arterial streets, 80 km/h on highways or expressways]*

3.13 What is the average measured speed of motor vehicles on the road? _____ km/h

[Measure 5 times facing traffic with vehicles at normal operating speed for this infrastructure. _____ km/h

If at traffic light, measure when light green and traffic at full speed. If at a stop sign, can _____ km/h

measure accelerating or decelerating traffic.] _____ km/h

_____ km/h

3.14 How wide are the following?

[Measure road width before elements that change the width of the road, e.g., corner bulges, turn lanes, diverters;

don't look at trundle wheel; choose safe place and time; cross at corner crosswalks where possible;

can use sightlines to estimate different start and endpoints than those at cross-walk; all to 1 decimal place;

where meet curb, add 0.15 meters to measurement of each curb;

0 meters if not present]

Road _____ meters *[include bike lanes, parking lanes, paved shoulders, raised median]*

Total marked paved shoulder

_____ meters

Total marked bike lane

_____ meters

Total raised median

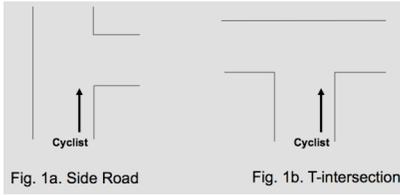
_____ meters

3.15 What is the traffic count on the **road** in 5 minutes? _____ Motor vehicles
 [total traffic in both directions; _____ Bicycles
 stand on one side of road, look across, count
 traffic passing through slice of road only]

TYPE OF TRAFFIC	COUNT	
Motor vehicles, including cars, SUVs, vans, motorcycles, scooters, buses, streetcars, trucks		
Bicyclists, including electric bikes <i>[riding bike]</i>		

4. INFRASTRUCTURE: INTERSECTION

4.1 Intersection description



1. 3-way, intersecting road to right of cyclist [Figure 1a]
2. 3-way, intersecting road to left of cyclist
3. 3-way, T- intersection [Figure 1b]
4. 4-way
5. > 4-way
6. Other [specify: _____]

4.2 Type of traffic control

1. Uncontrolled
2. Traffic circle
3. Stop sign, on one road only
4. Stop sign, on all roads
5. Crossing guards
6. Traffic light, with no controls for cyclists
7. Traffic light, with controls for cyclists [including bike signal light, push button, or in street sensors]
8. Crosswalk light only

4.3 Other intersection features

[check all that apply]

- Right-turn lanes for motor vehicles [Number: _____]
- Left-turn lanes for motor vehicles [Number: _____]
- Marked pedestrian crossing [Number: _____]
- Pedestrian and/or bike bridge [Number: _____]
- Bike box [Number: _____]
- Bike-permeable median [Number: _____]
- Raised median, not bike permeable [Number: _____]
- Corner bulge, restricting road width [Number: _____]
- Motor vehicle traffic diverter [Number: _____]
- Other [specify: _____]
- No, none of the above

4.4 If there is a bicycle lane on the route that the cyclist was coming from, what happens to this lane at the intersection?

0. No bicycle lane
1. Bicycle lane no longer present within a 5 meter diameter of intersection
2. Bicycle lane merges with right turn lane within a 5 meter diameter of intersection, or becomes bike permeable
3. Bicycle lane continues to intersection, but not into it
4. Bicycle lane marked through intersection
5. Other [specify: _____]

[The next questions apply to the **street that crosses** the road the cyclist was on or beside prior to entering the intersection.

For a cyclist that entered the intersection from the sidewalk or other off-street path beside the road, the cross-street is the road the cyclist crosses; note that this may not be the street the cyclist was riding beside before entering the intersection]

- 4.5** What type of road was the **cross-street**?
[If different on each side of intersection, indicate type on the side of the road the cyclist was on prior to intersection.]
1. Back lane / alley
 2. Local street *[no centreline or marked lanes]*
 3. Collector or minor arterial road *[centreline only]*
 4. Major arterial road *[multiple through lanes each side of centreline]*
 5. Highway
 6. Expressway
- 4.6** Is the motor vehicle traffic on the cross-street one-way or two-way?
1. One-way traffic only
 2. Two-way traffic
- 4.7** How many marked motor vehicle through lanes are on the full width of the cross-street?
_____ lanes
[If this changes at different times of day/week, consider injury trip time]
- 4.8** What is the average measured speed of motor vehicles on the road?
_____ km/h
[Measure 5 times facing traffic with vehicles at normal operating speed for this infrastructure. If at traffic light, measure when light green and traffic at full speed. If at a stop sign, can measure accelerating or decelerating traffic.]
_____ km/h
_____ km/h
_____ km/h
_____ km/h
- 4.9** How wide is the cross-street?
[including bike lane, parking lane, & paved shoulder (on the cyclist's side of the street)]
_____ meters *[to 1 decimal place; where meet curb, add 0.15 meters to measurement]*

4.10 What is the traffic count on the cross-street in 5 minutes?

[Total traffic in both directions;

Stand on one side of cross-street, look across, count traffic passing through slice of street and sidewalk only]

_____ Motor vehicles

_____ Bicycles

_____ Pedestrians

TYPE OF TRAFFIC	COUNT	
Motor vehicles, including cars, SUVs, vans, motorcycles, scooters, buses, streetcars, trucks		
Bicyclists, including electric bikes <i>[riding bike]</i>		
Pedestrians and other foot traffic <i>[including dismounted cyclists; count one side of street only – the side of the street the cyclist was on when entering the intersection]</i>		

5. GENERAL ROUTE CHARACTERISTICS [complete for all site types]

5.1 What is the grade of the route?

[Measure with clinometer, left side of scale; To sight: use tape at eye level on feature 10 to 20 meters away, unless grade changes before that]



_____ degrees

*[Mark - = negative if cyclist travelling in downhill direction
+ = positive if cyclist travelling in uphill direction]*

5.2 How far back is the route visible (in the direction the cyclist came from)?

[Consider effect of permanent features only, including curves, hills, trees;

Stand at site, look back towards direction cyclist was coming from.]

1. < 5 meters
2. 5 to < 10 meters
3. 10 to < 20 meters
4. 20 to < 50 meters
5. 50 to < 100 meters
6. ≥ 100 meters

5.3 Within a 5 meter diameter of the site, are there streetcar or railway tracks on the surface the cyclist was on?

0. No
1. Yes, perpendicular to direction of travel
2. Yes, parallel to direction of travel
3. Yes, oblique to direction of travel
4. Yes, multiple angles to direction of travel

5.4 Within a 5 meter diameter of the site, what is the quality of the surface the cyclist was on?

[choose worst case]

2 cm _____

5 cm _____

1. Smooth
2. Pitted, bumps, broken pavement (2-5 cm)
3. Potholes or bumps (> 5 cm)

5.5 Within a 5 meter diameter of the site, are any of the following on the surface the cyclist was on?

[for debris, consider whether it is a quantity likely to be bothersome to cyclists]

[check all that apply]

- Leaves
- Glass
- Sand
- Gravel
- Papers
- Sewer grates
- Manhole covers
- Construction holes
- Metal / wood plates covering construction
- Puddles of water
- Ice
- Snow
- Other *[specify: _____]*
- No, none of the above

5.6 Is the site on a bridge, or in an underpass or tunnel?

- 0. No
- 1. Yes, on a bridge
- 2. Yes, in an underpass or tunnel

5.7 Is there "street" lighting on the route within view of this site, i.e., unobscured?

- 0. No
- 1. **Yes**

[If yes]



5.7.1 How far from the site is the **nearest unobscured** light?

[approximate with trundle wheel]

- 1. < 5 meters
- 2. 5 to < 10 meters
- 3. 10 to < 25 meters
- 4. 25 to < 50 meters
- 5. ≥ 50 meters

5.8 What are the land uses within -100 meters of this site, along both sides of the cyclist's route?

[check all that apply]

[Consider property adjacent to road or path.]

- Residential, detached houses
- Residential, townhouses
- Residential, low rise apartments [≤ 4 stories high]
- Residential, high rise apartments
- Park, playing field, golf course, cemetery, empty lot, green space
- Shopping mall
- Local business/shopping district, i.e., low rise
- Downtown business/shopping district, i.e., high rise
- Surface parking lot
- Parking garage
- Air, rail, or road transport depot
- Industry or factory
- Institutional: elementary or secondary school
- Institutional: college or university
- Institutional: stadium
- Institutional: church, recreation, community centre
- Institutional: hospital or government buildings
- Agricultural or other rural
- Construction site
- Freeway entrance or exit
- Waterway: river, lake, ocean
- Above or below ground, e.g., on bridge or in tunnel

6. PHOTOGRAPHS

- Ensure date functions is on
- Take photos with camera lens in full wide angle
- When not certain if all important features covered, take more photos, and indicate in comments below. Assign numbers 6.6, 6.7, etc., for documentation in spreadsheet
- **Don't stand on road**, but can stand at edge of parked cars, **if** they obscure the view of the site.
- You may find it helpful to take the photo by holding the camera over your head. Please check the photo to make sure you captured the necessary shot.

	Description/Comments
6.1 Photo of Interview Sheet Q. 11 & 12	

First stand beside the site: *[If on road, stand at nearest off road location, and indicate location distance from site in "Description" below.]*

Direction	Description/Comments
6.2 Facing the direction the cyclist was travelling to	
6.3 Facing the direction the cyclist was coming from	

From the position where you took photos 6.2 and 6.3, go 20 meters forward (in direction cyclist was travelling to) and 20 meters back (in direction cyclist was travelling from), turn towards site and take photo.

[If on road at 20 meters, keep going until off road, and indicate location distance from site in "Description" below.]

Direction	Description/Comments
6.4 - 20 meters forwards along route, facing site	
6.5 + 20 meters backwards along route, facing site	

Observation End: ____:____ am pm
hr: min