Assignment 2: Intersection Counts
Counting protocol and form developed by Robert Schneider, UC Berkeley

Assignment Description for Instructor:
This assignment teaches the methodology that students will use to count pedestrians and bicyclists at intersections. Review the instructions and if necessary do a trial run to familiarize yourself with the procedures as well as any portions students may find challenging or confusing.

Instructor Prep Work:
Select intersections for students to observe—it would be best to choose different street segments than students used for the previous assignment. This may be an individual or group project. Review the instructions on the student assignment sheet. As with the previous assignment, encourage the students to each do their observations at different days and/or times. This will be a good point for students to discuss in class after their observations and reports are complete.

Time Required for Students:
Out of class:
- 2 hours for counts
- Analyze and summarize the data, write up the report
In-class discussion of findings

Assignment:
The final product will be the completed counts and a 2-3 page summary of observations and analysis from the experience.
Assignment 2: Intersection Counts

Assignment Description for Students:
This assignment describes the procedure that you will use to count pedestrians and bicyclists at intersections.

- Arrive at the count intersection at least 15 minutes before the count period is scheduled to find a location where you can see all of the intersection crossings and to fill in general information
- Record the name of the mainline roadway (roadway with more traffic) and intersecting roadway
- Label the intersection diagram with the names of each roadway
- Record your name as the observer
- Record the date and time period of the count
- Estimate the current temperature (°F) and weather (sunny, cloudy, rainy, etc.)
- Describe the intersection, including surrounding buildings (e.g., restaurants, single-family houses, offices, etc.), roadway characteristics (traffic signals, median islands, fast traffic, etc.)

Pedestrian Counting Procedure (See Side 1 of Data Collection Sheet):
- Tally each time a pedestrian crosses each leg of the intersection from either direction
- Pedestrians should be counted whenever they cross within the crosswalk or when they cross an intersection leg within 50 feet of the intersection
- Do NOT count pedestrians who do not cross the street (e.g., turn the corner on the sidewalk without crossing the street)
- If the pedestrian is female, mark an “O”; if male, mark an “X”; if unknown, mark a “+”. If the pedestrian volume is so high that it is difficult to count by gender, use standard line tally marks.
- Count for two hours. Enter tally marks in a new row after each 15-minute period. Record totals at the bottom of the sheet after the two hours are completed.
- If the intersection is a “T” intersection with only three legs, you should still count four sides of the intersection. Pedestrians using the “sidewalk side” of the intersection should be counted when they travel along the sidewalk for at least half of the width of the intersection. Label the “sidewalk side” on the intersection diagram.
- Pedestrians include people in wheelchairs, people using canes and other assistive devices, children being carried by their parents, children in strollers, runners, skateboarders, people walking with a bicycle, etc., but do NOT include people riding bicycles, people in cars, etc.

Bicyclist Counting Procedures (See Side 2 of Data Collection Sheet):
- Tally each time a bicyclist leaves each leg of the intersection and enters any of the other intersection legs (this includes turning left, going straight, or turning right)
- Count bicyclists who may be riding on the wrong side of the street (against traffic)
- Count bicyclists who ride on the sidewalk (i.e., if a bicyclist on the sidewalk turns right without crossing the street, they should still be counted as turning right)
- If the bicyclist is female, mark an “O”; if male, mark an “X”; if unknown, mark a “+”. If the bicycle volume is so high that it is difficult to count by gender, use standard line tally marks.
- Count for two hours. Enter tally marks in a new row after each 15-minute period. Record totals at the bottom of the sheet after the two hours are completed.
- Bicyclists include people riding bicycles. They do NOT include people who are walking their bicycles across the intersection.
**Time Required:**

- Out of class:
  - 2 hours for counts
  - Analyze and summarize the data
  - Report write up
  - In-class discussion of findings

**Assignment:**

The final product will be the completed counts and a 2-3 page summary of observations and analysis from the experience.
Side 1: Intersection Pedestrian Count Sheet

Mainline Roadway: ________________________________
Intersecting Roadway: ________________________________
Observer Name(s): __________________________________________
Date: __________________________________________
Observation Time: (Start) ___________ (End) ___________
Temp. (°F): ________ Sunny, cloudy, rainy, etc.: _____________________
Description of Specific Observation Location: __________________________________________

Tally each time a pedestrian crosses each leg of the intersection (count all crossings within 50 ft. of the crosswalk). If the pedestrian is female, mark an “O”; if male, mark an “X”; unknown, mark a “+.”

<table>
<thead>
<tr>
<th>Time Period #</th>
<th>Pedestrian Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Crossing Leg A</td>
</tr>
<tr>
<td></td>
<td>From 4 to 1 OR From 1 to 4</td>
</tr>
<tr>
<td>(0-15 min)</td>
<td></td>
</tr>
<tr>
<td>(15-30 min)</td>
<td></td>
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<tr>
<td>(30-45 min)</td>
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<td>(45-60 min)</td>
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<tr>
<td>(60-75 min)</td>
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<tr>
<td>(75-90 min)</td>
<td></td>
</tr>
<tr>
<td>(90-105 min)</td>
<td></td>
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<tr>
<td>(105-120 min)</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>Female:</td>
</tr>
</tbody>
</table>
## Side 2: Intersection Bicycle Count Sheet

Mainline Roadway: ____________________________________________________________
Intersecting Roadway: _______________________________________________________
Observer Name(s): ___________________________________________________________
Date: ______________________________________________________________________
Observation Time: (Start) __________ (End) __________
Temp. (°F): ________________ Sunny, cloudy, rainy, etc.: _______________________
Description of Specific Observation Location: _________________________________
________________________________________________________________________

Tally each time a bicyclist leaves each leg of the intersection (include bicyclists on sidewalks). If the pedestrian is female, mark an “O”; if male, mark an “X”; unknown, mark a “+.”

<table>
<thead>
<tr>
<th>Time Period #</th>
<th>Leaving Leg A</th>
<th>Leaving Leg B</th>
<th>Leaving Leg C</th>
<th>Leaving Leg D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Turning Right)</td>
<td>(Going Straight)</td>
<td>(Turning Left)</td>
<td>(Going Straight)</td>
</tr>
<tr>
<td>(0-15 min)</td>
<td>A to B</td>
<td>A to C</td>
<td>B to C</td>
<td>B to D</td>
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<tr>
<td>(15-30 min)</td>
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<td>(90-105 min)</td>
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<tr>
<td>(105-120 min)</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>Female:</td>
<td>Male:</td>
<td>Female:</td>
<td>Male:</td>
</tr>
</tbody>
</table>