



2013 Mileground Pedestrian and Bicyclist Counts Report

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(Draft)

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CONTENTS

| | |
|---|----|
| Introduction..... | 3 |
| Methodology..... | 3 |
| Count Locations | 3 |
| Count Dates and Times | 3 |
| Count Procedure and Materials..... | 3 |
| Count Results..... | 4 |
| Data Summary..... | 4 |
| Key Findings | 5 |
| Conclusion | 6 |
| Appendix I: Raw Pedestrians & Bicycles Counts (excluding mid-block crossings) | 7 |
| Appendix II: Mid-Blocking Crossing Counts..... | 8 |
| Appendix III: Mileground Pedestrian and Bicyclist Count Map..... | 9 |
| Appendix IV: Counting Staffs and Schedule | 10 |
| Appendix IV: Pedestrian / Bicyclist Count Form..... | 11 |

LIST OF TABLES

| | |
|-------------------------------------|---|
| Table 1: Count Locations..... | 3 |
| Table 2: Data Summary by Types..... | 4 |

LIST OF FIGURES

| | |
|---|---|
| Figure 1: Pedestrian Counts by Date (excluding mid-block crossings) | 4 |
| Figure 2: Mid-block Crossings by Date..... | 5 |
| Figure 3: Bicyclist Counts by Date | 5 |

INTRODUCTION

In April and October of 2013, the Morgantown Monongalia MPO conducted the pedestrian and bicycle counts on Mileground Road in Morgantown, WV. The purpose of the counts were to gather the data necessary to inform policy and planning decisions concerning infrastructure improvements on the Mileground Rd.

METHODOLOGY

Count Locations

MPO staff selected two sites as count locations on Mileground Road, as shown in the table below:

Table 1: Count Locations

| Count location # | Address | Vicinity Property | Intersection |
|------------------|--------------------|--------------------------|--------------|
| 1 | 1738 Mileground Rd | The Mileground Car Wash | N/A |
| 2 | 1750 Mileground Rd | W.V. Army National Guard | N/A |

These location were selected based on three criteria:

- The ability to observe the street without obstacles
- Minimum interference with private properties
- A relatively safe environment for manual counters

Count Dates and Times

The counts were conducted on April 9 (Tuesday), April 10 (Wednesday), April 13 (Saturday), October 1 (Tuesday), October 2 (Wednesday), and October 5 (Saturday). The count time is 7:00AM – 9:00AM, 11:00AM – 1:00PM, 3:30PM – 5:30PM.

These count dates were coordinated with the MPO’s ongoing annual vehicular traffic count program.

Count Procedure and Materials

MPO staff set one screen line at each count location. The counters recorded every pedestrian and bicyclist each time they crossed the designated screen line. Mid-block crossings were recorded when observed.

Pedestrians and bicyclists were counted for two hours in 15 minute increments during morning, noon, and afternoon peak periods. The counters used standardized count forms to record their findings, and were provided with instructions and training for how to properly use the form.

COUNT RESULTS

Data Summary

Pedestrian and bicyclist counts are summarized in Table 2. Weather conditions during the counting days were cloudy or sunny, with temperature ranging from 53F to 86F.

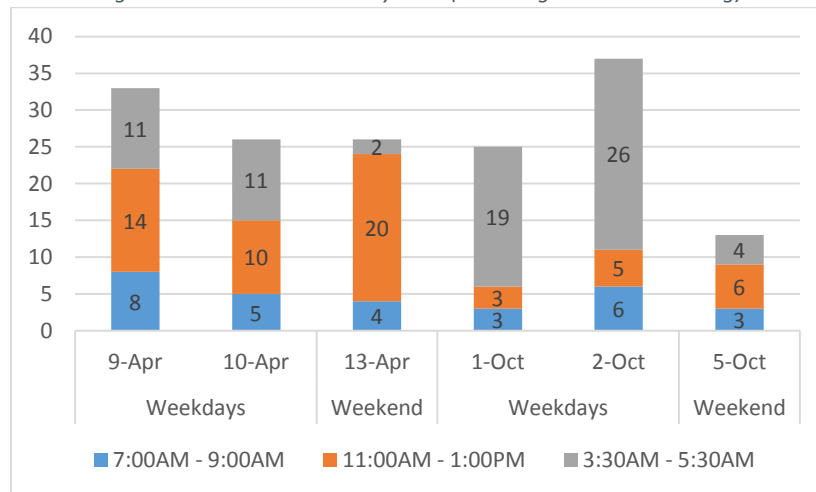
It should be noted that mid-block crossings are separated from pedestrian counts. Most mid-block crossing occurs between the parking lots on either side of the Mileground owned by John Howard Motors. These pedestrians have different destinations than those walking along the street. Separating the two types of pedestrian activities avoids potentially misleading conclusions and more accurately reflects the reality of pedestrian activities on Mileground Rd.

Table 2: Count Data Summary

| | Pedestrians | Mid-Block Crossing | Bicyclists |
|--------------|---------------|--------------------|------------------------|
| Total | 160 | 174 | 9 |
| All Days | Ave. 27 / Day | Ave. 29 / Day | Ave. 1 / Day |
| Weekdays | Ave. 30 / Day | Ave. 39 / Day | Ave. 2 / Day |
| Weekend days | Ave. 20 / Day | Ave. 10 / Day | Ave. less than 1 / day |

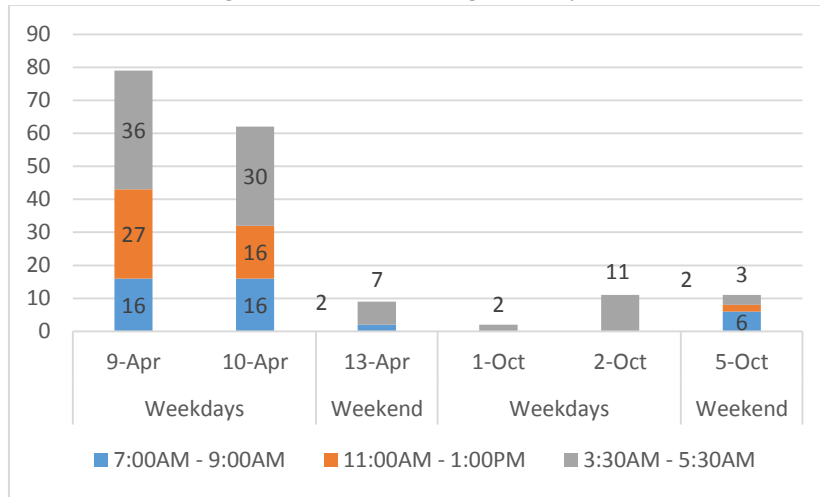
Pedestrian traffic volume is illustrated in the Figure 1.

Figure 1: Pedestrian Counts by Date (excluding mid-block crossing)



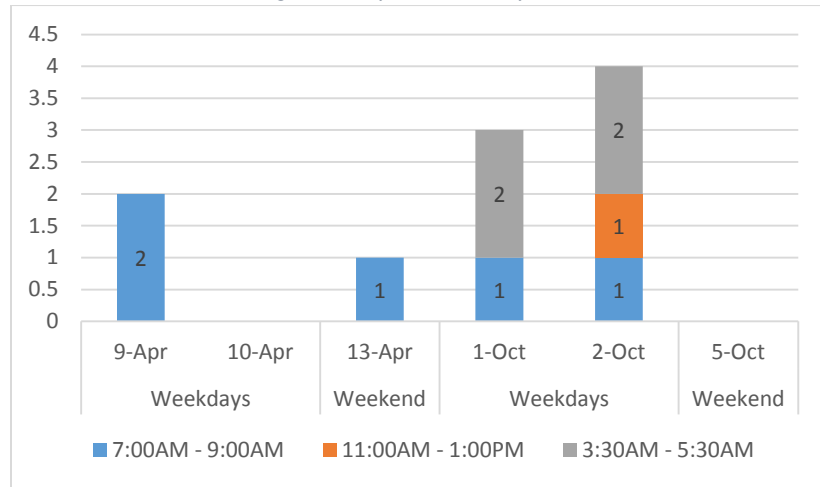
Mid block crossings are illustrated in Figure 2.

Figure 2: Mid-block crossing Counts by Date



Bicycle traffic volume is illustrated in the Figure 3.

Figure 3: Bicyclist Counts by Date



Key Findings

Based on the data collected and interviews with manual counters, MPO staff have identified, albeit inconclusively, the following characteristics of non-motorized traffic conditions on Mileground Road.

-- Regarding pedestrians, it is recognized that:

- More pedestrians were observed during weekdays (76%) than weekend days (24%)
- More pedestrian were observed during afternoon hours between 3:30PM and 5:30 PM. (Afternoon hours 46%, noon hours 36%, morning hours 18%)
- No significant discrepancy was observed between the spring and fall counts.
- It was not uncommon for the same pedestrian to be counted multiple times, when he/she walked to and from one place.

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- According to the manual counter's observation, pedestrians appeared to consist of people working or living in the Mileground area.

-- Regarding mid-block crossings, it was observed that:

- Most mid-block crossing was observed in the vicinity of John Howard Motors, which owns properties on both sides of the street.
- Some mid-block crossings were observed at the BFS gas station.
- Observed mid-block crossing decreased dramatically from the spring to the fall, especially during the weekdays (-84%). The reason for this change has not been conclusively identified. Though it may be speculated that the change in the traffic pattern caused by the installation of the roundabout at the intersection of the Mileground and WV 705 contributed to this change.

-- Regarding bicyclists, it is recognized that:

- Bicycle traffic increased between the spring and the fall, from 3 to 7. Given the small sample size this is not a statistically significant figure.
- Bicyclists rode through the parking lots.
- Most bicyclists were observed during the weekdays.

CONCLUSION

Although relatively a small amount pedestrian and bicycle traffic was observed, compared to more densely developed places, such as downtown, there is pedestrian and bicyclist activity on a regular basis on Mileground Road.

It may be estimated from the peak period vehicular traffic counts in the surrounding area that the observed peak period pedestrian activity shown in this report comprises approximately 25% to 30% of the total pedestrian activity during an entire day along the corridor.

In general, MPO staff concludes that:

1. Mileground road has pedestrian and bicyclist traffic, especially during weekday afternoon hours.
2. In the vicinity of John Howard Motors there are mid-block crossings on the Mileground.
3. The most frequent destination for pedestrian traffic on Mileground road is the BFS store.

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APPENDIX I: RAW PEDESTRIANS & BICYCLES COUNTS (EXCLUDES MID-BLOCK CROSSINGS)

| Date | | Apr. 9 Tuesday | | Apr.10 Wednesday | | Apr. 13 Saturday | | Oct. 1 Tuesday | | Oct. 2Wednesday | | Oct. 5 Saturday | | |
|-----------------------|------------------------|----------------|--------------|------------------|---------------|------------------|---------------|----------------|---------------|-----------------|---------------|-----------------|----------|-------------------------|
| Count Location Number | | #1 | #2 | #1 | #2 | #1 | #2 | #1 | #2 | #1 | #2 | #1 | #2 | |
| Morning | 7:00 AM – 7:15 AM | -- | -- | -- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | Morning Total: 28 5 |
| | 7:15 AM – 7:30 AM | 1 | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 7:30 AM – 7:45 AM | -- | -- | -- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 7:45 AM – 8:00 AM | -- | 1 | -- | -- | 1 | 1 | -- | -- | -- | -- | 1 | 1 | |
| | 8:00 AM – 8:15 AM | 1 | -- | -- | -- | -- | -- | -- | -- | 1 | -- | -- | -- | |
| | 8:15 AM – 8:30 AM | 3 | -- | 2 | -- | 2 | 1 | 1 | 1 | 2 | 1 | -- | -- | |
| | 8:30 AM – 8:45 AM | 1 | 1 | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- | |
| | 8:45 AM – 9:00 AM | 1 | -- | 1 | -- | -- | -- | 1 | -- | 1 | -- | 1 | -- | |
| | Morning Total | 6 1 | 2 1 | 3 | 2 | 3 | 1 1 | 2 | 1 | 5 1 | 1 | 2 | 1 | |
| Noon | 11:00 AM – 11:15 AM | 1 | -- | 2 | 4 | -- | -- | -- | -- | -- | -- | -- | -- | Noon Total: 58 1 |
| | 11:15 AM – 11:30 AM | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 11:30 AM – 11:45 AM | -- | 1 | -- | -- | 5 | 1 | -- | -- | -- | 2 | -- | -- | |
| | 11:45 AM – 12:00 PM | 4 | 2 | -- | -- | 3 | -- | -- | -- | -- | -- | 1 | -- | |
| | 12:00 PM – 12:15 PM | 1 | 1 | -- | 2 | -- | 1 | -- | -- | 1 | 1 | 2 | 2 | |
| | 12:15 PM – 12:30 PM | -- | -- | 2 | -- | 1 | -- | 1 | 1 | 1 | -- | -- | -- | |
| | 12:30 PM – 12:45 PM | -- | -- | -- | -- | 3 | -- | 1 | -- | 1 | -- | 1 | 1 | |
| | 12:45 PM – 1:00 PM | 3 | 1 | -- | -- | 6 | -- | -- | -- | -- | -- | -- | -- | |
| | Noon Total | 9 | 5 | 4 | 6 | 18 | 2 | 2 | 1 | 2 1 | 3 | 3 | 3 | |
| Afternoon | 3:30 PM – 3:45 PM | -- | 1 | 1 | -- | -- | -- | -- | 1 | 4 1 | 4 | -- | -- | Afternoon Total: 73 4 |
| | 3:45 PM – 4:00 PM | 1 | -- | -- | -- | -- | -- | -- | -- | -- | 1 | -- | 1 | |
| | 4:00 PM – 4:15 PM | 2 | -- | -- | -- | -- | -- | 3 | 3 | 5 | -- | 1 | -- | |
| | 4:15 PM – 4:30 PM | 1 | 2 | 3 | -- | -- | -- | 4 | 4 2 | 1 | -- | 1 | 1 | |
| | 4:30 PM – 4:45 PM | 1 | 1 | -- | 1 | 1 | -- | 1 | -- | 2 | 1 1 | -- | -- | |
| | 4:45 PM – 5:00 PM | 2 | -- | -- | 2 | 1 | -- | -- | -- | 2 | 2 | -- | -- | |
| | 5:00 PM – 5:15 PM | -- | -- | 2 | 2 | -- | -- | 1 | -- | 1 | 2 | -- | -- | |
| | 5:15 PM – 5:30 PM | -- | -- | -- | -- | -- | -- | -- | 2 | -- | 1 | -- | -- | |
| | Afternoon Total | 7 | 4 | 6 | 5 | 2 | 0 | 9 | 10 2 | 15 1 | 11 1 | 2 | 2 | |
| Daily Total | 33 2 | | 26 | | 26 1 | | 24 3 | | 37 4 | | 13 | | | |

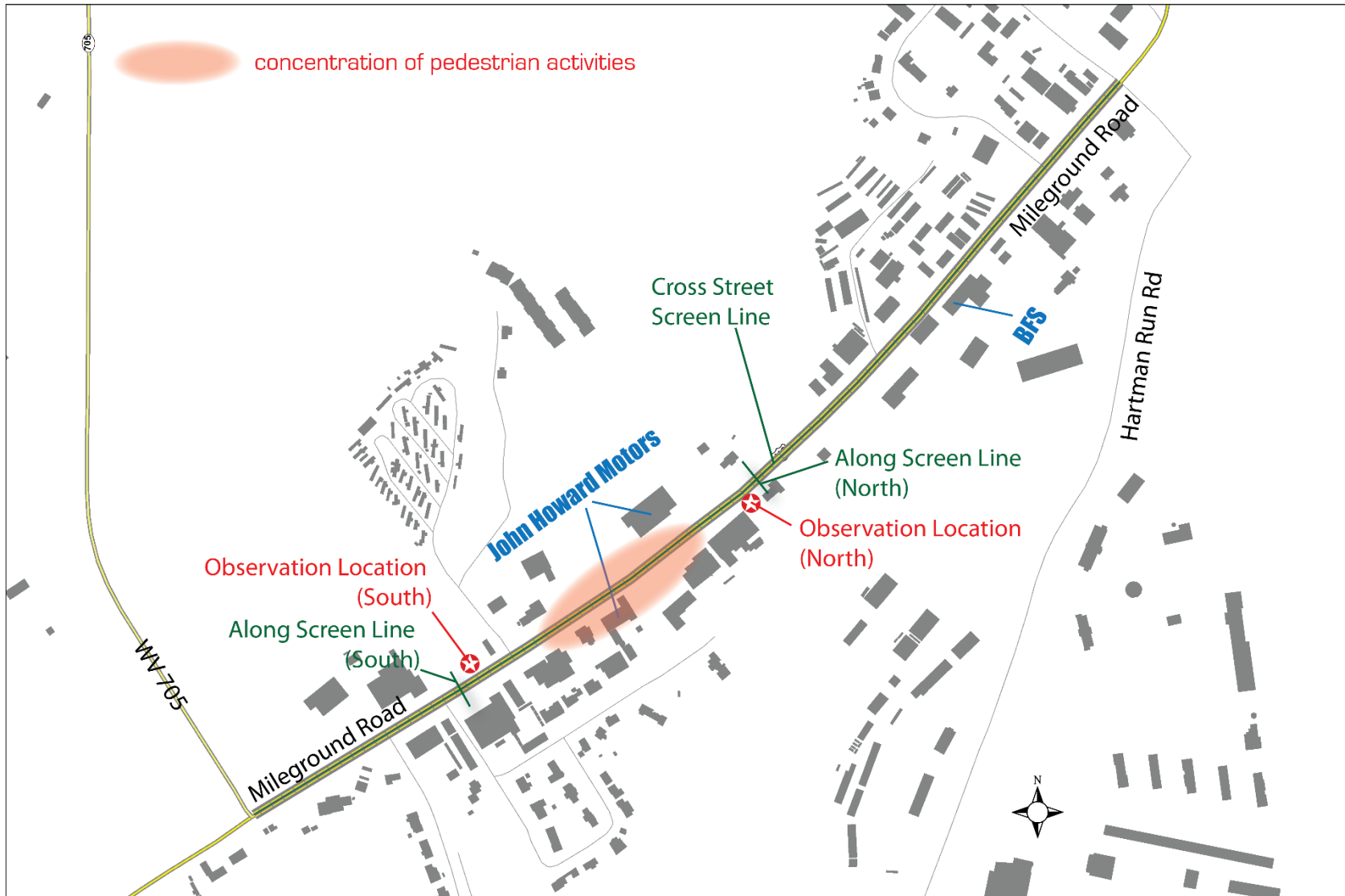
Number in Blue = Pedestrian, Number in Red = Bicyclist

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APPENDIX II: RAW MID-BLOCK CROSSING COUNTS

| Date | | April 9 Tuesday | | April 10 Wednesday | | April 13 Saturday | | October 1 Tuesday | | October 2 Wednesday | | October 5 Saturday | | |
|-----------------------|------------------------|--------------------|-----------|-----------------------|-----------|----------------------|-----------|----------------------|-----------|------------------------|-----------|-----------------------|-----------|---------------------|
| Count Location Number | | #1 | #2 | #1 | #2 | #1 | #2 | #1 | #2 | #1 | #2 | #1 | #2 | |
| Morning | 7:00 AM – 7:15 AM | -- | 1 | -- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | Morning Total: 40 |
| | 7:15 AM – 7:30 AM | -- | 4 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 7:30 AM – 7:45 AM | -- | 3 | -- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 7:45 AM – 8:00 AM | -- | 2 | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 8:00 AM – 8:15 AM | -- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | 2 | -- | |
| | 8:15 AM – 8:30 AM | -- | 1 | 4 | -- | -- | -- | -- | -- | -- | -- | 2 | -- | |
| | 8:30 AM – 8:45 AM | 1 | 1 | 2 | -- | -- | -- | -- | -- | -- | -- | 2 | -- | |
| | 8:45 AM – 9:00 AM | -- | 2 | 7 | -- | 2 | -- | -- | -- | -- | -- | -- | -- | |
| | Morning Total | 1 | 15 | 14 | 2 | 2 | -- | -- | -- | -- | -- | 6 | -- | |
| Noon | 11:00 AM – 11:15 AM | -- | 6 | -- | 4 | -- | -- | -- | -- | -- | -- | -- | -- | Noon Total: 45 |
| | 11:15 AM – 11:30 AM | -- | -- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 11:30 AM – 11:45 AM | 1 | -- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 11:45 AM – 12:00 PM | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 12:00 PM – 12:15 PM | 3 | 3 | 3 | 2 | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 12:15 PM – 12:30 PM | 3 | 4 | 1 | -- | -- | -- | -- | -- | -- | -- | 2 | -- | |
| | 12:30 PM – 12:45 PM | 5 | -- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 12:45 PM – 1:00 PM | 4 | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | Noon Total | 18 | 9 | 10 | 6 | -- | -- | -- | -- | -- | -- | 2 | -- | |
| Afternoon | 3:30 PM – 3:45 PM | -- | 2 | -- | 2 | -- | -- | -- | 2 | -- | 2 | 2 | -- | Afternoon Total: 87 |
| | 3:45 PM – 4:00 PM | 3 | 1 | 2 | 1 | -- | -- | -- | -- | -- | 2 | -- | -- | |
| | 4:00 PM – 4:15 PM | 3 | 5 | 3 | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 4:15 PM – 4:30 PM | 4 | 2 | 4 | 4 | -- | -- | -- | -- | 4 | -- | -- | -- | |
| | 4:30 PM – 4:45 PM | -- | 1 | -- | 1 | 1 | -- | -- | -- | 1 | -- | -- | -- | |
| | 4:45 PM – 5:00 PM | 2 | 1 | 2 | 2 | 1 | -- | -- | -- | -- | 2 | -- | -- | |
| | 5:00 PM – 5:15 PM | 5 | 3 | 4 | 3 | 3 | -- | -- | -- | -- | -- | -- | -- | |
| | 5:15 PM – 5:30 PM | -- | 4 | 2 | -- | 2 | -- | -- | -- | -- | -- | 1 | -- | |
| | Afternoon Total | 17 | 19 | 17 | 13 | 7 | -- | -- | 2 | 5 | 6 | 3 | -- | |
| Daily Total | 79 | | 62 | | 9 | | 2 | | 11 | | 11 | | -- | |

APPENDIX III: MILEGROUND PEDESTRIAN AND BICYCLIST COUNT MAP



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APPENDIX IV: COUNTING STAFFS AND SCHEDULE

| | April 9 | April 10 | April 13 | October 1 | October 2 | October 5 | Count Location # |
|--|---------|----------|----------|-----------|-----------|-----------|------------------|
| Morning Shift <i>7:00 am -9:00 am</i> <i>11: 00 am – 12:00 pm</i> | Simpson | Simpson | Simpson | Yang | Yang | Yang | #1 |
| | Latif | Zhang | Scohy | Cheng | Zhang | Cheng | #2 |
| Afternoon Shift <i>12:00 am -1:00 pm</i> <i>3:30 pm – 5:30 pm</i> | Zhang | Zhang | Zhang | Yang | Yang | Yang | #1 |
| | Latif | Latif | Scohy | Cheng | Cheng | Cheng | #2 |

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APPENDIX IV: PEDESTRIAN / BICYCLIST COUNT FORM

BICYCLIST / PEDESTRIAN COUNT FORM

Name: _____ Date: _____ Location: North / South (check)

Start Time: _____ End Time: _____ Weather Conditions: _____ Temp Estimation: _____

| Time: 15 min increments (period) | Pedestrians | | Bicyclists | | Mid-Block Crossing |
|---|-------------|----|------------|----|-----------------------|
| | NB | SB | NB | SB | |
| (1) | | | | | |
| (2) | | | | | |
| (3) | | | | | |
| (4) 1 hour | | | | | |
| (5) | | | | | |
| (6) | | | | | |
| (7) | | | | | |
| (8) 2 hours | | | | | |
| TOTAL | | | | | |