STEM **Education and Outreach**

# Traffic Counting

The Minnesota Pedestrian and Bicyclist Data Program produces walking and bicycling information used to inform state, regional, and local planning and engineering initiatives and to assess important transportation policies. Traffic data can be used in safety evaluation, pavement design, funding decisions, forecasting, modeling, and much more.

**Recommended Grade Levels: 9-12**

**Name of person who is counting traffic.**

**Where are you counting traffic?**

**What data are you interested in collecting? Why?**

**What do you think you will see? (i.e. more pedestrians, more cars, evenly split, more adults, etc.)**

## DIRECTIONS

Split up into groups of four or more. Each group will focus on one mode of transportation to count. Pick an imaginary line that crosses the street. Count all instances of your group's mode of transportation (bicylists, pedestrians, motor vehicles, or public transportation)that crosses your line. Make only one tally mark every time each person crosses the imaginary line. The same person should be counted everytime they cross. Do your best when traffic volumes are high – note if you lose track of count.

## BICYCLISTS

Bicyclists can be identified as anyone riding a bicycle. Please count the people on the bike, not the number of bikes.

**TIME STARTED:**

| Time (Minutes) | Adult | Child |
|---|---|---|
| 0 – 10 | | |
| 10 – 20 | | |
| 20 – 30 | | |
| 30 – 40 | | |
| 40 – 50 | | |
| 50 – 60 | | |
| **Total** | | |

**NOTES:**

## PEDESTRIANS

Pedestrians often walk, but may also use wheelchairs, canes, roller skates, skateboards, or scooters.

**TIME STARTED:**

| Time (Minutes) | Adult | Child |
|---|---|---|
| 0 – 10 | | |
| 10 – 20 | | |
| 20 – 30 | | |
| 30 – 40 | | |
| 40 – 50 | | |
| 50 – 60 | | |
| **Total** | | |

**NOTES:**

## TOTAL BIKE AND PED COUNT

Add up totals from the tables above to clearly compare the data.

| Type | Adult | Child |
|---|---|---|
| Bicycle | | |
| Pedestrain | | |

## MOTOR VEHICLES *(Optional)*

Please count motor vehicles as cars, trucks, or other compact vehicles.

**TIME STARTED:**

| Time (Minutes) | Adult | Child |
|---|---|---|
| 0 – 10 | | |
| 10 – 20 | | |
| 20 – 30 | | |
| 30 – 40 | | |
| 40 – 50 | | |
| 50 – 60 | | |
| **Total** | | |

**NOTES:**

## PUBLIC TRANSPORTATION *(Optional)*

Please count public transportation as buses or limousines carrying multiple passengers.

**TIME STARTED:**

| Time (Minutes) | Adult | Child |
|---|---|---|
| 0 – 10 | | |
| 10 – 20 | | |
| 20 – 30 | | |
| 30 – 40 | | |
| 40 – 50 | | |
| 50 – 60 | | |
| **Total** | | |

**NOTES:**

## TOTAL MOTORIZED VEHICLE COUNT *(Optional)*

Add up totals from the tables above to clearly compare the data.

| Type | Adult | Child |
|---|---|---|
| Vehicle (Car) | | |
| Public Transportation (Buses) | | |

## REFLECTION

Please use this time to reflect and analyze the data you collected. While you can write about any key takeaways, please use the below bullet points as a guide:

- **How many people did you count?**
- **Did the number surprise you? Why or why not?**
- **What did you learn about the area you counted traffic in?**
- **Were there other elements (construction, emergency vehicles, etc.) that you think affected your count? If so, why?**
- **Why do you think it's important that we count traffic?**
- **What would you do differently next time you count traffic?**
- **How do you think bicyclists and pedestrians affect overall traffic decisions?**