*Consider having students conduct the observations*

**Why Conduct Observations?**

* Observations before the campaign are strongly recommended to be able to document the idling problem at the school. Observations after the campaign can be used to demonstrate how effective the campaign was once complete.

**Recommendations for Conducting Observation:**

* If students are conducting observations, their safety must be the top priority. Schools should provide whatever supervision they feel is necessary (e.g., assigning teachers or parents to escort and assist the children, or pairing older students together).
* Schools can also have staff or parents conduct the observations.
* Observers would observe the idling behavior of drivers during afternoon pick-up. While 4-5 consecutive days are recommended, schools need to decide how many days are feasible. Conducting observations for just 1-2 days would not necessarily be statistically viable, but would still provide some data for students to work with.
* Morning drop-off isn’t usually a problem for schools. Generally, the line of cars moves and cars don’t sit and idle. However, if a school believes morning drop-off is an issue, observations can be made then as well.
* Do not combine observations with the Driver Contact Event.

**September (Pre-Campaign Observations):**

* To make the observations as true to “natural behavior” as possible, it is imperative that the observations be done ***before*** promoting the campaign at the school. If the campaign is promoted before the first set of observations, then you will not get a true set of data.
* Observersshould be told that they are collecting data for a transportation study for EPA to gather information on the types of cars on the road and on driving behavior in general. **Observers** should be told this for the pre-campaign observations; any drivers who question the observers should be told the same.

**January (Mid-Campaign Observations), Optional**

**April (Post-Campaign Observations):**

* A final set of observations will show you the progress made in the campaign.

**How to Conduct Observations**

* Observers should be split into Zones: areas of the school where one observer can easily track all of the vehicles in that area (e.g., all vehicles on one side of the street in one block; all vehicles on both sides of the street on a small block; all vehicles in the school’s traffic circle; all vehicles in one section of the school’s parking lot, etc.).
* Be sure to cover all zones at the school.
* Have observers ready about 20-30 minutes before school is dismissed. Be sure that any students conducting the observations are appropriately paired off and/or supervised, as determined appropriate by the schools. All observers should be prepared to stay until student pick up is complete.
* All observers should have the following items:
  + Observations Sheets *(See: “Sample Observation Sheet”)*
  + Pen (don’t use pencils)
  + Clipboard
  + Watch or Cell Phone (to track time)
* Observers complete observation sheets.
* Have students or other volunteers collect the sheets, tally up the data collected, and determine how much idling was observed at the school.
* Have students, or parents, analyze the data *(See “Analyzing the Data”).*
* Here is a sample table that can be used to present the data:

|  |  |
| --- | --- |
| Total # of Vehicles |  |
| # Vehicles Idling |  |
| Total Idling Minutes |  |
| Average Idle Time/Vehicle |  |
| Total Gas Wasted |  |
| Total Gas Wasted in a Year of Idling |  |
| Total CO emitted |  |
| Total NOx emitted |  |
| Total VOC emitted |  |