18 Common Traffic Counting Mistakes And How To Avoid Them

Spack SOLUTIONS

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We started out in business collecting traffic data in 2001 and eventually decided to branch into developing better hardware and software for traffic counting, "scratching our own itch." We've successfully used our equipment to complete tens of thousands of traffic counts since starting our business. Here's a quick list of some of the lessons we've learned in the traffic counting business.

1. NOT CONTACTING THE LOCAL GOVERNMENT.

Contact the engineering department in the city where you're going to do the counting. Ask if they're doing any street sweeping or other maintenance that would affect your gear or counts. Also, let the police department know what you're doing so their officers know about the gear you'll have deployed.

2. OVER-PROMISING.

Build time into your schedule so you know you can meet the deadline even if something goes wrong. Tubes break. SD cards go bad. Don't let those things sabotage an important relationship.

3. NOT COLLECTING ENOUGH DATA.

The wide use of cameras, such as the countCAM video recorder, are leading to significant data collection cost savings. Collecting a 13-hour turning movement count from 6 am to 7 pm captures the rush hours plus provides data for signal warrant analysis. Collecting 48-hour turning movement counts provide average daily traffic volumes on each leg of the intersection. Utilize technology to collect more data, which will lead to better analysis.

4. NOT KEEPING TRACK OF EQUIPMENT.

It's important to keep a log of the gear that's available and to manage upcoming use. This is especially important in larger organizations where you can experience several people wanting to use the gear to meet their deadlines.

5. COLLECTING DURING NON-NORMAL PERIODS.

Find out if there are any events that would cause abnormal traffic when you're planning to do the data collection. Research school spring breaks, local city events that might have parades, large sporting tournaments, etc. Collecting 48 hour turning movement counts or tube counts allows you to compare two days to make sure they are similar, i.e. "normal."

6. NOT BEING PREPARED FOR WEATHER.

It's unfortunate, but to meet deadlines we sometimes must work in less than ideal conditions. Staff should have appropriate winter or rain jackets, gloves, sun screen, hats, bug spray, etc.

7. NOT LEVERAGING TECHNOLOGY.

Video cameras are a powerful multi-purpose tool allowing for discrete data collection. This can include bicycle data, pedestrian data, train data and other sorts of research in addition to standard vehicle turning movement counts.

8. NOT ACCURATELY DOCUMENTING INSTALLATIONS.

Have clear paperwork so the installation locations are documented in case someone other than the installer needs to pick up the gear. Take photos. Double check notes to make sure the A and B on tube counters are correctly labeled. Write down serial numbers.

9. WRONGLY INSTALLING EQUIPMENT.

Follow the manufacturer's instructions for setting up the gear. The better manufacturers will provide videos in addition to manuals. Make sure staff know what they're doing before the pressure of a project is on.

10. COLLECTING DATA IN THE WRONG SPOT.

Provide clear maps with correct street names and reference points to make sure there aren't any mix-ups. Using phone apps with pins on the correct location can help.

11. NOT CHARGING COUNTERS.

Properly maintain the batteries on counters and tools. Battery levels should also be checked in the shop before going out in the field. Don't install counters that will die before the end of the count.

12. NOT COMMUNICATING.

Clients and bosses like to know things are going smoothly. They also need to know if something is going wrong (but always recommend a way for handling the situation). Send regular email updates to keep everyone informed.

13. BEING UNSAFE.

Staff should have high visibility clothing and work vehicles should be outfitted per OSHA and State DOT regulations. In addition, staff should be taught to always look both ways before they take a step onto a road. They should also be taught where to park safely for different conditions. It's better to carry gear 200 feet than cause an accident by parking in the wrong spot.

14. NOT KEEPING THE WORK VEHICLE ORGANIZED.

Having a messy work van slows down the worker and can lead to losing gear and paperwork. Provide work vehicles with appropriate bins, shelves, and slots for gear. Thankfully cameras and tube counters keep getting smaller and lighter, making it easier to keep the work vehicle organized.

15. NOT SECURING GEAR.

Traffic counting gear seems to attract 12-year-old boys with a pocket knife. Make sure the gear is installed as discretely as possible. Also, use chains, locks and hose clamps to secure tube counters and cameras tightly onto permanent infrastructure.

16. PUTTING GEAR ON THE VEHICLE.

It is very tempting to place a hammer or a drill on the hood, tailgate, or top of the work vehicle. It's a very bad habit. Many data collectors have a story of having something fly off the vehicle as they're driving down the freeway.

17. IMPROPERLY SITING THE GEAR.

Don't point cameras at the horizon where the sun will rise or set and wash out the camera. Don't chain a tube counter to a sign in a ditch that could flood with an overnight rain. Don't setup the gear so it could be a tripping hazard on a trail or sidewalk.

18. DELIVERING INACCURATE DATA.

Look at the data to make sure the vehicles balance between intersections if you're doing a turning movement count. Look to make sure the commuter patterns are going in the right direction. Check to make sure the peak hour is about 10% of the daily traffic volume. Cross reference turning movement count data with tube counter data if you're collecting both. In short, do as much quality control checking as you can.