

CONCURRENT SESSION 3C - LTPP SURVEY PANEL

Presented at
National Traffic Data Acquisition Conference
Albuquerque, New Mexico

May 5-9, 1996

LTPP TRAFFIC MONITORING SURVEY

Ron Tweedie
New York Department of Transportation

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Panel Moderator: Ron Tweedie

Panelists:

**Koney Archuleta, Mulder Brown,
David Scott, Tony Manch**

In the spring of 1996, the **FHWA LTPP** Program staff conducted a survey of State DOT and the Canadian Provinces to gain a better understanding of the influences affecting monitored traffic data submitted as part of the LTPP data collection effort. This survey was a sequel to a similar survey conducted in 1994 which resulted in several specific actions by FHWA and AASHTO. (See first overhead)

The purpose of this session is to present the results of the second survey and to provide a forum for dialogue on WIM equipment, software, and data procedures between a panel of state DOT experts and the audience.

Observations:

The collection of WIM and vehicle classification for the LTPP research project is improving but still falls short of meeting the research objectives. The states and provinces continue to have problems with equipment reliability, data processing, and staff support for the program. Communication between pavement engineers, who designed the project, and traffic engineers, who collect the data, is still problematic. It is the consensus of the session attendees that given the results available thus far, the LTPP program staff should revisit the research design and make the corrections necessary to improve the chances of success during the remainder of the project.

ITPP Traffic Monitoring Survey

Ron Tweedi e. New York DOT,
Moderator .

Regional Presenters:

Dave Scott, Vermont DOT

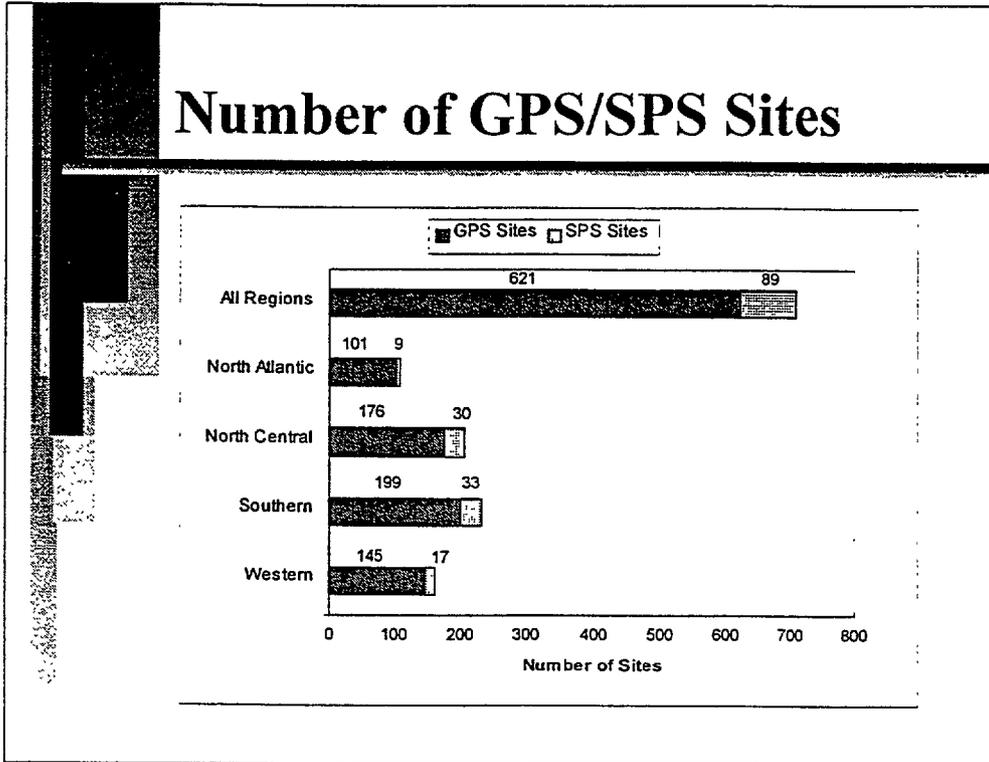
Tony Manch, Ohio DOT

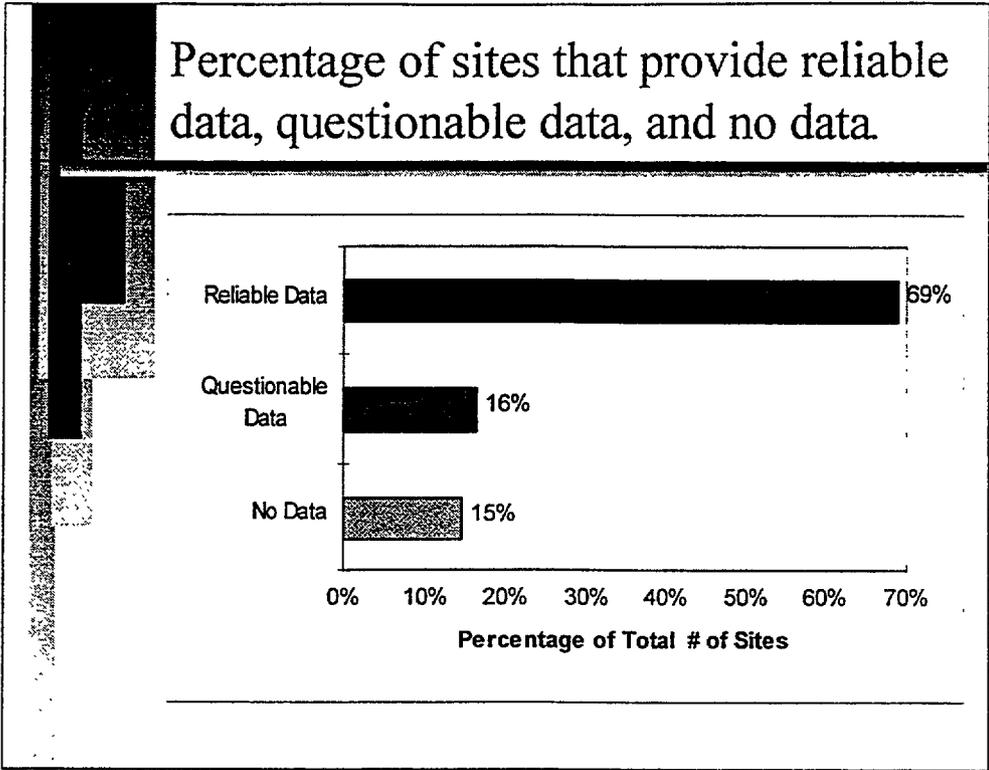
Mul der Brown, Florida DOT

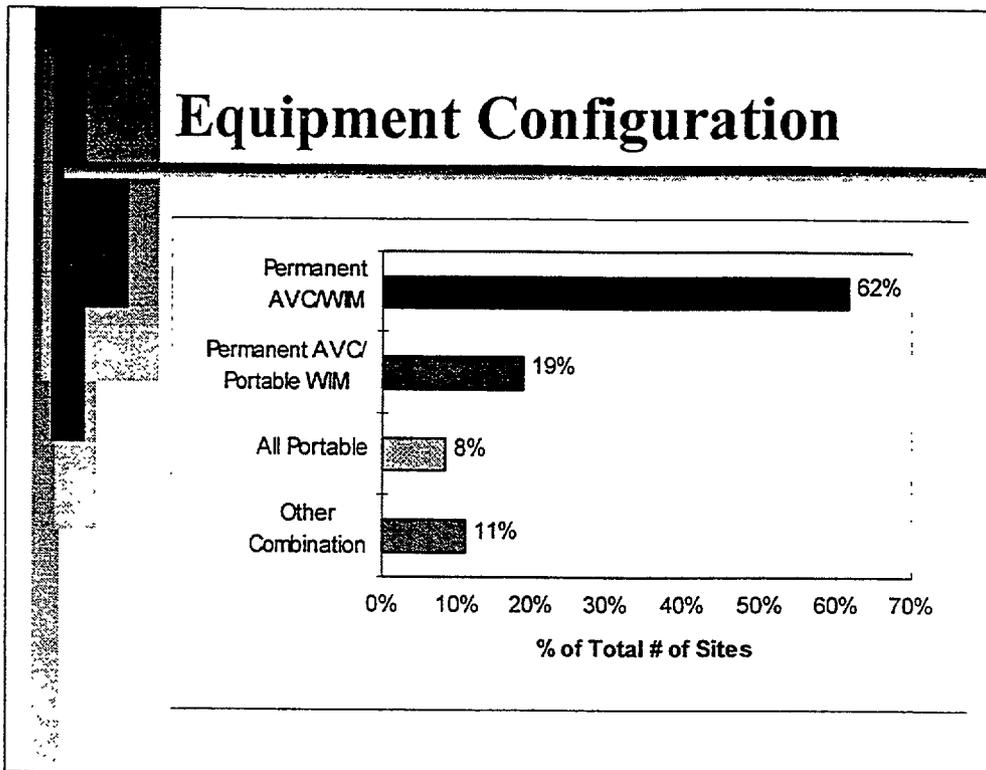
Koney Archul etta, California DOT

NATDAC '94 Follow-Up

- . *Circuit Riders*
- . *QC Procedures*
- . *State Contacts*
- . *Regional User Groups*
- . *Best Practices Handbook*
- . *Pooled Fund Study*
- . *Mid-Term Review*
- . *Customer Satisfaction Resurvey*

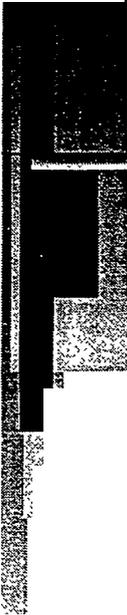






Other combination:

- Permanent piezo sensors, portable AVC and WIM control units (Oregon)
- Permanent counter with loops giving length classification (New Brunswick)
- Dewitt and Cranberry sites have rotational not portable WIM electronics (New York)
- Vehicle Class Only (North Dakota)
- AVC only, awaiting peizo installation (Texas)
- ATRs only (Alberta)
- Currently, 1 GPS site #531501 the pavement is too thin for AVC or WIM sensors, so we are only submitting 3 card data from 1 permanent loop counter.



Top Two obstacles in meeting the data collection needs

H Malfunctioning data collection equipment (ranked largest obstacle)

- ***Not enough personnel to collect, process and/or submit data (ranked second largest obstacle)***

Other was ranked #3: "Other" could be renamed to "Funding Limitations"

*Budget limitation (New Brunswick)

*Lack of dedicated resources to perform work and keep equipment functional (New York)

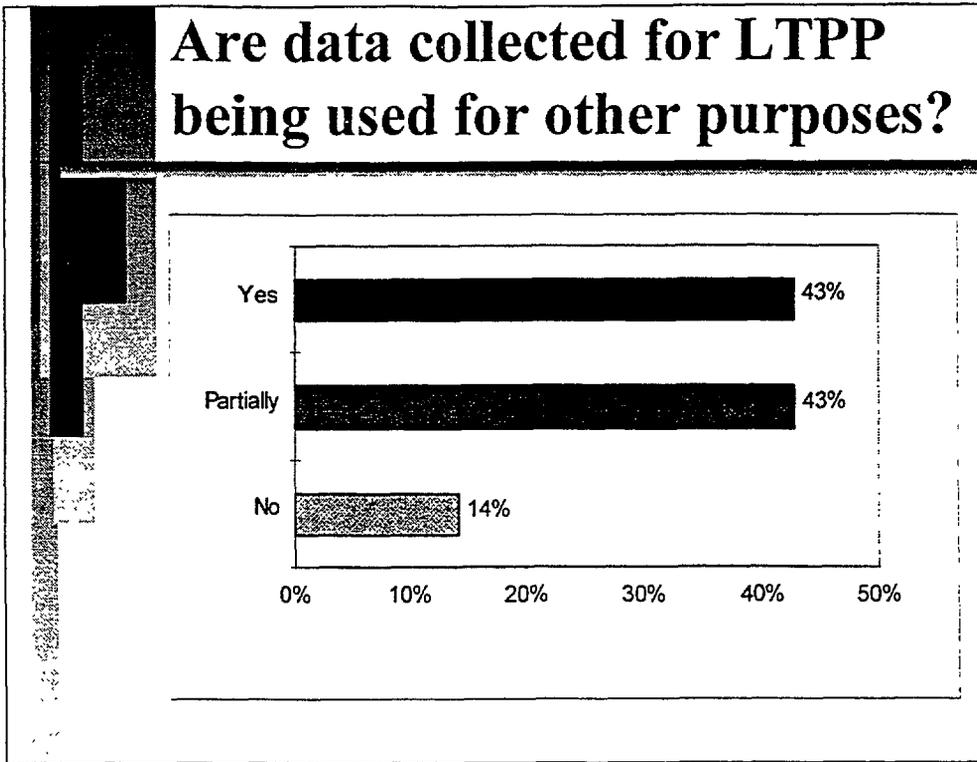
*Not enough personnel to maintain (Minnesota)

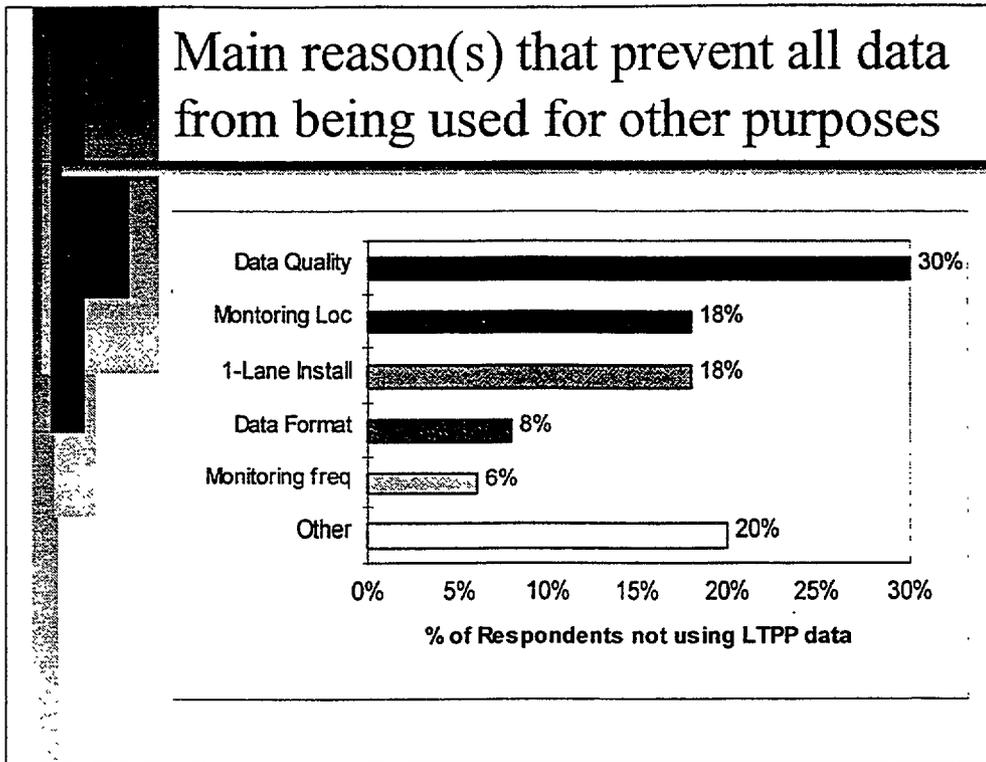
*Low funding priority (South Carolina)

*Uncertain funding (California)

-No money (Oregon)

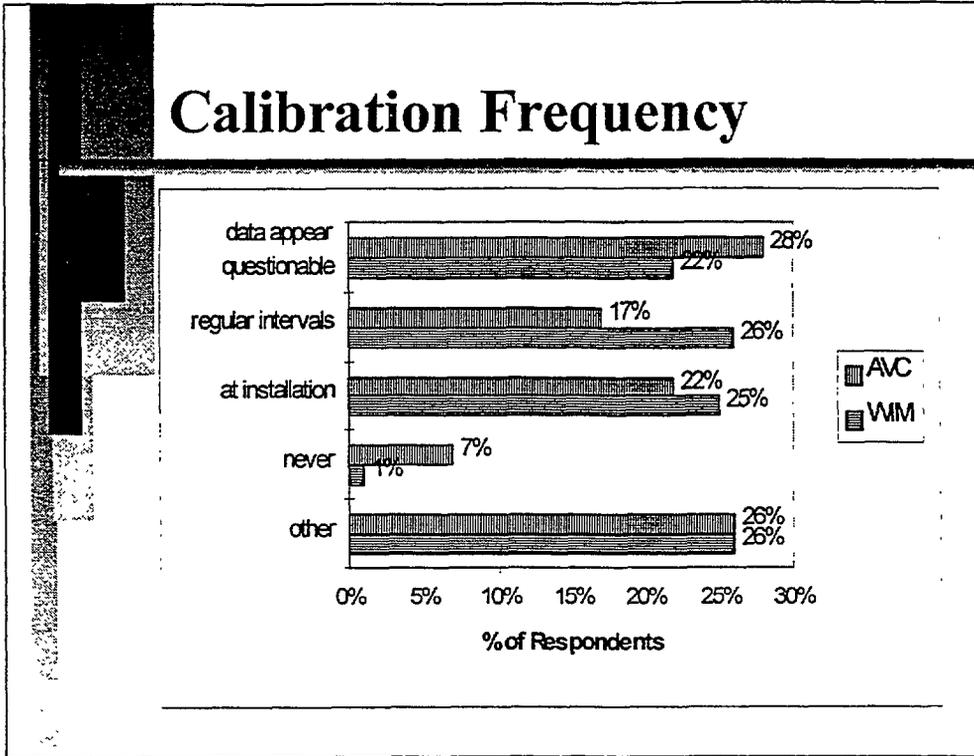
*Insufficient funds & staff to keep equipment in road repaired (Washington)





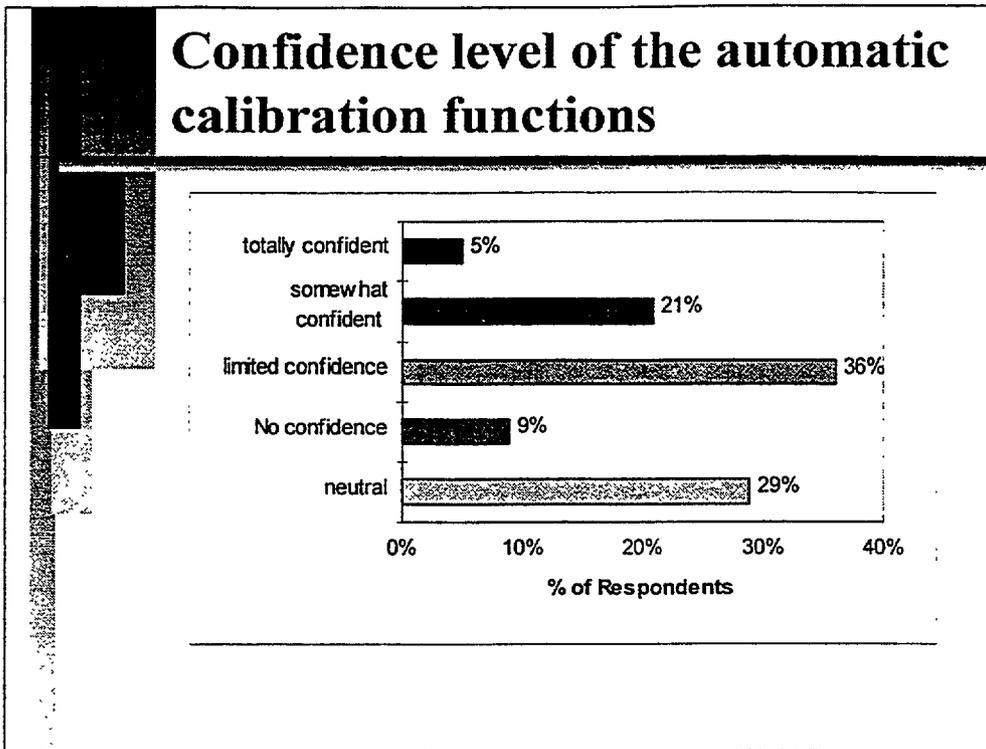
Other:

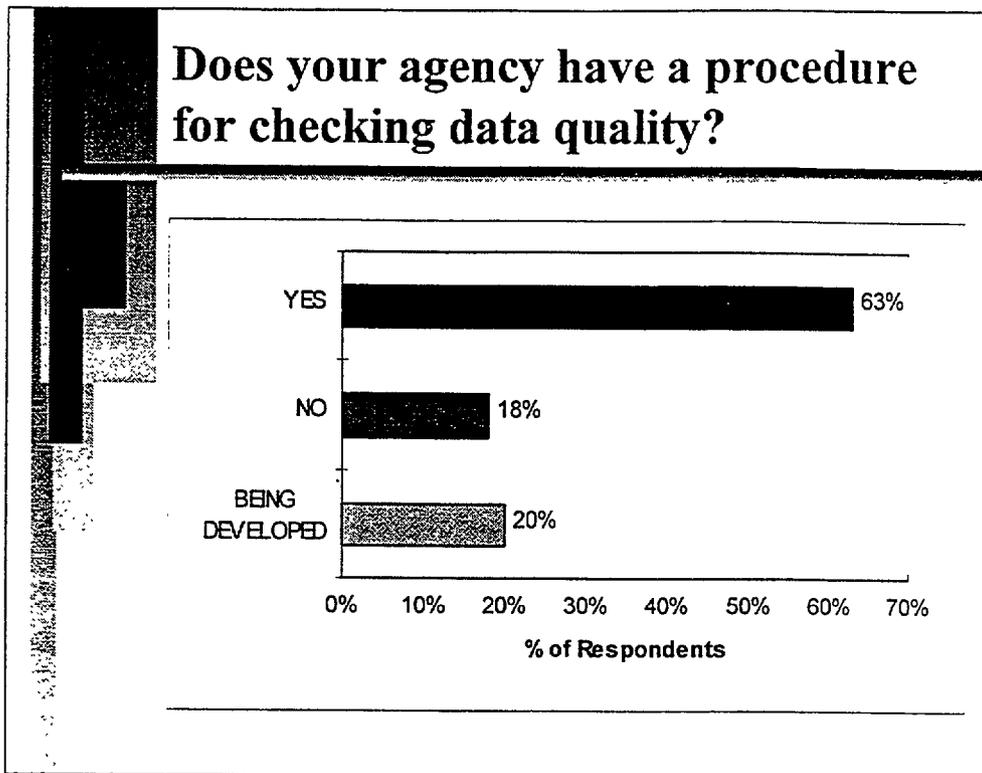
- Other programs require only a sampling of data. We collect 24 hour continuous data for LTPP; therefore they are not equipped or need to handle all the data (Conn)
- Lack of knowledge or interest by other groups (New York)
- Samples of data have proven adequate (Ontario)
- To much WIM data (Kentucky)
- Do not have time to edit and report it (Minn)
- Single Direction (Nebraska)
- Lack of information (Tennessee)
- FHWA class, table not compatable with Texas
- Lack of staff resources to process data (Alaska)



Other:

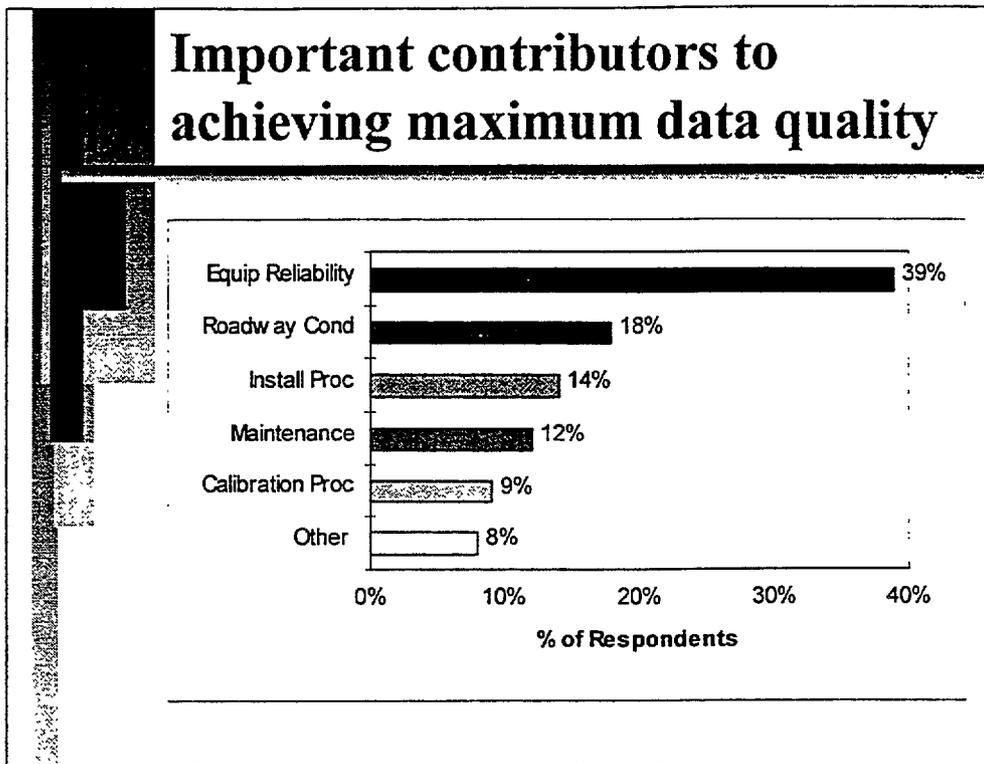
- self calibrating
- when funding and time permit
- during equipment servicing (as part of maintenance contract)





Some reported procedures for checking quality of data:

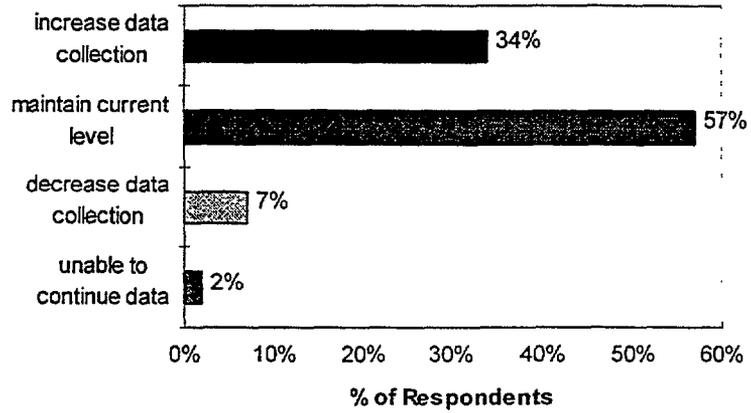
- Data checked with historical data, data from Maryland police, and manual counts
- Check weekly and monthly for number of vehicle recorded as errors and as warnings. Examine GVW and FAW weight trends for FHWA Class 9's (Conn)
- For WIM, track gross weight and steer axle weight of class 9's. Classification accuracy checked infrequently against manual counts (NJ)
- Check ESAL/Class and % class by weight range values (Penn)
- Visit truck scales, look at front axle weights and compare with data collected from WIM (Virginia)
- If unclassified bin for AVC data is > 10%, the data are marked as good for volume data only.(Texas)



Other:

- Technology. (This differs from Specific equipment brand etc.) (Conn)
- All above are important. (Wisconsin, Florida, Texas)

Agencies ability to meet the need for traffic data for LTPP test sections



OBSERVATIONS

- *Equipment Reliability - Improving*
- *Data Quality- Perception vs. Reality*
- *Multiple Use of Data - Yes!!!*
- *Commitment - 90%+*