RESEARCH QUESTION

What are the relationships between the incident types and data?

Could you quantify an incident's impact on delay (i.e., for every one minute of incident duration you can expect xx minutes of additional delay)?

BACKGROUND

The schema *incidents* contains the table *incidents_217_2009* as well as various look-up tables for the incident data. Begin by developing qualitative descriptive of the incident data fields. Explore the relationships between these variables.

The schema *loop* in the class database contains data obtained from inductive loop sensors on OR-217 SB at 5-minute aggregations for calendar year 2009. The loop sensors collect volume, speed, occupany and metrics on vehicle-miles-traveled, vehicle-hours-traveled, delay and information about bad detector readings in table loop.loopdata_5min_217sb_2009. The loop schema also contains tables *highways*, *detectors*, *ramps*, and *stations*. Detectors are related to ramps and stations.

Next process the *loop* data for some simple data quality metrics to identify a segment that you wish to consider in more detail. Ideally, this segment would have high-quality data. This segment should also have some number of incidents within the segment or downstream of the segment.

Estimate the descriptive statistics of delay, both numerically and graphically. Statistically quantify these results.

Could you quantify an incident's impact on delay (i.e., for every one minute of incident duration you can expect xx minutes of additional delay)?

REFERENCES

Understanding and Communicating Multimodal Transportation Data