James Hubbard, PMP

Assistant Research Scientist

YEARS OF QUALIFYING EXPERIENCE: 10

Education

- M.S., Analytics, Johns Hopkins University, 2019
- B.S., Marketing, Old Dominion University, 2011
- Project Management Professional Certification, 2021

Background and Qualifications

Since joining TTI in 2018, Mr. Hubbard has performed a comparison of Bluetooth traffic data and the National Performance Management Research Data Set for the purpose of historical operational analysis. This took a look at data sets on I-35 in central Texas and a 24-hour daily review of corridor performance across 200 directional miles. Using the 24-hour daily review he developed data models that could predict future daily maximum travel times on the corridor. He also developed various visualizations that captured traffic delays and maximum travel times across the corridor on I-35. He has also applied Travel Time Reliability metrics on datasets for the City of Coppell, TX to evaluate the impact of an 18-month reconstruction effort.

Recent Work Experience

Dates	Position(s)	Organization
2022 - Present	Assistant Research Scientist	Texas A&M Transportation Institute
2018 - 2022	Associate Transportation Engineer	Texas A&M Transportation Institute

Relevant Project Level Experience

Data Analyst, I-35 Traveler Information During Construction (TxDOT). Mr. Hubbard is the Data Analyst on a large-scale traveler information project for the Texas Department of Transportation. The system collects and integrates planned lane closure schedules from the multiple contractors working on the I-35 corridor, automatically assess the traffic queuing and delay potential associated with those planned closures and disseminates advance notification of the closures and potential impacts to various users in the corridor. The system has also been designed to assist TxDOT and contractors with deployment decisions of portable end-of-queue warning systems and integrates inputs from those systems with various other traffic monitoring technologies in the corridor to develop accurate delay forecasts for travelers in the corridor. Outputs from the system have won national and international acclaim for their clarity and innovation.

Data Analyst, Arterial Comparative Travel Times for City of Coppell. Mr. Hubbard was a Data Analyst on an 18-month reconstruction project on a 1.4 miles of Freeport Parkway between W. Bethel Rd and I-635 in the city of Coppell. The 4-mile section of Freeport Parkway between SH 121 and I-635 is a major travel route through the city carrying nearly 20,000 vehicles per day. During construction, travelers on this route were expected to be impacted by decreased capacity, increased congestion, and increased travel times. He used Travel Time Reliability metrics to evaluate the effect of the construction project on travel patterns.

Database Administrator, Innovation IAC Database (TxDOT). Mr. Hubbard is the Database Administrator on the state-wide Innovation IAC project. He built a database to compile information on past, present and future Innovative projects done by TxDOT districts and divisions. The information captured in this database included pictures, specifications, summaries, cost information, location, as-builts, project reports or links to any of these items.

Data Scientist, Waco District High-Speed, Rural Two-Lane Roadway Crash Analysis. Mr. Hubbard was part of a team that used connected vehicle data to conduct a crash analysis on rural 2-lane high speed roads in the Waco district. This included defining the roadway network, identifying intersections and curves in the roadway, processing the connected vehicle data and modeling the correlation between the connected