

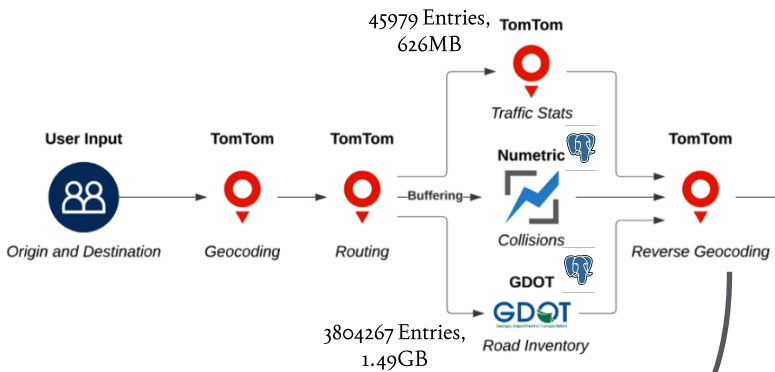
Atlanta Traffic Route Safety Visualization

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Motivation

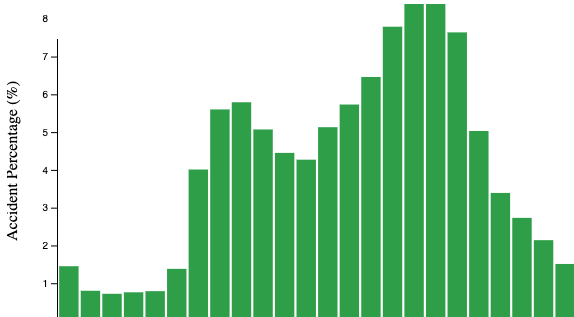


Data



Route Recommendation

This route is currently the fastest at 1744 seconds. The likelihood of a collision occurring on this route is 0.83 times the average. Additionally, the likelihood of a collision on this route being fatal is 0.23 times the average. This time of day is less dangerous, being 52.22% less prone to crashes.



Approaches

buffer analysis to identify relevant accidents



route index calculated from
normalized traffic and safety statistics

- travel time
- traffic time
- traffic length
- collision likelihood
- fatality likelihood
- hourly trends

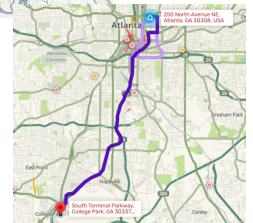
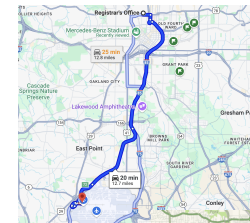
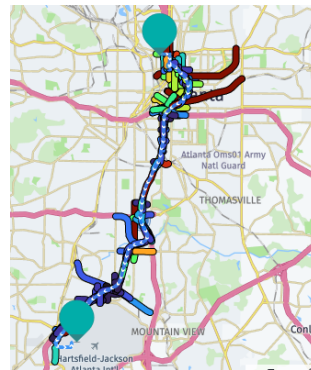


route visualization with detailed safety indicators, graphs, and text summaries

Experiment: Peer Reviews

Safe Maps Offers:

Map Applications Offer:



Accident Count



- visual accident information
 - priorities safety
 - useful for long-term planning
 - ex: new drivers
 - difficult to interpret unless zooming in
- traffic information
 - prioritizes time
 - useful for immediate action
 - ex: late for school
 - hard to drive mindfully