UTC Project Information – N	lational Transportation Center @ Maryland (NTC@Maryland)
Project Title	Advanced Volatility Models for Improving Travel Time Prediction
University	University of Maryland
Principal Investigator(s)	Ali Haghani
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PI(s) and Co-PI(s) Photo(s) Image should be 80width x 120height pixels. Allowed file types: png gif jpg jpeg .	
Funding Source(s) and Amounts Provided (by each agency or organization)	UMD NTC, UMD, SHA
Total Project Cost	\$240,000
Agency ID or Contract Number	DTRT13-G-UTC30
Start and End Dates	January 2015 – December 2015
Project Image (for website) Should be 233width x 155height pixels. Allowed file types: png gif jpg jpeg.	Output Upper Upper Prediction Interval Predicted True Lower Prediction Interval Lower Sample
Brief Description of	In order to provide meaningful traffic information to both traveler
Research Project	and traffic managers, it is critical to develop accurate and reliable

	traffic prediction algorithms that not only reduce absolute value of prediction error but also take into consideration the uncertainty associated with travel time prediction. The objective of this resea is to identify and model uncertainties associated with travel time prediction and develop models for short term forecasting of the traffic state. Most existing travel time prediction methods only provide a point value as the prediction result which does not represent the uncertainty issues. Instead of providing a point valu (an average of travel time during a certain time interval), a prediction interval based approach is proposed. The prediction interval represents likeliness of capturing true value of the future travel time. In other words, a prediction interval is an estimated range that captures the future observation, with a prescribed probability, given the current available observations.
Describe Implementation of Research Outcomes (or why not implemented)	
May Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	

Web Links • Reports • Project website	