The VOTERS (Versatile Onboard Traffic Embedded Roaming Sensors) framework and system was developed as part of a government funded project over the last 5 years and has created a new way to make it more affordable to provide frequent city-wide road quality ratings. This Northeastern University led project creates a paradigm shift from inspecting some roads every 3-5 years to vehicle based inspections every 6 months in a more accurate and detailed manner.

VOTERS is currently exploring its value to the towns and cities around New England and invites you to participate. This proposed pilot study relies on having a minimum number of subscribers to allow Northeastern University to maintain the research and engineering team necessary to provide and improve this service. We hope you will partner with VOTERS and Northeastern University to change the way roadway inspections are performed in the future.

Roadway Inspection Subscription Service (RISS)

RISS works like this: You subscribe for a year of service at a cost determined by the miles of roadway lanes and population in your jurisdiction (details below). VOTERS will survey around 90% of your paved town or city roads at least twice a year and provide a pavement condition rating for each of the surveyed streets accessible through a web-based GIS interface. Ratings will not only be from intersection to intersection, rather be divided into smaller stretches of x feet. Then each participant can compare our results with other pavement inspection results, validate the ratings by investigating our provided surface images, or checking out stretches of road in person.

Cost and Benefits

- The cost is determined based on a town or cities population and miles of road lanes: COST = x % * POPULATION + LANE MILES * Y (Minimum cost: $Z)
- VOTERS will inspect all town or city roads at least twice a year with a VOTERS in-traffic inspection vehicle (Additional more frequent surveys can be purchased).
- Access to a protected web-based interface to our professional GIS front-end managing and visualizing the inspection data and ratings backed by an Oracle data base.
- The GIS will maintain access to the road ratings history from previous surveys allowing to quantify the deterioration process and to calibrate existing life-cycle cost analysis.

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