

Road Transportation in Dhaka, Bangladesh

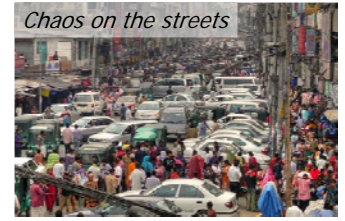
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Status Quo

- Rapid increase in car ownership
- Chronic traffic congestion
- High use of Rickshaw (human-powered taxi) and Auto Rickshaw, called CNG
- Few motorcycles
- Traffic control by traffic cops even at signalized intersections
- Insufficient knowledge, technique, and experience about traffic operation
- Lack of discipline in driving

Objectives of the Case Study

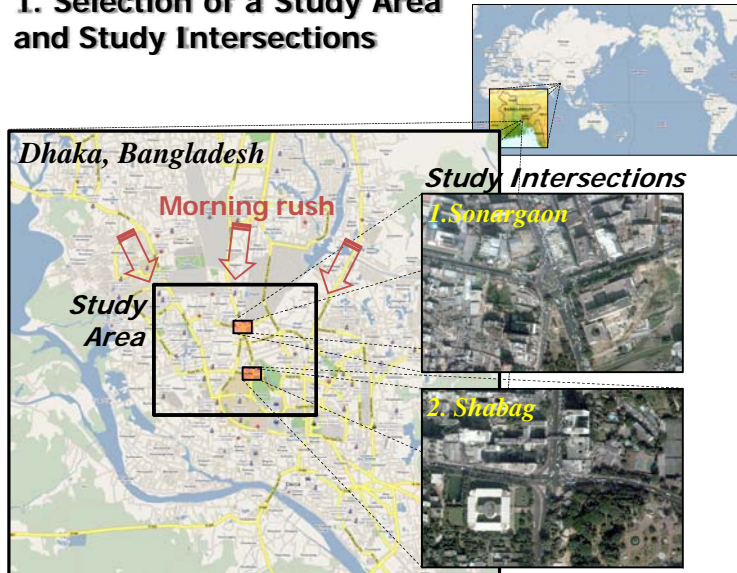
- Understand the current traffic condition of arterial roads in Dhaka
- Propose performance-improvement plans for several critical intersections
- Evaluate the effects of the plans at microscopic and macroscopic levels
- Collaborate with Bangladeshi specialists in traffic engineering
- Train Bangladeshi students majoring in traffic engineering



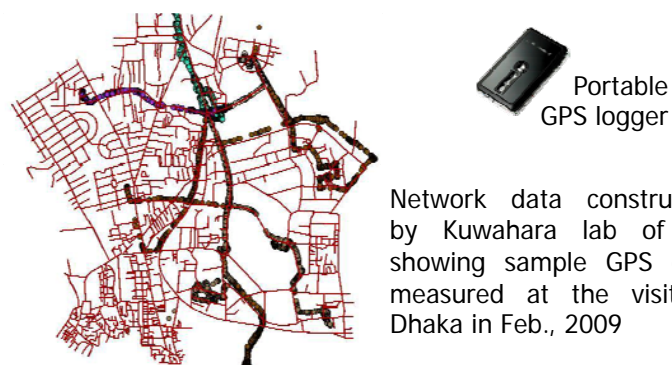
Research Strategy

Completed

1. Selection of a Study Area and Study Intersections



2. Construction of Network Data



To be done in 2009

3. Field Survey of Study Intersections



- Intersection geometries
- Directional traffic flow by vehicle type
- Saturation flow rate
- Typical control pattern of traffic cops
- Etc...

4. Probe Car Experiment

- Travel time, travel speed, etc. on each link
- To be used for the evaluation of the current traffic condition and for the validation of traffic simulators



5. Intersection Analysis and Improvement

6. Evaluation of the effect by micro and macro simulation



Micro simulator



Macro simulator