

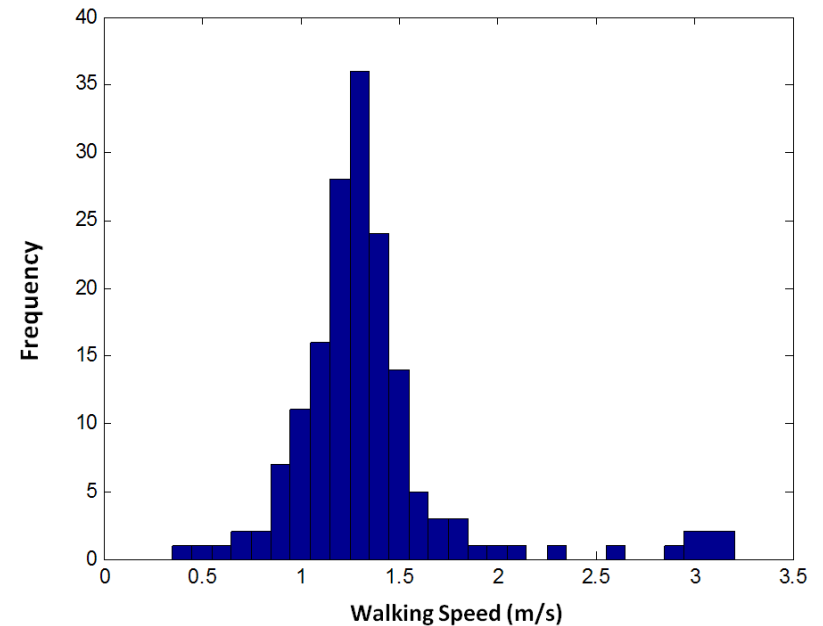
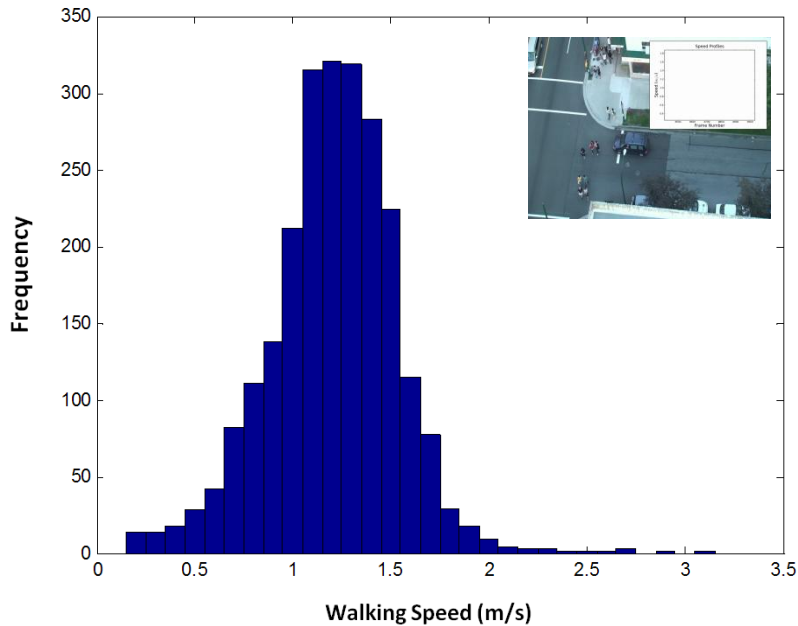
ITS for Transportation Data Collection and Road Safety Analysis Integrated Platform for Transportation Data Analysis

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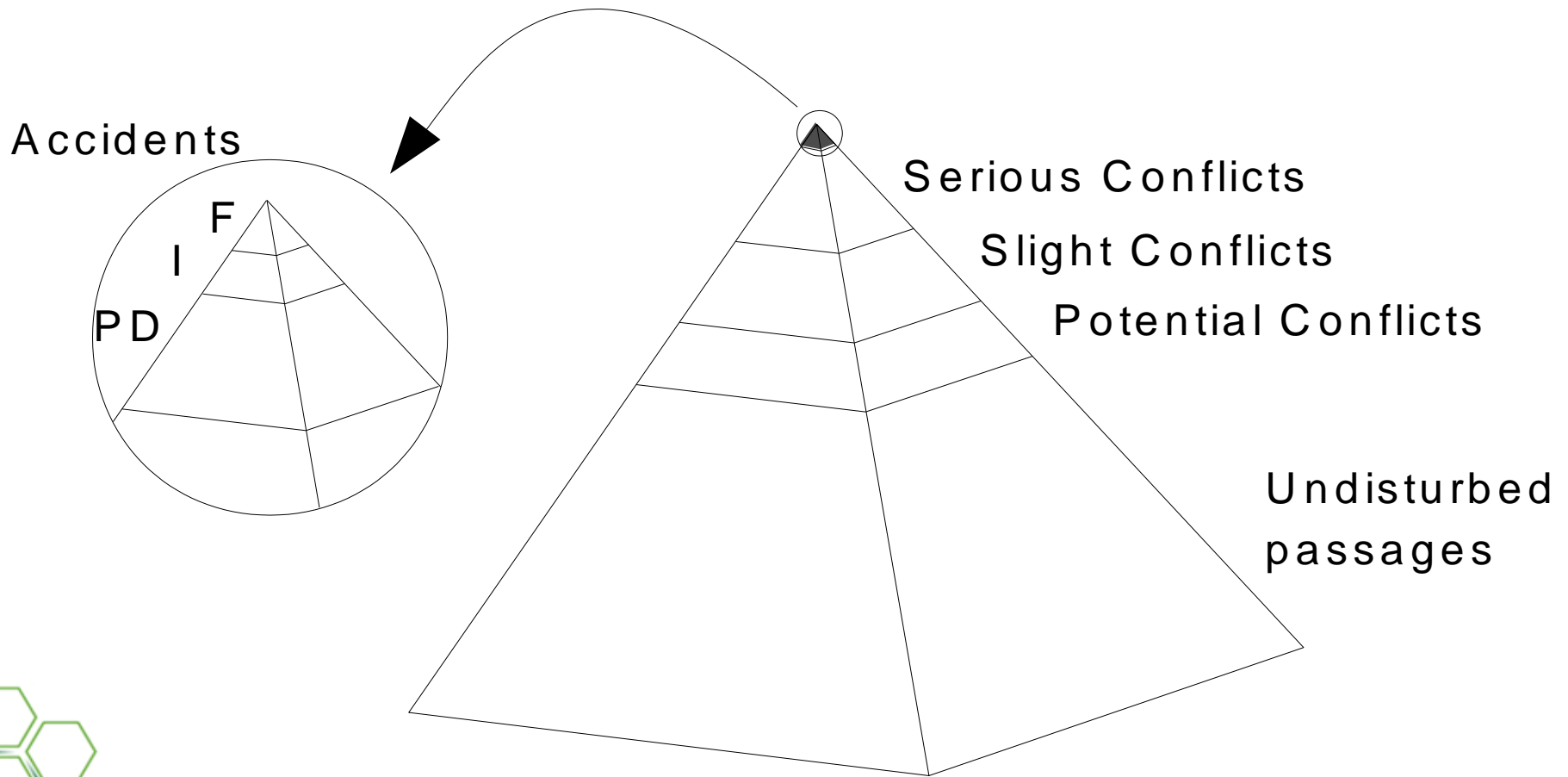


Transportation Data collection

- Travel Time Reliability (MTQ - Pr. Catherine Morency): probes (Communauto/INRIX), video, Bluetooth tests
- Pedestrian Data Collection



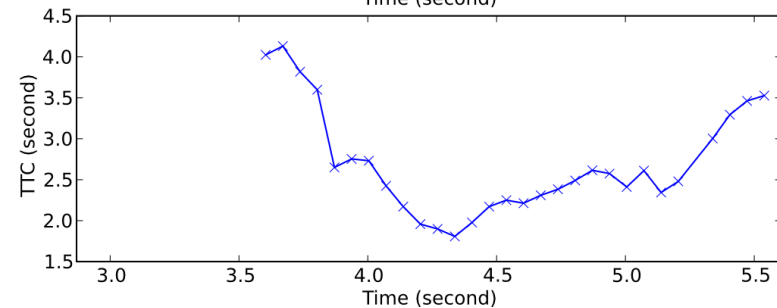
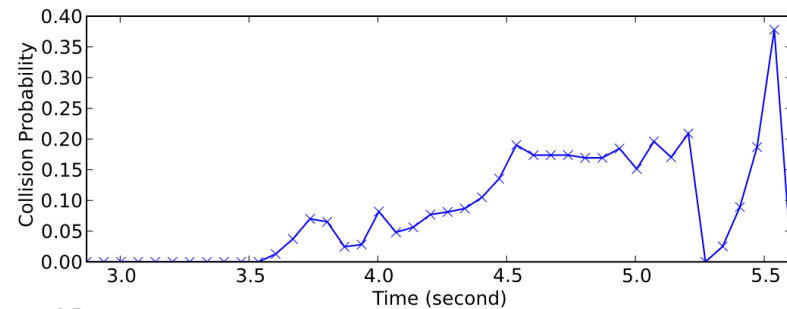
Proactive Methods for Road Safety Analysis



Interaction Severity Indicators



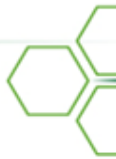
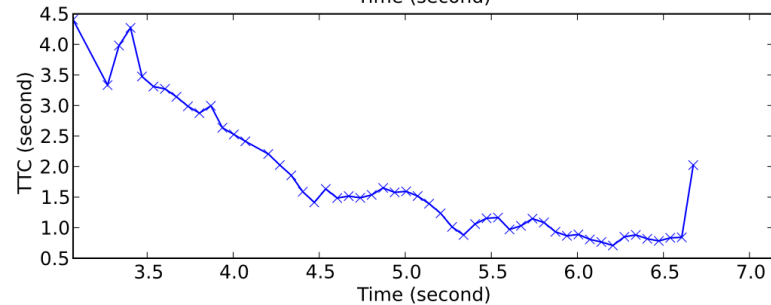
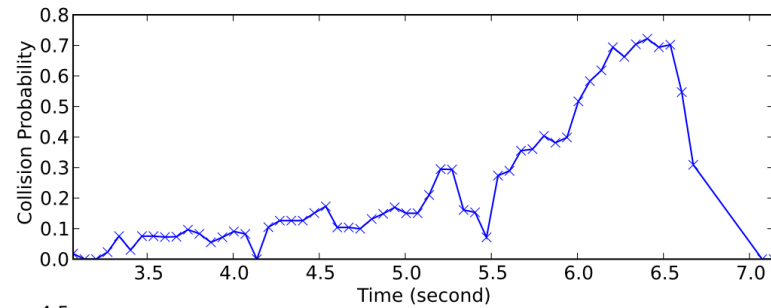
Side Conflict



Interaction Severity Indicators

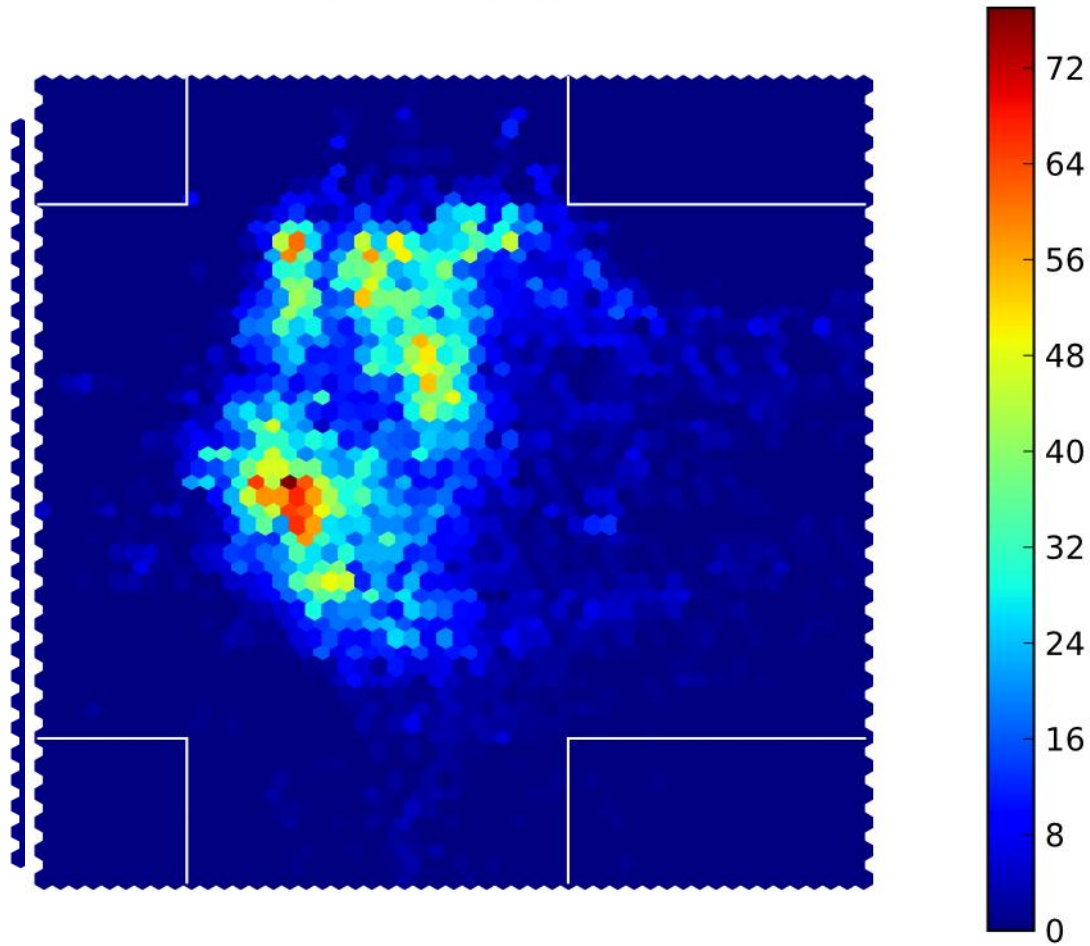


Side Collision

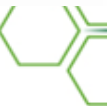
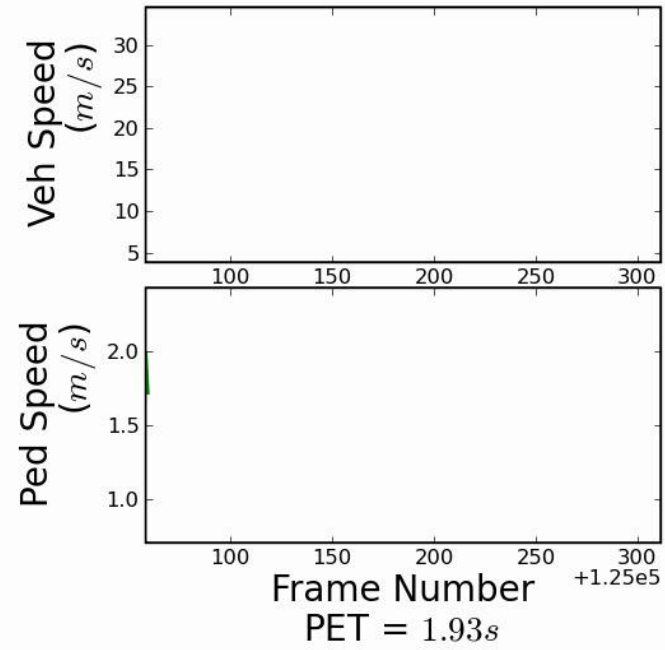
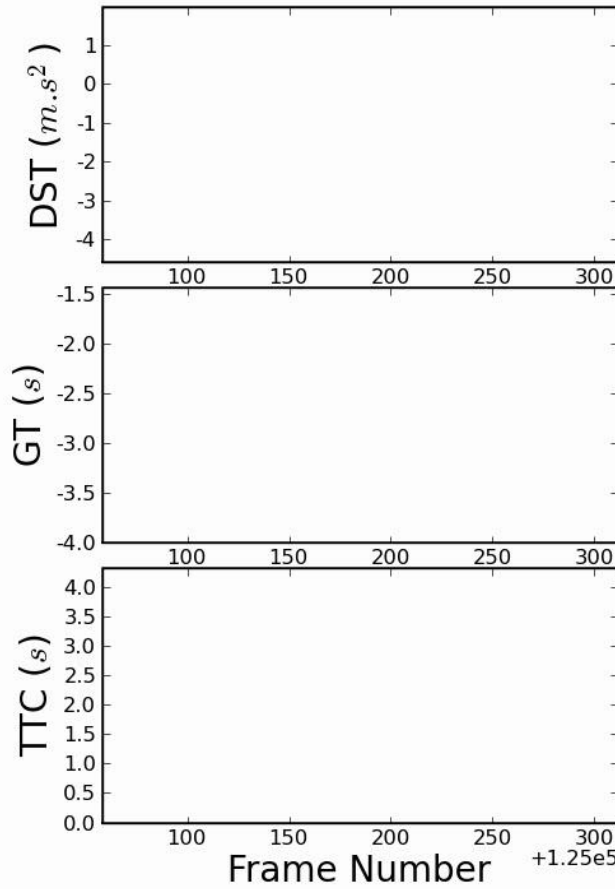


Interaction Spatial Distribution

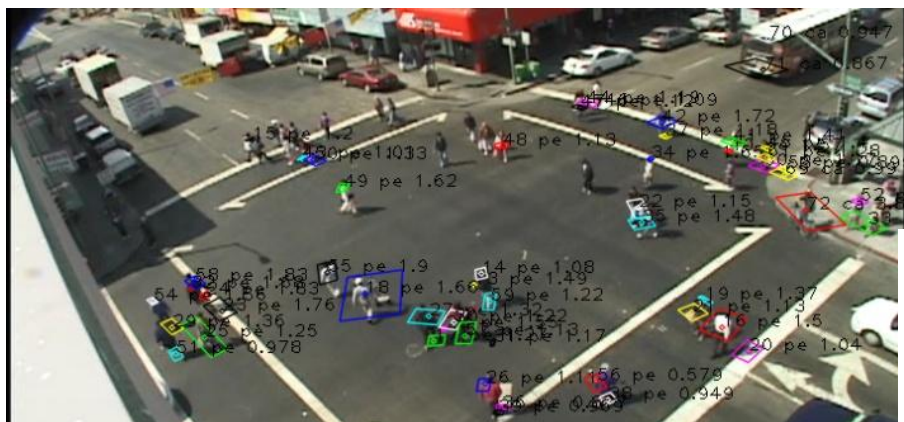
Traffic Conflicts



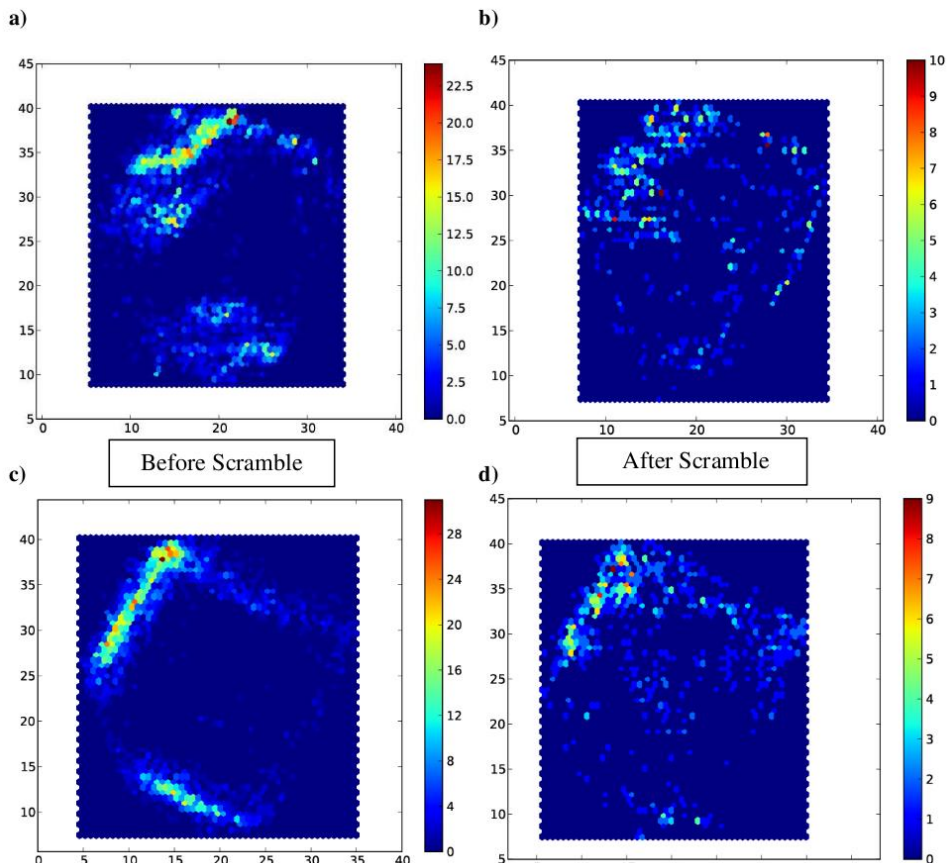
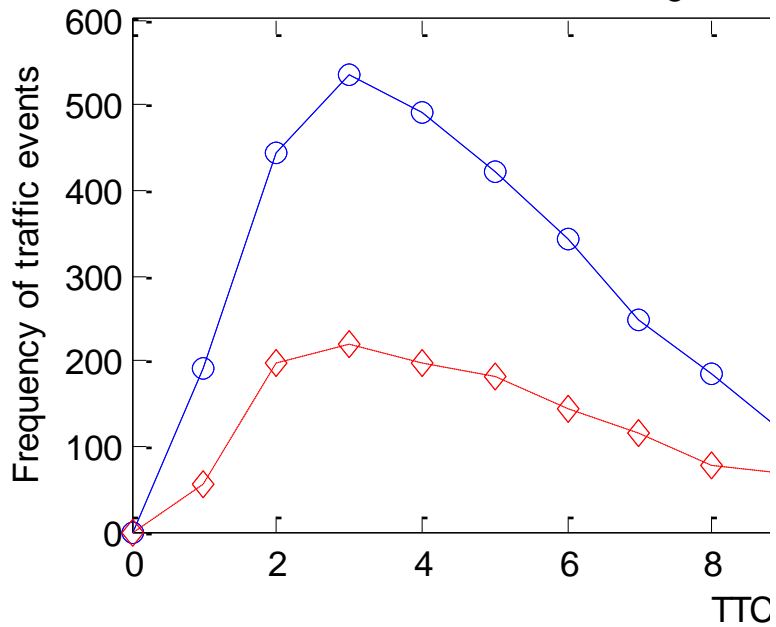
Pedestrian-Vehicle Interactions



Pedestrian-Vehicle Interactions



Histogram of

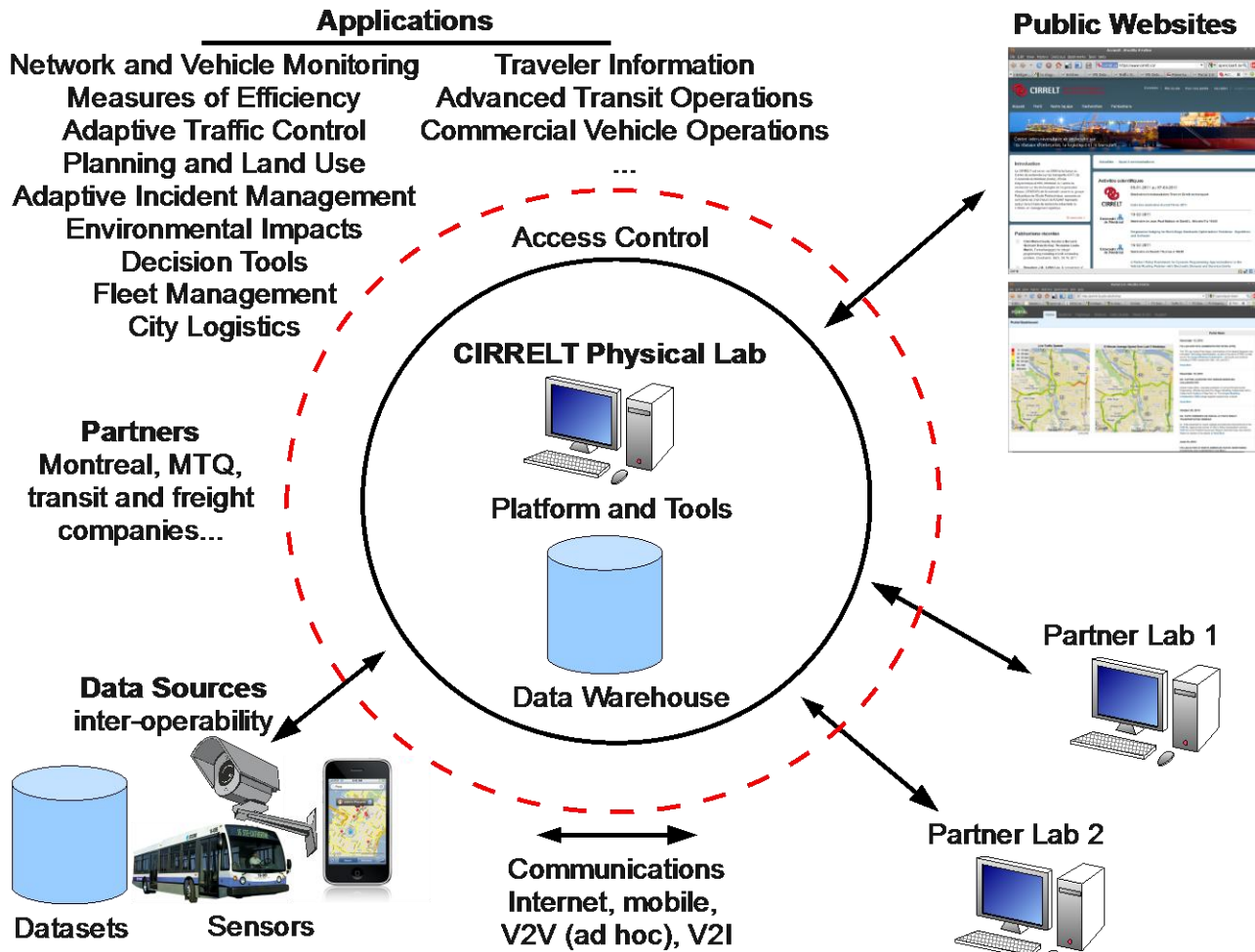


The Data Challenges



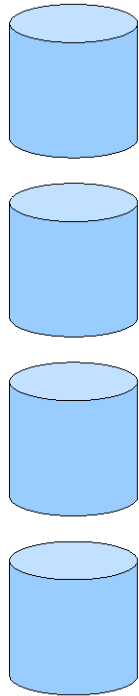
[http://www.chelmsford.gov.uk/media/image/m/d/Monitor_wall_\(o\)_large.jpg](http://www.chelmsford.gov.uk/media/image/m/d/Monitor_wall_(o)_large.jpg)

Project for Transportation Data Platform



Project for Transportation Data Platform

Datasets



Platform and Tools

Software for Data Processing and Analysis, Models



Data Formatting
(inter-operability)

Data Cleanup and
Quality Diagnosis

Data Processing and Analysis
(e.g. Data Mining),

Visualization

Data Fusion

Smart Aggregation
and Archiving

Geographical
Information Systems

Modular Architecture

Applications

- Network and Vehicle Monitoring
- Measures of Efficiency
- Adaptive Traffic Control
- Planning and Land Use
- Traffic Management
- Adaptive Incident Management
- Environmental Impacts
- Decision Tools
- Traveler Information
- Advanced Transit Operations
- Dynamic Routing
- Commercial Vehicle Operations
- Maintenance Optimization
- Fleet Management
- City Logistics
- ...

