

Different Information Needs for Different Markets: URBAN and RURAL

Ali Mortazavi March 4, 2008

Traveler Information/Advance Traveler Information System

- Empower the public with the information
- Static information
- Real-time information
 - Travel time a valuable source





Advanced Traveler Information System

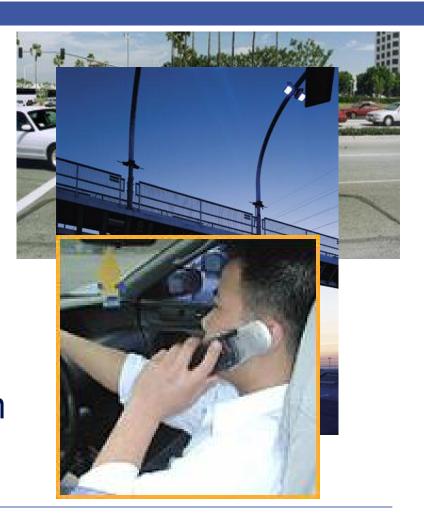
Sensors Loop Detector, Radar, ETC, LPR, Cell phones Deriver / **Data Integration** Algorithms Vehicle **Data Processing** Devices CMS, 511, HAR,...



Point Detection

Segment Detection

Floating Point/Cell Detection





Point Detection

5

Inductive Loop (ILD)

Doppler Radar

Video

Doppler Microwave

Passive Acoustic

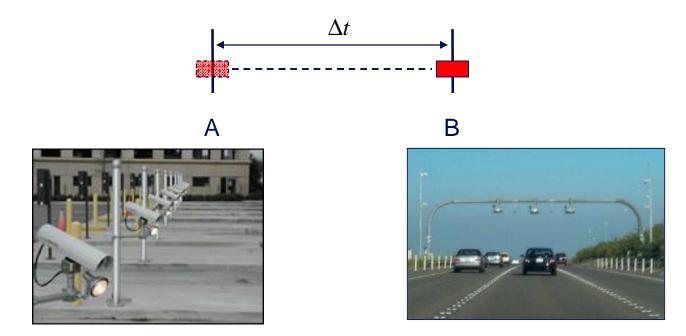




Segment Reading

Toll Tag Readers/License Plate Readers

Lag time on traffic data



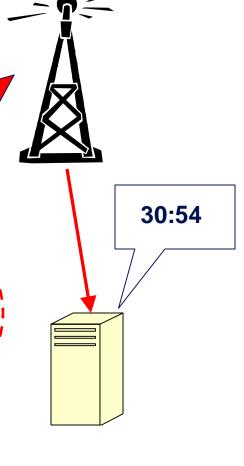


Floating Point

7









Urban

1

Recurrent congestion
Condense sensor coverage
Need for traffic/transit info
Accuracy



Mid-Size Urban

2

Less congestion
Poor sensor coverage
Accuracy
Weather, incident,...



Rural

3

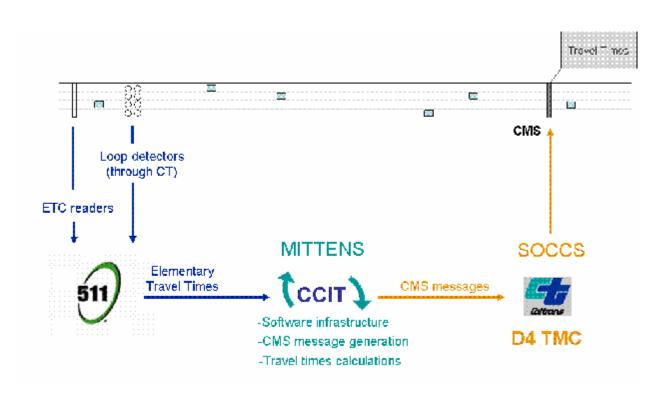
No congestion
Different concept
No sensor coverage
Weather, incident,...





1-Travel Time on CMS-The Bay Area

9



Schematic of Travel Time Display System in District 4

20 highway travel time signs



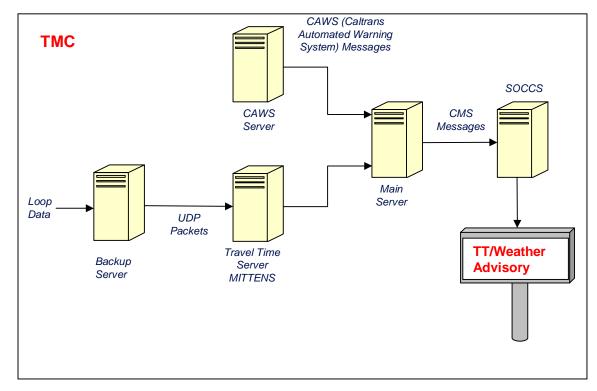
2 transit travel time signs





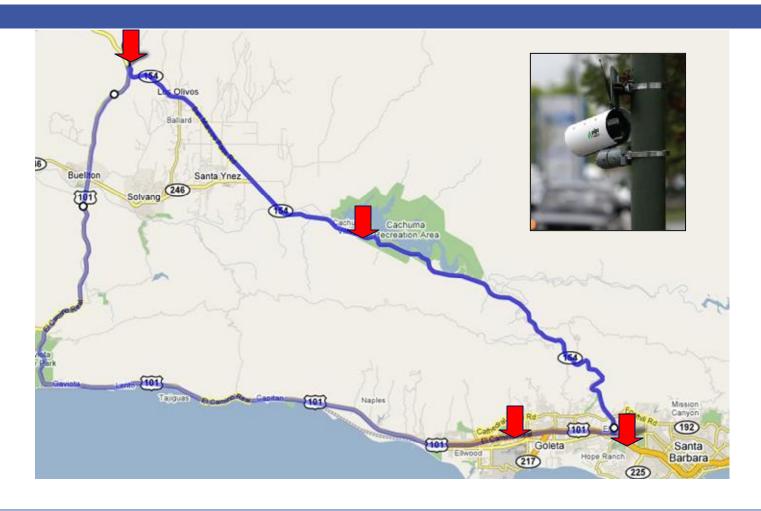
2-Travel Time on CMS- Stockton



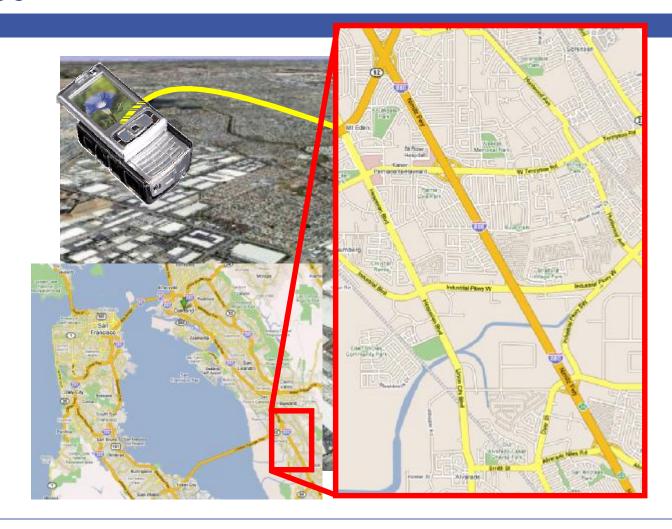




3-Traffic Data Collection-US 101 & CA-154

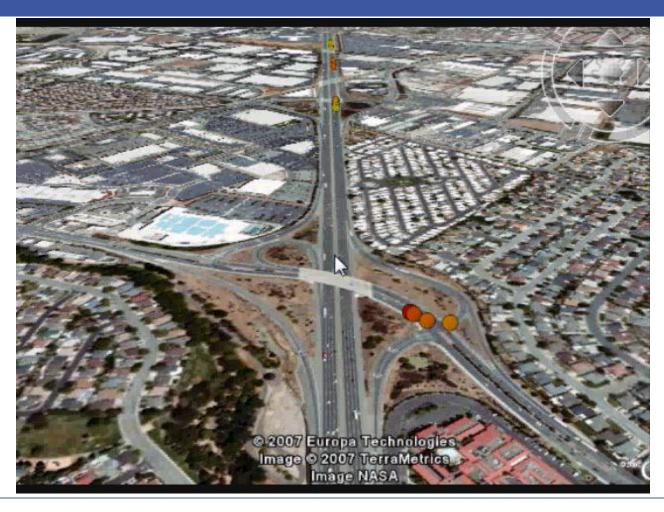








GPS-Equipped Cell Phones as Traffic Probes





Conclusions

- Need for expanding data coverage
- Hybrid solutions
- Public-Private Partnership
- Different requirements different solutions





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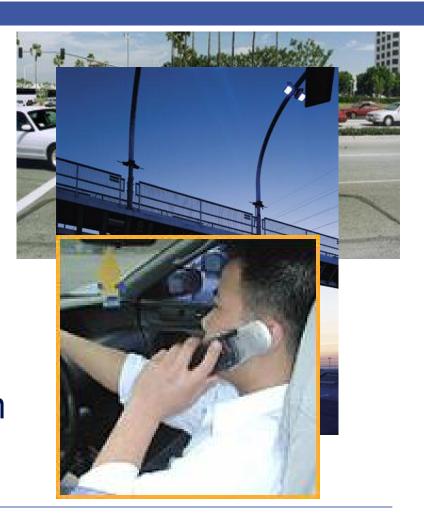
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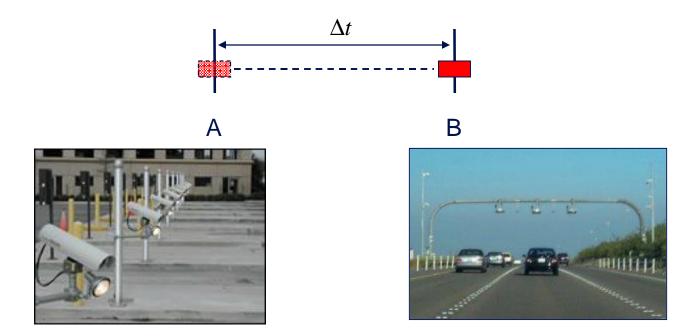




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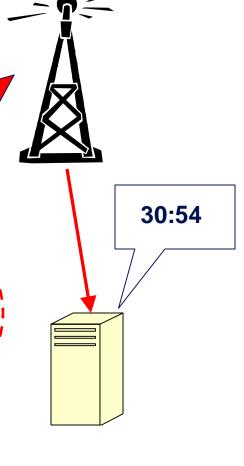


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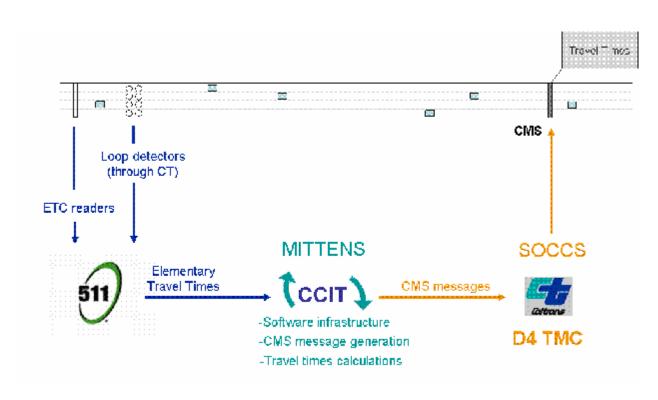
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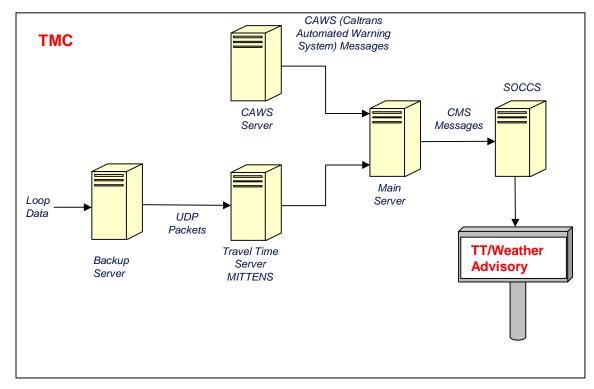
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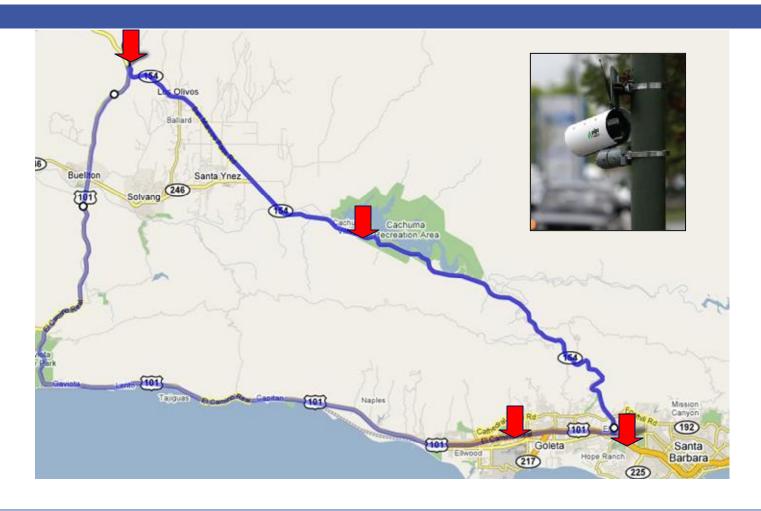
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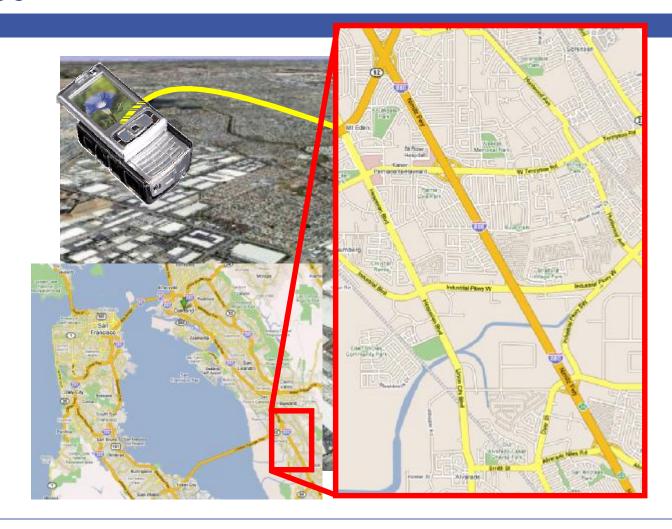




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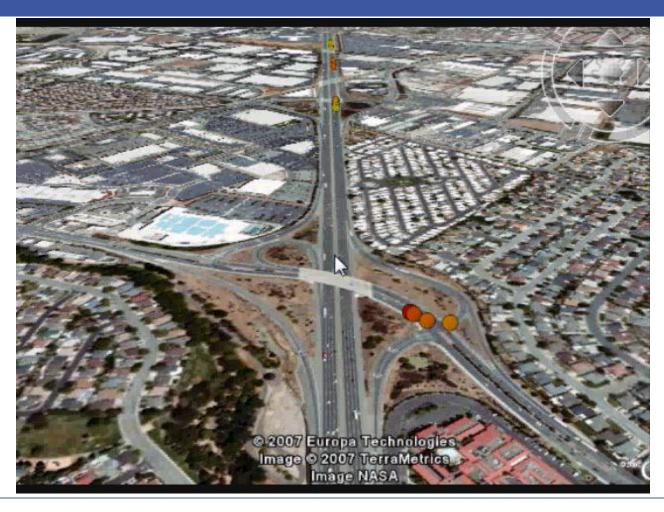








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