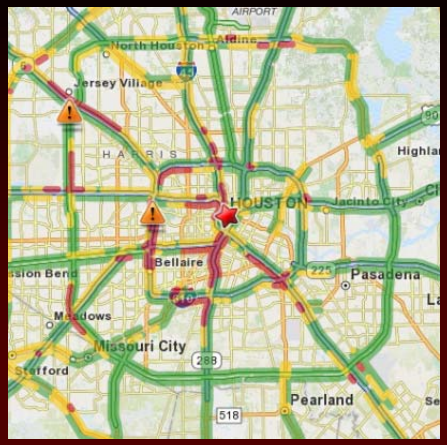
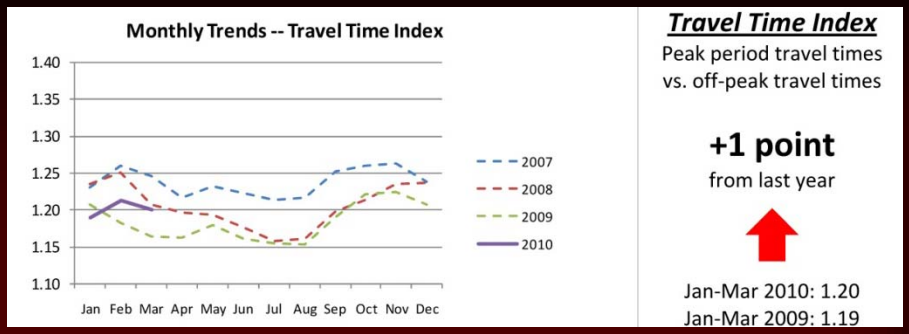




Using Private Sector Data in Performance Reporting

Shawn Turner
Texas Transportation Institute

NATMEC 2010 ~ Seattle, WA
June 24, 2010

Texas Transportation Institute

Overview

- The basics
- TTI experience to date
  - Evaluations, prototypes, reports
- Lessons learned

The Basics

- Offline analysis of historical data
- Does not require real-time data feed, simply license historical data
  - Day-of-week averages, variation, percentiles, etc.
  - Day-to-day archive for some companies
- GPS-based probes - does not require roadway sensors to be deployed

What is provided?

- Only link speed, no traffic counts/flows
- Time intervals
  - Hourly or 15-minute day-of-week averages
  - Sometimes separate holiday averages
- Date range
  - Annual, sometimes quarterly or monthly
- Road coverage
  - TMC (traffic message channel) referencing

Who?


The right traffic at the right time
Beat the Traffic


INRIX


NAVTEQ
TRAFFIC


TOMTOM


TRAFFICAST

- Others

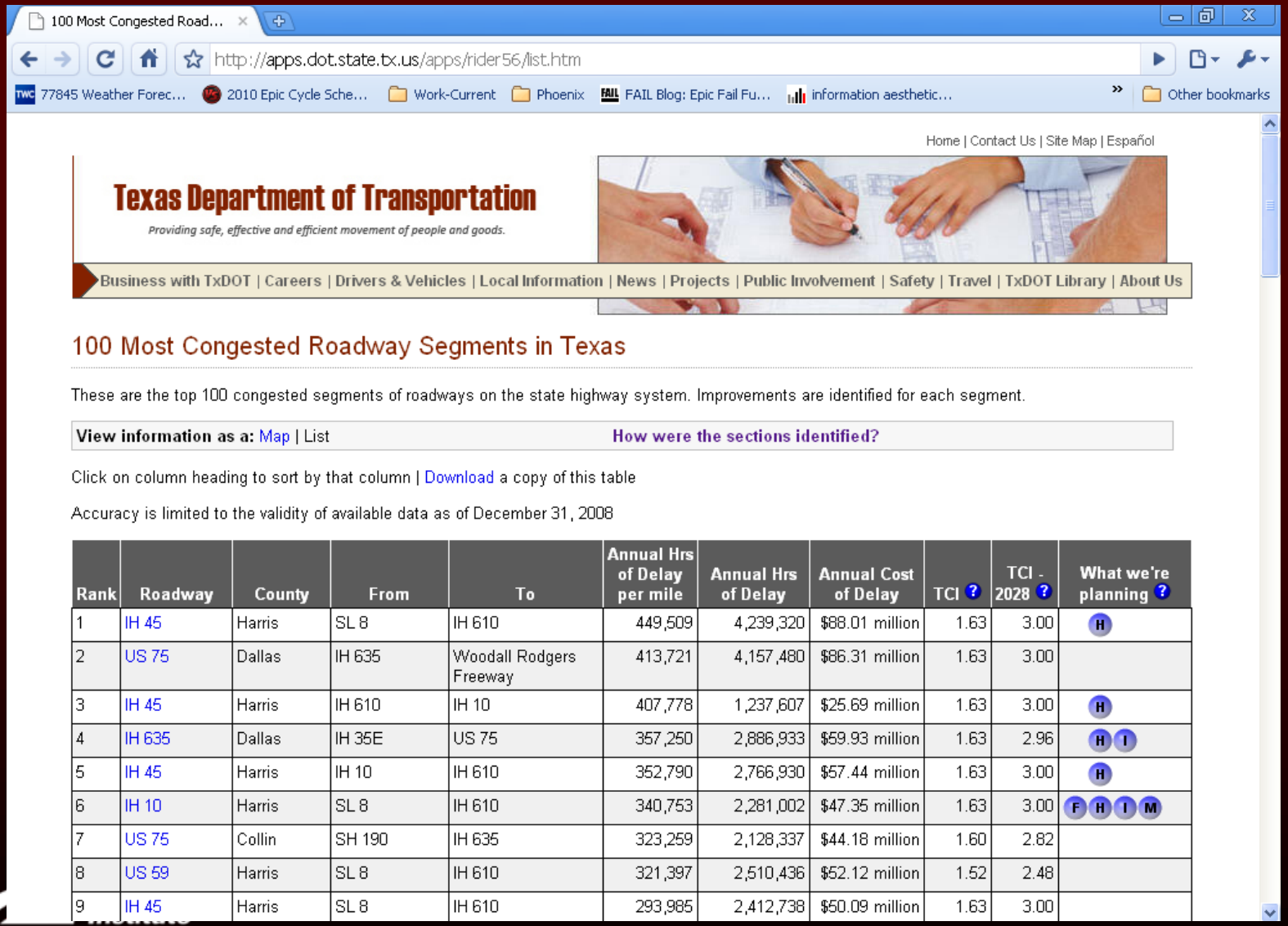
TTI Experience to Date

- Evaluations and prototypes
  - Minneapolis freeway & arterials
  - Phoenix freeway & arterials
- Reports
  - Texas “100 Most Congested”
  - Minnesota Statewide Report
  - 2010 Urban Mobility Report

Texas 100 Most Congested

- Rider 56 – Lt. Governor held up state highway funds until Top 100 list published by TxDOT
- First iteration used TxDOT road inventory data to estimate congestion
- Disagreement and debate
- 2nd iteration – Competitive RFP for 2009 statewide historical data awarded to Inrix

Texas Top 100 Most Congested



100 Most Congested Road...

http://apps.dot.state.tx.us/apps/rider56/list.htm

77845 Weather Forec... | 2010 Epic Cycle Sche... | Work-Current | Phoenix | FAIL Blog: Epic Fail Fu... | information aesthetic... | Other bookmarks

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100 Most Congested Roadway Segments in Texas

These are the top 100 congested segments of roadways on the state highway system. Improvements are identified for each segment.

View information as a: Map | List — **How were the sections identified?**

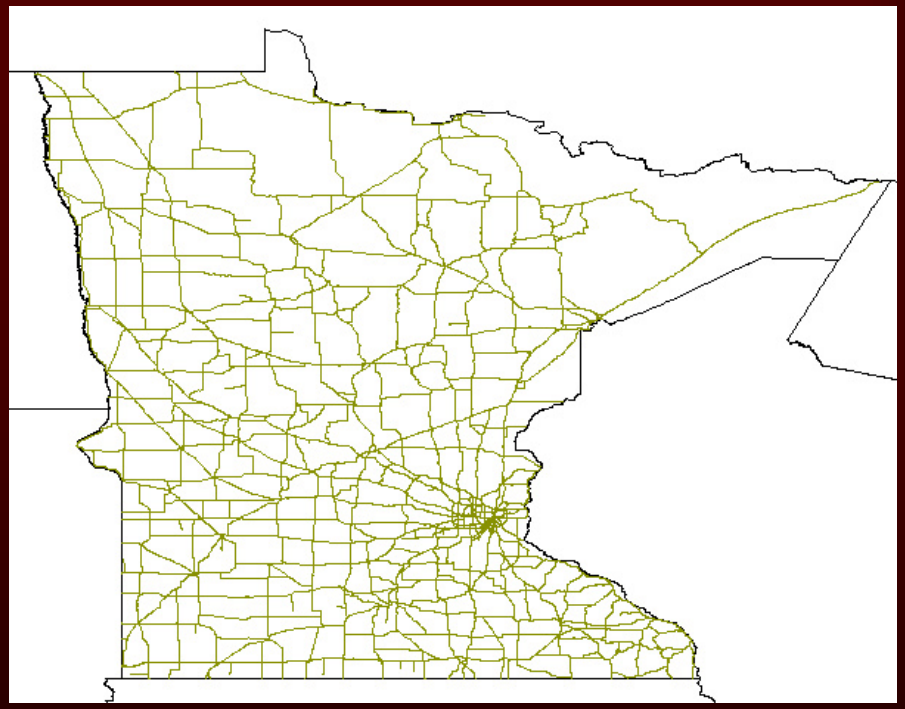
Click on column heading to sort by that column | Download a copy of this table

Accuracy is limited to the validity of available data as of December 31, 2008

Rank	Roadway	County	From	To	Annual Hrs of Delay per mile	Annual Hrs of Delay	Annual Cost of Delay	TCI	TCI - 2028	What we're planning
1	IH 45	Harris	SL 8	IH 610	449,509	4,239,320	$88.01 million	1.63	3.00	H
2	US 75	Dallas	IH 635	Woodall Rodgers Freeway	413,721	4,157,480	$86.31 million	1.63	3.00	
3	IH 45	Harris	IH 610	IH 10	407,778	1,237,607	$25.69 million	1.63	3.00	H
4	IH 635	Dallas	IH 35E	US 75	357,250	2,886,933	$59.93 million	1.63	2.96	H I
5	IH 45	Harris	IH 10	IH 610	352,790	2,766,930	$57.44 million	1.63	3.00	H
6	IH 10	Harris	SL 8	IH 610	340,753	2,281,002	$47.35 million	1.63	3.00	F H I M
7	US 75	Collin	SH 190	IH 635	323,259	2,128,337	$44.18 million	1.60	2.82	
8	US 59	Harris	SL 8	IH 610	321,397	2,510,436	$52.12 million	1.52	2.48	
9	IH 45	Harris	SL 8	IH 610	293,985	2,412,738	$50.09 million	1.63	3.00	

Minnesota Statewide Reporting

- Competitive RFP for statewide historical data awarded to Inrix
- First foray into rural intercity corridors
- Location referencing
- Segment definitions



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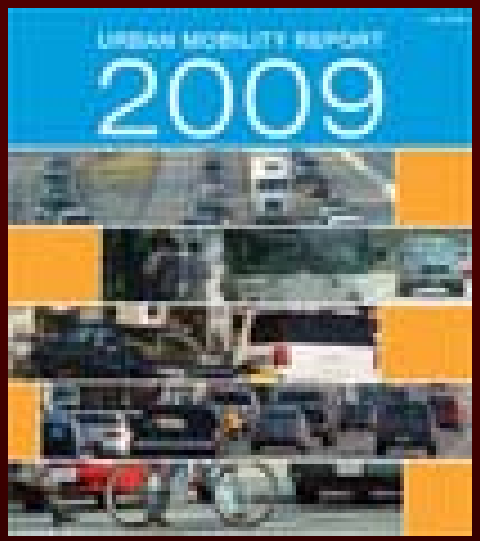
2010 Urban Mobility Report – Partnership with INRIX

- Announced January 11, 2010 http://inrix.com/pressrelease.asp?ID=91
- Provides nationwide speeds
  - Speeds directly measured
- "Under the hood" fixes in 2010
- In future updates:
  - Intercity corridors
  - Worst 10 bottlenecks each city
  - Travel time reliability



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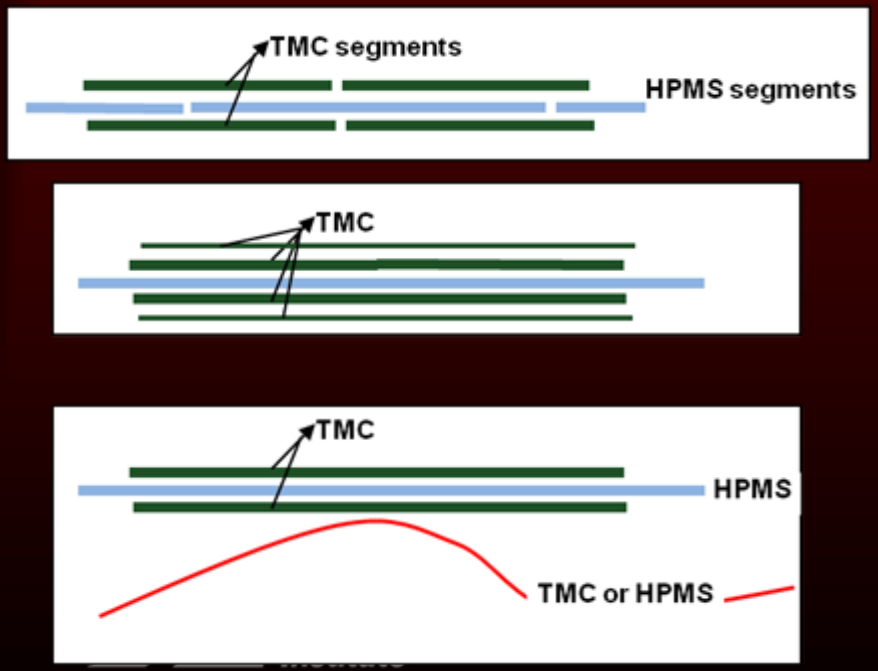
Lessons Learned

1. Location, location, location
   - TMC network vs. DOT network
   - Conflation to integrate speed and VMT



Lessons Learned

2. VMT-weighted averages
   - Important when combining data for wide range of vehicle/person movement

City	Travel Time Index		Difference (points)
	Weighted by VMT	Weighted by length	
1	1.33	1.22	+11
2	1.27	1.19	+ 8
3	1.48	1.32	+16
4	1.19	1.16	+ 3
5	1.14	1.08	+ 6

Lessons Learned

3. Segmentation for summary statistics
   - TMC paths "rolled up" to segments/routes
   - Reporting and tracking purposes

Lessons Learned

4. Single-use vs. open licensing
   - Analogy - single desktop vs. enterprise-wide software licensing
   - Licensing rights – most things are possible, but you will have to pay for more control and ability to release detailed data

Questions?

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