SAFETRIP-21 and the I-95 Corridor Coalition

George Schoener, Executive Director
I-95 Corridor Coalition

Transportation Research Board
January 2010
Agenda

• The I-95 Corridor Coalition
• Vehicle Probe Project
• SafeTrip 21 and the I-95 Corridor Coalition
The I-95 Corridor Coalition is....

- An alliance of transportation agencies, toll authorities and related organizations, including public safety from Maine to Florida with affiliates in Canada
- A successful model for interagency cooperation and coordination since the early 1990’s
Coalition 2040 Strategic Vision

Develop an architecture for state-of-the-art regional operations and management, including real-time information
Vehicle Probe Project

- This is a groundbreaking initiative among public, private and academia.
- 18 months of real-time data to seven contiguous states – New Jersey to South Carolina
- Continuous, comprehensive data validation, improving access to information, and expanding project limits.
Timeline/Milestones

- **Procurement Process**
  - RFIs: October 2006, February 2007
  - RFP Published: April 2007
  - Proposals Submitted (5): June 2007
  - Contract Awarded: December 2007

- **Early Project Milestones:**
  - Initial Task Order: February 2008
  - **NJ Expansion Task Order:** June 2008
  - **Service Operational:** July 1, 2008
  - Initial Validation: July – October 2008
  - **NC Expansion Task Order:** November 2008
  - SAFETRIP Task Order: January 2009
  - Initial Validation Results Published: January 2009
  - **SC Expansion Task Order:** August 2009
Project Highlights

Contract
- 3 years – options to 10 years
- Task Order contract with U of Md
- Member agencies can:
  - Expand coverage, Add source data
  - Access consulting services, Extend project duration

Core Task
- Traffic data feed
- Monitoring web site
- Data archive
- Coverage
  - ~1500 freeway miles
  - ~1000 arterial miles (donated)
Project Requirements

RFP Requirements

What
– Avg Error 10 MPH
– Avg Bias: 5 mph
– For 4 Bins: <30, 30-45, 45-60, >60 MPH
– Latency: ≤ 8 minutes
– Update Rate: ≤ 5 minutes
– Data Reliability: ≥ 95%
– Data Availability: ≥ 99%

When
– Flow > 500 VPH on a segment

Where
– Core Freeways, Expansions
– Not Core Arterials

Validation

Through September 2009

<table>
<thead>
<tr>
<th>Speed Range</th>
<th>Avg Absolute Error (MPH)</th>
<th>Avg Bias (MPH)</th>
<th>Hours of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirement</td>
<td>&lt; 10 MPH</td>
<td>&lt; +/-5 MPH</td>
<td></td>
</tr>
<tr>
<td>0 – 30 MPH</td>
<td>4.8</td>
<td>2.7</td>
<td>233</td>
</tr>
<tr>
<td>30 – 45 MPH</td>
<td>6.0</td>
<td>2.1</td>
<td>288</td>
</tr>
<tr>
<td>45 – 60 MPH</td>
<td>2.1</td>
<td>0.0</td>
<td>1911</td>
</tr>
<tr>
<td>&gt; 60 MPH</td>
<td>2.0</td>
<td>-1.9</td>
<td>9249</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2.2</td>
<td>-1.4</td>
<td>11681</td>
</tr>
</tbody>
</table>
Project Status

Current Coverage
- Freeways: ~ 4700 Centerline miles
- Arterials: ~ 900 Centerline miles
- From NJ to SC
- ~ 11,000 Road Segments

Data Access (through 12/7)
- 15 agencies executed DUA
- >300 monitoring site users
- >30 data feed users

Availability since July 1, 2008
- Monitoring Site: 99.90%+
- Data Feed: 99.93%+

www.i95travelinfo.net
Vehicle Probe Project – Agency Applications

- Web applications
- VP monitoring site to monitor freeways and detect issues
- Combining VPP data with other sensor data
- 511 operations
- Planning
- Performance measures
SAFETRIP 21 & the I-95 Corridor Coalition: Projects

- Long distance trip planning using real-time travel time data (public website)
- Displaying travel times in public areas (2 VA Welcome centers & a local mall)
- Provide travel time information to airport users
Long Distance Trip Planner

• A website where travelers can obtain the up-to-date travel times and congestion information on routes to their destination from Portland, Maine to Orlando, Florida.
Public Displays

- Leverages existing VDOT efforts
- Tysons Corner Center (yes, a shopping mall)
  - Concurrent with Virginia’s Mega Projects
- Virginia Welcome Centers along I-95
  - Fredericksburg
  - Skippers
Provide travel time information to airport users

• Make the information available through kiosks located within the BWI terminal, through wireless devices (e.g., cellular phones), and through the Airport’s website.
Thank You

www.I95Coalition.org