



# Vehicle Probe Project Web Conference

*Status Update*

**October 22, 2008**



# ***Call Courtesies***

- Please give your name and agency before asking your question (at least the first time)
- Please keep your phone muted until asking a question or speaking (press \*6 to mute/unmute individual phone lines)
- Please press \*0 to speak to an operator for questions regarding audio
- Please call 610-662-5569 for difficulties with the web application



# Agenda

<b>Topic</b>		<b>Speaker</b>
1	Introductions and Welcome	Bill Stoeckert
2	Monitoring Web Site & Data Feed – Update <ul style="list-style-type: none"><li>•Brief review of comments</li><li>•Review of proposed release schedule</li><li>•Interface Guide v2.2</li></ul>	Rick Schuman/ Jeff Summerson
3	Contractual Issues <ul style="list-style-type: none"><li>•Data Use Agreement Status</li><li>•Expansion Status</li></ul>	Kathy Frankle
4	TMC Code Status	Bob Rupert
5	Data Validation – Update	Stan Young
6	Agency Updates <ul style="list-style-type: none"><li>•Data Use activities and plan</li><li>•Expansion Plans</li></ul>	All
7	Review of Action Items from this call	Karen Jehanian
8	Next Meeting	Karen Jehanian



# ***Monitoring Web Site & Data Feed Update***

***Rick Schuman/Jeff Summerson***  
***INRIX***



# *Topics*

- Summary Statistics
- Monitoring Site 1.1 Upgrades
- Interface Guide Update



# *Summary Statistics*

- Coverage
  - 1496 Core Freeway miles
  - 418 NJ Freeway Expansion miles
  - ~870 Arterial miles
  - > 7200 road segments
- Registered Users
  - Monitoring Site: 55
  - Data Feed: 9
- Data Feed Availability
  - July: 100%
  - August: 99.6%
  - September: 100%
  - 3Q 2008: 99.8%+
- Monitoring Site
  - July: 99.6%
  - August: 99.3%
  - September: 100%
  - 3Q 2008: 99.6%+



# *Monitoring Site 1.1 Upgrades*

- 36 comments received from 5 people + Jeff
- Dispensation Process
  - Reviewed internally against agreed scope and resources
  - INRIX and Coalition staff/consultant met August 25
  - Project Team sent agreed plan via email in September
- Next few slides
  - Update release schedule plans
  - General scoping themes – several possible good ideas are out of scope
  - Themes of upgrades for release 1.1
  - Couple items for Project team consideration for release 2.0



# *Release Schedule Plans*

- Release 1.0 – launched July 1
- Release 1.1 – October
  - Development resources available ~ Sept 18
  - Need to have agreement shortly to align resources/meet schedule
  - Date in October dependent on scope of to do list
    - Turns out October 28 is planned date
- Subsequent releases – 6 month cycles (Jan, July)
  - Release 2.0 Jan 09, 2.1 Jul 09, etc.
- So not a one shot deal...
  - Allows for deeper thought in some cases and additional comment cycles from new users



# *General Scoping Themes*

- Monitoring Site map/data
  - Primarily designed to be used by operators/staff/execs for situational awareness
  - Not a public display tool
- Archive
  - Not a data warehouse
  - Makes project data available – you bought it, it is there
  - Not designed to be analysis/display tool in own right
  - Not intended to be primary data source for validation
    - API calls for that
    - Archive is a back-up



# *Themes for Release 1.1*

## *Enhancements*

- Help link/tab
  - Several comments would be addressed
  - Will create to be configurable so Jeff can easily change information
- Bubble improvements
  - Road direction, TMC length, Timestamp
- Highlighting of TMC segment associated with bubble
- Add time stamp to the traffic page (traffic last refreshed at XX:XX)
- Performance improvements/bug fixes
  - Stop display of traffic when both freeways and arterials are not selected
  - Use GIF instead of PNG files for map layers
  - Reorder layering of roads so FRC 1s segments overlay others
    - Not on list, but have identified as a needed improvement
    - Hoping for v1.1 may need to wait until v2.0
- Archive
  - Align UTC request time and return time to Eastern Time




# *Items for Project Team consideration in 2.0*

- Can apply more thought to release 2.0 (January)
  - Comment 7 – traffic overlay at lower zoom levels
  - Comment 18 – add more cities/counties/zooms to shortcut bar on left
  - Revisit the congestion color coding thresholds (not on list but a good idea)
  - Any “out of scope” items that should be considered for funding
    - Any out of scope listing that the team thinks shouldn’t be would also need to be discussed
  - No other obvious items – but a list could be brainstormed



# Sneak Preview... Coming Next Week



## I-95 TRAFFIC MONITORING

Welcome jeff@inrix.com

[Logout](#)

Home
Traffic
Archive
My Account
Help

**Traffic Settings**

Screen Settings

Full Screen

Center Map

I-95 Corridor

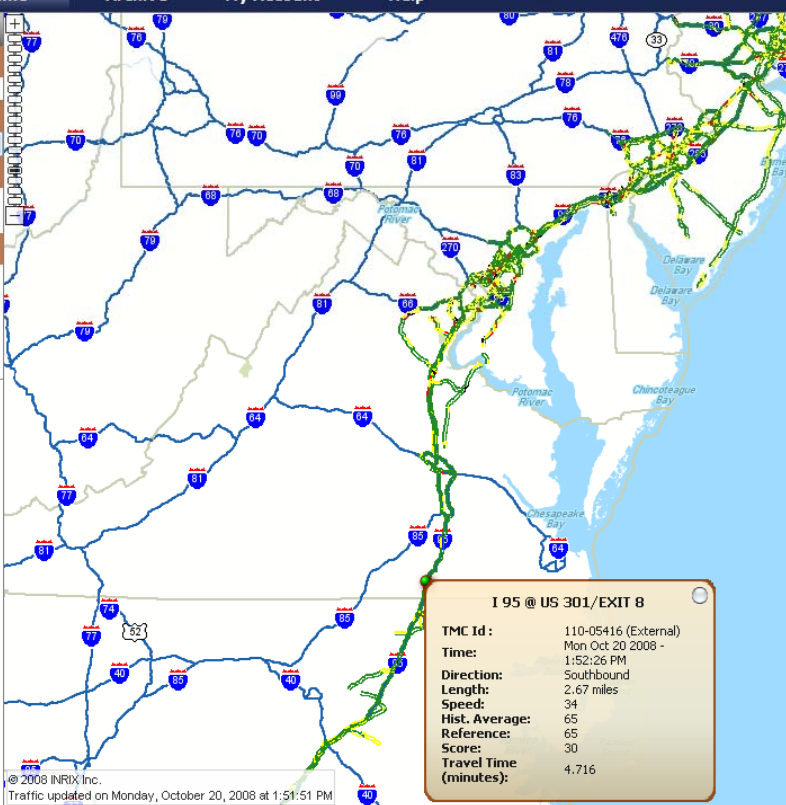
TMC Sets

Freeways

Arterials

Congestion Levels

- Free Flow
- Moderate
- Heavy
- Stop and Go



**I 95 @ US 301/EXIT 8**

TMC Id : 110-05416 (External)

Time: Mon Oct 20 2008 - 1:52:26 PM

Direction: Southbound

Length: 2.67 miles

Speed: 34

Hist. Average: 65

Reference: 65

Score: 30

Travel Time (minutes): 4.716

**NEW JERSEY TPKE @ NEW JERSEY TPKE/EXIT 6**

TMC Id : 103+04243 (External)

Time: Mon Oct 20 2008 - 2:08:00 PM

Direction: Northbound

Length: 6.33 miles

Speed: 72

Hist. Average: 68

Reference: 65

Score: 30

Travel Time (minutes): 5.277

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# Also...added coverage FDOT Panhandle Pilot

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**I-95 TRAFFIC MONITORING**

Home Traffic Archive My Account Help [Reload Map](#)

**Traffic Settings**

- Screen Settings
  - Full Screen
  - Center Map
  - Tallahassee, FL
- TMC Sets
  - Freeways
  - Arterials
- Congestion Levels
  - Free Flow
  - Moderate
  - Heavy
  - Stop and Go

**I 10 @ US 19/EXIT 19**

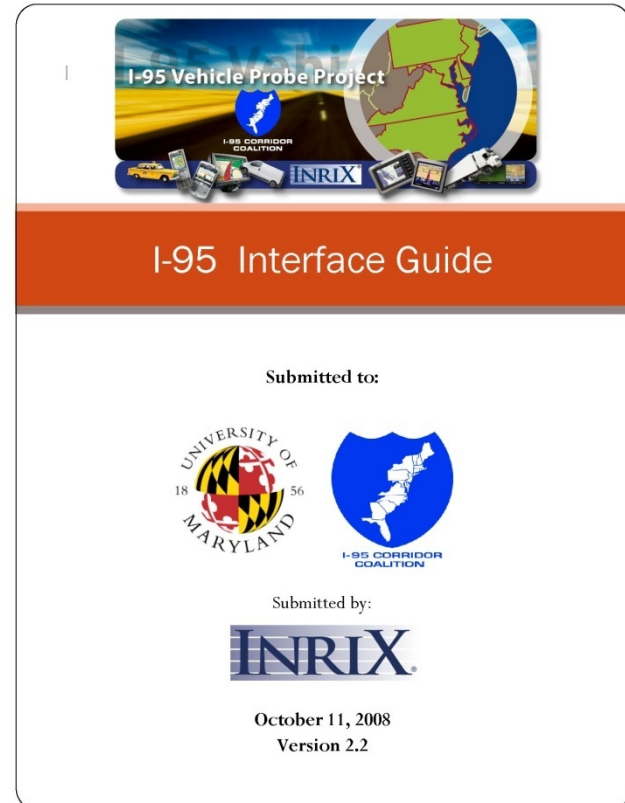
TMC Id :	102-05622 (External)
Time:	Mon Oct 20 2008 - 1:56:00 PM
Direction:	Westbound
Length:	7.32 miles
Speed:	69
Hist. Average:	70
Reference:	65
Score:	30
Travel Time (minutes):	6,368

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Traffic updated on Monday, October 20, 2008 at 1:55:33 PM

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# *Interface Guide Update*

- Version 2.2 provided to Coalition last week
- GetSecurityToken API updated
- To be loaded on the project web site





# ***Contractual Issues***

- Data Use Agreement Status
- Expansion Status

***Kathy Frankle***  
***University of Maryland***



# DUA Status

<b>Core States</b>	
DE DOT	9-May-2008
MD SHA	12-Jun-2008
NC DOT	15-Aug-08
NJ DOT	19-Jun-2008
PA DOT	----
VDOT	26-Jun-2008
<b>Other Coalition Members</b>	
ConnDOT	Inquired
District of Col	Inquired
FHWA	3-Sep-2008
Florida DOT	Inquired
MdTA	Inquired
MTA Bridges	23-Jul-2008
NJ Turnpike	Inquired
NY DOT	25-May-2008
SC DOT	Inquired



# Expansion Status

<b>Core States</b>	
DE DOT	----
MD SHA	----
NC DOT	almost signed
NJ DOT	8-Jul-2008
PA DOT	----
VDOT	----
<b>Other Coalition Members</b>	
ConnDOT	interested
District of Col	----
FHWA	N/A
Florida DOT	----
MdTA	----
MTA Bridges	----
NJ Turnpike	covered by NJDOT
NY DOT	----
SC DOT	interested



# ***TMC Code Status***

***Bob Rupert***  
***FHWA***



# ***Data Validation Update***

***Stan Young  
University of Maryland***



# *Data Validation Status*

- Validation Schedule
  - Began in July 2008
  - Ground Truth Testing in VA, MD, DE, and NJ
  - NC and central VA scheduled for Oct & Nov
  - Preliminary results for VA, MD, & DE
    - Charts and Graphs
  - Official report pending resolution of technical details



# ***Ground Truth Data Collection***

- **Extent of Bluetooth**
  - ~10,000 hours of sensor data
  - > 200 miles of testing
  - Seven weeks of data collection
- **Floating car data in NoVa and MD**
- **Primarily metro, urban and suburban**
- **Rural interstate samples in NC and VA in November**



# *Freeway Results*

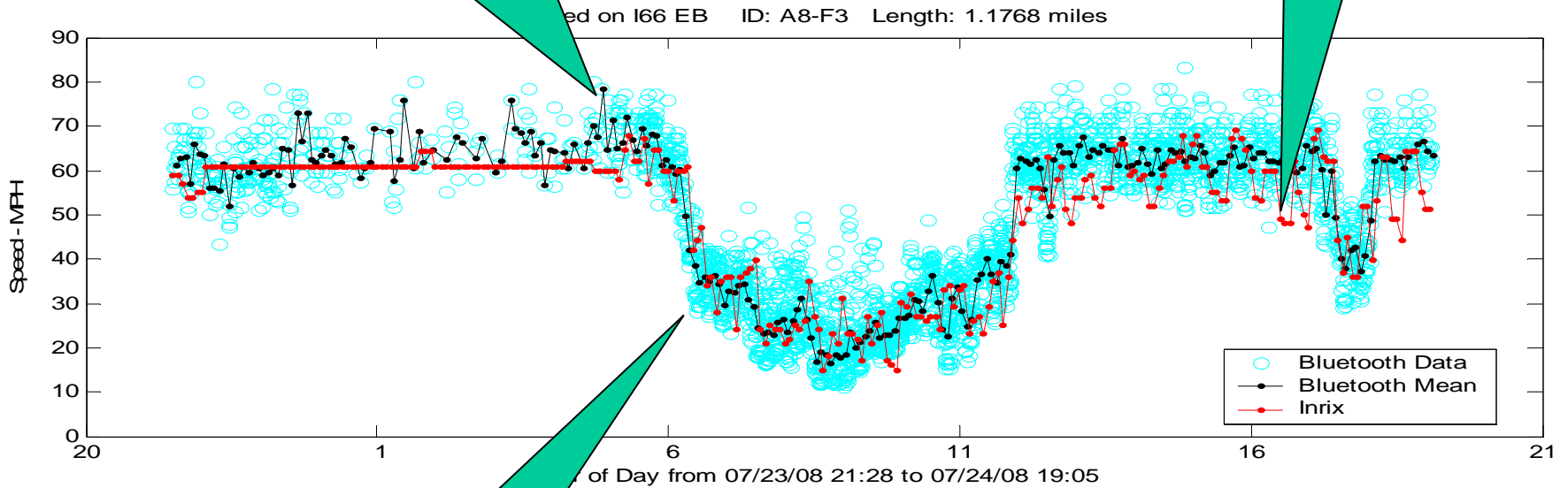
- 102 Freeway Segments from VA, MD & DE
- 76 Observed congestion events
  - Traffic slows to < 40 MPH for 15 minutes
- 75 Congestion events captured in the INRIX data feed

# Comparison of Speed

## Eastbound I66 in Northern Virginia

Black: Bluetooth Average

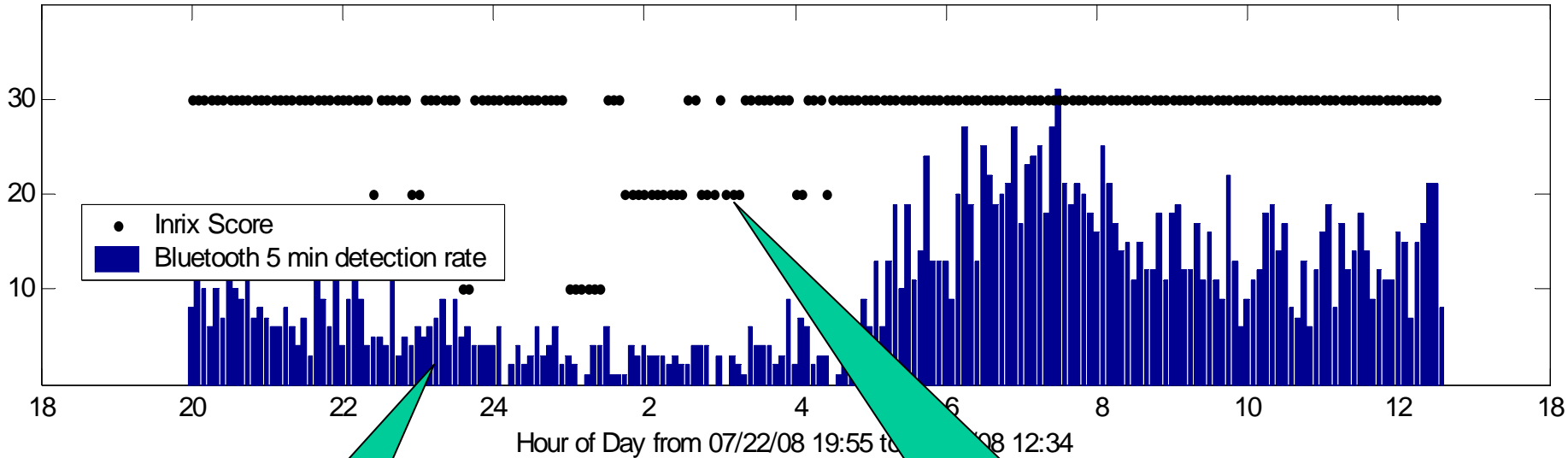
Red: INRIX Data



Cyan: Bluetooth Data

# Score and Detection Rate

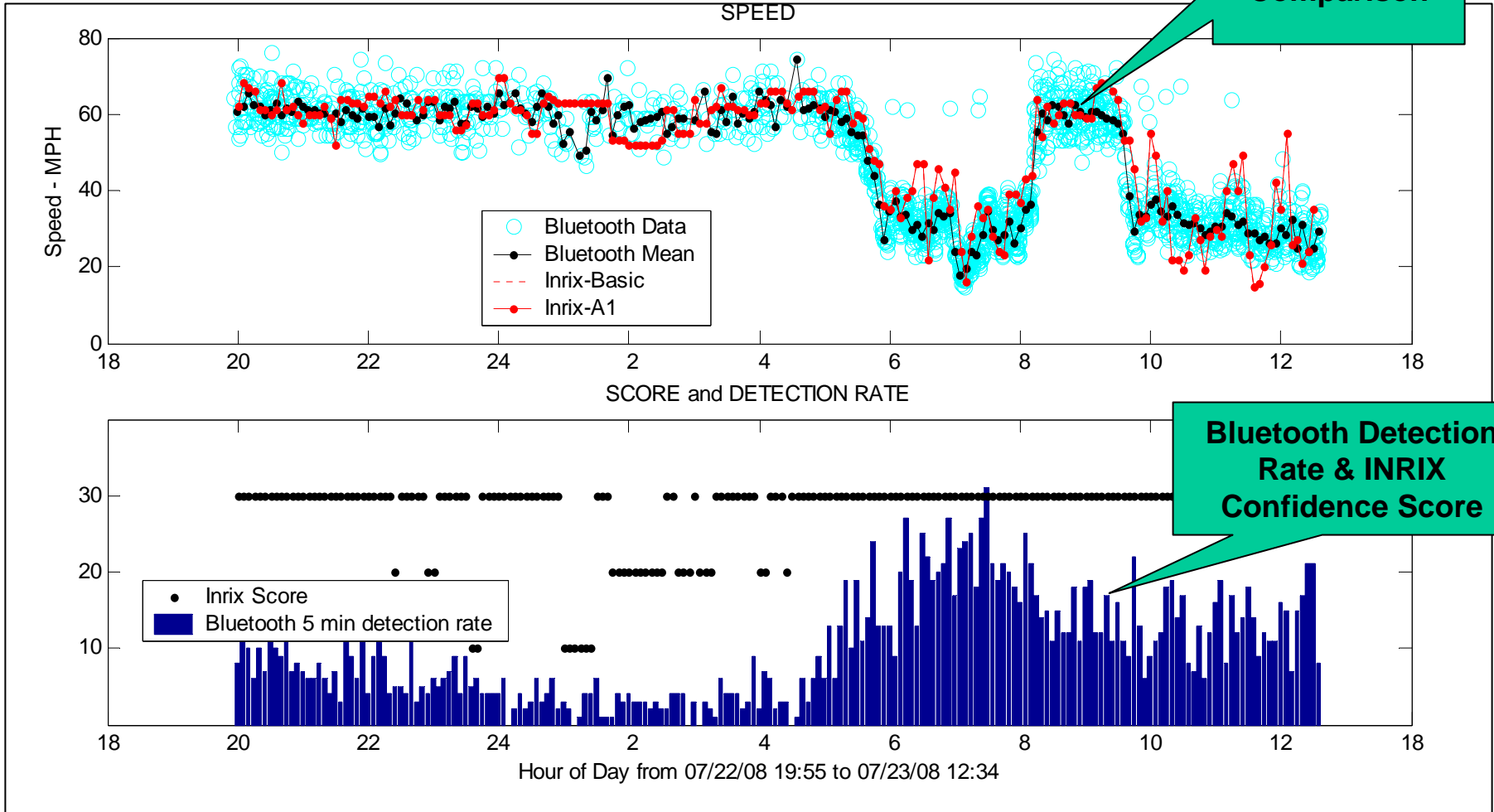
SCORE and DETECTION RATE



**# of Bluetooth  
Detections during the  
5 minute sample  
period**

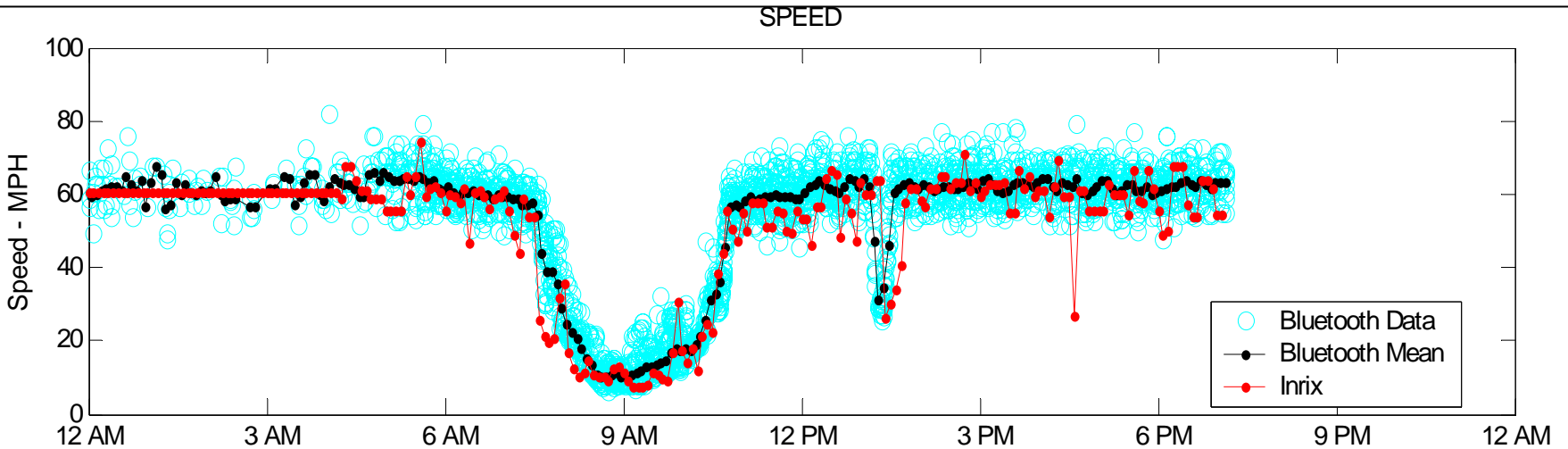
**INRIX confidence score for 5  
minute time period**  
30 – High Confidence  
20 – Medium Confidence  
10 – Lower Confidence

# SAMPLE DATA PLOT

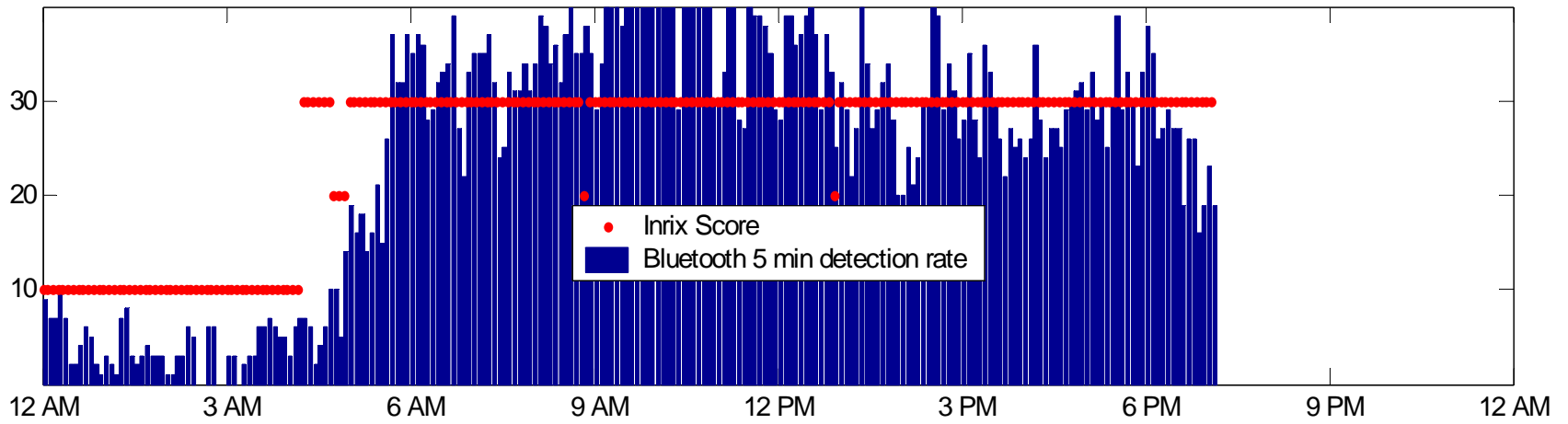




# I66 in Northern Virginia



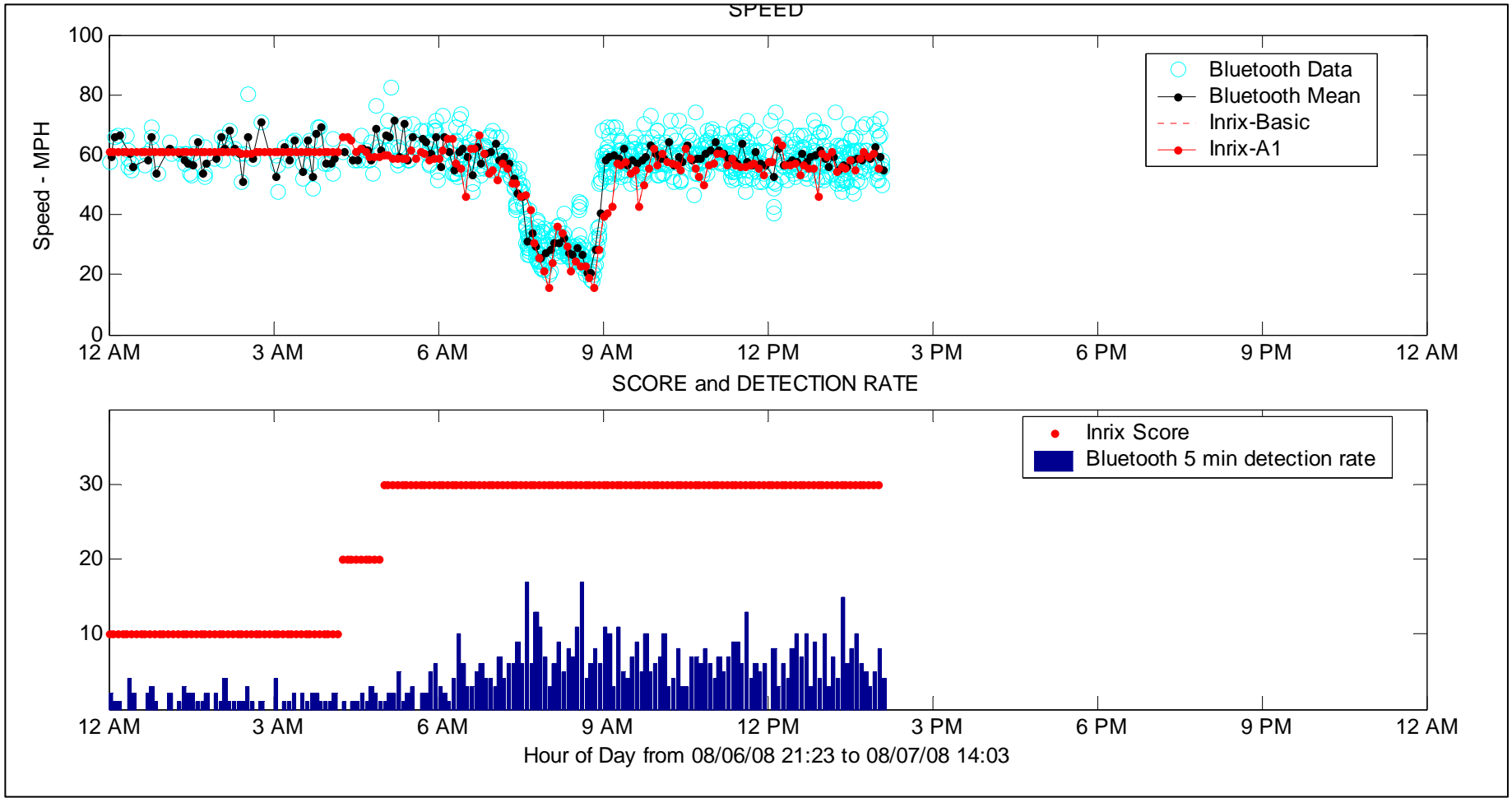
**SCORE and DETECTION RATE**



Hour of Day from 07/23/08 21:42 to 07/24/08 19:07

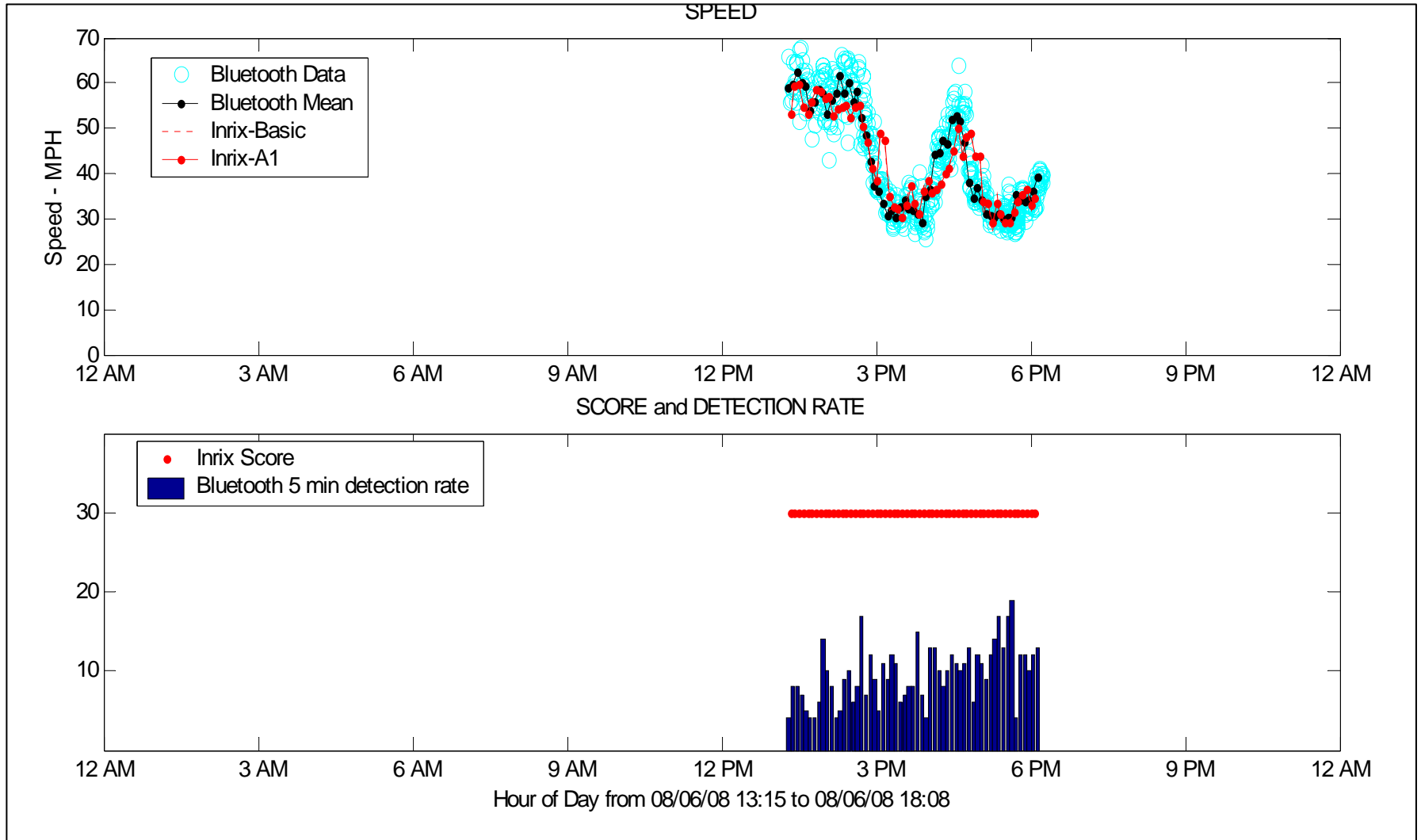


# I695 Baltimore Beltway



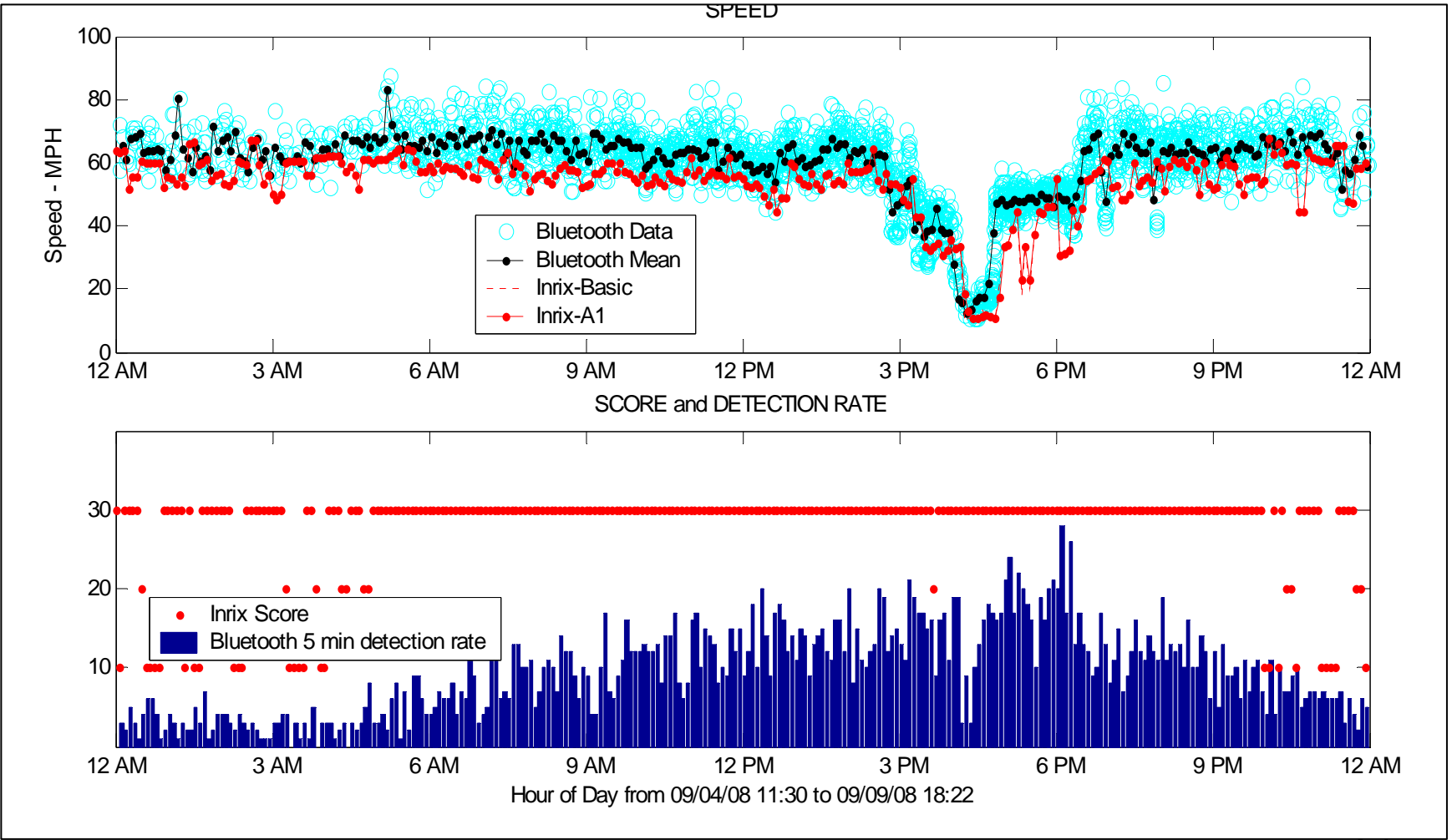


# I695 Baltimore Beltway





# I95 Delaware



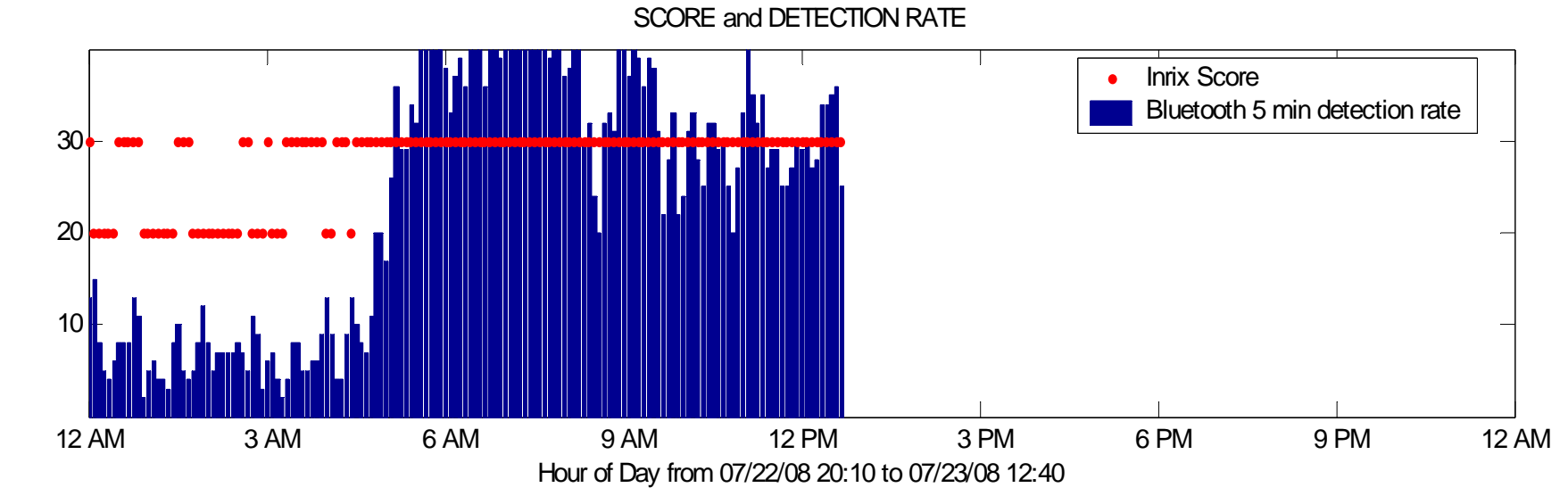
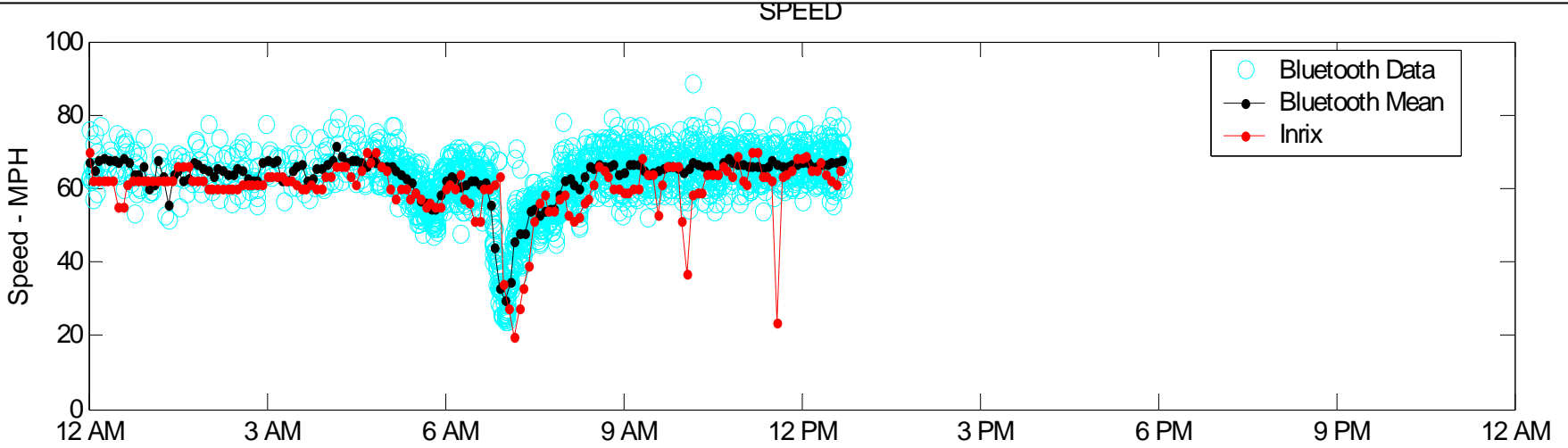


# *Freeway Results*

- Statistical Comparison
  - VA within 10 MPH
  - MD & DE under review
- Other observed issues
  - Occasional false alarms
  - Data lag from a couple of minutes to 15 minutes



# I-95 Northern Virginia





# ***Moving Forward***

- Published report target date – Nov 10
- INRIX addressing issues
  - Discovered and corrected system errors
  - Additional data added to system
- Arterial Results
  - Sufficient volume is needed



# *State/Agency Updates*

- Data Use Activities and Plan
- Expansion Plans



# ***Review of Action Items*** ***from this call***



***Next Meeting  
Proposed Date:***

***Wednesday,  
December 3, 2008  
10:00 AM***



# *Questions?*

- Bill Stoeckert at 774-207-0367 or [wstoeckert@yahoo.com](mailto:wstoeckert@yahoo.com)
- Stan Young at 301-403-4593 or [seyoung@umd.edu](mailto:seyoung@umd.edu)
- Rick Schuman at 407-298-4346 or [rick@inrix.com](mailto:rick@inrix.com)
- For contract expansion issues Kathy Frankle at 410 - 414-2925 or [kfrankle@umd.edu](mailto:kfrankle@umd.edu)



# *Thank You*



**I-95 CORRIDOR  
COALITION**