

Vehicle Probe Project

*North Carolina
Department of Transportation
Status Update*

July 16, 2009



North Carolina (updated)

- Utilizing VP data within the Statewide Monitoring System
 - Entering events into both our Travel Information Website and in the 511 system
 - Detecting and verifying incidents;
 - Providing information to callers that are routed to the Statewide Transportation Operations Center from 511
 - Currently using only VP data but plan to combine with sensor data in the future

North Carolina (cont'd)

- Final review of the integration of the monitoring site mapping (red, yellow, green)
- Next step for website:
 - Add automatic congestion incidents
 - Show speeds on segments when they drop below a certain threshold.



Travel Information (TMS)

[Travel Info. Home](#)

[511](#)

[Emergency Info.](#)

[National Traffic & Road Info.](#)

North Carolina Travel

- [Blue Ridge Parkway](#)
- [Ferry Info.](#)
- [NC Tourism](#)
- [Train Info.](#)

Road Safety & Laws

Travel Info. FAQ

Weather

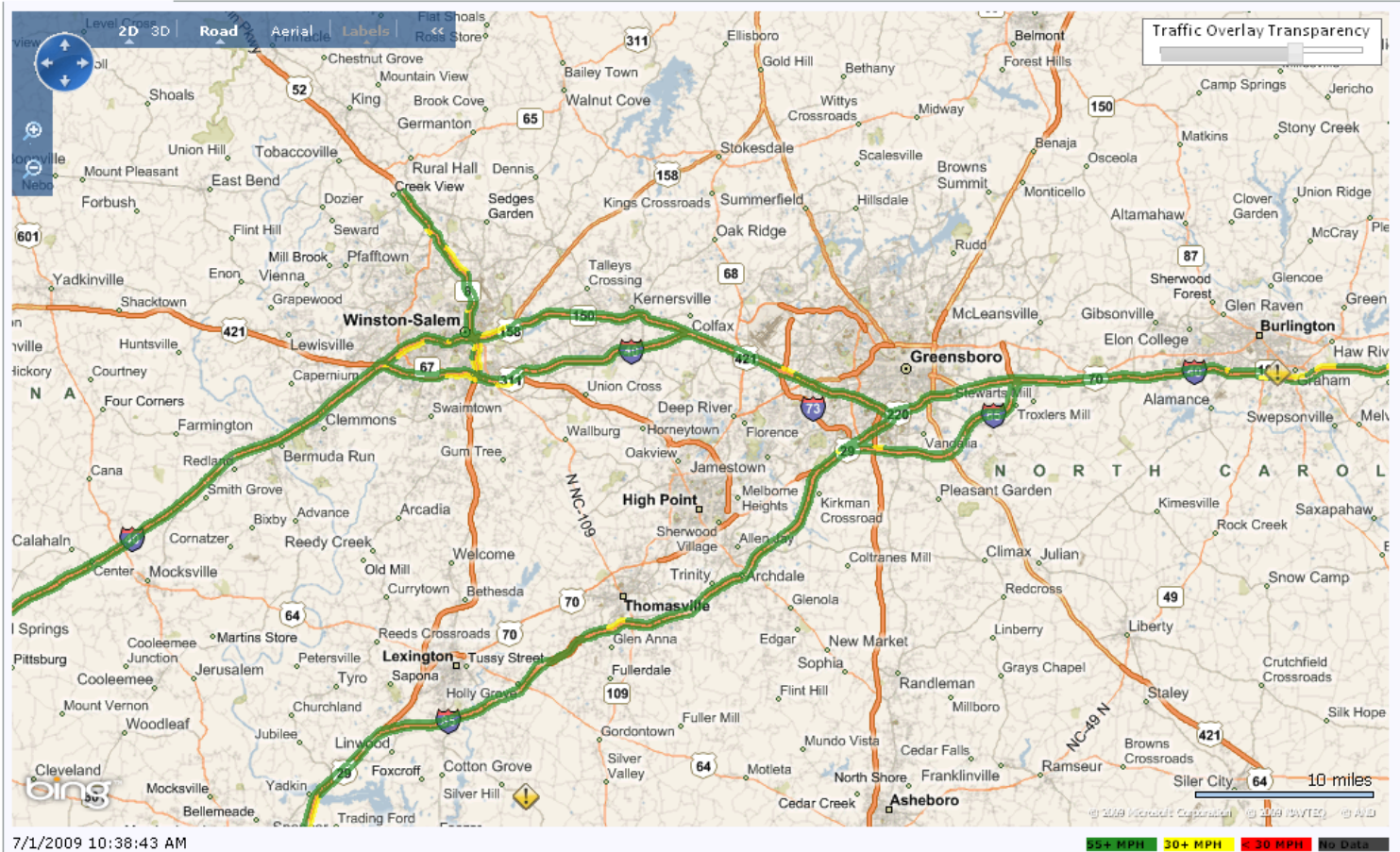
- [Central NC Weather](#)
- [North Eastern NC Weather](#)
- [South Eastern NC Weather](#)
- [North Western NC Weather](#)
- [South Western NC Weather](#)

Travel Information»

Triangle Region

Select by Region: Route: County:

Traffic Incidents Adverse Weather



North Carolina (cont'd)

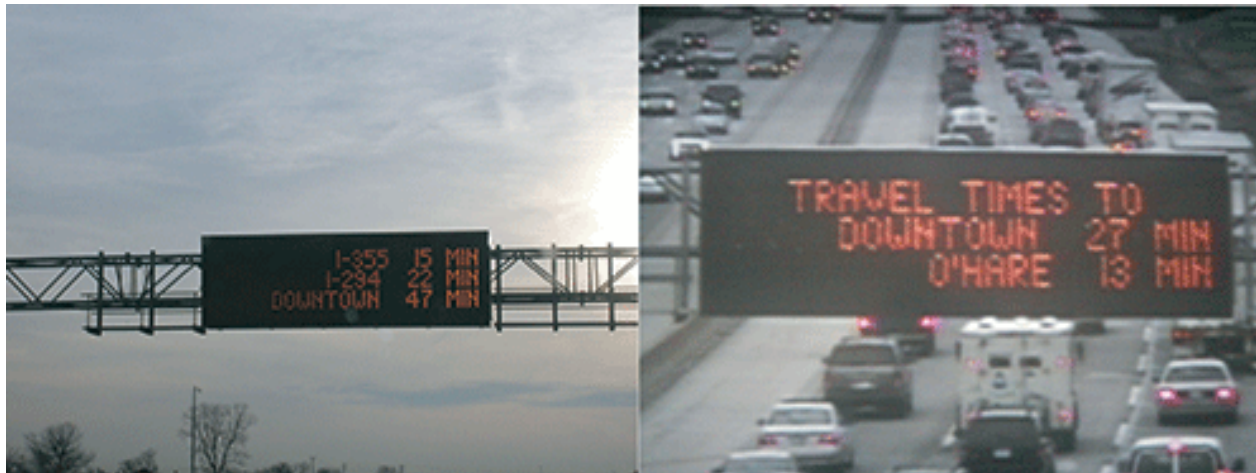
- Currently working on integrating Travel Times into our 511 system. TT's in urban areas will have ability to chose begin/end; TT's in rural areas will be based off of predetermined cross streets. (Available mid/late August)
- Getting ready to let RFP for Statewide Software Integration that will include utilizing VP data for Automated Travel Times to NC's DMS.
- Working with IT to develop statewide Data Archiving Database to use data for performance measures
- In the future, Planning Department may utilize the VP data

North Carolina (cont'd)

Current DMS Travel Time Methods

Travel Time To:
Exit 42, 15 Miles 15 Min
Exit 50, 22 Miles 22 Min

TRAVEL TIME TO
I-405 12-15 MIN
HWY 26 10-12 MIN



North Carolina (cont'd)

Virtual Message Sign Approach

- Emulates a DMS sign in a voice “report”

“Travel time on I-95 North from exit 27 to exit 42,
15 minutes”

North Carolina (cont'd)

Virtual Message Sign

- Must get input from the caller
- Plays the travel time to the next several “significant exits”
- Playback report is “tunable” and can be modified based on feedback

North Carolina (cont'd)

Travel Time Report Format

- What information should be played to the caller?
- Examples:
 - “I-95 Travel time to:”
 - “Exit 42, 17 minutes”
 - Or
 - “Exit 42, 15 miles, 17 minutes”
 - Or
 - “Exit 42 at Fayetteville, 15 miles, 15 minutes”

North Carolina (cont'd)

Virtual Message Sign Sample Caller Interaction

- **System:** On what interstate are you traveling?
- **Caller:** I-95
- **System:** Are you traveling North or South?
- **Caller:** North
- **System:** At what exit or mile marker are you currently located?
- **Caller:** Exit 27
- **System:** Travel time on I-95 North from Exit 27 to:
 - Exit 42, 15 minutes;
 - Exit 50, 22 minutes;
 - Exit 55, 27 minutes; Would you like to hear that again?
- **Caller:** No
- **System:** Would you like to hear further travel times for this interstate?
- **Caller:** Yes
- **System:** I-95 North travel time to: Exit 70, 42 minutes...

North Carolina (cont'd)

Next Steps?

- Get travel times on 511 relatively quickly
- Get feedback from end users and modify if necessary
- Web based subscription component for commuters?

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Thank You



**I-95 CORRIDOR
COALITION**