

PROGRESS REPORT #1

June 4, 2010 – September 4, 2010

Use of Dynamic Traffic Assignment in FSUTMS in Support of Transportation Planning in Florida (Research BDK80 TWO #977-12)

Submitted by:
Mohammed Hadi, Principal Investigator
Florida International University

Activities Performed this Quarter

1. The kick-off meeting for the project was conducted on June 22, 2010. The kick-off meeting minutes are enclosed with this progress report.
2. A conference call of the Dynamic Traffic Assignment subcommittee was conducted On June 11 to discuss the project activities. The subcommittee was formed by the modeling task force committee to advice on project activities. Addition subcommittee meetings are scheduled for September 13 and mid October.
3. The research team worked with the FDOT project manager (Mr.Vladimir Majano) on creating web pages for the project to share information with the DTA subcommittee of the modeling task force.
4. An extensive review of literature of related research has started. More than 100 related papers and reports were reviewed. The review of literature has focused on the areas below.
 - a. DTA modeling steps and variations among models
 - i. Time-dependent shortest paths
 - ii. Path choice
 - iii. Traffic flow model (network loading)
 - iv. Convergence criteria
 - b. Time-variant O-D estimation
 - c. Validation and calibration methods
 - d. Integration with other tools/modules
 - e. Treatment of intersection control, ITS, etc.
 - f. DTA implementation and issues
5. Comparison started of existing DTA tools. All available published information on these tools has been reviewed. A matrix that compares the attributes of these different tools is being produced.
6. A survey was developed and will be distributed to the members of the DTA subcommittee of the modeling task force. This survey will be discussed in the September 13 meeting of the subcommittee.

Activities Planned for Next Quarter

1. Continue the literature review
2. Continue the comparison of the DTA tools based on the published information
3. Start comparing some of the available tools by running the software and comparing the results
4. Conduct a requirement workshop at the end of November or beginning of December
5. Continue coordination with the DTA subcommittee of the modeling task force.

Summary of Requested Modifications

None requested.

Remarks

None.

Schedule Progress

See attachment A.

June 22, 2010

**Kickoff Meeting of Project
Use of Dynamic Traffic Assignment in FSUTMS in Support of Transportation
Planning in Florida (Research BDK80 TWO #977-12)**

Attendees

- Vladimir Majano (FDOT)
- Vidya Mysore (FDOT)
- Mark Greeley (FDOT)
- Matthew Martimo (Citilabs)
- Mohammed Hadi (FIU)
- Halit Ozen(FIU)
- Yan Xiao (FIU)
- Wei Zhao (FIU)

Summary

At the beginning of the meeting, Dr. Mohammed Hadi, the principal investigator of the project introduced the research team and presented a summary of anticipated project activities and schedule. The participants discussed the potential DTA tools for the project and additional tools and data needed for DTA modeling. The roles of FIU as the prime contractor and Citilabs as a subcontractor in the project were also discussed. In addition, the participants discussed the process for the identification of project requirements in a requirement workshop, potential location of the workshop, and the format of the workshop. The discussion included the coordination with the DTA subcommittee of the modeling task force that was formed to advice on these project activities.

Mr. Vidya Mysore mentioned that it may be good to conduct an early survey of the DTA subcommittee to have an initial identification of the needs for DTA in Florida.

Mr. Vladimir Majano (the FDOT project manager) requests that a web page should be developed for this project by the end of August to post the project documents and to share the project information with the members of the FDOT model task force subcommittee.

Mr. Majano and Mr. Mysore emphasized the importance of this project to the modeling community in Florida. Administrative issues regarding this project were also discussed.