

Seminar and TRB Conference Attendance: Year 9

By

Michael D. Anderson, Ph.D.
Civil and Environmental Engineering Department
University of Alabama in Huntsville
Huntsville, Alabama

Virginia P. Sisiopiku, Ph.D.
Civil, Construction, and Environmental Engineering Department
University of Alabama at Birmingham
Birmingham, Alabama

And

Yingyan Lou, Ph.D.
Civil, Construction and Environmental Engineering Department
University of Alabama
Tuscaloosa, Alabama

Prepared by

UTCA

University Transportation Center for Alabama
The University of Alabama, The University of Alabama in Birmingham, and
The University of Alabama at Huntsville

UTCA Report Number 11306
December 2012

Technical Report Documentation Page

1. Report No FHWA/CA/OR-	2. Government Accession No.	3. Recipient Catalog No.	
4. Title and Subtitle Seminar and TRB Conference Attendance: Year 9		5. Report Date December 2012	
7. Authors Michael Anderson, Virginia Sisiopiku, and Yingyan Lou		8. Performing Organization Report No. UTCA Report 11306	
9. Performing Organization Name and Address Civil and Environmental Engineering Department University of Alabama in Huntsville Huntsville, AL 35899		10. Work Unit No.	
		11. Contract or Grant No.	
12. Sponsoring Agency Name and Address University Transportation Center for Alabama Box 870205, 271 H M Comer Mineral Industries Building Tuscaloosa, AL 35487-0205		13. Type of Report and Period Covered Final Report/ 10/01/2011– 2/28/2012	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract Students from the three campuses of the University of Alabama of System are engaged in a variety of transportation related research activities. This project intended to provide a forum for transportation students to present their research results to faculty and students from their home campuses as well as transportation professionals in a professional setting. The students selected to make presentations, by faculty representatives from the three campuses, were rewarded with travel money to cover the cost of attending the Transportation Research Board Annual Meeting in Washington D.C.			
17. Key Words Student Seminar, TRB Annual Meeting		18. Distribution Statement	
19. Security Class (of this report)	20. Security Class (of this page)	21. No. of pages 11	22. Price

Table of Contents

Table of Contents	iv
List of Figures	v
Executive Summary	vi
1.0 Introduction.....	1
2.0 Selection of Students.....	2
3.0 Student Seminar	4
4.0 TRB Attendance.....	5
5.0 Conclusions.....	7

List of Figures

Number		Page
2-1	Announcement for UAH students.....	3
3-1	Program for student seminar	4

Executive Summary

There were two issues examined in this project. First, students from the three University of Alabama campuses need the opportunity to present the results of their research in a professional forum. Second, students need the opportunity to attend international meetings to learn first-hand research work being conducted at other universities. This project addressed these issues by identifying deserving students and providing a forum to highlight their research work and a means to explore other research work being performed nationwide through attendance at the Transportation Research Board Annual Meeting.

Section 1

Introduction

The issues examined in this project were twofold. First, there is a variety of quality transportation research currently being performed by undergraduate and graduate students from the three universities in the Alabama System. Unfortunately, no mechanism existed for students to present the results of their research to the other faculty members from either their home campus or the other campuses. The solution developed in this project was the development of a transportation student seminar hosted by the Institute of Transportation Engineers student chapter at the University of Alabama at Birmingham. Students from the three campuses were required to submit an original abstract and resume to faculty members from the three schools. The faculty members then formed a review board and selected those students who were invited to make a presentation at the technical session.

The second issue addressed in this proposal was the lack of funding to send some of the best students in Alabama to the Transportation Research Board Annual Meeting in Washington D.C. This meeting is one of the premiere transportation conferences in the world, attracting over 10,000 participants from around the globe. Attendance at this meeting enabled our students to experience, firsthand, the research topics being studied and the solutions to those topics. Attendance at this meeting represented an incredible opportunity for students from the University of Alabama System to learn about the future of transportation and how their education and research will help realize the future.

This project combined these two issues by awarding travel funds to students to attend the Transportation Research Board Meeting as a reward for being selected to present in the student seminar. This report is divided into five chapters. The introduction presents the basis of the project. Chapter two discusses the selection and review process used to pick the students invited to present. Chapter three provides a review of the student seminar. Chapter four presents the impact from the students attending the TRB Annual Meeting. The final chapter of this report provides an overview of results and expectations for future projects.

Section 2

Selection of Students

The initial task for this project focused on advertising and selecting the students to present at the seminar designed to highlight student research work. The advertising was accomplished through an announcement requesting students to submit an abstract of their potential research work for consideration of presentation at the student seminar. As an example, the announcement for UA is shown in Figure 2-1. Copies of the announcement were distributed to each of the campus representatives for the project and they were responsible for placing these in locations the students would see them and generate interest.

Each announcement requested that the appropriate on-campus representative collect abstracts and resumes. The two on-campus representatives who were not on the student's home campus performed the reviews of the abstracts and resumes. This - process was desirable in order to remove some bias from the reviews, as individual faculty who worked closely with students on projects, were not allowed to judge those same students. In addition, the abstracts were made available to external members of the UTCA advisory board for review. The reviews from the representatives were then forwarded to Dr. Anderson, summaries were developed, and letters of acceptance to present a paper or a poster at the conference were sent to the students.

Overall, 14 students, representing the three campuses, submitted abstracts and resumes for the program (6 from UA, 3 from UAB, and 5 from UAH). Based on the travel funds and seminar time available, one student from UA, UAB and UAH were selected to present formal papers at the seminar and receive funding to attend the TRB Annual Meeting, eight students (three each from UA and UAH and two from UAB) were selected to receive funding to attend the TRB Annual Meeting.

The University Transportation Center for Alabama (UTCA) is sponsoring a student research abstract competition with a chance to present research work at a professional forum and earn a trip to the Transportation Research Board (TRB) Meeting in Washington, D.C., January 2012.

Anyone interested in this competition needs to submit an abstract of current research and a resume via email to Dr. Anderson by **October 28, 2011**. The abstract may be up to 500 words and detail a transportation related project. From the submitted abstracts, a collection of students will be selected to possibly present their research at a professional meeting to be held in late November and receive money to attend the Transportation Research Board Meeting in Washington, D.C. in January 2012. The student awardees should be enrolled full-time in the spring semester 2012 and will be required to prepare a brief report documenting their experience.

For more information, please contact Dr. Anderson.

Figure 2-1. Announcement for UAH students.

Section 3 Student Seminar

The second task conducted in this project was to host a student seminar. The student seminar was developed and hosted by the Institute of Transportation Engineers (ITE) student chapter at the University of Birmingham and held on December 2, 2011 on the UAB campus, a location easily accessible to students and faculty from the three campuses, as well as representatives from around the state. The announcement for the student seminar, including presenters and presentation titles is included in Figure 3-1.

6th ANNUAL STUDENT AWARDS LUNCHEON
Celebrating the Achievements of Transportation Students

Friday, December 2, 2011
11:30 a.m.-1:00 p.m.

The University of Alabama at Birmingham
HOEN Building Room 120
1075 13th St South, Birmingham, AL

AGENDA

11:30	Buffet Lunch and Networking	
11:45	Welcome	<i>Dr. Virginia Sisiopiku</i> , Associate Professor - University of Alabama at Birmingham
11:50	Student Competition Awards Presentation	<i>Dr. Mike Anderson</i> , Associate Professor - University of Alabama in Huntsville
12:00	Assessment of Transit Oriented Development Impacts	<i>Mr. Md Imran Shah</i> , University of Alabama at Birmingham
12:20	Multiclass Fuzzy User Equilibrium with Endogenous Membership Functions and Risk-Taking Behaviors	<i>Mr. Mohammad Miranilqahi</i> , University of Alabama
12:40	Development Of Commodity Specific Freight Flow Volume Estimates Within The Freight Analysis Framework (FAF3)	<i>Ms. Mary Catherine Dondapati</i> , University of Alabama in Huntsville
1:00	Closing Remarks	<i>Dr. Virginia Sisiopiku</i> , Associate Professor, University of Alabama at Birmingham

*This event is sponsored by the University Transportation Center for Alabama (UTCA)
and the UAB ITE Student Chapter*

Figure 3-1. Program for student seminar

Section 4

TRB Attendance

The final task conducted in this project was to provide travel money to attend the Transportation Research Board Conference in January 2012 for students who were selected. Before attending the TRB Meeting, each student was responsible for preparing an itinerary of sessions and/or committee meetings they intend to participate and discuss these with their on-campus representative. Some of the session topics that were identified by the students included:

- Asset Management,
- Pavement Management Systems,
- Statewide Transportation Planning,
- Transportation Safety,
- Traffic Simulation,
- Intelligent Transportation Systems,
- Pavement Testing, and
- Aviation.

In addition, each student attending the TRB Meeting was required to prepare a written summary of the sessions attended and the relationship between conference sessions and his or her current research or interest in transportation. Quotes from the student summaries included:

“This was important for me because I got a chance to see an overview of the problems that exist in the growing transportation system. I was specifically impressed by the opportunities that the railways system has to offer and the many advantages with it.”

“Since I am very interested in environmental problems it was really interesting to hear the solutions and opportunities that our transportation system creates to fight with this problem. The ideas that were mentioned about emission reduction make me believe that there are things that can be changed in transportation to make it considerate towards the environment. The session started with a very interesting video explaining how pollution affects people. The video included powerful ideas and made me understand more on how we need to act now regarding protecting our environment by designing better transportation systems.”

“It was a great opportunity and experience in terms of gathering versatile knowledge. Integrated Transportation and Land use models session was interesting, the integrated model involves microsimulation, plugging back the updated travel costs and accessibility

and a new land use model indicates that proximity to highways and other roadways, distance from flood plains, parcel location in the context of existing development, and distance from schools are all important determinants of land-use. Development of public transit performance measurement was presented in terms of Level of Service approach. While attending a poster sessions, a presenter showed an assessment of operational performance of public transit agencies using DEA (Data Envelopment Analysis) technique and productivity index. Because I am conducting a project on public transit evaluation and finishing a project on Land use and Planning, those sessions and posters gave me an opportunity to see the presentation and ask question. Also, it is accessible to attendees to have all papers downloaded for later use. Beside these, light rail track design; bridge health monitoring by sensors, evaluation of trip generation models for smart growth project, and the prediction of FRP strength were interesting.”

Overall, the students took advantage of the opportunity to learn from top researchers and identify how those research ideas can be incorporated into the student’s work.

Section 5 Conclusions

This project worked toward the development of a community of students from the three campuses, highlight the work students from the three are performing, and provide a means to explore other research work being performed nationwide.

The relevance of this project was far reaching. The project allowed students from the three campuses to compete against each other and present their research results in a professional forum, attended by transportation professionals from across the state. In addition, this project allowed students to learn first-hand what research topics were being examined internationally through attendance at the TRB Annual Meeting. The student's experiences and education gained through this project is anticipated to become evident in the completion of graduate level work being performed at the three campuses.