

ALDOT – Bureau of
Research & Development
Project 930-634



Research & Development

ALABAMA DEPARTMENT OF TRANSPORTATION



2005 PEER EXCHANGE

FINAL REPORT

Conducted at:

The University of Alabama
Bryant Conference Center
through
The University Transportation Center for Alabama (UTCA)
May 3 – 5, 2005



2005 PEER EXCHANGE

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PEER EXCHANGE THEMES

Organization and Research Program Management

University Collaboration

Research Budget Management

Research Project Management and Performance Measures

Implementation Strategies



PEER EXCHANGE TEAM

| | | |
|----------------|--|---------------------------|
| North Carolina | <i>Dr. Mrinmay “Moy” Biswas</i> <i>State Research and Analysis Engineer</i> | (Team Leader) |
| Georgia | <i>Ms. Georgene Geary</i> <i>State Materials and Research Engineer</i> | |
| Mississippi | <i>Mr. Randy Battey</i> <i>State Research Engineer</i> | |
| FHWA – AL | <i>Mr. James Garland</i> <i>FHWA Transportation Planner – Research Liaison</i> | |
| Alabama | <i>Mr. Jeffery W. Brown</i> <i>State Research and Development Engineer</i> | (Host) |
| Alabama | <i>Ms. Ivy W. Harris</i> <i>Assistant State Research and Development Engineer</i> | (Peer Exchange Organizer) |



Research & Development
ALABAMA DEPARTMENT OF TRANSPORTATION



2005 PEER EXCHANGE

Introduction

Research is the oldest function of organized transportation in our country. It has played a vital role in the advancements that have led to our current transportation system. Federal regulation (23 CFR 420 Subpart B) establishes the Peer Exchange process of Research, Development, and Technology Transfer management of each state department of transportation. State Planning and Research funds are contingent upon the completion of a Peer Exchange. Peer Exchanges allow each state an opportunity to share the operation of its research program with peers from other states. The Peer Exchange teams are typically composed of state research managers, FHWA representatives and university personnel. From this positive exchange, all parties receive the benefit of best management practices and positive ideas that can be incorporated into their respective research programs.

Peer Exchanges are recommended every 3 to 5 years. The 2001 Alabama Department of Transportation Bureau of Research and Development Peer Exchange was conducted at the National Center for Asphalt Technology in Auburn, Alabama. The Peer Exchange documented in this report was hosted by The University Transportation Center for Alabama on the campus of The University of Alabama in Tuscaloosa, Alabama.



2005 PEER EXCHANGE

Executive Summary

This report documents the Peer Exchange conducted in the spring of 2005 to examine the research activities of the Research & Development Bureau of the Alabama Department of Transportation (ALDOT). The exchange was conducted with the participation of research program managers from Georgia, Mississippi, North Carolina and the Alabama Division of the Federal Highway Administration. In addition, members of the ALDOT Research Advisory Committee and university representatives attended, bringing total participation to over 50 individuals.

This Peer Exchange is a federal requirement but has grown to be far more than that. It has proven benefits and is now almost an extension of the AASHTO Standing Committee on Research - Research Advisory Committee. Across the nation, the participants now look forward to peer exchanges and to learning more about each other so that they can continuously improve their operations for the benefit of their stakeholders.

This Peer Exchange concentrated on five high-priority theme areas selected by the ALDOT Bureau of Research and Development. They included Theme 1: Organization and Project Management, Theme 2: University Collaboration, Theme 3: Research Budget Management, Theme 4: Research Project Management and Performance Measures, and Theme 5: Implementation Strategies.

For each theme, participants received overview presentations by ALDOT and peer programs. For Theme 2: University Collaboration, the overview was expanded through presentations by seven of ALDOT's university research partners. Following each theme presentation, a thorough discussion ensued, with core group members identifying and capturing good ideas and key thoughts. During the latter portion of the exchange, the core group organized these key thoughts into three categories: (1) Accomplishments of the ALDOT Research & Development Bureau, (2) Opportunities for Improvement, and (3) General Observations. These are contained in the body of the report.

A measure of the success of this conference is that all Peer Exchange Team Members learned from it and identified enhancements for their organizations. These are reflected in the "Take Home" ideas recorded by each peer as part of the conference.

In closing, the participants noted the enthusiasm generated during this meeting, the job-pride that ensued when accomplishments were highlighted and the suggested methods to overcome challenges. The employees of the ALDOT Bureau of Research and Development Bureau express their sincere appreciation for the assistance rendered.

1.0 Theme 1: Organization and Research Program Management Process

1.1 Accomplishments

The Alabama Department of Transportation Bureau of Research and Development was noted for the following accomplishments:

- ❑ The current process of the ALDOT Research Program is well organized, clear and easy to understand
- ❑ ALDOT took care to be inclusive in organizing the Peer Exchange and to get all “players” involved
- ❑ Use of a Research Project Review Form that documents subject matter expert review and concurrence by the appropriate Division Engineer or Bureau Chief and includes justification for recommendations
- ❑ A system that allows acknowledgement of ALDOT upper managers to build champions of the Research Program
- ❑ Good recognition and rapport with those in leadership at ALDOT and at partnering universities
- ❑ Use of a “Letter of Direction” that authorizes research work to begin and establishes project start and end dates, the Project Advisory Committee, the funding source, etc.
- ❑ Incorporation of the necessity of a research implementation plan in the “Letter of Direction”
- ❑ Many recommendations from the last Peer Exchange have been implemented, so that there is easy evidence that Peer Exchange has been of value to ALDOT
- ❑ ALDOT is moving to electronic/web processes for new product evaluation
- ❑ ALDOT’s Bureau of Research and Development has excellent involvement in national research initiatives by serving as the lead state for multiple national transportation pooled fund projects
- ❑ The Peer Exchange was well organized by ALDOT and The University Transportation Center for Alabama at The University of Alabama

1.2 Opportunities for Improvement

The following opportunities for improvement of the ALDOT Research Program were noted by Peer Exchange Team Members:

- ❑ Reconsideration of the longstanding ALDOT RAC decision to disallow payment of student tuition as a part of a research project
- ❑ A system should be established to track research project theme areas and report how they serve future/current emerging needs with tracking of both solicited and unsolicited proposals
- ❑ Start implementation planning at the beginning of a project by identifying the deliverable research product and aiming all activities toward it
- ❑ Establish a “special opportunity” research fund with approval allowance by the Bureau of Research and Development for immediate special needs projects to address instant priority issues
- ❑ Announce the publication of Final Reports to AASHTO RAC members
- ❑ Investigate the duplication of project results (reports, web posting) that is required by USDOT for both ALDOT and university centers
- ❑ Allow electronic application for the introduction of new products to ALDOT
- ❑ Add rotating Division Engineers to the ALDOT RAC
- ❑ Target additional federal funding (Innovative Bridge Research and Construction - IBRC, etc. with earmarks and allocations) and become actively involved in organizing policy studies
- ❑ Develop a format for research proposals that allows variance but clearly defines needed items.
- ❑ Use electronic ballots for expedited projects
- ❑ Encourage bureaus to use their own funding sources for research “quick needs” with project management by the Bureau of Research and Development
- ❑ Encourage more active involvement by research staff in actual research activities

1.3 General Observations

The following observations were made by the Peer Exchange Team:

- ❑ As Research Managers, we should encourage more warranty projects so that they can be more easily evaluated
- ❑ Use of a fiscal year close-out meeting to analyze the year's research progress is a good practice

2.0 Theme 2: University Collaboration

2.1 Accomplishments

The Alabama Department of Transportation Bureau of Research and Development was noted for the following accomplishments:

- ❑ There are a good variety of projects and universities involved in the ALDOT Research Program
- ❑ The Peer Exchange was formatted to allow inclusion of university partners
- ❑ The development of Tuskegee University as a research partner for ALDOT - good progress since the last Peer Exchange in engaging HBCU schools
- ❑ Recognizing potential new research partner institutions to try to match ALDOT needs with expertise
- ❑ Excellent university resources are available for ALDOT use
- ❑ Excellent wetlands research capability of Tuskegee University
- ❑ Quarterly RAC meetings allow more opportunities for ALDOT to introduce new research throughout the year

2.2 Opportunities for Improvement

The following opportunities for improvement of the ALDOT Research Program were noted by Peer Exchange Team Members:

- ❑ The exploration of more non-engineering research topics and the engagement of HBCU schools for this
- ❑ Establishment of summer pre-college programs for student introduction to engineering and to transportation research
- ❑ Encouragement of university partner collaboration within specialty areas
- ❑ Organization of a 1-day research conference to allow ALDOT to describe research needs and report accomplishments
- ❑ Develop a matrix of university capabilities and ALDOT research needs
- ❑ Investigate joint-state projects
- ❑ Find a mechanism to search ongoing/completed projects by in-state universities
- ❑ Explore natural environmental and emerging human environment (community impact assessment, environmental justice, etc.) issues in research and opportunities for HBCU involvement
- ❑ Collaboration – encourage researcher lectures at ALDOT and ALDOT personnel assistance with senior design courses to offer real world experiences (excellent recruiting tool)
- ❑ Consider creating a transportation research newsletter to showcase the ALDOT Research Program (internal targets and possible university collaboration)
- ❑ Consider a scholarship program similar to that of Mississippi
- ❑ Consider GA (GaTI) & MS programs of lead institutions handling an ongoing topic
- ❑ Involve universities in some manner of critiquing the ALDOT Peer Exchange and Research Program

2.3 General Observations

The following observations were made by the Peer Exchange Team:

- ❑ Universities seem to operate from silos with professions in sub silos – few partnerships
- ❑ There appears to be redundancy in research projects in adjoining states and opportunities for partnerships on research should be more actively pursued (possible opportunity for 100% SP&R funding)
- ❑ GA, NC, & MS are all working to be inclusive of universities of their respective states in their research programs
- ❑ There is a need at all DOT's for Human Resource studies

3.0 Theme 3: Research Budget Management

3.1 Accomplishments

The Alabama Department of Transportation Bureau of Research and Development was noted for the following accomplishments:

- ❑ Successful and effective research project budget tracking is being provided by the use of spreadsheets.
- ❑ Use of a General Agreement with each university for research projects has been an excellent tool in authorizing individual research projects
- ❑ Payments are contingent upon deliverables
- ❑ There is no consideration of funding for successive project phases without successful completion of previous phases

3.2 Opportunities for Improvement

The following opportunities for improvement of the ALDOT Research Program were noted by Peer Exchange Team Members:

- ❑ Consider the use of a separate SP&R Travel Fund that excludes any travel from the research project – North Carolina Model

3.3 General Observations

The following observations were made by the Peer Exchange Team:

- ❑ Information is needed at the next annual AASHTO RAC Meeting on copyright, intellectual property issues and property rights (Who is the true owner of the research products?)
- ❑ Other states have more flexibility in disbursing research money

4.0 Theme 4: Project Management and Performance Measures

4.1 Accomplishments

The Alabama Department of Transportation Bureau of Research and Development was noted for the following accomplishments:

- Use of a Research Project Review Form that documents subject matter expert review and concurrence by the appropriate Division Engineer or Bureau Chief and includes justification for recommendations
- Inclusion of completed Research Project Review Forms in RAC Agenda books for review by all RAC members
- ALDOT's Bureau of Research and Development uses a structured methodology to manage research projects
- There is excellent administration of national transportation pooled-funds
- There is a research manual in place with guideline compliance by the ALDOT Research Program
- ALDOT's Bureau of Research and Development does an excellent job of keeping FHWA in the research information loop
- ALDOT maintains TRIS/RIP information in its project files – excellent opportunity for later use in project to check relevance to existing or concurrent studies

4.2 Opportunities for Improvement

The following opportunities for improvement of the ALDOT Research Program were noted by Peer Exchange Team Members:

- Before project close-out, a meeting should be held with the PAC and the researcher(s) to clear up any remaining project issues and allow proper completion of the Final Report and Implementation Plan
- Consider posting quarterly reports on the ALDOT Intranet (limits paperwork and archives the materials)
- Recognize that performance measures do not have to be project specific, but can have other additional benefits
- Investigate using commercial project management software for large projects (Microsoft Project)
- Seek customer feedback
- All of us should strive to earn recognition and awards for project management and performance measures

4.3 General Observations

The following observations were made by the Peer Exchange Team:

- The FHWA Resource Center can help with performance measure evaluation
- The ALDOT Research Manual is certified annually by the FHWA

5.0 Theme 5: Research Implementation Practices

5.1 Accomplishments

The Alabama Department of Transportation Bureau of Research and Development was noted for the following accomplishments:

- The ALDOT Research Program has definite examples of research that have been implemented in ALDOT operations
- There is an online library of ALDOT research projects which allows ease in finding any needed documentation/information
- The ALDOT implementation of research projects was better than realized before the beginning of the Peer Exchange

5.2 Opportunities for Improvement

The following opportunities for improvement of the ALDOT Research Program were noted by Peer Exchange Team Members:

- Adopt the *Roadways into the Development of Elementary Students (RIDES)* program created in MS - information is available on the MDOT website at <http://www.gomdot.com>
- Start implementation planning as early as possible in the research project
- Add a tracking feature to track implementation/final report as a performance measure
- Measure implementation by project and topic
- Develop a Technical Assistance Request Form similar to NC's and use a set aside funding system (usual = 80 hours consulting time per request)
- Require an implementation plan in the research proposal
- Provide training at conferences or offices to aid in the implementation of research
- Organize an Implementation Review and Strategic Planning Meeting
- Explore adopting a formal implementation procedure
- Add the requirement that the researcher draft "implementation language" when specifications change
- Conduct follow-up interviews after research projects are completed to assess the success of the research's implementation

5.3 General Observations

The following observations were made by the Peer Exchange Team:

- Overall, states do a better job of research implementation than they would immediately recognize but there's no method in place to readily measure or track it
- Recognize that the product of a research project is much more than a Final Report

6.0 Take Home Items

6.1 Georgia:

Theme 1:

- ❑ Use of a Research Project Review Form that documents subject matter expert review and concurrence by the appropriate Division Engineer or Bureau Chief and includes justification for recommendations
- ❑ Use of a “Letter of Direction” that authorizes research work to begin and establishes project start and end dates, the Project Advisory Committee, the funding source, etc.
- ❑ Web posting of Quarterly Research Reports
- ❑ Announce the publication of Final Reports to AASHTO RAC members

Theme 2:

- ❑ Organize Peer Exchanges to allow inclusion of university partners
- ❑ Investigate joint-state projects
- ❑ Consider a scholarship program similar to that of Mississippi
- ❑ Establishment of summer pre-college programs for student introduction to engineering and to transportation research
- ❑ Use ALDOT research on Train the Trainer and other workshops for applicable meetings

Theme 3:

- ❑ Consider the use of a separate SP&R Travel Fund that excludes any travel from the research project – North Carolina Model
- ❑ Consider the use of the budget tracking spreadsheet model provided by AL

Theme 4:

- ❑ The AL model of a Research Project Review Form with subject matter expert review and delivery to RAC members at completion
- ❑ Maintenance of TRIS/RIP data in the project file for follow-up and review later in the project
- ❑ Establishment of a Technical Advisory Committee
- ❑ Use of project close-out evaluation meetings
- ❑ Maintenance of research quarterly reports on the GA website
- ❑ Performance measures are not only tied to individual projects but can be seen as benefits of the overall Research Program

Theme 5:

- ❑ Hold implementation reviews on projects and look at implementation reviews by topic (strategically)
- ❑ Use a proposal review checklist form
- ❑ Conduct follow-up interviews after research projects are completed to assess the success of the research’s implementation

6.2 Mississippi:

Theme 1:

- ❑ Use of a Research Project Review Form that documents subject matter expert review and concurrence by the appropriate Division Engineer or Bureau Chief and includes justification for recommendations
- ❑ Use of a “Letter of Direction” that authorizes research work to begin and establishes project start and end dates, the Project Advisory Committee, the funding source, etc.
- ❑ Create Research Program champions from upper management
- ❑ Develop a matrix of university capabilities and MDOT research needs
- ❑ Increase minor research (contingency items) from 25K to 50K

Theme 2:

- ❑ Investigate joint-state projects
- ❑ Consider a 1-day research conference to let MDOT describe needs (projects and topics)
- ❑ Consider transportation research newsletter (internal targets)
- ❑ Develop annual or biannual ideas for research form
- ❑ Improve regional cooperative efforts to minimize duplication of research

Theme 3:

- ❑ Consider the use of a separate SP&R Travel Fund that excludes any travel from the research project – North Carolina Model
- ❑ Consider the use of budget tracking spreadsheet model provided by AL
- ❑ Provide a mechanism to ensure that invoices are not paid until progress reports are received - prior to Final Report
- ❑ Check on MS law – relation to \$5,000 federal equipment inventory guidelines

Theme 4:

- ❑ Look into categorizing areas of Research to facilitate Technical Advisory Committee formation
- ❑ Add a close-out meeting to project before finalizing
- ❑ Examine Microsoft Project software for project management capabilities

Theme 5:

- ❑ Develop a Technical Assistance Request Form similar to NC’s and use a set aside funding system (usual = 80 hours consulting time per request)
- ❑ Establish a follow-up review to facilitate and track implementation

6.3 North Carolina:

Theme 1:

- Track annual statistics of research projects
- Check on career progression for R&D positions

Theme 2:

- A Contracting process with multiple universities – AL model
- Explore Professional Development Hour (PDH) Seminars
- Exploration of undergraduate students for research focus
- Scholarship Program for in-state undergraduate research interns
- DOT involvement in college senior design courses

Theme 3:

- Use of separate General Agreements for each university

Theme 4:

- Review Research Manual of ALDOT
- National Transportation Pooled Fund Management Process

Theme 5:

- Review the online library in place
- Present research findings at the annual Construction and Operations Meeting

6.4 FHWA – AL:

Theme 1:

- ❑ Investigate the USDOT request for duplication of project results (reports, web posting) for university centers and ALDOT
- ❑ Target additional research funds and organize efforts to retrieve it from both discretionary allocations and earmarks

Theme 2:

- ❑ Recommendation from FHWA for Research Programs to be more inclusive of all in opportunities.
- ❑ Help with creating Alabama 101 – a course in working with ALDOT on transportation issues – training for universities
- ❑ Increase collaboration between FHWA and the ALDOT Research Program on how to rollout research opportunities to universities not currently involved
- ❑ Bring summer institute training to more institutions of the state

Theme 3:

- ❑ Review budget items in the Code of Federal Regulations and identify opportunities for growth

Theme 4:

- ❑ FHWA-Resource Center individuals can help develop performance measures of state Research Programs

Theme 5:

- ❑ Help with tracking implementation after project close-out and when final reports have been published

Take Home Items

6.5 Alabama:

Theme 1:

- ❑ Reconsideration of the longstanding ALDOT RAC decision to disallow payment of student tuition as a part of a research project
- ❑ Track research project theme areas and report how they serve future/current emerging needs with tracking of both solicited and unsolicited proposals
- ❑ Start implementation planning at the beginning of a project by identifying the deliverable research product and aiming all activities toward it
- ❑ Establish a “special opportunity” research fund with approval allowance by the Bureau of Research and Development for immediate special needs projects to address instant priority issues
- ❑ Announce the publication of Final Reports to AASHTO RAC members
- ❑ Investigate the duplication of project results (reports, web posting) that is required by USDOT for both ALDOT and university centers
- ❑ Allow electronic application for the introduction of new products to ALDOT
- ❑ Add rotating Division Engineers to the ALDOT RAC
- ❑ Target additional federal funding (Innovative Bridge Research and Construction - IBRC, etc. with earmarks and allocations) and become actively involved in organizing policy studies
- ❑ Develop a format for research proposals that allows variance but clearly defines needed items.
- ❑ Use electronic ballots for expedited projects
- ❑ Encourage bureaus to use their own funding sources for research “quick needs” with project management by the Bureau of Research and Development
- ❑ Encourage more active involvement by research staff in actual research activities

Theme 2:

- ❑ The exploration of more non-engineering research topics and the engagement of HBCU schools for this
- ❑ Establishment of summer pre-college programs for student introduction to engineering and to transportation research
- ❑ Encouragement of university partner collaboration within specialty areas
- ❑ Organization of a 1-day research conference to allow ALDOT to describe research needs and report accomplishments
- ❑ Develop a matrix of university capabilities and ALDOT research needs
- ❑ Investigate joint-state projects
- ❑ Find a mechanism to search ongoing/completed projects by in-state universities
- ❑ Explore natural environmental and emerging human environment (community impact assessment, environmental justice, etc.) issues in research and opportunities for HBCU involvement
- ❑ Collaboration – encourage researcher lectures at ALDOT and ALDOT personnel assistance with senior design courses to offer real world experiences (excellent recruiting tool)
- ❑ Consider creating a transportation research newsletter to showcase the ALDOT Research Program (internal targets and possible university collaboration)
- ❑ Consider a scholarship program similar to that of Mississippi
- ❑ Consider GA (GaTI) & MS programs of lead institutions handling an ongoing topic
- ❑ Involve universities in some manner of critiquing the ALDOT Peer Exchange and Research Program

Theme 3:

- ❑ Consider the use of a separate SP&R Travel Fund that excludes any travel from the research project – North Carolina Model

Theme 4:

- ❑ Before project close-out, a meeting should be held with the PAC and the researcher(s) to clear up any remaining project issues and allow proper completion of the Final Report and Implementation Plan
- ❑ Consider posting quarterly reports on the ALDOT Intranet (limits paperwork and archives the materials)
- ❑ Recognize that performance measures do not have to be project specific, but can have other additional benefits
- ❑ Investigate using commercial project management software for large projects (Microsoft Project)
- ❑ Seek customer feedback
- ❑ All of us should strive to earn recognition and awards for project management and performance measures

Theme 5:

- ❑ Adopt the *Roadways into the Development of Elementary Students (RIDES)* program created in MS - information is available on the MDOT website at <http://www.gomdot.com>
- ❑ Start implementation planning as early as possible in the research project
- ❑ Add a tracking feature to track implementation/final report as a performance measure
- ❑ Measure implementation by project and topic
- ❑ Develop a Technical Assistance Request Form similar to NC's and use a set aside funding system (usual = 80 hours consulting time per request)
- ❑ Require an implementation plan in the research proposal
- ❑ Provide training at conferences or offices to aid in the implementation of research
- ❑ Organize an Implementation Review and Strategic Planning Meeting
- ❑ Explore adopting a formal implementation procedure
- ❑ Add the requirement that the researcher draft "implementation language" when specifications change
- ❑ Conduct follow-up interviews after research projects are completed to assess the success of the research's implementation



2005 PEER EXCHANGE AGENDA

TUESDAY, MAY 3, 2005

Paul W. Bryant Conference Center, The University of Alabama

Birmingham Room

11:30 AM

Welcome Messages

*Alabama Transportation Director, Mr. Joe McInnes
FHWA Division Administrator, Mr. Joe Wilkerson
ALDOT Research Advisory Committee Chair, Mr. Mike Harper
The University of Alabama President, Dr. Robert E. Witt
The University of Alabama, Dr. Charles L. Karr
The University of Alabama and UTCA, Dr. Daniel S. Turner*

Introduction of Team and Participants

ALDOT Research & Development Engineer, Mr. Jeffery Brown

Introduction to Peer Exchange

Team Leader, Dr. Mrinmay "Moy" Biswas, NCDOT

12:00 Noon

L u n c h

Wilson Room

12:45 PM

Peer Exchange Themes, Goals, Expectations, and Program Plan

Jeffery Brown and Moy Biswas

1:00 PM

Theme 1: Organization and Research Program Management Process

Ivy Harris, Carl Smith, Michelle Owens – ALDOT R&D

1:30 PM

Theme 1 Discussion: Peer Exchange Participants

*Georgene Geary, GDOT
Randy Battey, MSDOT
Moy Biswas, NCDOT*

2:00 PM

Theme 2: University Collaboration

(10 min informal break for setup)

*Alabama A&M University
Auburn University
The National Center for Asphalt Technology (NCAT)
The University of Alabama & UTCA
The University of Alabama at Birmingham
The University of Alabama in Huntsville
Tuskegee University*

3:45 PM

B r e a k

4:10 PM

Theme 2 Discussion: Peer Exchange Participants

*Georgene Geary, GDOT
Randy Battey, MSDOT
Moy Biswas, NCDOT*

4:45 PM

Day 1 Closing Comments *Jeffery Brown and Moy Biswas*

5:00 PM

A d j o u r n



5:00 PM

PEER EXCHANGE RECEPTION – BIRMINGHAM ROOM





WEDNESDAY, MAY 4, 2005
Paul W. Bryant Conference Center, The University of Alabama

Morgan Board Room

- 8:00 AM **Review and Documentation of Theme 1: Peer Exchange Team**
- 8:40 AM **B r e a k**
- 8:50 AM **Review and Documentation of Theme 2: Peer Exchange Team**
- 9:30 AM **B r e a k**
- 9:40 AM **Theme 3: Research Budget Management**
Ivy Harris, ALDOT Asst. Research & Development Engineer
- 10:00 AM **Theme 3 Discussion: Peer Exchange Participants**
Georgene Geary, GDOT James Garland, FHWA
Randy Battey, MSDOT Jeffery Brown, ALDOT
Moy Biswas, NCDOT Ivy Harris, ALDOT
- 10:30 AM **Documentation of Theme 3**
- 10:45 AM **B r e a k**
- 10:55 AM **Theme 4: Project Management and Performance Measures**
Carl Smith, ALDOT Asst. Research & Development Engineer
- 11:15 AM **Theme 4 Discussion: Peer Exchange Participants**
Georgene Geary, GDOT James Garland, FHWA
Randy Battey, MSDOT Jeffery Brown, ALDOT
Moy Biswas, NCDOT Ivy Harris, ALDOT
- 11:45 AM **Documentation of Theme 4**
- 12:00 Noon **L u n c h - 4 P o i n t s H o t e l B u f f e t**
- 1:30 PM **Theme 5: Research Implementation Strategies**
ALDOT Research & Development Staff
- 2:00 PM **Theme 5 Discussion: Peer Exchange Participants**
Georgene Geary, GDOT James Garland, FHWA
Randy Battey, MSDOT Jeffery Brown, ALDOT
Moy Biswas, NCDOT Ivy Harris, ALDOT
- 2:30 PM **Documentation of Theme 5**
- 3:00 PM **C A M P U S T O U R**
The Paul W. Bryant Museum, Bryant – Denny Stadium, Shelby Hall, Dept. of Civil and Environmental Engineering, etc.
Dr. Daniel S. Turner, The University of Alabama, The University Transportation Center for Alabama (UTCA), Past ASCE National President – Tour Guide
- 5:00 PM **Return to hotel & Adjourn**



6:30 PM PEER EXCHANGE DINNER – TUSCALOOSA AREA FAVORITE – CYPRESS INN
(Day 2 Peer Exchange Participants & Support Staff)





T H U R S D A Y , M A Y 5 , 2 0 0 5
Paul W. Bryant Conference Center, The University of Alabama

Morgan Board Room

8:30 AM **Review of Documentation – Themes 1 – 5**
 (Comments and Recommendations)
 Peer Exchange Team

9:15 AM **Preparation of Draft Final Report**

11:00 AM **Presentation of Draft Final Report**
 Jeffery Brown and the Peer Exchange Team

Closing Comments
 Moy Biswas, Peer Exchange Team Leader
 Jeffery Brown

11:45 AM **Administrative Tasks – Expense Reports, Travel Forms, Etc.**

12:00 Noon **L u n c h - 4 P o i n t s H o t e l B u f f e t**

1:00 PM **A d j o u r n**



PEER EXCHANGE THEMES

Organization and Research Program Management
University Collaboration
Research Budget Management
Research Project Management and Performance Measures
Implementation Strategies



PEER EXCHANGE TEAM

| | | |
|----------------|--|---------------------------|
| North Carolina | <i>Dr. Mrinmay “Moy” Biswas</i> <i>State Research and Analysis Engineer</i> | (Team Leader) |
| Georgia | <i>Ms. Georgene Geary</i> <i>State Materials and Research Engineer</i> | |
| Mississippi | <i>Mr. Randy Battey</i> <i>State Research Engineer</i> | |
| FHWA – AL | <i>Mr. James Garland</i> <i>FHWA Transportation Planner – Research Liaison</i> | |
| Alabama | <i>Mr. Jeffery W. Brown</i> <i>State Research and Development Engineer</i> | (Host) |
| Alabama | <i>Ms. Ivy W. Harris</i> <i>Assistant State Research and Development Engineer</i> | (Peer Exchange Organizer) |

PEER EXCHANGE PARTICIPANTS

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| Deputy Director, Operations | <i>D. W. Vaughn</i> |
| Assistant Chief Engineer, Operations and Research Advisory Committee Chair | <i>Mike Harper</i> |
| Design Bureau Chief | <i>Don T. Arkle</i> |
| Computer Services Bureau Chief | <i>Guin Butler</i> |
| State Bridge Engineer | <i>Fred Conway</i> |
| 3 rd Division Engineer | <i>J. F. Horsley</i> |
| State Materials and Tests Engineer | <i>Larry Lockett</i> |
| State Maintenance Engineer | <i>John Lorentson</i> |
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| FHWA AL Division Administrator | <i>Joe Wilkerson</i> |
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| The University of Alabama | <i>Dr. Robert E. Witt, Dr. Charles L. Karr</i> |
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2005 PEER EXCHANGE

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Auburn University
The National Center for Asphalt Technology (NCAT)
The University of Alabama
The University of Alabama at Birmingham
The University of Alabama at Huntsville
Tuskegee University