

# **LTRC Project Management and Tracking System**

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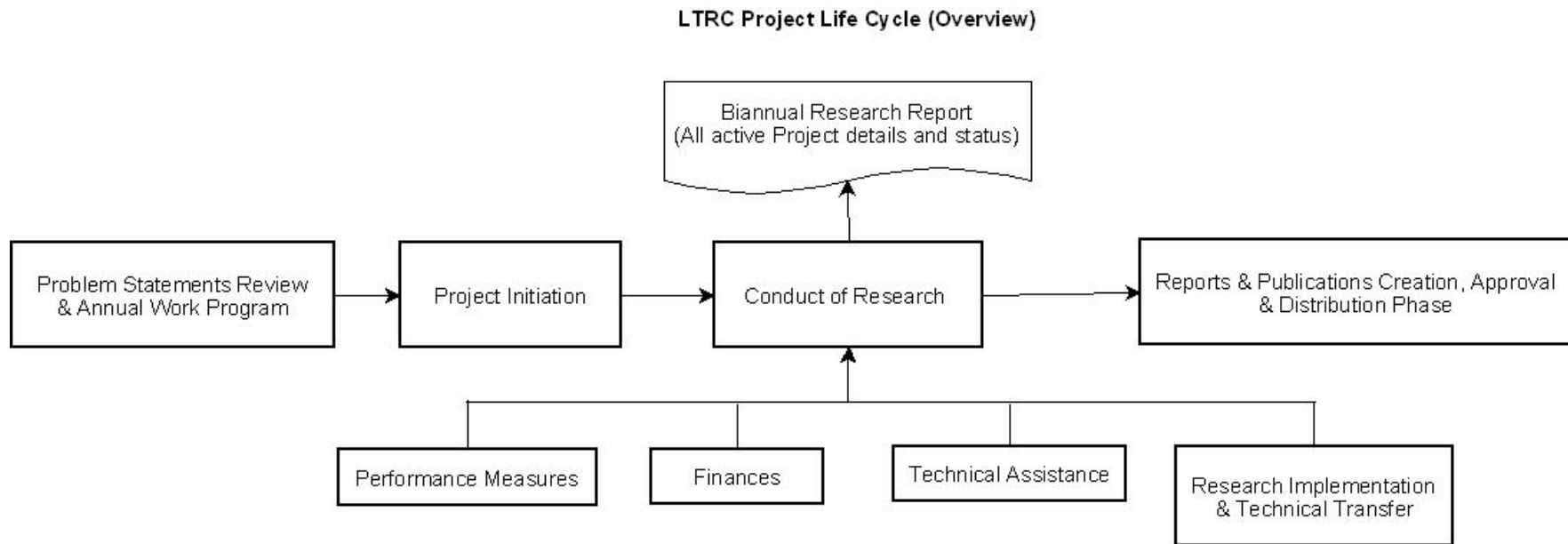


**July 2013**

RAC/TRB Rep Annual Meeting

# System Architecture Methodology

- Research Project Management is a cumbersome process
- A Web application alleviates the difficulties of research project management and tracking
- Internal Custom Programming (2008 on-going)




# General Features

- Web-based Internet Access
- Authenticated access using Login and password
- Limited access based authorization on every web page (Administrator, Project Manager, Principal Investigator, etc.)
- Ability to manage user information
- Automated email generation



# Projects Management Functions


Research Project Management and Tracking  
Louisiana Transportation Research Center

You are here: [Home](#) > [Project Management](#) > [Search Projects](#)

HOME   RPIC   **PROJECT MANAGEMENT**   PERFORMANCE MEASURES   RESEARCH ADMINISTRATION   PUBLICATIONS   REPORTS   SYSTEM ADMINISTRATION

Project Functions

- >> Request LTRC Project Number
- >> **View Project**
- >> View PRC
- >> Project Files
- >> Project Tasks
- Annual Work Program
- >> Create AWP Sheet
- >> View AWP Sheet
- >> AWP Reports
- Biannual Reports
- >> Create Biannual Report
- >> View Biannual Report
- Expense Reports
- >> Project Expense Report
- >> Fiscal Year Expense
- Implementation
- >> Create Assessment Report
- >> View Assessment Report
- >> Create Summary Report
- >> View Summary Report

### Search Projects

**Search Projects using any of the following:**

**General Project Details**

Research Project Number:

Funding Source:

Actual Start Date (From):

Actual Start Date (To):

End Date (From):

End Date (To):

Group Administrator:

Select Project Type:  GT  P  B  ST  SS  C  PF  ADM  RS  LTAP  TT  CON  Other

Title:

SIO/State Project Number:

Budget Category:

Amount Requested (\$):

Project Status:

Project Manager:

Principal Investigator:

Agency:

**View All Projects**

Click on 'View' to see the details of the selected Projects

Select	Research Project Number	State Project Number	Title	Project Manager	End Date	Status	Funding Source	Edit	View Document
Select	10-1GERL	30000111	LTRC Support for Geotechnical Research at the Geotechnical Engineering Research Laboratory (GERL)	Dr. Zhongjie 'Doc' Zhang	6-30-2015	Ongoing	SPR: TT-Fed/TT-Reg	Edit	View

# Financial Reports Features

- Download from state financial system
- Access to financial history by project
- Easy report searching by agency, funding, category, etc.
- Special reports for Division of Administration/ Legislature, Federal reporting
- Excel or word export

A	B	C	D	E
SIO	FISCAL YEAR	BUDGET GROUP	COST ELEMENT NAME	COST
05-1GT/30000116	2008-2009	CONTRACTS PAYABLE	Invoices Payable – Administrative Contracts	\$60,327.10
			Total	\$60,327.10
	2009-2010	CONTRACTS PAYABLE	Invoices Payable – Administrative Contracts	\$65,810.15
			Total	\$65,810.15
	2010-2011	CONTRACTS PAYABLE	Invoices Payable – Administrative Contracts	\$6,127.36
			Total	\$6,127.36
	2011-2012	PROF SRV-INVEST/RES	MISC-PROF SVCS	\$28,476.21
			Total	\$34,603.57
	Total	Total	Total	\$163,041.71
	08-3GT/30000114	Total	Total	\$242,254.37
10-1GERL/30000111	Total	Total	\$2,246,830.0	
10-2GT/30000201	Total	Total	\$61,177.00	

A	B	C	D	E	F	G	H	I	J	K
RESEARCH STATE	PROJECT TITLE	PROJECT	STANDING	SOURCE	AGENCY	ACTUAL START	END DATE	REVISED	AMOUNT	REVISED
09-4AD	70145-1162 Support for Senior Design Project Courses	Completed	State	TT-Reg	LSU	7/12/2008	6/30/2009		\$2,553	
09-3AD	70145-1310 LTRC Student Program	Completed	SPR	TT-Fed	LSU	7/12/2008	6/30/2010		\$147,608	
10-2AD	70145-1311 SCOTD Support Program for Civil Engineering Studies	Ongoing	State	TT-Reg	LSU	2/8/2010	6/30/2010		\$5,000	
10-1SS	70145-1402 Evaluation of Knowledge Transfer in an Immersive Virtual Learning Environment for the Transportation	Ongoing	STP	TT-Fed	LSU	1/15/2010	12/31/2010		\$274,476	
11-3AD	70145-1482 LTRC Student Program	Ongoing	STP	TT-Fed	LSU	7/12/2010	6/30/2011		\$147,000	
02-3SS	712-99-0003 Developing a Comprehensive Highway Accident Data Analysis System with GIS (II)	Past Due	State	TT-Reg	LSU	2/12/2002	6/30/2004	7/30/2009	\$89,861	\$177,989
06-1EMCRF	736-99-1029 Pavement Materials Research using Special Equipment at the Engineering Materials Characterization	Ongoing	SPR	TT-Fed	LSU	7/12/2009	6/30/2012		\$2,141,941	
10-1ALP	736-99-0915 Management and Operation of the Pavement Research Facility	Ongoing	State	TT-Reg	LSU	7/12/2009	6/30/2012		\$2,977,050	
10-1GREL	736-99-1101 LTRC Support for Geotechnical Research at the Geotechnical Engineering Research Laboratory (II)	Ongoing	SPR	TT-Fed	LSU	7/12/2009	6/30/2011		\$2,717,417	
05-1SS	736-99-1301 Evaluation of The Traffic Safety Benefits of A Lower Speed Limit And Restriction of Trucks To Use	Past Due	State	TT-Reg	LSU	9/12/2004	8/31/2009	8/31/2009	\$330,013	\$382,961
06-3ST	736-99-1367 Development of Advanced Grid Stiffened (AGS) FRP Tube-Encased Concrete Columns	Past Due	100% Federal	LSU	9/12/2005	9/12/2007	12/31/2008		\$225,000	
06-6ST	736-99-1370 Bridge Deck Replacement using FRP Materials	Ongoing	IBRD	TT-Fed	LSU	11/15/2005	6/14/2008	11/14/2010	\$220,537	
02-2P	736-99-1411 Characterization and Development of Truck Load Spectra for Current and Future Pavement Design	Past Due	State	TT-Reg	LSU	4/12/2007	9/30/2009	3/31/2009	\$119,986	
07-3ST	736-99-1438 Repairing/Strengthening of Bridges with Post-Tensioned FRP Strands and Performance Evaluation	Ongoing	IBRD	TT-Fed	LSU	10/12/2007	4/12/2010	3/31/2011	\$300,000	
07-4ST	736-99-1439 Integral Abutment Bridge for Louisiana's Soil and SHR Soils	Ongoing	IBRD	TT-Fed	LSU	10/12/2007	8/12/2011		\$400,000	
07-2C	736-99-1450 Determination of Coefficient of Thermal Expansion Effects on Louisiana's PCOP for the Mechanistic	Past Due	State	TT-Reg	LSU	2/12/2007	4/30/2009	6/30/2009	\$74,533	\$132,578
07-3SS	736-99-1483 Establishing an Intelligent Transportation Systems (ITS) Lab at LTRC	Completed	State	TT-Reg	LSU	7/12/2007	12/31/2008		\$49,994	
07-6P	736-99-1495 Developing Embedded Wireless Strain/Stress/Temperature Sensors Platform for Highway Application	Ongoing	NCHRP	TT-Reg	LSU	6/12/2007	3/31/2010		\$125,000	
10-1TAP	736-99-1497 Local Technical Assistance Program (LTAP)	Ongoing	LTAP	TT-Fed	LSU	1/12/2010	12/31/2010		\$688,625	
08-3D	736-99-1498 A Comparative Analysis of Modified Binders - Original Asphalts and Materials Extracted from Existing	Past Due	State	TT-Reg	LSU	5/12/2007	7/31/2009	1/11/2010	\$71,150	\$284,904
07-2SS	736-99-1603 The Design of Lane Merges at Rural Freeway Construction Work Zones	Past Due	State	TT-Reg	LSU	9/12/2007	11/12/2007	12/31/2009	\$140,000	
08-1ST	736-99-1513 Evaluation of Continuity Details for Precast Prestressed Girders	Ongoing	State	TT-Reg	LSU	12/15/2007	11/30/2009	12/31/2010	\$349,578	
08-1TRC	736-99-1514 Developing an In-situ Characterization Technique to Assess the Scour Potential of Cohesive Soils	Past Due	State	TT-Reg	LSU	2/12/2008	1/12/2009		\$30,000	
08-3TRC	736-99-1516 First Flush Reactor for Stormwater Treatment for Elevated Linear Transportation Projects	Past Due	State	TT-Reg	LSU	12/12/2007	10/31/2008	6/30/2009	\$30,000	
08-1P	736-99-1518 Cost Effective Prevention of Reflective Cracking of Composite Pavement	Ongoing	State	TT-Reg	LSU	6/15/2008	6/14/2010	2/14/2011	\$165,444	
08-2ST	736-99-1572 Monitoring Bridge Scour Using Fiber Optic Sensors	Ongoing	IBRD	TT-Fed	LSU	1/12/2009	7/12/2011		\$199,999	
09-2SS	736-99-1575 Enhancing Calibrated Peer Review for Improved Engineering Communication Education	Ongoing	100% Federal	LSU	9/12/2008	9/12/2011		\$50,000		
08-3ST	736-99-1620 Evaluation of Design Methods to Determine Scour Depths for Bridge Structures	Ongoing	State	TT-Reg	LSU	4/12/2009	4/12/2011		\$200,004	
04-4ST	736-99-1622 A Shape Memory Polymer based Self-healing Sealant for Expansion Joints	Ongoing	NCHRP	LSU	5/12/2009	11/12/2010		\$135,000		
09-2TRC	736-99-1643 Application of Satellite Imagery for Surface Rain Rate Estimation	Completed	State	TT-Reg	LSU	6/12/2009	5/31/2010		\$29,940	
09-3TRC	736-99-1644 Use of Titanium Dioxide to Improve Performance and Air Purifying Capabilities of Concrete Pavement	Completed	State	TT-Reg	LSU	6/12/2009	5/31/2010		\$79,985	
05-2P	736-99-1648 Implementation of the Rolling Wheel Deflectometer (RWDD) in PMS and Pavement Preservation	Ongoing	State	TT-Reg	LSU	7/12/2009	9/30/2010	6/30/2011	\$112,862	
09-6C	736-99-1650 Support Study on the Characterization of Tensar Mats with Various SCMs	Ongoing	State	TT-Reg	LSU	7/12/2009	6/30/2010	12/31/2010	\$89,271	
09-3GT	736-99-1660 Real-Time Kinematic Global Positioning Service for Louisiana	Ongoing	US Army Corp of Eng.	LSU	8/14/2009	4/14/2010		\$79,961		
10-3TRC	736-99-1696 Performance Evaluation of Recycled PET Fiber Reinforced Concrete	Ongoing	State	TT-Reg	LSU	7/12/2010	6/30/2011		\$29,891	
10-1PLA	736-99-1714 LTRC Proposal for the Support of Research and Development in Transportation Planning	Ongoing	SPR	TT-Fed	LSU	7/12/2010	6/30/2012		\$1,059,722	

# Research Problem Statements



## Login to Site

User Email Id

Password

Forgot password

Login

OR

Create a new account

## Welcome to LTRC Research Project Management and Tracking Website

This website is for LTRC Project Management purposes only. It is used to manage and track all the Research Projects in LTRC.

### Links

- [Submit a Problem Statement](#)
- [Download Form to create Problem Statement](#)



## Submit Problem Statement

Problem Statement Title

*(Give a brief and appropriate name to the problem you are proposing)*

Problem Statement

*(Briefly describe the problem you are proposing)*

Research Proposed

*(Describe the approach you envision to solve the problem)*

Potential Implementation and Benefits

*(Describe how you foresee the results will be implemented and how the Transportation community will benefit. Higher priorities will be given to statements with significant implementation potential)*

Submitted by

Name:

Affiliation:

Title:

E-mail:

# Problem Statement Prioritization

LTRC Project Management and Tracking

home | logout

**Research Project Management and Tracking**  
Louisiana Transportation Research Center

You are here:

HOME | **PROBLEM STATEMENTS** | PROPOSAL FUNCTIONS | PROJECT MANAGEMENT | RESEARCH ADMINISTRATION | SYSTEM ADMINISTRATION

Create Problem Statement | **Problem Statement Ratings**  
View Problem Statement  
RPIC  
>> Create Committee  
>> Assign Problem Statements  
>> **Ratings/Assign to RAC**  
RAC  
>> Create Committee  
>> Ratings  
Project Reports  
>> Biannual Budget Report  
>> Biannual Graph

**Search Problem Statements using Committee Names:**

Select Year: 2009  
Select Committee Name: Materials and Construction  
Search Clear All

**Problem Statements Assigned**

Export Final Rating Sheet  
Export Individual Rating Sheets


Total No. of Problem Statements = 24

Problem Statement No.	Title	RPIC Ratings	Assign to RAC	Comments	Assign Ratings	Remove Problem Statement
09-009	Prevention of Extensive Dessication Cracking on Rural Highways	5.9	Assign to RAC		Assign Rating	Remove
08-021	Evaluation of processing additions for portland cement	4.3	Assign to RAC		Assign Rating	Remove
08-041	A Simple Absorption Test Method for Measuring the Effectiveness of Amine Anti-Strip Additives and Development of a Theoretical Model for Asphalt Absorption	4	Assign to RAC		Assign Rating	Remove
08-015	Application of titanium dioxide to enhance durability and performance of concrete pavements	3.5	Assign to RAC		Assign Rating	Remove
08-042	Theoretical and Experimental Determination of Adhesion between Asphalt Binders and Aggregates	3.5	Assign to RAC		Assign Rating	Remove

# Annual Work Program Feature

LTRC Project Management and Tracking

home | logout

 **Research Project Management and Tracking**  
Louisiana Transportation Research Center

You are here: Home > Project Management > Create Annual Work Program Report

HOME   PROBLEM STATEMENTS   PROPOSAL FUNCTIONS   **PROJECT MANAGEMENT**   RESEARCH ADMINISTRATION   SYSTEM ADMINISTRATION

Project Functions

- Request LTRC Project Number
- View Project
- Create PRC
- Annual Work Program**
  - Create AWP Sheet**
  - View AWP Sheet
  - AWP Reports
- Biannual Reports
  - Create Biannual Report
  - View Biannual Report
- Implementation Report
  - Create Report
  - View Report

### Create Annual Work Program

**Select a Project using the Research Project Number or Title:**

Research Project Number:

Project Title (For Proposed Projects without LTRC Project Number):

Copy data from Previous Years AWP Sheet:

### General Information

Fiscal Year:

Title:

Budget Category:

Funding Source:

Project Status:

State Project Number:  Proposed Start Date:

LTRC Project Number:  Completion Date:



# Work Program Summary Tables

HOME    PROBLEM STATEMENTS    PROPOSAL FUNCTIONS    **PROJECT MANAGEMENT**    RESEARCH ADMINISTRATION    SYSTEM ADMINISTRATION

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**Project Functions**    **Annual Work Program Reports**

Request LTRC Project Number

View Project

Create PRC

Project Files

**Annual Work Program**

Create AWP Sheet

View AWP Sheet

**AWP Reports**

Biannual Reports

Create Biannual Report

View Biannual Report

Implementation Reports

Create Report

View Report

**Click on the following links to view and export the AWP Summary sheets:**

Sheet 1: Research Administrative and Support Items

Sheet 2 & 3: FHWA - SPR: TT-Fed/TT-Reg

Sheet 4: FHWA - Pooled Fund

Sheet 5: FHWA - SPR: External Collaborations

Sheet 6: FHWA - IBRD

Sheet 7: FHWA - STP: TT-Fed

Sheet 8: State

Sheet 9: Self-Generated

Sheet 10: Other DOTD Sections

**Click on the following links to view and export the AWP Budget Recap Sheet**

Budget Recap Sheet

**Click on the following links to view and export the AWP Summary Tables**

1: Research Administrative and Support Items

2 & 3: FHWA - SPR: TT-Fed/TT-Reg

4: FHWA: Pooled Fund

5: FHWA - SPR: External Collaborations

6: FHWA - IBRD

7: FHWA: - STP: TT-Fed

7: LTAP

8: State

9. RPIC List

10: Self-Generated

11: Other DOTD Sections

1 of 1    100%    Find | Next    Select a format    Export

Select a format

Excel

Acrobat (PDF) file

LTRC ANNUAL RESEARCH PROGRAM

SPR: TT-Fed/TT-Reg

FISCAL YEAR 2010-2011

Funding	A/P	Project Type	State Project Number	Research No.	FY Budget	Total Cost	Agency	Principal Investigator	Project Title
<b>Project Type: Administrative</b>									
SPR: TT-Fed/TT-Reg	A	ADM	730-99-1703	11-1PM	\$785,000	\$785,000	LTRC	Mr. Harold 'Skip' Paul	Program Management
						\$785,000	\$785,000	<b>ADMINISTRATIVE BUDGET TOTALS</b>	
<b>Project Type: Research Support</b>									
SPR: TT-Fed/TT-Reg	A	RS	730-99-1707	11-1EQM	\$300,000	\$300,000	LTRC	Mr. Mark Morvant	Equipment Management
SPR: TT-Fed/TT-Reg	A	RS	730-99-1704	11-1LFT	\$150,000	\$150,000	LTRC	Mr. Mark Morvant	Research Laboratory and Field Test Support
SPR: TT-Fed/TT-Reg	A	RS	730-99-1705	11-1NPE	\$60,000	\$60,000	LTRC	Mr. Mark Morvant	New Products Evaluation
SPR: TT-Fed/TT-Reg	A	RS	730-99-1706	11-1TA	\$385,000	\$385,000	LTRC	Mr. Mark Morvant	Technical Assistance
SPR: TT-Fed/TT-Reg	A	RS	730-99-1709	11-1TRS	\$400,000	\$400,000	LTRC	Mr. Mark Morvant	Technical Research Surveillance
SPR: TT-Fed/TT-Reg	A	RS	730-99-1708	11-1TRI	\$285,000	\$285,000	LTRC	Mr. Mark Morvant	Technology Transfer and Research Implementation
						\$1,580,000	\$1,580,000	<b>RESEARCH SUPPORT BUDGET TOTALS</b>	

http://projectmanagement.ltrc.lsu.edu/ProjectManagement/A/    Internet | Protected Mode: On

# Project Progress Report Feature

Project Functions

- >> Request LTRC Project Number
- >> View Project
- >> Create PRC
- Annual Work Program
- >> Create AWP Sheet
- >> View AWP Sheet
- >> AWP Reports
- Biannual Reports
- >> **Create Biannual Report**
- >> View Biannual Reports
- Implementation Report
- >> Create Report
- >> View Report

## Create Biannual Research Report

**Select a Project using the following:**

Research Project Number:  Search Rese

View data from existing Biannual Reports:   →

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### General Information

For Period Ending:

Title:

Funding Source:

State Project Number:  Project Start Date:

Research Project Number:  Completion Date (original):

Research Agency:  Completion Date (revised):

Principal Investigator:

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### Budget Status

**Total Budget**

Total Cost (Original):  Progress (%):

Total Cost (Revised):

Est. Expended (to Date):

FY 2010-2011 Budget

**LTRC Biannual Research Progress Report**  
For Period Ending: 12/31/2009

<b>Title:</b> Monitoring Bridge Scour Using Fiber Optic Sensors			
<b>Funding Source:</b> IBRD: TT-Fed			
State Project Number:	736-99-1573	Project Start Date	01/01/2009
Research Project Number:	08-2ST	Completion Date (original)	07/01/2011
Research Agency	LSU	Completion Date (revised)	
Principal Investigator:	Dr. Steve C.S. Cai		
<b>BUDGET STATUS</b>			
<b>Total Budget</b>		Funds Expended (%)	6.00%
Total Cost (original)	199,999	Time Expended (%)	40.0%
Total Cost (revised)		Progress (%)	20.00%
Total Expenditures	12,000		
<b>Fiscal Year Budget</b>			
F.Y. Funds (original)	72,000		
F.Y. Funds (revised)	40,000		
F.Y. Expenditures (to date)	12,000		
<b>PART I. PRINCIPAL INVESTIGATOR</b>			
<b>Accomplishments this period</b> (use additional sheets if necessary) (include any problems on which assistance is needed)			
Task 1: A state-of-the-art review 100%			
Note: This task was completed in previous period.			
Task 2: Submit a summary report 100%			
An interim report was submitted to the project committee.			
Task 3: Development of Scour Monitoring Methodology 30%			
Monitoring methodology to monitor the scour is under development by using optic sensors.			

# Implementation Report

The screenshot displays a web application interface for managing research projects. The main navigation bar includes: HOME, PROBLEM STATEMENTS, PROPOSAL FUNCTIONS, PROJECT MANAGEMENT (active), RESEARCH ADMINISTRATION, and SYSTEM ADMINISTRATION.

**Left Navigation Menu:**

- Project Functions
  - Request LTRC Project Number
  - View Project
  - Create PRC
  - Annual Work Program
    - Create AWP Sheet
    - View AWP Sheet
  - Biannual Reports
    - Create Biannual Report
    - View Biannual Reports
  - Implementation Report
    - Create Report
    - View Report** (highlighted with a red circle)

**Main Content Area:**

### Create Research Assessment and Implementation Report

Select a Project using the following:

Research Project Number:

**Project Details**

Research Project Number: 05-SGT  
Project Title: Evaluation of the Base/Subgrade Soil Under Repeated Loading

**Objectives**

Understand the mechanism of geogrid's functions and develop practical recommendations of implementation in pavement and geotechnical infrastructures by

- Evaluate the potential benefits of geogrid base reinforcement in flexible pavement sections,
- Validate the results of the cyclic plate load testing through comparing with the results from rolling wheel loading on large-scale ALF test sections,
- Conduct finite element parametric study to evaluate influences of different variables and parameters contributing to the improved performance of flexible pavement with geogrid base reinforcement.

**Implementation Recommendations**


- Update the current LADOTD's specifications on geogrids and other related materials
- Use geogrids reinforcement for flexible pavements built on soft subgrades with resilient modulus  $M_r < 2000$  psi, especially in cases where it is difficult to stabilize/treat the soft subgrade soil with cement or lime and to create working platforms,
  - Place the geogrid layer at the base-subgrade interface for pavements with a base thickness of less than 18 in. and at the upper one third for base thicknesses equal or greater than 18 in.
  - Place one geogrid layer on top of soft subgrade immediately above the non-woven geotextile and another geogrid layer if needed to enforce the base layer at upper one third thickness of the base course layer when geogrid reinforcement is used to create a working platform for constructing on soft subgrade,
  - Use the proposed modified formula to calculate the equivalent modulus of elasticity for the multi-layers pavement system,

**Potential Impact**

The use of geogrid for base reinforcement has the potential of reducing the base course layer, delaying the rut development, and extending the service life of flexible pavements, and hence reducing the life-cycle cost of pavements. It also provides an alternative and economical solution to stabilize subgrade soil in cases where it is difficult to stabilize/treat the soft subgrade soil with cement or lime and to create a construction working platform. The use of modified formula, which considers both the thickness and relative position of individual layers, to calculate the equivalent modulus of elasticity for multi-layers pavement system, provides engineers with a more rational parameter for pavement design.

Done | Internet | Protected Mode: On

# Implementation Status Report


Research Project Management and Tracking  
 Louisiana Transportation Research Center

You are here: > Home > Problem Statements > Proposal Functions > Project Management > Performance Measures > Research Administration > System Administration

HOME PROBLEM STATEMENTS PROPOSAL FUNCTIONS PROJECT MANAGEMENT PERFORMANCE MEASURES RESEARCH ADMINISTRATION SYSTEM ADMINISTRATION

Project Functions
Research Assessment and Implementation Status Report

Search Projects using any of the following:

General Project Details

Research Project Number:

Funding Source:

Actual Start Date (From):

Actual Start Date (To):

End Date (From):

End Date (To):

Group Administrator:

Select Project Type:  GT  P  B  ST  SS  C  PF  ADM  RS  LTAP  TT  CON  Other

Project Title:

LTRC Implementation Status Report

09-1C  
Evaluation of Fly Ash Quality Control Tools

Several concrete projects occur nationwide where the project performs poorly and fly ash is blamed as the culprit. The main objective of this research was to identify tools available for quality control (QC) of as-delivered class C fly ash. Test procedures were evaluated, and statistical analysis was completed to determine any correlation between chemical/physical properties of the fly ash and concrete set time/temperature profiles. Recommendation was made to continue the current DOTD method of requiring concrete set times to be completed daily in the field for construction purposes.

LTRC Implementation Status Report

10-1C  
Evaluation of the Surface Resistivity Measurements as an Alternative to the Rapid Chloride Permeability Test for Quality Assurance and Acceptance

This project investigated the use of a surface resistivity device as an indication of concrete's ability to resist chloride ion penetration. Use of surface resistivity devices will benefit the state economically by significantly reducing both the cost of testing equipment and the number of man-hours required to conduct quality assurance testing. Surface resistivity measurements have been included in DOTD specifications, and a TR test method (with relevant training material) is being implemented.

Research shows a very strong correlation between surface resistivity device and conventional testing. Correlations found also show 28-day surface resistivity measurements can be used to predict 56-day rapid chloride ion penetration.

Implementation of surface resistivity device began before research project completion on Twin Spans and Caminada Bay bridges. Within six months of project completion, LTRC has purchased 11 meters for distribution and provided training around the state for preparations of upcoming statewide permeability requirements.

The preliminary cost benefit analysis shows that LADOTD will save about \$101,000 in personnel costs and an estimated \$1.5 million in quality control costs which will indirectly benefit the Department for current operations. The savings will be much greater for LADOTD, suppliers, and contractors when permeability requirements are applied statewide.

View All Reports

Click here to Download all selected Implementation Reports at once

Total Number of Implementation Reports searched: 121

Select	Research Project Number	State Project Number	
Select	05-1B	736-99-1358	E Supe Cont
Select	06-1B	736-99-1366	Imp Test for A Char H Co
Select	09-1B	736-99-1574	Co Recycled Asphalt

View Summary Report

Past Due    SPR: TT-Fed/TT-Reg    Project/Implementation    Edit    View

# Reports Tab Features

- Financial Reports
- » Project Expenses
- » FY Expenditure Report
- » Contract Payables
- » Contract Payables (Details)
- » DOA Budget Report**
- » Project Report BR 17A
- » FY 2010-2011 Budget

## DOA Budget Report

 Search Projects using any of the following:

General Project Details

Select Fiscal Year:

Research Project Number:

End Date (From):

End Date (To):

Group Administrator:

Funding Source:

State Project Number/SIO:

Agency:

Project Manager:

Principal Investigator:

Budget Category:

Project Status:

Select Project Type:

- GT
  P
  B
  ST
  SS
  C
  PF
  ADM
  RS
  LTAP
  TT
  CON
  Other

Project Title:

### View FY Expenses

of 1
 
100%  |

LTRC NUMBER	SIO	PROJECT TYPE	PROJECT TITLE	START DATE	END DATE	TOTAL COS
10-1MATT	30000205		Research Support for the Deployment of a Revised Quality Assurance Program	1/1/0001	1/1/0001	\$45,000
12-1MATT	30000860			1/1/0001	1/1/0001	
13-8GT	30000960	100% State Funds	Bayou Corne Sinkhole: Control Measurements of State Highway 70 in Assumption Parish, Louisiana	9/19/2012	9/30/2013	\$84,356
12-1TIRE	30000731	SPR 80/20	Comparitive Evaluation of Pile Set Up and Axial Capacity of Driven Piles Installed Using Impact Hammer versus Vibratory Pile Driving Equipment	7/1/2012	6/30/2013	\$30,000

# Publication Tracking Features (New module)

- Final reports, technical summaries, project capsules, Implementation publications, etc
- Report submittal/sharing
- Date tracking

The screenshot displays the LTRC Project Management and Tracking system interface. The main heading is "Research Project Management and Tracking" with the subtitle "Louisiana Transportation Research Center". The navigation menu includes: HOME, RRC, PROJECT MANAGEMENT, PERFORMANCE MEASURES, RESEARCH ADMINISTRATION, PUBLICATIONS, and SYSTEM ADMINISTRATION.

The "Track Final Report" section is active, showing a search bar for "Research Project Number" and a "Search" button. Below this, the "General Information" section displays the following details:

Field	Value
Title	Statewide Traffic Safety Study - Phase II
State Project Number	737-99-0649
Project Start Date	7/1/2005
Research Project Number	06-1SS
Project End Date	6/30/2008
Research Agency	LSU
Project Manager	Dr. Chester Wilmot
Principal Investigator	Dr. Chester Wilmot

The "Review Dates" section includes the following information:

Category	Field	Value
Final Report	Final Report Number	212
	Submitted by PI	3/20/2012
Technical Summary	Submitted by PI to PRC	3/21/2012
	Submitted by PI to Editor	3/19/2012
	Approval Date	

The "Publication Status" section provides a timeline of events:

- 3/20/2012 - final report submitted - Mr. Chester Wilmot
- 3/21/2012 - report sent to PRC - Mr. Kirk Zeringue
- 3/19/2012 - reports submitted to editor - Mr. Kirk Zeringue
- 5/19/2012 - PRC review comments sent to PI - Kirk Zeringue
- 7/28/2012 - Revised final report submitted to PM - Mr. Chester Wilmot

A "Save" button is located at the bottom right of the form.

# Performance Measures Feature

(under development)

HOME RPIC PROJECT MANAGEMENT **PERFORMANCE MEASURES** RESEARCH ADMINISTRATION PUBLICATIONS REPORTS SYSTEM ADMINISTRATION

**PRC Survey Results** (circled in red)

**Goal 1.1 Project Capsule**

**Search Projects using any of the following:**

General Project Details

Select Fiscal Year:

Research Project Number:

End Date (From):

End Date (To):

Group Administrator:

Funding Source:

Select Project Type:  GT  P  B  ST  SS  C  PF  ADM  RS  LTAP  TT  CON  Other

Project Title:

**View Report**

1 of 1 100% Find | Next

**Research Group 19**

**Goal 1**

**Department and Engineering: Customer Perspective: Improve customer service and public confidence**

**Objective 1.1: Meet 85 percent of target goals established for marketing of technical information and research results with publications and formal presentations current FY.**

LTRC Project Number	State Project Number	Project Title	Project Start Date	Distribution Sheet Approval Date	Project Capsule completed within 3 months of Project Start Date Yes / No

**Louisiana Transportation Research Center  
Research Project Completion Survey  
Project Review Committee**

LTRC Project Number: 02-387  
State Project Number: 736-99-1134  
Project Title: Assessing the Needs for Intermediate Diaphragms in Prestressed Concrete Bridges (Final Report)

Q.No	Question	Rating
1	Were you given adequate opportunities to provide input in the development of project process?	<input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Very Good <input type="checkbox"/> Excellent
2	Were you given adequate opportunities to provide direction during project delivery? (in view formal reports, PRC meetings, communication etc.)	<input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Very Good <input type="checkbox"/> Excellent
3	Did the contractor's performance meet expectations? (as per the PI perform table as defined in proposal?)	<input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Very Good <input type="checkbox"/> Excellent
4	How would you rate the report (before project)? (in view your comments addressed?)	<input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Very Good <input type="checkbox"/> Excellent
5	How would you rate the quality of the project's final report?	<input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Very Good <input type="checkbox"/> Excellent
6	How would you rate the support you received from the LTRC staff throughout the project period?	<input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Very Good <input type="checkbox"/> Excellent
7	How would you rate the success of the research project?	<input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Very Good <input type="checkbox"/> Excellent
8	Was the implementation of results adequately increased throughout the project?	<input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Very Good <input type="checkbox"/> Excellent
9	How was your PRC experience overall?	<input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Very Good <input type="checkbox"/> Excellent

**Supplemental Comments:**

Comments about any of the above questions (Please identify questions by number)

Were you involved in developing an implementation strategy for the project? (How can the implementation of project results be improved?)

Suggested improvements to the LTRC

Name (optional):

# Challenges



- Customized programming
  - ▣ Requires internal staff expertise
  - ▣ Staged Modular Implementation
  - ▣ Development costs & time allocation/tracking
- Long term maintenance
  - ▣ Continual debugging process
- Documenting the user functions
  - ▣ User experience
  - ▣ Infrequent repetition
- Users/staff must regularly update and maintain data



# Challenges



- Frustration when system does not work as expected
- Training needs to be provided for end users
- Some changes in the way of doing business
- Dealing with user suggestions and feedback to improve

# Benefits



- Facilitate executing research projects on time, on budget
- Track the progress of the projects in a timely manner
- Reducing paper work, risk of accidental loss of data
- Provide timely information to the various disciplines involved, improving communication among users

# Benefits

- Users will be able to generate reports (budget, progress etc.)
- Automate certain processes, thereby saving time
- Reduce the effort and provide accurate data
- Maximize efficiency by providing centralized data



# Questions / Suggestions

