

The Torch

Points of Light:

The Office of Research (OR):

- Funded by State Planning & Research (SP&R) funds.
- Manages GDOT's state and national research and development activities.
- Manages the GDOT Library and foreign exchange activities.

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GDOT/Georgia Tech Study Receives AASHTO Award

Georgia DOT recently received an award from the American Association of State Highway and Transportation Officials (AASHTO) for contract research with Georgia Tech.

The Research Advisory Committee (RAC) to AASHTO's Standing Committee on Research selects 16 High Value Research (HVR) studies from state DOT and FHWA research programs each year to highlight the value of research through an AASHTO publication distributed nationwide. A GDOT-sponsored project

led by Georgia Tech was among the 16 studies selected: Assessment of the Impact of Future External Factors on Road Revenues.

This project, co-directed by Dr. Michael Meyer and Mr. Phillip Cherry, developed a model for assessing the implications of changes in factors that influence overall transportation revenue levels. These factors include oil production, fuel efficiency, clean energy, and public transit. The model is intended to be a revenue estimation toolbox that allows GDOT plan-

ners and budget officials to assess how different scenarios could impact future fuel tax revenue. This can be used to assess funding gaps when compared to expected needs and to help planners and decision makers understand how changes in different inputs would affect overall revenue.

GDOT staff received the award at the AASHTO-RAC meeting in Burlington, Vermont in July. The project will also be showcased at the Transportation Research Board annual meeting in Washington, D.C. in January 2013.

R&D Branch Now Part of Office of Research

On September 1, the Office of Materials and Research divided into two new offices, the Office of Materials (OM) and the Office of Research (OR). OM, led by State Materials Engineer Chuck Hasty, remains in the Division of

Construction, while OR, led by State Research Engineer Georgene Geary, joins the Division of Organizational Performance Management, directed by Angela Alexander. Both offices remain in Forest Park. Ms. Geary will su-

pervise the R&D Branch and the Mechanistic-Empirical Design Guide (MEPDG) Implementation Branch, a task force which administers research supporting accelerated implementation of the MEPDG at GDOT.



Glimmer: Thirteen University Transportation Center Studies Underway Under New Federal Award

As noted in the Spring 2012 *Torch*, Georgia Transportation Institute (GTI), Georgia's University Transportation Center (UTC), won two large research funding awards from USDOT in January 2012, matched by GDOT. USDOT's Research and Innovative Technology Administration administers the national UTC program, which leverages university academic programs and

research capabilities to educate transportation professionals, conduct transportation research, and transfer research results. The program includes awards for centers focusing on regional needs and for other centers with varying research themes. GTI is supporting a regional center led

by the University of Florida and directing two studies under that center. GTI is leading another center (Tier 1) focusing on interactions among safety, transportation infrastructure, and economic competitiveness. Georgia Tech is directing 11 studies under the Tier 1 center.

RTAG Update: Mobility

Mobility research is aimed at planning and constructing multi-modal projects that (1) make travel times lower and more predictable; and (2) ensure efficient movement of freight. Research scope includes (1) planning to relieve congestion; (2) intermodal programs; and (3) preconstruction, construction, and operations activities.

Meeting Highlights (06/13/12). Four projects were approved for FY 2013 funding: (1) Rate of Infiltration of Highway Stormwater Runoff; (2) American Cemetery Movement in Georgia: A Historic Context; (3) Reference Stream Library; and (4) Implementation of an Improved Bridge Scour Prediction Procedure. For more information,

please contact Mr. Binh Bui, Mobility RTAG Secretary, at bbui@dot.ga.gov.

Membership Update. Mobility RTAG welcomes Bobby Hilliard, Office of Program Control; Marc Mastronardi, Office of Construction, and Lisa Myers, Office of Project Review (Engineering Services) as new members.

RTAG Update: Asset Management

Asset Management research is aimed at providing the most efficient care of current assets. Research scope includes (1) infrastructure (materials, construction, maintenance); (2) customer satisfaction; and (3) use of funds.

Meeting Highlights (06/13/12). Three projects were approved for FY 2013 funding:

(1) Semi-Autonomous Inspection of Sign Structures; (2) Validating Productive Asset Management Data Collection and Governance Practices; and (3) Impact of Guide Specifications for Load Resistance Factor Design (LRFD) Seismic Bridge Design for Georgia. For more information, please contact Gretel Sims, RTAG Secretary, at gsims@dot.ga.gov.

Membership Update. Asset Management RTAG welcomes Juliette Carter, Division of Communications; Mr. Treasury Young, Office of Transportation Services Procurement; and DeWayne Comer, Division of Field Services and Local Grants (District 6) as new members.

"A penny saved is a penny earned." —Ben Franklin

RTAG Update: Policy/Workforce

Policy/Workforce research is aimed at (1) evaluating and enhancing GDOT policies to improve program delivery and business results; and (2) improving the success and engagement of GDOT employees to help achieve GDOT strategic goals. Research scope includes administration, finance, planning, and program delivery.

Meeting (06/13/12). Five projects are under consideration for FY 2013 funding: (1) Effectiveness of Job Reassignment or Job Shadowing as a Tool to Motivate the Workforce; (2) Innovative Finance Mechanisms for Transportation Projects; (3) Streamlining Project Delivery through Risks; (4) Department (TEA and CET) Engi-

neers Retention and Tenure Study; and (5) Maximizing Exceptional Employee Talent to Meet Department Needs. For more information, please contact Mrs. Supriya Kamatkar, RTAG Secretary, at skamatkar@dot.ga.gov.

“Honesty is the best policy. If I lose mine honor, I lose myself.” —Shakespeare

RTAG Update: Safety

Safety research is aimed at ensuring the overall safety of state transportation infrastructure and making safety investments and improvements where the traveling public is most at risk. Research scope includes (1) accident analysis; (2) work zone safety (motorists & workers); (3) bike/pedestrian safety; (4) employee safety; and (5) homeland security.

Meeting Highlights (6/13/12). Two projects were approved for FY 2013 funding: Developing GDOT Pavement Marking Handbook using Field Test Deck Evaluation and Long-term Performance Analysis; and (2) Deer Fencing Operational Field Trial (pending office support). For more information, contact David Jared, RTAG Sec-

retary, at djared@dot.ga.gov.

Membership Update. Safety RTAG welcomes Eric Pitts, Office of Maintenance, and Ms. Tamaya Huff, Office of Traffic Operations, as new members, and bids farewell to Chair Brad Ehrman, who is leaving GDOT. Vice-Chair Steve Gafford, Office of Utilities, will succeed as Chair.

Shining Beacon: Guide for NextGen Design-Build Contracting

GDOT, in partnership with Georgia Tech, developed a Design-Build (DB) guidebook to improve the efficiency of DB contracting in highway construction. A DB selection tool was developed to evaluate the appropriateness of DB for projects. This tool helps GDOT in (1) transparent and consistent DB implementation; (2) de-

termining suitability of DB for projects; (3) assessing whether project risks can be managed if DB selected; and (4) evaluation of authorized procurement methods and selection of the most appropriate method. A workshop was held in September 2012 to facilitate adoption of DB contracting in Georgia.

Effective July 1, 2012, Georgia legislators raised the cap for DB by 50% (in dollars), based on the total amount of construction projects awarded in the previous fiscal year. This was made possible, in part, by solid DB project suitability assessments that this research will perpetuate and enhance.

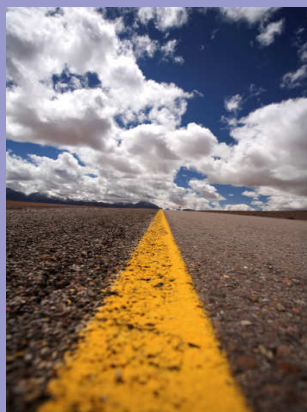
“This tool helps GDOT in ...transparent and consistent Design-Build implementation ...”



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**Georgia DOT
Strategic Goals:**

- Making *GDOT a better place to work* will make GDOT a place that works better
- Making *safety* investments and improvements where the traveling public is most at risk
- *Taking care of what we have*, in the most efficient way possible
- *Planning and constructing* the best set of mobility-focused projects we can, on schedule



Lighting the Way to the Future.

Library Illumination

The Roy A. Flynt Memorial Library was founded in 1967 and provides library services for GDOT and the public. The Library collection includes documents from national and state resources, plus audio/visual resources.

GDOT employees can visit the Library in person (M-F, 8-5). The Library is also open to the public for on-site use of its materials; however, an appointment must be scheduled for this service. For borrowing or search assis-

tance, please contact Ms. Stardina Wyche, GDOT Librarian, at swyche@dot.ga.gov or 404.608.4800. The Library is upgrading its catalog/search software, which is expected to be functional later this year.

We're on the Web! Visit us at
<http://www.dot.ga.gov/doingbusiness/research/Pages/default.aspx>.

Sharing the Light: Submitting Ideas

The R&D Branch has created a Research Idea Mailbox open to all GDOT employees (see link below).

GDOT employees are encouraged to submit brief (1-2 paragraph) ideas for research that could potentially benefit GDOT. Contact information for submitters should also be included for follow up.

The ideas will be reviewed initially by R&D staff, which serve as secretaries for the RTAG's. The RTAG's will review

the ideas and determine which ones would be pursued under the GDOT research program.

For further information on the Research Idea Mailbox, please contact David Jared, Acting R&D Branch Chief, at djared@dot.ga.gov or 404.608.4799.

"Thought is the seed of action." —Ralph Waldo Emerson

Mailbox link:

ResearchIdea@mygdot.dot.ga.gov

