# Index to Charts: Guidance to US Department of Transportation (DOT)

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The DC Office of Research Advancement has created the Federal Mission Agency Program Summaries (MAPS) website to:

1. Connect PIs with appropriate funding agency programs/program officers
2. Assist in development of white papers/charts/elevator pitches

The website can be accessed using one’s USC NetID and Password.

It has the following resources:

1. **Search Tab** for a searchable database of programs/program officers
   At that website one can do keyword searches to locate the associated mission agency (DHS, DOD, DOE, DOT, ED, EPA, INTEL, NASA, NIST, NOAA and USDA) programs and program officers.

2. **Mission Agency Tab** (DHS, DHHS, DOD, DOJ, DOE, DOT, ED, EPA, INTEL, NASA, NIST, NOAA, USDA)
   - Guide to Agency Funding for FYXX
   - Agency Research Program Charts
   - Agency Planning Documents
   Chart numbers in the text above reference the Agency Research Program Chart files.

3. **Presentation Tab** for charts from recent USC Center of Excellence in Research workshops

4. **Proposal Tab** for report / guides on writing proposals

5. **Email Alerts Tab** for URLs at which one can arrange for automatic solicitation updates

6. **Grantee Tab** for URLs at which one can find previous agency awardees

7. **Visiting DC Tab** for information about DC Office services
# DOT Research Programs

[http://www.rita.dot.gov/rdt/dot_research_programs.html](http://www.rita.dot.gov/rdt/dot_research_programs.html)

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## Cooperative Research Programs

- Airport Cooperative Research Program (ACRP)
- Hazardous Materials Cooperative Research Program (HMCRP)
- National Cooperative Freight Research Program (NCFRP)
- National Cooperative Highway Research Program (NCHRNP)
- Transit Cooperative Research Program (TCRP)
DOT OST-R

Intelligent Transportation Systems (ITS)
Joint Program Office
http://www.its.dot.gov/index.htm

What: The ITS program focuses on intelligent vehicles, intelligent infrastructure and the creation of an intelligent transportation system through integration with and between these two components. Vehicle-to-vehicle and vehicle-to-infrastructure communications safety applications are designed to increase situational awareness and reduce or eliminate crashes through data transmissions that support driver advisories, driver warnings, and vehicle and/or infrastructure controls. ITS Strategic Research Plan 2015-2019 http://www.its.dot.gov/landing/strategicplan2015.htm

The Federal ITS program invests in major research initiatives, exploratory studies and a deployment support program including technology transfer and training.
See more at: http://www.its.dot.gov/its_jpo.htm#sthash.ZdMXrfay.dpuf

Areas of Research:
- **Connected Vehicle Research**
  Connected vehicle research aims to enable safe, interoperable networked wireless communications among vehicles, the infrastructure, and passengers' personal communications devices.
- **Intermodal Research**
  Research in a set of Short Term Intermodal research programs is expected to further the Department's goal of leveraging technology to maximize safety, mobility, and environmental performance.
- **Cross-Cutting Research**
  The ITS Program's Cross-Cutting Support are functions that ensure the effective and successful implementation and use of ITS.
- **Exploratory Research**
  The ITS Exploratory Research Program solicits creative ideas for new technology options that address connectivity, safety, mobility, and environmental mitigation.

How Much: The FY 2017 budget request for the Intelligent Transportation Systems (ITS) program is $100M (in the FHWA budget line).

Where: http://www.its.dot.gov/procurement.htm
Near-Term Research Themes (2015 – 2016)

Maturing Connected Vehicle Systems
- Vehicle-Focus Standards – Craft the set of standards that support vehicle communications for all vehicle and other device (pedestrian/bicycle) types after production begins and that support a low-vehicle penetration environment.
- On-board Driver Enhancements – Establish solutions that support the intermediate stage between connected vehicles and automated vehicles.
- Secured Vehicles – Ensure implementation of a secure connected vehicle environment with the capability to perform system-wide upgrades to counter evolving threats.

Piloting and Deployment Readiness
- Business Model Development – Establish the value proposition and seek mechanisms for public-private coordinated investment in connected vehicles, including resource sharing.
- Data Exchange Facilitation – Coordinate, internationally and domestically, information-sharing specifications, architecture, and standards necessary for enhanced data sharing across the public and private sectors.
- Multimodal Operations – Establish new levels of coordinated operations that extend beyond the achievements of Integrated Corridor Management, including urban and rural environments.
- Truck Route Optimization – Examine optimized truck route optimization for cross-urban and inter-urban freight movements. Address the geometric challenges trucks face on many non-limited-access routes that could function as alternate routes and identify railroad crossings that pose safety hazards.
- Expanded Regional Pilots – Demonstrate data management capabilities to support multimodal operations and data fusion, including crowd-sourced information.

Integrating with the Broader Environment
- Decision Support Systems – Develop the intelligent logic needed at transportation management centers to produce greater value in the connected vehicle environment.
- Data Fusion/Modeling/Standards – Extend the value of legacy ITS tools to continue providing support during the connected vehicle transitional stage.
- EV Fleets – Support the deployed EV fleets by leveraging increased information needs via longer connect times (i.e., recharging provides longer connectivity to high-speed/high-volume data communications).

Long-Term Research Themes (2017 – 2019)

Maturing Connected Vehicle Systems
- Automated Vehicle – Define how an automated vehicle fleet can be introduced with limited or no impact to current infrastructure and other legacy transportation assets.
- Vehicle Automation Enablers – Define enabling technologies and redundancies required to progress toward control intervention and vehicle automation in a connected vehicle environment.
- Automation Risk Factors – Research risk profile changes with increased vehicle automation in traffic and liability implications for stakeholders.

Integrating With the Broader Environment
- Digital Society – Advance coordination of public infrastructure assets with transportation assets to enable operation of alternatively powered vehicles through data integration with the private sector, other state department of transportation agencies, and other public agencies.
- Always Connected Users – Accommodate the transportation information needs of always-connected users and augmented-reality applications.
- Redefining Roadway Planning, Geometry, Modeling, and Operations – Assess the opportunity to redefine current transportation infrastructure assets due to changed requirements from the presence of automated vehicles.
What: Advance U.S. technology and expertise in the many modes and disciplines comprising transportation through the mechanisms of research, education, and technology transfer; to provide a critical transportation knowledge base outside the US DOT; and to address vital workforce needs for the next generation of transportation leaders.

Specific objectives of the UTC Program and of each individual Center are:

• Research: To conduct basic and applied research, the products of which are judged by peers or other experts in the field of transportation to advance the body of knowledge in transportation.
• Education and Workforce Development: To provide an education program relating to transportation that includes multidisciplinary course work, participation in research, and workforce development activities and programs to expand the workforce of transportation professionals.
• Technology Transfer: To deliver an ongoing program of technology transfer that makes transportation research results available to potential users in a form that can be implemented, utilized, or otherwise applied.

It may be a single university or a consortium of two or more universities. Each Center is required to obtain matching funds from non-federal sources. National and Regional UTCs must obtain matching funds in an amount at least equal to the US DOT grant amount.

How Much: over 4 year period (total FY2017 budget estimated at $75M in the FHWA budget line)

• Five National UTCs, $2 to 4M per Center per fiscal year
• Ten Regional UTCs, $1.5 to 3M per Center per fiscal year
• Twenty Tier 1 UTCs, $1 to 2M per Center per fiscal year

When: Solicitations at roughly four year intervals, most recent in FY2016 with 1 Apr 2016 LoI due date and 13 May 2016 proposal due date

Where: Federal Register Vol. 81 No. 21 Tuesday, Feb 2 2016 page 5517

USC has a Tier I UTC on Metropolitan Transportation in the FY14-18 time frame (as well as from FY05-09); it also contributes to the National Center for Sustainable Transportation UTC led by UC Davis.
### National UTCs

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### Regional UTCs

| Region 1 | Massachusetts Institute of Technology, Safety New England University Transportation Center |
| Region 2 | City University of New York, Economic Competitiveness University Transportation Research Center |
| Region 3 | to be competed in Fall 2013 |
| Region 4 | University of Tennessee, Safety Southeastern Transportation Center |
| Region 5 | University of Minnesota, Safety Center for Roadway Safety Solutions |
| Region 6 | University of Oklahoma, State of Good Repair Southern Plains Regional Transportation Center |
| Region 7 | Iowa State University, State of Good Repair Midwest Transportation Center |
| Region 8 | North Dakota State University, State of Good Repair Mountain-Plains Consortium |
| Region 9 | University of California, Berkeley, Economic Competitiveness UC Center on Economic Competitiveness in Transportation |
| Region 10 | to be competed in Fall 2013 |

### Tier 1 UTCs

#### Economic Competitiveness

- University at Buffalo, State University of NY, Transportation Informatics University Transportation Center
- University of Arkansas, Maritime Transportation Research and Education Center
- University of Illinois, Urbana-Champaign, National University Rail Center
- University of Southern California, Metropolitan Transportation University Transportation Center
- University of Texas, Austin, Data-Supported Transportation Operations and Planning Center

#### Environmental Sustainability

- Maine Maritime Academy, Marine Engine Testing and Emissions Laboratory
- University of Alaska, Fairbanks, Center for Environmentally Sustainable Transportation in Cold Climates
- University of Central Florida, Electric Vehicle Transportation Center

#### Livable Communities

- Montana State University, Small Urban and Rural Livability Center
- University of South Florida, National Center for Transit Research
- Western Michigan University, Transportation Research Center for Livable Communities

#### Safety

- Florida State University, Center for Safe and Accessible Transportation for an Aging Population
- Ohio State University, Crash-Imminent Safety University Transportation Center
- University of Iowa, Safety Research Using Simulation Center
- University of Michigan, Center for Advancing Transportation Leadership and Safety
- University of Nevada, Reno, Institute for Safety and Operations of Large-Area Rural-Urban Intermodal Systems
- University of Texas, Pan American, University Transportation Center for Railway Safety

#### State of Good Repair

- Florida International University, Accelerated Bridge Construction University Transportation Center
- Michigan State University, University Transportation Center for Highway Pavement Preservation
- Missouri Univ of Science and Technology, University Transportation Center for Research on Concrete Applications for Sustainable Transportation
The Sun Grant Initiative is charged with conducting a competitive research program for land-grant universities and their partners. Working with the Sun Grant Initiative, the Department of Transportation Research and Innovative Technology Administration (RITA) convened a team of federal agency specialists to identify the nation’s leading research priorities to be addressed in order to develop renewable bio-based transportation fuels. DOT took a comprehensive “systems” approach, looking at the total bioenergy production process from feedstock development and logistics through conversion processes. DOT also looked at crosscutting issues, such as examining ways to produce and process bio-based transportation fuels to minimize the impacts of the transportation sector on the environment. To address these national research priorities in their regional and local contexts, with support from DOT, the Sun Grant Initiative has developed and implemented a national program of peer-reviewed regional competitive grants to conduct research on the development of bio-based transportation fuels.

Each of the five SGI Centers managed its own regional competitive grants program, to best meet the challenges of bioenergy and biomass research and education needs within their respective regions. Each Center utilizes approximately 75% of their total funding for these grant programs. As part of the development of the Regional Competitive Grants Program, each of the SGI Centers developed a solicitation for their region, consistent with national priorities identified by an ad hoc federal agency panel led by DOT/RITA with representatives from DOE, USDA, EPA and DOD. These national priorities for renewable transportation fuel development included: biofuel feedstock development; biofuels conversion processes; biofuel system analysis; economics, marketing and policy; and, environmental impacts. These national priorities were considered in the context of the unique biomass and biomass resources and challenges within each of the regions.

Some regions are holding new proposal calls annually while others will hold theirs biennially.
The Office of the Administrator includes the Administrator, Deputy Administrator, and the Executive Director. The Office of Innovative Program Delivery, Directors of Field Services (DFS), Office of Technical Services (OTS), Program Manager for Transportation Security, and the Executive Secretariat are extensions of the Executive Director's office. The DFSs provide administrative supervision and leadership on strategic initiatives to their constituent Federal-aid division offices. The Director of Technical Services is responsible for the Resource Center, the National Highway Institute, and Technology Partnership Programs.

** The Intelligent Transportation Systems/Joint Program Office (ITS/JPO), which has a departmentwide role and authority for coordinating ITS program activities and initiatives, is organizationally located within FHWA. The Assistant Secretary for Research and Technology has primary responsibility for the strategic oversight and direction of the ITS/JPO, including but not limited to, providing policy guidance for ITS programs and activities and coordinating ITS research within the Department. The FHWA Administrator is responsible for ensuring the continuing availability of professional, technical, and administrative services to support the ITS/JPO.
DOT FHWA
Office of Research, Development and Technology

Office of Research, Development, and Technology Organizational Chart

Office of Infrastructure Research and Development
- Program Management
- Bridge and Foundation Engineering Team
- Hazard Mitigation Team
- Infrastructure Management Team
- Long-Term Pavement Performance Team
- Pavement Design and Construction Team
- Pavement Materials Team

Office of Safety Research and Development
- Program Management
- Human Factors Team
- Roadway Team
- Safety Management Team

Office of Operations Research and Development
- Program Management
- Transportation Enabling Technologies Team
- Transportation Operations Applications Team
- Transportation Operations Concepts and Analysis Team

Office of Corporate Research, Technology, and Innovation Management
- Program Management
- Exploratory Advanced Research Team
- Innovation Management and Communications Team
- Research and Technology Program Development and Partnership Team

Office of Resource Management
- Program Management

Organization Chart with Names and Codes available at: http://www.fhwa.dot.gov/research/tfhrc/expertise/makepdf.cfm
Advanced Research Partnerships and Broad Agency Announcements and Other Contract Opportunities
As part of the Exploratory Advanced Research program, the Federal Highway Administration issues Broad Agency Announcements soliciting proposals for high-risk, high-payoff research and innovations to help solve critical highway challenges.

Communities of Practice
One way is through the Federal Highway Administration's (FHWA) Highway Community Exchange "Community of Practice" (CoP). This CoP is dedicated to the open exchange of information and knowledge about issues that are important to the transportation community, including highway research and technology deployment.

International Activities
Through its Office of International Programs (OIP), FHWA works to improve the technological and institutional base of highway transportation system performance and program delivery in the United States and abroad. OIP's programs and activities include:

- International Visitor Program
- Coordination of U.S. International Road Activities
- International Highway Technology Scanning Program
- Global Technology Exchange Program
- Emerging Markets/Opportunities

Research, Technology, and Education Partnerships
The highway community has numerous opportunities for formal and informal partnerships. For those seeking to become directly involved in highway research and technology deployment, please review the diverse opportunities identified in the partnerships at the Web site.

Scientific Peer Review
Get involved through participation in the U.S. Department of Transportation's (USDOT) scientific peer review process.
**Focus Areas**

**Connected Highway and Vehicle System Concepts** - Emphasizes the longer-term needs to reach critical FHWA safety and mobility goals by developing the theory and assessing feasibility for systems that leapfrog current technological approaches for linking infrastructure with future vehicle and personal mobility technology.

**Breakthrough Concepts in Material Science** - This focus area leverages new approaches in materials science to produce innovative new highway materials with characteristics that enable enhanced functionality (including multi-functionality), constructability, sustainability, cost effectiveness or operating characteristics of highway infrastructure and system monitoring sensors to enhance highway safety, reliability, and resilience.

**Human Behavior and Travel Choices** - This focus area leverages research concepts from the social sciences including psychology and economics along with more traditional research for improving safety, reducing congestion, and improving the livability of the nation’s communities.

**Technology for Assessing Performance** - This focus area seeks novel approaches and breakthrough technology that will revolutionize the use of performance management in the highway sector.

**New Technology and Advanced Policies for Energy and Resource Conservation** - This focus area cuts across infrastructure, operations and societal and complex natural systems to support innovative methods for reducing highway industry costs and move towards sustainability.
DOT FHWA
EXPLORATORY ADVANCED RESEARCH PROGRAM
https://www.fhwa.dot.gov/advancedresearch/

What:
This program is intended to spur innovation and focus on high risk and high pay-off research. Exploratory Advanced Research bridges basic and applied research. In contrast to applied research, a specific application or product is not the goal of the work. Incremental advances and demonstrations or evaluations of existing technologies are not within the scope of this program.

The announcement includes the following topics:
- Topic 1: Virtual Nondestructive Evaluation (NDE) Laboratory for Highway Structures
- Topic 2: Applications of Massive Data and Data Mining Techniques Relevant to Safety Data
- Topic 3A: Behavioral based (or agent based) National Freight Demand Modeling
- Topic 3B: Freight Data Development and Enhancement to Support National Freight Transportation Analysis, Modeling and Forecasting Practices

The FHWA may award either contracts or cooperative agreements as a result of the BAA

Offerors should prepare proposals with a baseline period of performance up to 12 months, and if needed, with one or more options, each with a 12-month period of performance.

For the EAR program flyer, see Publication Number: FHWA-HRT-13-071

How Much: Depends on topic, but typically a topic has ~$1-2M available

When:
For FY14 Released Mar 4, 2014
Proposals Due 4:00 pm EST Apr 23, 2014

Where: BAA DTFH61-14-R-00017
What: The goal of the NSF CPS Program (http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503286) is to develop the core system science needed to engineer complex cyber-physical systems upon which people can depend with high confidence. The FHWA Exploratory Advanced Research (EAR) Program provides the opportunity to translate advances in basic science in order to solve mission critical issues for highway transportation through partnerships with and beyond traditional highway research stakeholders. Successful advances in cyber-physical systems are critical for the FHWA and the entire U.S. highway transportation industry to meet increasingly complex and difficult goals from increasing safety, to reduce energy dependence, to support sustainable economic growth and increased quality of life.

FHWA has identified specific technology-based requirements to support ongoing and anticipated research road maps including for multi-modal integrated corridor management, arterial traffic management, traffic signal management and control, traffic incident and event management, and passenger and freight data management. These requirements will advance system capabilities in positioning, timing, and navigation, onboard and infrastructure-based sensors and actuators, with the aim of improving environmental awareness and responding to changing conditions, vehicle-infrastructure communications, shared human-machine control systems, data management and system performance assessment, and energy efficiency. Consideration of integration with legacy systems and equipment will be a critical component.

Based on recent research results, anticipated results from continued research investments, and ongoing scanning of scientific and engineering advances, the FHWA EAR program has identified an area where a coordinating investment with NSF would best advance both the fundamental science of CPS and speed the application of scientific advances into the highway industry: enabling technology and scaling cyber-physical highway systems. FHWA particularly has interest in foundational technologies that can accelerate innovation, reduce cost, and lower risk of technology adoption.

How Much: Approximately 10 Breakthrough projects, 20 Synergy projects, and 2 Frontier projects are anticipated. Anticipated Funding Amount: $34M

When: proposals due 24 May - 7 Jun 2016 for most recent solicitation

Where: The program is solicited under NSF 16-549
DOT FHWA
Center for Environmental Excellence (CEE)

**What:** The purpose of the Center for Environmental Excellence (CEE) will be to provide a wide range of products and services to assist agencies in achieving environmental excellence in delivering their transportation programs and projects. Through its information-sharing, technical assistance, partnership-building and training resources, the purpose of the CEE is to directly engage Federal Highway Administration stakeholders such as State Department of Transportations (State DOTs), Metropolitan Planning Organizations (MPOs), local planning organizations, other Federal and state surface transportation agencies to incorporate environmental compliance, and stewardship into transportation planning, project development, construction, maintenance, and operations.

AASHTO has managed the previous center (environment.transportation.org/)

**How Much:** $4M

**When:** Application due date 15 Oct 2015

**Where:** FHWA DTFH611RA000005
DOT
FAA
Research
http://www.faa.gov/data_research/research/

**Aerospace Medical and Human Factors Research**
- Aerospace Human Factors Research
- Aerospace Medical Research

**Aviation Research Grants**
- Human Factors and Aviation Medicine
- Environment and Energy
- Aircraft Safety Technology
- Airports
- Communications, Navigation and Surveillance
- Aviation Weather
- Capacity and Air Traffic Control Technology
- Systems Science/Operations Research
- Commercial Space Transportation

**Environment and Energy R&D**
- Science and Integrated Modeling
- Aircraft Technologies
- Sustainable Alternative Jet Fuels
- Operations
- Environmental Standards, Market Based Measures and Policy Options

**Modernization Highlights**
- Cost Sharing Partnership Opportunities
- Air Transportation Oversight System (ATOS)
- GPS Implementation in Aviation
- Operational Evolution Partnership (OEP)
What: The FAA’s COE program is a cost-sharing research partnership between academia, industry and the federal government; there are presently 8 COE. A Center develops and implements transportation programs within a FAA specified ‘theme’ best suited for the Center to make the most significant contribution to the transportation community.

The purposes of the education element of the program are to: build upon the strengths of existing programs at the Centers, create new innovative programs, expand graduate level transportation education in the United States, and increase the opportunities for new entrants into the field of transportation.

The purpose of the research element is to: identify and conduct high quality research that will foster significant advances in transportation science and technology and generate basic, fundamental and applied knowledge in the appropriate disciplines.

The purpose of the technology transfer element is to: ensure that the results of the research program are widely disseminated, applied, implemented and utilized. This effort requires close interaction between the universities and the entire transportation community.

A fundamental goal of the program is to: establish close linkages between education and research activities. These linkages occur through carefully designed programs that provide continuing opportunities for faculty and students to interact in the classroom and on research projects.

How Much: In past competitions FAA has provided $0.5 - 4 million a year for up to 10 years. Requires 100% matching from non-Federal sources.

When: Periodic Competitions, the last several awards have been:

- Technical Training and Human Performance (applic due by 20 Apr 2016)
- Unmanned Aircraft Systems (Mississippi State, announced 8 May 2015) 2015
- Alternative Jet Fuels and the Environment 2013
- General Aviation 2012
- Partnership to Enhance General Aviation Safety, Accessibility and Sustainability 2012

Where: https://www.cfda.gov/?s=program&mode=form&tab=step1&id=7165bce20cfbdabb599573bc5a2a45
The FAA Research Grants Program encourages and supports innovative, advanced research of potential benefit to the long-term growth of civil aviation and Commercial Space Transportation. The intent is to encourage applied research and development to enhance technology assimilation, transfer, and development in the FAA. The agency encourages the submission of proposals that embrace the entire spectrum of physical, chemical, biological, medical, psychological, mathematical, and engineering sciences.

The areas which contribute to the FAA mission of improving aviation safety, capacity, efficiency, and security, are:

1. Capacity and Air Traffic Control Technology
2. Communications, Navigation, and Surveillance
3. Aviation Weather
4. Airports
5. Aircraft Safety Technology
6. Human Factors and Aviation Medicine
7. Environment and Energy
8. Systems Science/Operations Research
9. Commercial Space Transportation

The FAA expects that grantees will share in the costs at a level that reflects their interest in the research, the potential benefits they may derive, and their ability to share in the cost of the project. The potential grantee may contact the appropriate FAA organization in determining levels of cost sharing prior to submitting a proposal.

When: This solicitation will remain open until December 31, 2019

Where: FAA-12-01
Further information at 609-485-4781 or email to nicole.saiauskie@faa.gov
http://www.tc.faa.gov/logistics/grants
http://www.grants.gov
What:
NHTSA is responsible for reducing deaths, injuries and economic losses resulting from motor vehicle crashes. This is accomplished by setting and enforcing safety performance standards for motor vehicles and motor vehicle equipment, and through grants to state and local governments to enable them to conduct effective local highway safety programs. NHTSA conducts research on driver behavior and traffic safety, to develop the most efficient and effective means of bringing about safety improvements.

Research Topics of Interest:
- Biomechanics and Trauma [http://www.nhtsa.gov/Research/Biomechanics+&+Trauma]
- Crashworthiness [http://www.nhtsa.gov/Research/Crashworthiness]
- Driver Simulation [http://www.nhtsa.gov/Driver-Simulation]
- Event Data Recorder [http://www.nhtsa.gov/EDR]

Who: the solicitations appear focused on companies rather than University.
The FTA has periodic, if infrequent, competitions open to proposals from private University. Three examples are:

**Innovative Public Transportation Workforce Development Program**  FTA-2015-001-TRI
FTA plans to fund nationally or regionally significant public transportation workforce projects that will assist in building ladders of opportunity for American workers to move into the middle class, as well as build the critical skillset needed in the public transportation industry. FTA has budgeted approximately $9M for the program. FTA will award grants of a minimum of $200K and a maximum of $1M.

**Pedestrian Collision Warning Demonstration Project**  FTA-2012-010-TRI
The main objective of this pilot is to increase pedestrian/cyclist safety through demonstration of advanced pedestrian warning system on transit buses. FTA seeks applications to demonstrate innovative technologies that support the achievement of this objective. The applicant must be a transit agency or partner with a U.S. transit agency and obtain its commitment to participate in the project. The total available funding is $400,000.

**Transit Livability Performance Measures**  FTA-2011-001-LMP-TBP
The Federal Transit Administration (FTA) plans to develop measures of how well transit systems meet the needs of people in the communities they serve. Such metrics are required for evaluating the success of livability enhancement programs, and for identifying where these programs are needed. The objective of this project is to define national livability performance measures and to develop the data resources to be able to calculate these measures on an annual basis so as to track trends and progress. The scope of this effort includes both urban and rural areas with specific direction towards measures that will allow FTA to gauge the effectiveness of Federal transit livability efforts. FTA will fund three projects under this program, one in each of the three specified subject areas. Funding for each cooperative agreement under this program will range from $50,000 to $125,000. The total available funding is $300,000.

Federal Railroad Administrator
   Deputy Administrator
       Executive Director

Office of Civil Rights

Office of Communications *

Office of Public Engagement

Associate Administrator for Railroad Safety
   Office of Safety Analysis
   Office of Safety Assurance and Compliance

Chief Counsel
   Safety Law Division
   General Law Division

Associate Administrator for Administration
   Office of Human Resources

Associate Administrator for Railroad Policy and Development
   Office of Passenger and Freight Programs
   Office of Information Technology

Chief Financial Officer *
   Office of Financial Services
   Office of Policy
   Office of Budget

Chief Financial Officer *

Office of Acquisition
   Office of Research and Development

* Approval of this change is pending the FY13 budget submission to Congress.
What: The purpose of this Broad Agency Announcement (BAA) is to solicit a variety of basic and applied technology research projects that will support the strategic objectives of Office of Research and Development and the research needs of the four FRA research divisions:

- Track
- Rolling Stock and Equipment
- Train Control and Communications
- Human Factors

Projects shall develop technologies that have a direct impact on the safety and efficiency of freight and passenger rail operations in the US. Such technologies will:

- Reduce the operational and program deployment risks associated with mixed use rail lines;
- Improve safety by reducing human and technology failures;
- Bring about capital cost reductions and economy in producing equipment and facilities;
- Reduce operating costs of rail service by providing more efficient operations;
- Improve the reliability of equipment and infrastructure components by reducing failures and/or reducing false failure detections;
- Enhance the social benefits and/or environmental aspects of rail transportation; and
- Facilitate the development of domestic manufacture of rail equipment and infrastructure components.

How Much: About $2M during FY2016

When: Open for two years