Department of Transportation University Transportation Center (UTC).

Since 1998, University of Idaho transportation researchers have implemented cutting edge research and education programs with support from the US Department of Transportation Research and Innovative Technology Administration (USDoT-RITA). The legacy of leadership continues with new awards in 2011-12.

National Institute for Advanced Transportation Technology (NIATT).

From 1998 to 2011, the University hosted this competitively funded, national Tier One University Transportation Center (UTC). NIATT received an award of \$1 million per year, beginning in 1998, with competitive renewals in 2002 and 2006 and an annual \$1 million match from the University, the Idaho Transportation Department, and industry. NIATT's theme, Advanced Technology for Sustainable Transportation, has had four objectives:

- 1. Develop arterial traffic management tools that can be used by practitioners and researchers to manage congestion and improve safety.
- 2. Improve the quality and economic viability of biofuels and improve the fuel economy of motorized vehicles.
- 3. Increase the number of faculty and students in our research and education programs to enhance the transportation workforce.
- 4. Extend results to users and stakeholders.

With recent changes in funding of the RITA program, all of the 58 existing UTCs (including NIATT) were terminated and replaced by 22 new competitive centers; ten Regional Centers,

ten national Tier One Centers, and two national Tier One Transit centers. There were 63 applicants for the 22 centers. NIATT was the recipient of two of these awards - as the leader of a five-university, national Tier One Center, and as a partner in a Regional Center. The award of these highly competitive grants is an acknowledgement of NIATT's accomplishments, partnerships, and leadership in transportation research and education.

TransLIVE (Transportation for Livability by Integrating Vehicles and Environment). TransLIVE is a new \$3.5 million, UTC national Tier One Center led by the University of Idaho in partnership with Syracuse University, Old Dominion University, Virginia Tech, and Texas Southern University. TransLIVE focuses on the following research areas: a traffic data sharing system across universities



(tied to UI-based Northwest Knowledge Network, NKN), driverless intersection controls, ecodriving methods, eco-routing based on time and traffic, communication between vehicles to steady traffic flow, vehicle performance adjustments for efficient operation in controlled traffic systems, optimized freight routing, decision support tools for policy makers, and encouragement of driver behavior that reduces fuel consumption and increases safety.

PacTRANS (Sustainable Solutions for Diverse Transportation Needs of the NW Region). PacTRANS is the new, \$3.5 million, UTC Region 10 Center led by the University of Washington in partnership with the University of Idaho, University of Alaska Fairbanks, Oregon State University, and Washington State University. The regional center focuses on the following research areas: driver distractions and safety, using data to improve traffic movement (tied to NKN), freight routing performance.

Importance of Longer-Term Funding.

- The 22 new UTCs are funded for one year with FY11 monies. It is important that continued funding be provided for at least three more years for each center, in order to recover the considerable start-up cost for these centers and the effort required to develop the proposals across institutions. Start-up costs are usually realized in ROI after a few years of research and technology transfer. The DoT's experience with centers shows that they are most productive when they are funded for 4-5 years.
- The new Regional Center was awarded \$3.5 million (\$600,000 to UI) and the national Tier One proposal was awarded \$3.5 million (\$1.3 million to UI), each for one year.
- These FY11 awards are the result of a competitive process. Many UTCs in the past were funded by earmarks, but University of Idaho's Tier One Center has been competitive since 2002.
- Ford and Toyota Motor companies have contacted the University of Idaho to request partnerships. The Department of Energy Pacific Northwest National Lab has also contacted the Tier One and Regional Center researchers to explore common research interests.
- The state of Idaho will benefit directly from the new Center partnerships. UI's transportation researchers have a constructive and long-term working relationship with Idaho's ITD and other state DOTs in the region.

For elaboration on NIATT's objectives and accomplishments, please visit: www.niatt.org.