

# Oregon Transportation Research and Education Consortium Year 1 Projects (2006-2007)



As governed by our Strategic Plan, and after rigorous peer review of 54 submitted proposals, OTREC has selected the top 22 research, education and technology transfer projects for funding in 2006-2007:

## 2006-2007 PROJECTS

### Research

- 07-01 From arterial to asset: examining the role of the multi-way boulevard in coordinated transportation and land use planning. PI: Mark Gillem, UO
- 07-03 Socio-economic effect of vehicle mileage fees. PI: B. Starr McMullen, OSU; Co-PI: Lei Zhang, OSU
- 07-14 Using existing ITS commercial vehicle operation (ITS/CVO) data to develop statewide (and bi-state) truck travel time. PI: Christopher Monsere, PSU; Co-PI: Robert Bertini, PSU
- 07-18 Active transportation, neighborhood planning and participatory GIS. PI: Marc Schlossberg, UO
- 07-20 The influence of community walkability and safety on active transportation among low income children. PI: Jessica Greene, UO
- 07-30 Hurricane wave forces on highway bridge superstructure. PI: Daniel Cox, OSU
- 07-33 Understanding and measuring bicycling behavior: a focus on travel time and route choice. PI: Jennifer Dill, PSU
- 07-37 Characteristics of transitions in freeway traffic. PI: Robert Bertini, PSU; Co-PI: Soyoung Ahn, ASU
- 07-43 Factors for improved fish passage waterway construction. PI: David Sillars, OSU; Co-PIs: Hamid Moradkhani and Trevor Smith, PSU
- 07-45 Influence of environmental effects on durability of CFRP for shear strengthening of RC girders. PI: Chris Higgins, OSU
- 07-53 Performance enhancement of bridge bracing under service and extreme loads. PI: Peter Dusicka, PSU
- 07-57 Assessment and refinement of real-time travel time algorithms for use in practice. PI: Kristin Tufte, PSU
- 07-64 Improving travel information products via robust estimation techniques. PI: David Maier; Co-PI: Kristin Tufte, PSU
- 07-68 Co-evolution of transportation and land use. PI: Lei Zhang, OSU
- 07-79 Identify and address institutional barriers delaying incident clearance. PI: Karen Dixon, OSU; Co-PI: Lei Zhang, OSU
- 07-80 Evaluation of the Oregon DMV at-risk driver program. PI: James Strathman, PSU

### Education

- 07-02 City design lecture series: linking transportation and land use planning. PI: Mark Gillem, UO
- 07-21 Road ecology course and seminar series. PI: Mark Sytsma, PSU
- 07-51 Linking experiential learning to community transportation planning. PI: Robert Parker, UO; Co-PI: Bethany Johnson, UO

### Technology Transfer

- 07-13 OTREC Professional development program PI: Robert Layton, OSU; Co-PI: Christopher Monsere, PSU
- 07-41 Application of LRFD principles for deep foundations in Oregon: phase 1. PI: Trevor Smith, PSU; Co-PI: Peter Dusicka, PSU
- 07-67 Initiative for bicycle and pedestrian innovation. PI: Jennifer Dill, PSU; Co-PIs: Marc Scholssberg, UO and Karen Dixon, OSU

OTREC received a total of 54 proposals with a request of \$2.6 million for consideration for the 2006-2007 funding year. There were 38 unique proposers; 30 proposals with multiple principal investigators; and 10 were multi-campus. The diversity of the proposals submitted displays impressive breadth of discipline and demonstrates great collaboration between universities and with external agencies. As governed by the OTREC Strategic Plan, all proposals underwent a rigorous peer review process before a funding recommendation was made. Each proposal was reviewed by at least three expert reviewers, including one federal reviewer.

On April 2, 2007, the OTREC Executive Committee selected the top 22 research, education and technology transfer projects. We encourage those with proposals that were not selected but fit well with the OTREC theme of Advanced Technology, Integration of Land Use and Transportation, and Healthy Communities to strengthen the approach and consider resubmitting for the 2007-2008 funding year. The request for proposals for 2007-2008 will be issued April 11, 2007. Abstracts will be due April 27, 2007 with full proposals due May 25, 2007. Only proposals with abstracts submitted by the due date will be accepted.

	<b>Awarded</b>	<b>Submitted</b>
Total Proposals	22	54
Research	16	39
Education	3	9
Tech Transfer	3	6
Proposers	19	38
Multi-campus	3	10
Multi-PI	10	30



## About OTREC

OTREC is a National University Transportation Center created by Congress in 2005. A partnership between Portland State University, the University of Oregon, Oregon State University, and the Oregon Institute of Technology, OTREC is dedicated to stimulating and conducting collaborative multi-disciplinary **research** on multi-modal surface transportation issues; **educating** a diverse array of current practitioners and future leaders in the transportation field; and encouraging **implementation** of relevant research results. Through collaboration and partnerships with transportation agencies, industry, and other universities in the Northwest, OTREC's theme focuses on advanced technologies; integration of land use and transportation; and healthy communities.

## Contact Us

**OREGON TRANSPORTATION RESEARCH  
AND EDUCATION CONSORTIUM**  
P.O. Box 751, Portland, Oregon 97207  
**503-725-2866**  
**Fax: 503-725-5950**  
**www.otrec.us**  
**E-mail: otrec@pdx.edu**

**Robert L. Bertini, Ph.D., P.E.**  
**Director**  
**503-725-4249**  
**bertini@pdx.edu**

*OTREC and its partners are affirmative action/equal opportunity institutions. 4/07*