

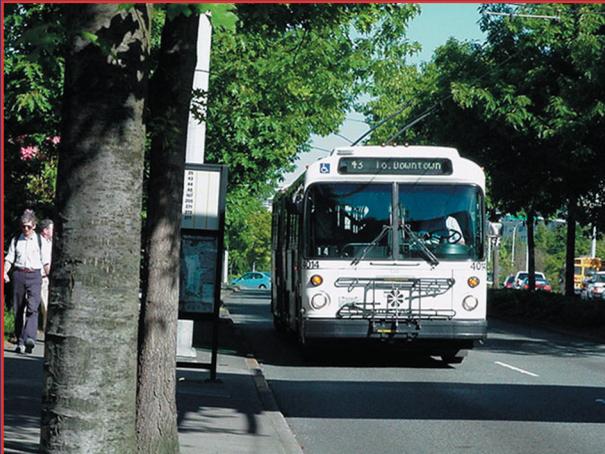
TRAC's primary purpose is to encourage research in all aspects of transportation by focusing the resources of the University of Washington (UW), Washington State University (WSU), and the Washington State Department of Transportation (WSDOT) on the transportation problems of the region and the nation.

The objectives of this applied research are to improve the effectiveness, efficiency, safety, economy, and energy conservation of the transport of people and goods throughout Washington state and the country.

From our offices at the UW and WSU, we coordinate research resources and work among

- federal, state, and local agency officials
- private sector transportation professionals
- university faculty
- our own research engineers.

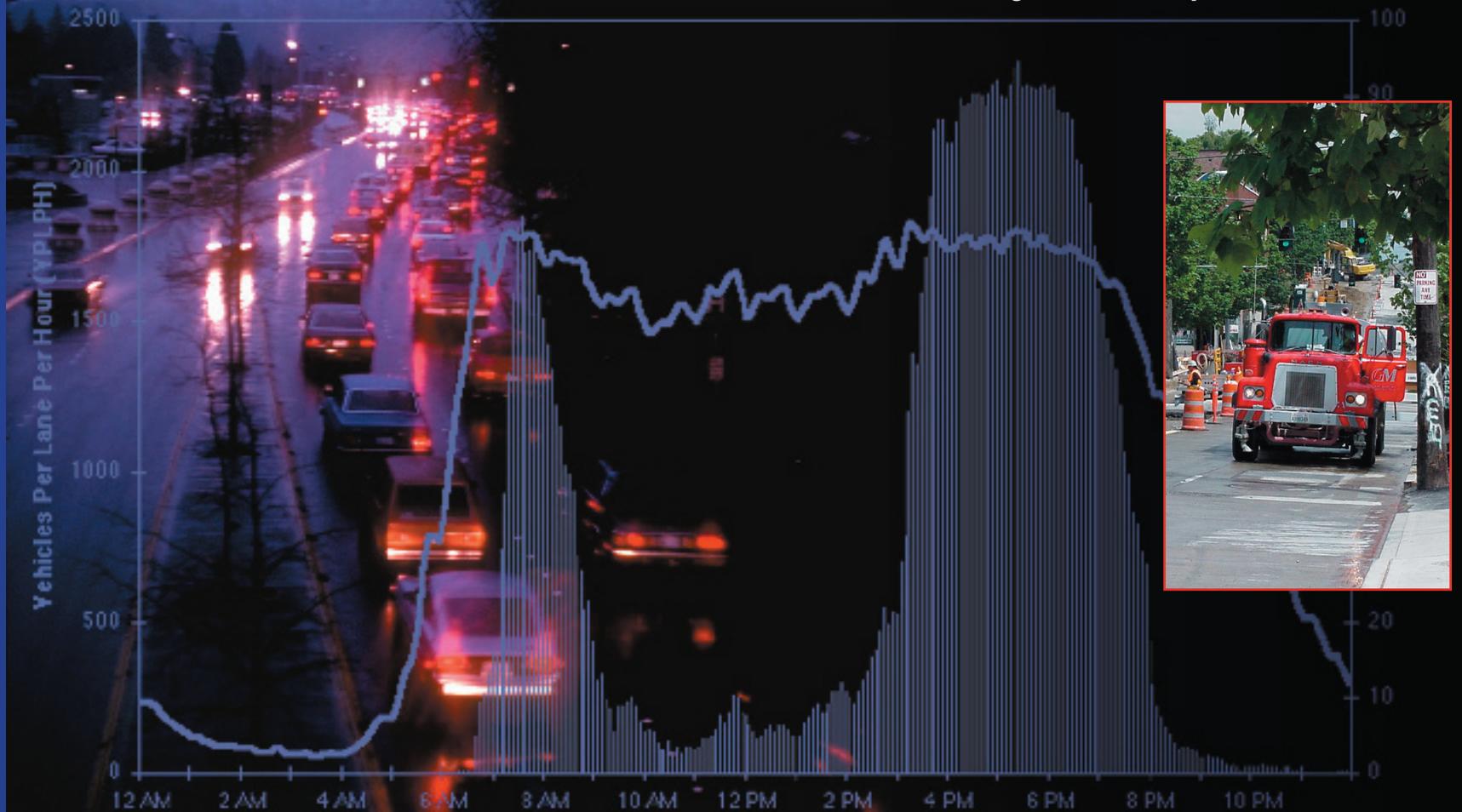
The results are innovative solutions to pressing problems in transportation system design, construction, operations, and maintenance.



Washington State Transportation Center is a nucleus for developing, coordinating, and conducting research in transportation.

TRAC

Washington State Transportation Center



Washington State Transportation Center

UW

1107 NE 45th St., Suite 535
Seattle, Washington 98105
Phone: 206.543.8690
Fax: 206.685.0767

WSU

Sloan Hall, Room 101
PO Box 642910
Pullman, WA 99164-2910
Phone: 509.335.3175
Fax: 509.335.7632

WSDOT Research Office

Transportation Building
310 Maple Park Avenue SE
PO Box 47300
Olympia WA 98504-7300
Phone: 360.705.7000

Executive Director

Leni Oman

360.705.7974 OmanL@wsdot.wa.gov

Director, University of Washington

Mark E. Hallenbeck

206.543.6261 tracmark@u.washington.edu

Director, Washington State University

David McLean

509.335.9578 mclean@wsu.edu

History of Success

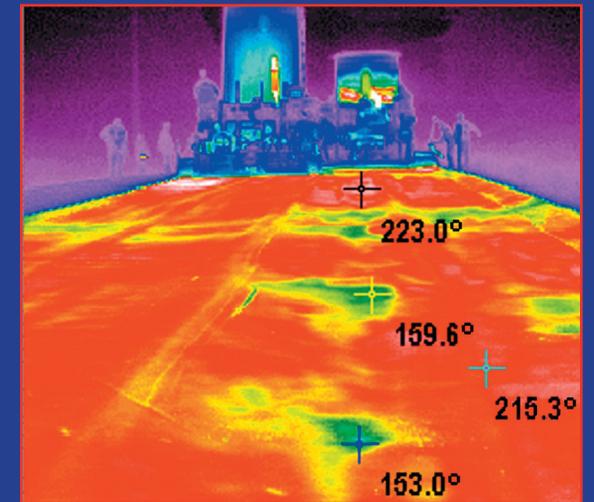
Since 1983, TRAC researchers have gained a reputation for conducting high-quality research with usable results.

A few examples:

- During the 2001 6.8-magnitude earthquake, many bridges in the Puget Sound region were probably safe because of seismic retrofitting that WSDOT conducted as a result of TRAC research.
- The ramp metering algorithm now used for all of the Puget Sound region's freeway ramp meters is the most advanced in the country. Developed by TRAC researchers, it helps smooth traffic flow and reduce freeway congestion daily.
- TRAC researchers have discovered the reason for uneven temperatures and densities in newly laid pavement —ultimately a cause of premature pavement failure—as well as ways to prevent the problem. This may save the state millions of dollars a year.
- TRAC researchers have conducted numerous studies on the effects of culverts and ferry docks on migrating salmon. The results are helping WSDOT to effectively address concerns posed by the Endangered Species Act.
- TRAC's development of new ways to evaluate and understand freeway congestion has helped WSDOT track and target congestion on specific freeway sections. It has also been useful to other

public agencies and the state legislature in addressing the region's congestion problems.

- TRAC research on the use and design of geosynthetic reinforced walls for routine, permanent construction could save the state as much as \$1 million a year in construction costs. These walls could also help maintain better soil stability during settling and earthquakes.



Research Areas

Projects conducted by both university faculty and TRAC engineers cover a variety of diverse transportation topics. These include bridge decks and structures; the environment; freeway and arterial management; freight and multimodal travel; Washington's ferry system; geotechnical engineering; highway design; intelligent transportation systems; pavements; planning; traffic engineering, maintenance, and surveillance and control; and even vehicle design.