IOWA STATE UNIVERSITY
Institute for Transportation

CREATING, SHARING, AND APPLYING TRANSPORTATION KNOWLEDGE

From traffic safety to big data and from preservation to education, InTrans focuses on research and service that impact transportation now and into the future.

ABOUT INTRANS

Since its inception in 1983 as a technical assistance program for Iowa's rural transportation agencies, the Institute for Transportation has evolved into a $22-million-per-year hub for local, regional, and national transportation-focused research, education, and technology transfer.

InTrans, located at Iowa State University, administers 13 centers and programs with several distinct yet affinitive research specialties and a variety of technology transfer and professional education initiatives.

Our innovative research program (with over 200 projects underway) is supported by a variety of state and national organizations, including our primary sponsor—the Iowa Department of Transportation.

IOWA STATE UNIVERSITY
Senior Vice President and Provost

Vice President for Research

Institute for Transportation

InTrans Centers and Programs

FOCUS AREAS

SAFETY

Focusing on the evaluation of roadway countermeasures and developing data-driven solutions to reduce traffic fatalities

INFRASTRUCTURE

Developing new ways to construct and preserve America's roads, bridges, and other forms of infrastructure

MOBILITY, DATA ANALYTICS, AND RESILIENCY

Studying resilience measures for extreme weather events, investigating the future of autonomous vehicles, and analyzing traffic "big data" to support improved mobility decision-making

CONSTRUCTION MANAGEMENT

Enhancing transportation efficiency and cost-effectiveness through innovative construction technologies and processes

OUTREACH AND EDUCATION

Seeking to impact lives by improving the skills and knowledge of transportation workers through workshops offered by InTrans centers and programs

SERVICES

- Statewide urban design and specifications
- Training, professional development, advice, and referral
- Safety/law enforcement liaison
- Traffic safety and crash analysis services
- Conferences and workshops
- Technical support for traffic safety initiatives (e.g., GIS application design, data integration, implementation, and training services)
- Pavement management systems
- REACTOR Laboratory
- Bridge management systems
- Focus groups to determine research needs through a collaborative agreement with Iowa's Board of Regents universities

COLLABORATIONS

InTrans is synergistic, which means that we work with a variety of organizations, both here in Iowa and across the country. Our partnerships with the Iowa DOT, Minnesota DOT, and Federal Highway Administration are long-lasting, as is our relationship with the faculty and staff in Iowa State's Department of Civil, Construction, and Environmental Engineering.

We value the connections we have made, and continue to make, with numerous universities, state DOTs, cities, counties, regional planning organizations, industry associations, equipment manufacturers, materials suppliers, and other groups.

RESEARCH, PUBLICATIONS, PRODUCTS

InTrans researchers use innovative methods, materials, and technologies to advance the transportation field. InTrans provides tangible products that fulfill clients' needs while ensuring that research is oriented toward real-world results.

PUBLICATIONS

- Guides/manuals
- Reports
- Tech transfer summaries
- Tech briefs
- Peer-reviewed articles
- Newsletters, brochures, etc.

MORE PRODUCTS

- Technical presentations
- Decision support tools/systems
- Standards and specifications
- New processes and designs
- Outreach and extension activities to advance the state of the practice

INSTITUTE FOR TRANSPORTATION

Shauna Hallmark, Director
Neal Hawkins, Associate Director

intrans.iastate.edu
ph: 515-294-8103

2711 S. Loop Dr., Ste. 4700
Ames, IA 50010-8664

CENTERS

Bridge Engineering Center (BEC)

Conducting research to solve real-world structural problems

Justin Dahlberg, Director | bec.iastate.edu

Center for Transportation Research and Education (CTRE)

Exploring safety, infrastructure management systems, and sustainability in transportation

Omar Smadi, Director | ctre.iastate.edu

Center for Weather Impacts on Mobility and Safety (CWIMS)

Facilitating better and safer ways to travel when weather impacts transportation systems

Zach Hans, Director | cwims.intrans.iastate.edu

National Center for Wood Transportation Structures (NCWTS)

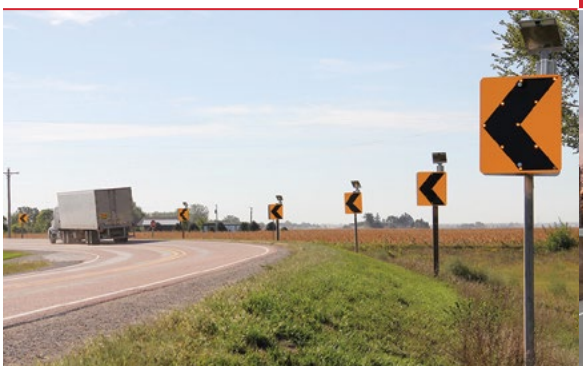
Integrating research, demonstration, and education to improve wood transportation structures

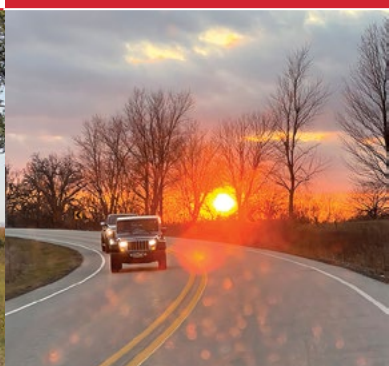
Justin Dahlberg, Codirector | woodcenter.org

National Concrete Pavement Technology Center (CP Tech Center)

Serving as the national hub for concrete pavement research and technology transfer

Peter Taylor, Director | cptechcenter.org





PROGRAMS

Asphalt Materials and Pavements Program (AMPP)

Improving asphalt pavements through research and education

Chris Williams, Director | ampp.intrans.iastate.edu

AURORA Program

Working to advance road weather information systems technology

Codirectors: Zach Hans and Neal Hawkins
aurora-program.org

Construction Management and Technology (CMAT) Program

Researching innovative construction technologies and processes for the transportation industry

Jennifer Shane, Director | cmat.intrans.iastate.edu

Iowa Local Technical Assistance Program (Iowa LTAP)

Helping Iowa's local governments keep up with growing transportation demands

Keith Knapp, Director | iowaltap.iastate.edu

Iowa Statewide Urban Design and Specifications (SUDAS)

Providing uniform design guidelines and construction specifications for Iowa's urban public improvement projects

David Carney, Director | iowasudas.org

Program for Sustainable Pavement Engineering and Research (PROSPER)

Investigating and integrating innovative, sustainable pavement materials and technologies

Halil Ceylan, Director | prosper.intrans.iastate.edu

Real-Time Analytics of Transportation Data (REACTOR) Laboratory

Completing traffic calculations within seconds to enable the delivery of near real-time solutions

Codirectors: Anuj Sharma, Neal Hawkins, and Skylar Knickerbocker | reactor.ctre.iastate.edu

Smart Work Zone Deployment Initiative (SWZDI)

Investigating better ways to control traffic through work zones

Keith Knapp, Director | swzdi.intrans.iastate.edu

THE INSTITUTE FOR TRANSPORTATION IS THE FOCAL POINT FOR TRANSPORTATION AT IOWA STATE UNIVERSITY

INTRANS PERFORMS
transportation research for public and private agencies and companies.

INTRANS CONTRIBUTES
to Iowa State University and the College of Engineering's educational programs for transportation students and provides K–12 outreach.

INTRANS CONDUCTS
local, regional, and national transportation services and continuing education programs.

INSTITUTE FOR TRANSPORTATION

IOWA STATE UNIVERSITY

Iowa State University does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, genetic information, sex, marital status, disability, or status as a U.S. Veteran. Inquiries regarding nondiscrimination policies may be directed to Office of Equal Opportunity, 2680 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, telephone: 515-294-7612, email: eooffice@iastate.edu.