The NEXTRANS Center is a Regional University Transportation Center funded by the U.S. Department of Transportation’s Research and Innovative Technology Administration (RITA) to implement a multidisciplinary program of transportation research, education, and technology transfer. The Center’s theme is to develop integrated and innovative solutions to transportation challenges by explicitly studying the interactions between vehicle, traveler, and infrastructure.

2010 UNDERGRADUATE INTERNS DELIVER FINAL PRESENTATIONS

The NEXTRANS Center’s 2010 Undergraduate Summer Interns delivered their final presentations on Friday, July 23, 2010 at Purdue University’s Discovery Park. This event was an opportunity for interns to showcase their research accomplishments to faculty, staff, graduate mentors, and other undergraduate students from the Center’s major partner universities.

The Undergraduate Internship in Transportation provides six competitively-selected undergraduate students with the opportunity to complete a ten-week program of transportation research and activities at Purdue University, the University of Illinois at Urbana-Champaign, and The Ohio State University.

This year’s program attracted students from Pennsylvania State University, the Missouri University of Science and Technology, and Villanova University, as well as the Center’s major partner institutions. Interns participated in hands-on research involving a broad range of transportation modes and topics. They were challenged to learn basic modeling techniques, develop surveys, participate in the collection of field data, and utilize a variety of innovative technologies. Collectively, their research aimed to:

- Evaluate the likelihood of commuters to switch routes based on real-time traffic information.

(Continued on Page 3)
It has been an exciting summer at the NEXTRANS Center.

We are currently in the final stages of selecting our third-year research projects, utilizing peer evaluations and a holistic approach that ensures the various dimensions of the Center theme and USDOT priorities are being addressed. These newly-funded projects will be announced on the Center’s web site in the coming weeks.

As part of our continuing educational efforts, we recently concluded a second successful year of the NEXTRANS Undergraduate Internship Program in Transportation (cover and p. 3). Interns showcased their accomplishments by delivering formal presentations on July 23, 2010 at Purdue University’s Discovery Park. There, they also received encouragement and guidance in considering graduate-level education and transportation-related careers. I am happy to report that three of our six 2009 interns, Erin Kersh, Eunseok Choi, and Divya Kumar, went on to pursue graduate degrees in transportation engineering.

In technology transfer news, the Center sponsored three seminars; hosted two international visiting scholars; and collaborated with academic, public, and private sector stakeholders at a number of conferences and meetings (pages 8-9).

Finally, we have welcomed a number of new individuals to the NEXTRANS Center team. I am pleased to announce that Dr. Erol Tutumluer has joined the Executive Committee (page 4). Rick Evans is entering his fourth successful month as our Center’s Managing Director (page 10), and we recently hired a new Communications Coordinator, Andrea McIntyre (page 10). I would like to take this opportunity to thank departing EC member Dr. Imad Al-Qadi and Communications Coordinator Jessica Mehr for their contributions during our Center’s formative years.

I hope you enjoy this issue of the NEXTRANSporter. Please visit www.purdue.edu/dp/nextrans to learn more about our Center’s activities.

**IMAD AL-QADI ELECTED DISTINGUISHED MEMBER OF ASCE**

The Board of Directors for the American Society of Civil Engineers (ASCE) has elected Imad Al-Qadi as a Distinguished Member for his exemplary leadership and innovation in the civil engineering profession. This extraordinary honor is reserved for only one out of over 7,500 ASCE members.

The ASCE defines a distinguished member as one who has made legendary contributions to the area of civil engineering. In addition to his leadership in professional service and technology transfer, Dr. Al-Qadi was recognized for his extraordinary research and technical contributions in pavement engineering, modeling, rehabilitation technologies, pavement interlayer systems, asphaltic mixtures, transportation infrastructure sensing, and ground penetrating radar.

Dr. Al-Qadi is currently the Founder Professor of Engineering at the University of Illinois at Urbana-Champaign and the founding Director of the Illinois Center for Transportation (ICT). He has served as an investigator on a number of NEXTRANS-sponsored research projects, and was a member of the Executive Committee from its inception to June 2010.
INTERNS DELIVER FINAL PRESENTATIONS  (Continued From Page 1)

- Determine the comfort level of bicyclists when sharing the roadway with passenger vehicles.
- Increase the efficiency of railroad track inspection using advanced machine vision technology.
- Conduct research on public-private partnerships (PPPs).
- Investigate a potential relationship between increasing gas prices and transit ridership.
- Analyze bus headways using advanced vehicle location (AVL) data.

To learn more about the Center’s 2010 undergraduate interns, see pages 6-7. To view their final presentations, please visit www.purdue.edu/dp/nextrans/

CENTER HOSTS INTERNATIONAL SCHOLAR

The NEXTRANS Center recently hosted an international visiting scholar as part of its continuing mission to develop institutional linkages at the global level.

From January - May 2010, Priyanka Khan from the Indian Institute of Technology (IIT) in Kanpur conducted research-in-residence at Purdue University. Priyanka, who is currently pursuing a Masters Degree at IIT, is working on a joint-research project under the guidance of Dr. Partha Chakroborty (IIT) and Dr. Srinivas Peeta (NEXTRANS Director).

The project, titled, "Addressing Uncertainties in Travel Time Estimates Using Artificial Intelligence Techniques for Intelligent Transportation Applications," marks the beginning of an international collaboration between NEXTRANS and IIT. This research aims to determine if standard traffic models can be used to study traffic in India, where a variety of non-motorized vehicles share the road and there is a lack of lane discipline.

Through the process of collaboration, I have benefited a great deal from technical discussions with the Center’s faculty and students.
EROL TUTUMLUER JOINS EXECUTIVE COMMITTEE

NEXTRANS is pleased to announce that Erol Tutumluer has joined the Center’s Executive Committee.

Dr. Tutumluer is currently a Professor of Civil and Environmental Engineering (CEE) and the Paul F. Kent Endowed Faculty Scholar at the University of Illinois at Urbana-Champaign (UIUC). He holds a B.S. (Bogazici University 1989), 2 M.S. degrees (Duke University 1991 and Georgia Tech 1993), and a Ph.D. (Georgia Tech 1995), all in Civil Engineering.

Dr. Tutumluer’s area of expertise is in testing and modeling of pavement and railroad track geo-materials, areas in which he has authored and co-authored over 160 technical papers. Related to the NEXTRANS Center, Dr. Tutumluer has been working on the development of artificial neural network (ANN) and genetic algorithm (GA) based pavement structural analysis tools. The developed software, called SOFTSYS (Soft Computing Based Pavement & Geomaterial System Analyzer), was delivered to the Illinois Department of Transportation for evaluation in July 2008.

Dr. Tutumluer has received numerous awards for his teaching and research, including the Transportation Research Board’s (TRB) Fred Burgraff Award for Excellence in Transportation Research (2000), and TRB’s Geology and Properties of Earth Materials Section Best Paper Award (2009).

Dr. Tutumluer serves on a number of committees for TRB and the American Society of Civil Engineers (ASCE), and currently chairs the ASCE Geo-Institute’s Pavements Committee. He is an Editorial Board Member of the International Journal of Pavement Engineering and ASCE International Journal of Geomechanics, and an Associate Editor of both the International Journal of Pavement Research and Technology and the ASCE Journal of Computing in Civil Engineering. Welcome, Dr. Tutumluer!

DIRECTOR PEETA WINS UNISA RESEARCH AWARD

NEXTRANS Director Dr. Srinivas Peeta received a 2010 UniSA Distinguished Researcher Award from the University of South Australia in Adelaide (UniSA), awarded by the Australian Competitive Grants and Fellowships Development Committee. This award seeks to attract distinguished international researchers with outstanding research track records in their respective fields to visit UniSA to strengthen research collaborations and outcomes. Dr. Peeta visited UniSA for three weeks in April 2010, where, among other activities, he delivered a public lecture on infrastructure network survivability in disasters.

Dr. Peeta also took this opportunity to visit Monash University in Melbourne as a representative of both NEXTRANS and Purdue University. There he met with their Deputy Vice-Chancellor Dr. Edwina Cornish and Pro-Vice Chancellor Dr. Simon Adams to discuss opportunities for collaboration at the institutional level. Using the NEXTRANS Center and Monash’s Institute for Transport Studies as points of contact, Purdue and Monash would like to collaborate on research in the domains of intelligent transportation systems and sustainability.
EXPLORING THE FEASIBILITY OF DYNAMIC CONGESTION PRICING

Financial and Technical Feasibility of Dynamic Congestion Pricing as a Revenue Generation Source in Indiana: Exploiting the Availability of Real-Time Information and Dynamic Pricing Technologies

Investigated by Samuel Labi and Kumares Sinha (Purdue University)

An estimated 36% of our nation’s major urban highways are congested (2009 ASCE Report Card), costing Americans time and money while negatively impacting the environment. Simultaneously, there is a need for a significant increase in highway funding for facility renewal and preservation (National Surface Transportation Policy and Revenue Commission, 2007).

One initiative that could help alleviate both of these problems is dynamic congestion pricing (DCP). DCP allows toll prices to continually adjust according to traffic conditions, increasing when the tolled lane(s) are busy and decreasing when the tolled lane(s) are less busy. The prevailing price is displayed on electronic signs located at the approaches to the tolled section.

DCP not only generates revenue, but also induces more efficient use of highway infrastructure. Since the majority of rush-hour drivers on a typical urban highway are non-commuters, DCP discourages overuse of highways during peak hours, enabling the system to flow much more efficiently.

This NEXTRANS research project aims to evaluate the feasibility of implementing DCP in Indiana. The evolution of the congestion pricing, which is synthesized in the study, is characterized by a dichotomy in concept: the static model and the dynamic model. The static model, first introduced by Alan Walter in 1961, has served as the standard model until recent times due to its straightforwardness; however, it is plagued by a number of limitations including implementation issues. The dynamic model, developed towards the end of the last century, is more realistic, but is more complicated and requires more detailed inputs compared to the static model.

This project analyzes well-tested theories for both static and dynamic congestion pricing scenarios from an economic viewpoint and evaluates the feasibility of their implementation. It also examines DCP experiences from cities around the world. Researchers then examine the cost and benefits of a hypothetical implementation of DCP in a fast-growing urban freeway corridor in Indianapolis. It is hoped that this study will, among other objectives, shed more light on the feasibility of congestion pricing as a strategy for congestion mitigation and as a source of revenue generation.

The potential benefits of this research are numerous. DCP can reduce driver delays and stress, increase the predictability of trip times, and boost the economy by allowing for more efficient freight movement. It can provide additional revenue for funding transportation, and can help maximize the value of public investment in highway facilities. DCP can also translate into environmental benefits by reducing fuel consumption and vehicle emissions.

**Dynamic congestion pricing can reduce driver delays and stress, increase predictability of trip times, and boost the economy by allowing for more efficient freight movement.**

![Dynamic congestion pricing can reduce driver delays and stress, increase predictability of trip times, and boost the economy by allowing for more efficient freight movement.](image)

![Figure 1: The optimal congestion toll can be identified using the classical model for road pricing.](image)
Mark Asmuth is currently pursuing a B.S. in Electrical Engineering at Penn State University (University Park, PA). For his internship, Mark worked with J. Riley Edwards, Dr. Narendra Ahuja, Dr. Christopher Barkan, and John Hart at the University of Illinois at Urbana-Champaign on research that aims to increase the efficiency of railroad track inspection. Researchers are currently recording images of track from a moving vehicle and using advanced machine vision algorithms to detect broken or defective track components. Mark participated in field testing and worked to develop solutions to two major challenges: improving video capture in adverse lighting conditions, and accurately determining the locations of individual components found to be defective. This project will help to enable safe, efficient, and cost-effective inspections that reduce repair time and track closings.

Michael Lodes holds a B.A. in Music Education (2006), and is currently pursuing a B.S. in Civil Engineering at the University of Illinois at Urbana–Champaign (UIUC). For his internship, Michael worked with Dr. Ray Benekohal at UIUC on a project that aimed to determine the comfort level of bicyclists in relation to motor vehicles based on passing distance, lateral positions, and the operational space of cyclists. He developed a survey utilizing photos taken at varying distances between curb, bicycle, and vehicle, asking respondents to indicate their relative comfort levels for each image. Michael hopes this research will help lead to improvements in the current level of service models and help agencies make better spending decisions with increased pedestrian/bicycle funding.

Skyler Martin is currently pursuing a B.S. in Civil Engineering at the Missouri University of Science and Technology. For his internship, Skyler worked with Dr. Ray Benekohal at the University of Illinois at Urbana-Champaign on a project that aimed to determine if there is a relationship between increasing gas prices and transit ridership. There are a number of factors that influence rises in transit use, including population density, routes, fares, serviceability, rider income level, auto ownership, and gas prices. Skyler tracked increases in gas prices over the last ten years, and attempted to correlate this with a decrease in passenger vehicle miles traveled and an increase in transit ridership. He concluded that while commuters are turning towards more fuel efficient modes of transportation, there are too many factors to establish a solid relationship between transit use and gas prices without further study.

James Pokorny is currently pursuing a B.S. in Civil Engineering at Villanova University. For his internship, James worked with Dr. Srinivas Peeta and Dr. Sushant Sharma at Purdue University on research that aims to understand the benefits that real-time traffic information provides to commuters. Real-time traffic information is currently provided via email, text messages, voice messages, etc. in many U.S. cities. The content of this information can include congestion warnings, expected delays, and alternate route suggestions. James designed a Stated Preference (SP) survey and developed a model to help determine what environmental factors and demographics affect a commuter’s likelihood of switching routes based on real-time information. This will potentially help agencies to achieve the maximum benefit when implementing such programs.
Since further shortfalls in public infrastructure funding are expected over the next five years, expanding private sector involvement may provide a sustainable means of financing America’s infrastructure needs. For his internship, Jarrett researched the history of PPPs, their characteristics, and the mechanisms involved in the decision-making process. Ultimately, this project seeks to create a simple, Excel-based expert system that will help agencies select the most cost-effective PPP approach based on the project’s characteristics.

**MEET THE 2010 NEXTRANS UNDERGRADUATE INTERNS**

**Jarrett Powell** is pursuing a B.S. in Civil Engineering at Purdue University. For his internship, Jarrett worked with Dr. Samuel Labi at Purdue on research exploring public-private partnerships (PPPs). In a standard PPP, the private sector finances, builds, maintains, or operates an asset for the public sector, recovering the investment with revenues. Clever Devices, Inc. are currently upgrading OSU’s Campus Area Bus Service (CABS) with a state-of-the-art “smart bus” system. This new system includes advanced automotive vehicle location (AVL), automated passenger counting (APC), and a passenger information system. Justin used this data to analyze bus headways and load profiles. He developed data structures to organize AVL and APC data consistently for long-term use in various studies, and worked on a web site that features the Campus Transit Lab and collected data.

**Justin Vayda** is currently pursuing a B.S. in Computer Science and Engineering at The Ohio State University (OSU). For his internship, Justin worked with Dr. Rabi Mishalani, Dr. Mark McCord, Dr. Prem Goel, and Dr. Paul Sivilotti at OSU on research involving the Smart Campus Transit Lab. NEXTRANS investigators, various OSU entities, and Ali is currently working with Professor Ray Beneckohal on a NEXTRANS-funded project titled “Traffic Signal Coordination and Queue Management in Oversaturated Intersections.” This study aims to develop a signal coordination method based on the concept of queue minimization in a network of oversaturated intersections. This will help to advance the basic understanding of congestion management in urban networks, and provides a methodology for determining signal coordination.

In addition to his research duties, Ali is actively involved in the UIUC Chapter of the Institute of Transportation Engineers (ITE), and is a member of Phi Kappa Phi honor society. In 2009, he received the Best Student Paper Award from ITE, Illinois section.

**ALI HAJBABAIE**

Ali Hajbabaie is a Ph.D. candidate at the University of Illinois at Urbana-Champaign. He holds a M.S. in Transportation Planning (2006), and a B.S. in Civil and Environmental Engineering (2003) from Sharif University of Technology (Tehran, Iran).

Ali’s main research interests include the areas of optimization, traffic signal systems, traffic simulation, traffic safety, transportation planning, and transportation demand management. His Ph.D. dissertation focuses on Intelligent Dynamic Signal Timing Optimization.

In addition to his research duties, Ali is actively involved in the UIUC Chapter of the Institute of Transportation Engineers (ITE), and is a member of Phi Kappa Phi honor society. In 2009, he received the Best Student Paper Award from ITE, Illinois section.
NEXTRANS SEMINAR SERIES PROMOTES TECH TRANSFER

On May 7, 2010, Dr. Samer M. Madanat delivered a lecture to students and faculty at the University of Illinois at Urbana-Champaign (UIUC) as part of the NEXTRANS Seminar Series. The seminar was titled, “Reliability-Based Optimization of Maintenance and Replacement Policies for Heterogeneous System of Infrastructure Facilities.” This discussion addressed the determination of optimal maintenance and replacement policies for a heterogeneous system of facilities, utilizing a reliability-based framework based on optimal policies at the facility level.

Dr. Madanat is the Xenel Distinguished Professor in the Department of Civil and Environmental Engineering, and Director of the Institute of Transportation Studies at the University of California at Berkeley.

On May 11, 2010, Dr. Xuesong Zhou delivered a NEXTRANS-sponsored seminar to students and faculty at Purdue University. The lecture, titled, “High-speed Passenger Trains on Freight Tracks: Modeling Issues On Capacity Analysis, Train Timetabling and Real-Time Dispatching,” discussed utilizing existing freight rail lines to operate high-speed passenger trains, a shared-use strategy currently being considered in the U.S. Dr. Zhou addressed three operational elements in the context of shared-use freight tracks: capacity estimation, train timetabling and real-time train dispatching. After reviewing existing optimization and simulation-based models, he discussed potential scheduling complexities between passenger train timetabling and on-demand freight train dispatching.

Dr. Zhou is an Assistant Professor in the Department of Civil and Environmental Engineering at the University of Utah.

On June 28, 2010, Dr. Michael Shiffer delivered a NEXTRANS-sponsored seminar to students and faculty at The Ohio State University. The lecture was titled, “Reshaping Transit Planning in Metro Vancouver Through Dynamic Illustration, Solid Evidence and Careful Conversations.” With a focus on Vancouver, British Columbia, this presentation described how transportation agencies can leverage new data sources, multimedia tools and participatory techniques to reshape their approach to planning.

Dr. Shiffer discussed the recent successes surrounding the delivery of transit services during the 2010 Winter Olympics, as well as recent transit and roadway infrastructure improvements that will have a legacy for generations to come.

Dr. Shiffer is Vice President for Planning at TransLink, where he is responsible for planning activities that support major roads, bridges, bikeways, freight and public transit networks in the Vancouver region.

Please visit http://www.purdue.edu/discoverypark/nextrans/tech/seminar.php for more information about the NEXTRANS Seminar Series.
The NEXTRANS Center was pleased to host a session on March 10, 2010 during the 95th Annual Purdue Road School. The session, titled, “Striking the Balance Among Transportation Goals: Economics, Energy, and Safety,” included presentations on three NEXTRANS-sponsored projects that highlighted the integrated nature of the Center’s research.

Graduate researcher Josh Mills presented research that establishes a link between highway bypasses and changes in the local economy. Dr. Wallace Tyner (Purdue) discussed the impacts of cellulosic biofuel production on Indiana road infrastructure. Finally, Dr. Lili Du (NEXTRANS Research Associate) addressed how to best allocate limited resources in order to improve the functionality of infrastructure networks during natural or man-made disasters.

In addition to this session, hundreds of participants visited the NEXTRANS Center’s exhibit booth, where staff member Nija Phelps updated them on the Center’s current research, education, and technology transfer activities.

The 2010 Road School was coordinated by the Joint Transportation Research Program (JTRP), and chaired by JTRP Director Dr. Kumares Sinha, and NEXTRANS investigator Dr. Jon Fricker.

For more information on the Purdue Road School, please visit http://rebar.ecn.purdue.edu/jtrp_redesign/Education/RoadSchool.aspx.

Dr. Wallace Tyner (Top) and Josh Mills (Bottom) deliver presentations at the Purdue Road School.

### ITS WORKSHOP PROMOTES COLLABORATION

NEXTRANS Research Associate Dr. Sushant Sharma co-chaired a session at the ITS JPO (Intelligent Transportation Systems Joint Program Office) Strategic Research Plan UTC/University Workshop, held on April 28 – 29, 2010 at USDOT headquarters in Washington, D.C.

Dr. Sharma co-chaired a session on the potential environmental applications of ITS from a university perspective. He presented a number of environmentally-related research projects recently conducted by NEXTRANS and Purdue University, discussing their potential overlap with ITS research. He emphasized that real-time data procured by ITS could more effectively quantify CO2 emissions, providing better data for research and allowing agencies to develop policies for CO2 reduction. He also discussed the benefits of moving toward a “system of systems” approach, in which all modes and systems are integrated to achieve sustainability (improved efficiency, reduced cost, and energy consumption).

### STAFF ATTEND CUTC SUMMER MEETING

The 2010 Council of University Transportation Centers (CUTC) Summer Meeting was held on June 7 - 9, 2010 at Texas A&M University in College Station, Texas.

Srinivas Peeta (Center Director), Rick Evans (Managing Director), and Jessica Mehr (Communications Coordinator) represented NEXTRANS at the event, which featured discussions on a variety of relevant UTC topics. These included communicating the value of research, workforce development, best practices, capturing performance indicators, reauthorization, and developing and sustaining partnerships.

For more information about this year’s meeting, please visit http://cutc.tamu.edu/index.html.

Dr. Sushant Sharma at ITS JPO Workshop.

Director Srinivas Peeta (Left) and Managing Director Rick Evans (Right) at CUTC Summer Meeting.
FACULTY PROFILE: BEN COIFMAN

Ben Coifman is currently an Associate Professor of Civil and Environmental Engineering at The Ohio State University. His research interests include developing Intelligent Transportation Systems (ITS) and new approaches to traffic surveillance that will lead to better traffic control and better traffic flow theory.

Dr. Coifman’s NEXTRANS-sponsored research focuses on developing innovative and cost-effective vehicle classification strategies. First, researchers aim to use the existing infrastructure more efficiently by extending vehicle classification coverage to single loop detectors (and non-invasive detectors that emulate single loop detectors). Second, researchers are investigating alternatives for vehicle classification, such as LiDAR (Light Detection and Ranging) to monitor passing vehicles. A LiDAR unit reflects a laser, identifying obstructions in the laser’s path, allowing researchers to produce a 3D “image” of an object. These stations can potentially cost much less than comparable in-pavement systems.

Dr. Coifman has published 29 peer reviewed journal articles and 54 papers in conference proceedings. His honors include the Award for Best ITS Research (ITS America, 2000) and the NSF CAREER Award. His professional memberships include several TRB (Transportation Research Board) Committees, the IEEE Intelligent Transportation Systems Society Board of Governors, and the ITS Mid-America Board of Directors (2003-2007). He is on the Editorial Advisory Board for Transportation Research Part A and Part B, and is an Associate Editor of the Journal of Intelligent Transportation Systems.


WELCOME, RICK EVANS

NEXTRANS is pleased to introduce the Center’s new Managing Director, Rick Evans.

Rick holds a M.S. in Higher Education Business and Finance from Purdue University (2004), and a B.S. in Agribusiness from Illinois State University (1992). Rick worked in the agricultural industry for eight years (1992 – 2000) before moving to Sponsored Program Services at Purdue University (2000-2007). He then served as the Associate Director of the Office of Sponsored Programs at Georgia State University (2007 – 2010) prior to assuming his role at NEXTRANS in March 2010.

The role of the MD is to implement the strategic plan by supervising day-to-day operations, as well as research, education, and outreach activities. Rick’s duties include overseeing the Center’s staff, budget, and finances; coordinating the research selection process; and ensuring timely delivery of required publications, reports, and performance indicators. Welcome, Rick!

Andrea McIntyre recently joined the NEXTRANS team as the Center’s new Communications Coordinator.

Andrea holds a B.A. in Communications from Purdue University (2009), with specializations in Public Relations and Rhetorical Advocacy. She recently served as Editor-in-Chief of the Bluffton News in Bluffton, Ohio, where she completed a broad range of writing, graphic design, and editorial tasks.

As the NEXTRANS Center’s Communications Coordinator, Andrea’s major duties will include writing, editing, and designing all Center publications; updating the Center’s web site; and coordinating educational and outreach programs such as the Seminar Series, Undergraduate Summer Internship in Transportation, and Indiana High School Essay Competition. Welcome, Andrea!
Fidel Saenz de Ormijana has over 25 years experience in engineering, both in the water resources and transportation fields. He holds a B.S. degree in Civil Engineering from the Polytechnic University of Madrid (Spain), and M.S. and Ph.D. Degrees in Civil Engineering from the University of Texas at Austin. He is currently Technical Director of Ferrovial Agroman US Corp, where he has worked since 1994. Dr. Saenz de Ormijana is responsible for the engineering and technical aspects of all public-private partnership (PPP) projects that the company undertakes. These include current toll road projects in Indiana and Texas. He stays active in professional societies and participates regularly in technical forums and conferences.

Dr. Saenz de Ormijana has served on the NEXTRANS Advisory Council (AC) since the Center’s inception. In this role, he has regularly contributed to AC meetings, and reviews research need statements for potential NEXTRANS projects. He participated in the Center’s Inaugural Summit (May 2008) and its first official site visit conducted by the USDOT’s Research and Innovative Technology Administration (November 2009). In December 2008, Dr. Saenz de Ormijana contributed to the Center’s workforce development efforts by leading a workshop at Purdue University, which allowed graduate students to analyze a potential PPP toll road project from the perspective of private-sector investors.

Of his work on the NEXTRANS Advisory Council, Dr. Saenz de Ormijana states: “The practical viewpoint that I contribute helps researchers refine their thinking into ways that research can be more directly useful in the real-world. At the same time, my role gives me the opportunity to learn and exchange ideas with my peers.”

NEXTRANS thanks Dr. Saenz de Ormijana for his continuous contribution to the Center’s mission, and looks forward to his involvement in future activities.

**UNIVERSITY PARTNERS**

- Purdue University, Lead Institution & Major Partner
- The Ohio State University, Major Partner
- University of Illinois at Urbana-Champaign, Major Partner
- Wayne State University, Strategic Partner
- Illinois Institute of Technology, Strategic Partner
- University of Wisconsin, Platteville, Strategic Partner
- Indiana University-Purdue University Indianapolis, Institutional Resource Partner
- Martin University, Institutional Resource Partner

**CENTER STAFF**

- Srinivas Peeta, Ph.D.
  Director
- Rick Evans
  Managing Director
- Lili Du, Ph.D.
  Research Associate
- Nija Phelps
  Secretary
- Jessica Mehr
  Communications Coordinator
- Sushant Sharma, Ph.D.
  Research Associate