Introducing New Staff

Beverly Bezdek

Bev Bezdek is a software quality assurance and test engineer at the UGPTI’s Transportation Safety Systems Center in Lakewood, CO. Bezdek has more than 25 years of software experience encompassing project-management, systems analysis and software quality assurance. She specializes in software trouble shooting, testing and problem solving. Before joining UGPTI she was a senior software support analyst and quality assurance engineer for P2 Energy Solutions. She also worked in IT support, quality assurance and project manager positions in other technology companies. She holds a BA degree in computer science from Kansas Wesleyan University. Contact Bezdek at (720) 238-0070 or Beverly.bezdek@ndsu.edu.

Nimish Dharmadhikari

Nimish Dharmadhikari has joined UGPTI as a lead GIS Specialist. He will develop and implement GIS models in ArcGIS and Cube Transportation Planning Software, write program codes for Network analyst and Cube, develop new program codes for SAS, collect and analyze data, write technical reports, and work with multi-disciplinary teams. Dharmadhikari is a Ph.D. candidate in the transportation and logistics program and expects to graduate in August 2014. He has been a graduate research assistant with UGPTI since 2009. He earned an M.S. in industrial and manufacturing engineering at NDSU and a B.E. in mechanical engineering from the Maharashtra Institute of Technology at the
you would like to submit for the next newsletter, please email Tom Jirik at thomas.jirik@ndsu.edu

University of Pune in India. Contact Dharmadhikari at nimish.dharmadhikari@ndsu.edu or (701) 231-5763.

**Brian Fuder**

Brian Fuder will become the engineering training manager with the UGPTI’s Advanced Traffic Analysis Center. Fuder had been associate professor of land surveying and civil engineering technology at the N.D. State College of Science in Wahpeton for the past 6 years. Before that he had been the director of Wilkin County Emergency Management in Breckinridge, MN. Fuder also served as a firefighter and emergency medical technician with the Breckenridge Fire Department for 21 years. He was also a transportation generalist with the Minnesota Department of Transportation for 12 years. He earned an associate degree in civil engineering technology from the ND State College of Science in 1998. Fuder begins work with the UGPTI Monday, Feb. 10.

**Dale Heglund**

Dale Heglund joined the Bismarck staff of UGPTI as director of the Local Technical Assistance Program. Since 2000, Heglund has been the North Dakota sales engineer for Cretex Concrete Products. Before that he was with the NDDOT for 15 years, first as a transportation engineer and then as an assistant district engineer in Dickinson. Heglund earned his bachelor’s degree in civil engineering from the University of North Dakota, is a Registered North Dakota Professional Engineer and Professional Land Surveyor and is a graduate of the Bismarck-Mandan Chamber of Commerce Leadership Development program. He has served as president of the North Dakota Society of Professional Engineers and the North Dakota chapter of the American Public Works Association.

**Rob Lynch**

Rob Lynch joined the Small Urban and Rural Transit Center (SURTC) in January, 2014, as its new training coordinator. Most recently, Rob held the position of transportation manager for North Dakota State University (NDSU), where he managed transit, parking, bicycle, and pedestrian functions for a growing campus community of over 16,000. Rob is a member of the Metro Area Transit Coordinating Board for
Fargo, ND, and Moorhead, MN, and serves on many local transportation and corridor study groups. Prior to this, he managed two non-profit organizations and worked in the hospitality industry for over 25 years. During this period, he developed and conducted specialized management and team training for two national restaurant chains. Rob was elected to the Fargo City Commission in 2000 and served as chairman of the city's Parking Commission, Transportation Technical Committee and the Fargo/Cass Board of Health. Rob is a graduate of NDSU earning a B.U.S. in emergency management and industrial engineering. He can be reached at rob.lynch@ndsu.edu. He can be reached at (701) 231-8266 until Feb. 18 when his number will be (701) 231-8231.

**Sumadhur Shakya**

Sumadhur Shakya joined UGPTI as a spatial transportation analyst. He will be involved in developing and implementing transportation modeling solutions to assist in transportation planning and research efforts. Shakya is a Ph.D. candidate in the transportation and logistics program and has been a graduate research assistant with UGPTI since 2009. He has also taught an undergraduate course in economics for the Department of Agribusiness and Applied Economics. Prior to beginning his Ph.D., he completed his M.S in international agribusiness and worked as an intern with a federal research institute in Germany and with RJ O'Brien, a Chicago-based brokerage house. He also has work experience with Dell and other businesses in India. Reach Shakya at Sumadhur.Shakya@ndsu.edu or (701) 231-6448.

**Goodbyes**

**Peggy Kaiser-Mahardy**'s last day was Friday, Nov. 1. Kaiser-Mahardy had worked with UGPTI's Transportation Safety Systems Center in Lakewood, CO, since 2000 as a software quality assurance and test engineer.

**Keven Anderson**'s last day will be Friday, Feb. 14. Anderson joined SURTC as coordinator of training and outreach in 2011.
Godavarthy wins outstanding dissertation award

Ranjit Godavarthy, UGPTI associate research fellow, won the Wootan Award for Outstanding Ph.D. Dissertation in Policy and Planning from the Council for University Transportation Centers (CUTC). Godavarthy completed his dissertation, "Network and Design Guidelines for Accommodating Large Trucks at Roundabouts," at Kansas State University. He was presented the award at the CUTC Annual Winter Meeting & Banquet, which took place in conjunction with the Transportation Research Board (TRB) Annual Meeting in Washington, DC, on Jan. 11.

UGPTI staff members participate at TRB

Several UGPTI Staff members participated in the Transportation Research Board Annual Meeting Jan. 12-16 in Washington, D.C. The TRB's 93rd Annual Meeting attracted nearly 12,000 transportation professionals from around the world with more than 4,500 presentations in nearly 800 sessions and workshops focusing on all modes of transportation.

Brenda Lantz serves as chair of the TRB's Truck and Bus Safety Committee and presided at several meetings and sessions.

Kim Vachal presented "Calibration of Highway Safety Manual Predictive Methods for Rural Local Roads" along with Xiao Qin and Chen Zhi of South Dakota State University. Their poster was part of a session on highway safety performance. Their research focused on an approach to more accurately calibrating the Highway Safety Manual for use with rural local two-lane, two-way highway segments.

Vachal, Qin and Zhi also presented "Evaluating Local and Tribal Rural Road Design with Interactive Safety Design Model." Their poster was part of a session on case studies in performance-based analysis of geometric design. The research addressed two key goals relating to improving traffic safety in the region: first, to examine public perceptions of traffic safety issues and priorities; and, second, to address crash trends and possible intervention strategies with a focus on large truck/passenger vehicle interaction.

Andrew Kubas and Vachal presented "Oil County Traffic Safety: Perspective of Western North Dakota Residents" as part of a session on data driven decision making in highway safety management. The
paper examines public perceptions of traffic safety issues and priorities; and addresses crash trends and possible intervention strategies with a focus on large truck/passenger vehicle interactions.

Jeremy Mattson presented "Evaluating the state of Mobility Management and Human Service Transportation Coordination" as part of a poster session on achievements and future solutions in accessible transportation and mobility.

Denver Tolliver presented "Freight System Effects of the Bakken Shale Boom as part of a session on energy development and the transportation system.

Others attending the meeting were Nimish Dharmadhikari, Ranjit Godavarthy, Jill Hough, Diomo Motuba, and Brad Wentz.

New Address for UGPTI

NDSU's Industrial Agriculture and Communications Center (IACC) and home to the UGPTI's main office has been renamed the Quentin Burdick Building in honor of the long-serving U.S. senator from North Dakota and advocate for agriculture, North Dakota and NDSU.

Burdick was born and raised in North Dakota and represented the state in both the U.S. House of Representatives and the U.S. Senate. During his more than 30 years on Capitol Hill, he pursued funds to support agriculture research and education, including federal research stations and facilities at NDSU. Burdick served as senator at the time federal funds were secured for the multi-function computer center at NDSU, and he helped move the project forward.

Make sure that correspondence, new business cards, web pages and other items that carry the UGPTI address are updated to reflect the change in the building's name.

NDSU is planning an event to celebrate the name change.

New baby for Corwins

Elle Victoria Corwin was born Dec. 12 to Lindsay and Tanner Corwin. She weighed 6 lbs. 10 oz. and was 20 inches long. The family is doing great. Lindsay works as a graphic
designer from her home in Boise, Idaho.

Abstracts and plagiarism

Improving abstracts and avoiding plagiarism will be topics of two events as the NDSU Center for Writers celebrates International Writing Centers Week. The annual event is organized by the International Writing Centers Association.

"Writing an Abstract: Telling the Story" will be 1-2 p.m. Monday, Feb. 10, in the Meadow Room, Memorial Union. Join the NDSU Graduate Center for Writers for a workshop on how to write abstracts. Bring an abstract you are working on and learn to make it tell the story of your research.

"Paraphrasing to Avoid Plagiarism" will be 2-3:30 p.m. Wednesday, Feb. 12, in Room 152, Dunbar Lab. This workshop, sponsored by the NDSU Center for Writers will begin with a tutorial produced by the Harvard School of Education that teaches effective paraphrasing techniques. You will then practice these paraphrasing techniques to avoid plagiarism. Registration is required: http://www.ndsu.edu/cfwriters/workshops.

To schedule writing help or to find information about writing, citing sources, grammar and other topics related to writing visit the NDSU Center for Writers.

Dybing comments on derailment and explosion

UGPTI research fellow Alan Dybing served as a source for local and national news stories on the Dec. 30 Casselton train derailment and explosion. The train was carrying crude oil from the Bakken. Dybing primarily discussed the shift in rail traffic in North Dakota from coal and agricultural commodities to crude oil -- noting that about 800,000 barrels per day were being carried by rail out of North Dakota at the end of 2013, up about tenfold since August of 2011. Read a transcript or listen to audio from National Public Radio’s Here and Now.
UGPTI offers training on truck weight regulations

UGPTI, via NDLTAP, offered free training sessions on how to comply with truck weight regulations across North Dakota in November, December and January. Workshops were held in Washburn, Mandan, Dickinson, Williston, Grafton, Devils Lake, Jamestown, Fargo, and Minot with about 150 attendees.

Seasonal road weight limits were explained and truck owners and operators, aggregate haulers, truck manufacturers, local authorities, scale operators and others who influence truck route weights, or the purchase and alteration of trucks, learned how to haul the most legal weight without violating truck-weight laws. Instructors included current and former members of the Motor Carrier Operations division of the North Dakota Highway Patrol. The training was funded by the North Dakota Department of Transportation and coordinated by the NDLTAP and the North Dakota Highway Patrol.

Remember to review Effort Reporting/Personnel Activity Confirmation sheets

Personnel Activity Confirmation forms (green sheets) are distributed after the end of each semester to all employees who are paid from sponsored agreements or contributing effort on sponsored agreements (grants and contracts). This is a requirement of the federal government and care must be given to insure that the form clearly reflects the actual effort for each individual.

It is important that program directors review the payroll worksheets distributed after every pay period to insure that each employee’s percent of time is charged to the correct projects, in order to comply with the guidelines of the federal government mandate. If an employee’s percent of time needs to be adjusted, a Fund Change form will need to be submitted to reflect the change.

Please see NDSU Policy 821 for more information - http://www.ndsu.edu/fileadmin/policy/821.pdf
If you have any questions regarding the PAC forms, please contact Kathy at 231-7767 or Kathy.mccarthy@ndsu.edu

Policy Reminder: Sick Leave Policy

Sick leave is a benefit granted by the University to eligible employees and is not a benefit considered to be earned (like annual leave) by the employee. Sick leave is an insurance benefit allowing employees to build a reserve of days they can use for extended illnesses. Abuse of this benefit may be grounds for disciplinary action or termination. Employees are responsible for informing their supervisors of their sickness prior to the start of their work schedule. Sick leave for full-time eligible employees accrues based on rate per hour at a rate equivalent to 12 days per year. Sick leave for eligible part-time employees working 20 hours or more per week is granted on a prorated basis. Sick leave accumulation is unlimited. In addition, sick leave can be used for eligible family members as described in section 143.10.3. Sick leave used for family sick leave shall not exceed 80 hours per calendar year. All NDSU employees are asked to keep track of their dependent sick leave use each year. Any time in excess of the 80 hours needs to be approved by the employing department and the Office of Human Resources. Further information on employee sick leave benefits can be found on the NDSU Web site.

Mileage reimbursement rate changes

The Internal Revenue Service has released Notice 2013-80 http://www.irs.gov/pub/irs-drop/n-13-80.pdf, announcing the 2014 standard mileage rates. Effective for mileage incurred after December 31, 2013, the rates are as follows:

Effective January 1, 2014, the reimbursement rate for in-state mileage changed from 56.5 cents per mile (for travel prior to January 1, 2014) to 56 cents per mile (for travel on or after January 1, 2014).

The Accounting Office website and Policy 515.4 Travel Employees, Privately Owned Transportation, has been updated to reflect the changes. The Travel Expense Voucher will be updated, please be sure to select the correct voucher, dependent upon dates of travel.

If you have any questions, please contact the Accounting Office at 231-7432. NDSU and UGPTI encourage the use of state fleet cars whenever possible for official business.
UGPTI Switches from Shared Google Calendar to Outlook Calendar

UGPTI has switched from the Shared Google Calendar to a UGPTI Department calendar. The calendar can be viewed by all UGPTI employees through Outlook. Steps on how to connect were provided in an email from Mitch Hoffart dated 9/19/13 and can be viewed here. Access for adding information has been given to Sandy Baisch, Bismarck office, Mary Marquart (ATAC/DOTSC), Jody (CJPP), Sue Peterson and Kathy McCarthy for all others. The number of staff with administrative access to the calendar is being kept to a minimum in order to reduce multiple entries and errors.

The calendar is used to notify others of an employee’s absence from the office for extended periods of time to assist in scheduling meetings, etc., and keeping track of travel authorizations and travel information.

If you have any questions about access to the calendar please contact Mitch or Kathy.

Clay County GIS expert is guest speaker Feb. 10

Carol Wickenheiser, GIS database manager for Clay County, MN, will be the guest lecturer Monday, Feb. 10 in TL 785 -- Spatial Analysis in Transportation. The class will meet from 1 to 1:50 p.m. in Ehly 119. All are invited to attend and refreshments will be served at the end of the lecture.

Wickenheiser will present real-world business scenarios that utilize GIS data integration and describe how it is utilized at the local government level. She will also describe the steps and procedures needed to achieve efficiencies through integrated data. She will discuss the benefits of integrating data throughout a county government. Clay County currently stores most data on SQL servers and utilizes the SQL and ESRI software to house its GIS data.

Wickenheiser has been the GIS database administrator for Clay County for nearly 15 years. She currently serves on the Minnesota Digital Cadastral Data Committee, and is a member of URISA, the Pine to Prairie GIS User Group, and the Minnesota GIS/LIS Consortium.
Communication tip: Citing social media

Citing others’ work in your writing avoids plagiarism and helps readers and other scholars find more information if they want it. Citing information from journals and books is a long-standing practice, but authors are just beginning to cope with the need to cite social media. This post, provides guidance for citing social media in MLA and APA formats. Scroll to the bottom of this page for information on citing in Chicago Style.

Recent Publications


- "DUI Recidivism Fact Sheet" is an Issue Brief from the Rural Transportation Safety and Security Center. Alcohol recidivism rates presented are based on alcohol convictions within the previous 10 years, or two or more convictions in the current year.

- "Effectiveness of Various Safety Improvements in Reducing Crashes on Wyoming Roadways" by Zebulun C. Coulter and Khaled Ksaibati at the University of Wyoming was published as Mountain-Plains Consortium publication MPC-13-262. The research summarizes the effectiveness of the Wyoming State Highway Safety Plan on crash severity statewide.
• "Implementation of Low Temperature Tests for Asphalt Mixtures to Improve the Longevity of Road Surfaces" by Pedro Romero and ZacGary L. Jones at the University of Utah was published as Mountain-Plains Consortium publication MPC-13-260. Results from the research will allow the development of asphalt mixtures that have resistance to both low and high temperature distresses.

• "North Dakota Grain and Oilseed Transportation Statistics, 2012-13" by Kimberly Vachal and Laurel Benson was published as Departmental Publication DP-267. The report represents a continuation of analysis concerned with the patterns and methods of distributing grains and oilseeds from North Dakota.

• "Teen Driver Crash Fact Sheet" is an Issue Brief from the Rural Transportation Safety and Security Center. The brief indicates that less than 3% of teen crashes resulted in serious injury in the past five years. However, teen crashes of this type represent a much larger share of all serious injury crashes.

• "Wyoming Freight Movement System Vulnerabilities and ITS" by Rhonda Young, Joel Liesman, David Lucke, and Shane Schieck at the University of Wyoming was published as Mountain-Plains Consortium publication MPC-13-261. This report summarizes research on freight safety with respect to high wind conditions and proposes a system utilizing intelligent transportation system technology to mitigate high wind hazards.

• "North Dakota Driver's Education Instructor Survey: Perceptions and Program Evaluation, 2013" by Andrew Kubas was published as Departmental Publication DP-271. The study addresses two key goals related to improving traffic safety in North Dakota: first, to measure driver's education instructor perceptions of the new curriculum; and, second, to evaluate the new curriculum in relation to its usage in schools.

• "Community Leader and Law Enforcement DUI Survey, 2013" by Kimberly Vachal and Andrew Kubas was published as Departmental publication DP-269. The study examines the actions of those that have firsthand involvement with DUI prevention: prosecutors, community leaders, and law enforcement personnel.

• "Motorcycles: Crash Trends, Conspicuity, and Interventions" by Kimberly Vachal, Donald Malchose, and Laurel Benson was published as Departmental Publication DP-266. Motorcycle crashes in North Dakota are examined using crash data from 2002 to 2012. Additional information regarding motorcycle conspicuity and rider training and education is presented as a basis for efforts to guide crash prevention.

• "ND Traffic Safety: Oil Counties" was published as an Issue Brief for the Rural Transportation Safety and Security Center. It describes
increased traffic volumes on rural roads due to energy industry expansion and the resulting impact on safety

- "Off-Grid MEMS Sensors Configurations for Transportation Applications" by Alivia Plankis and Paul Heyliger at Colorado State University was published as Mountain-Plains Consortium publication MPC-13-257. The report proposes new micro-electromechanical systems sensors with applications in civil infrastructure sensing.

- "Phase I: Positioning Emergency Medical Services for Trauma Response for Rural Traffic Crashes: Pilot Case of Williston Basin in North Dakota" by EunSu Lee, Kimberly Vachal, and Poyraz Kayabas was published as Departmental Publication DP-270. The study estimated the travel response time between the ambulance locations and the demand points and between the demand points and the hospitals.

- "Seat Belt Use on North Dakota Rural Roads" was published as an Issue Brief for the Rural Transportation Safety and Security Center and summarizes efforts to measure seat belt usage for occupants on rural roads in North Dakota.

- "Truck Crash Facts" was published as an Issue Brief for the Rural Transportation Safety and Security Center and highlights how the size/mass difference between 80,000 pound trucks and 4,000 pound passenger vehicles, along with operational differences such as acceleration/deceleration times and turning radiiuses, heighten risk for crashes.

- "Truck Injury Crash Summary" was published as an Issue Brief for the Rural Transportation Safety and Security Center and notes that ND truck injury crash incidence, in terms of injury crashes per VMT, increased 80% between 2002 and 2012.

- "Behavior and Analysis of an Integral Abutment Bridge" by Paul J. Barr, Marv W. Halling, Conner Huffaker, and Hugh Boyle of Utah State University was published as Mountain-Plains Consortium publication MPC-13-256. Researchers studied the bridge movement of the 400 South Street Bridge for one year to quantify changes in bridge movement due to temperature variations.

- "Evaluating Local and Tribal Rural Road Design with the Interactive Highway Safety Design Model (IHSDM)" by Xiao Qin, Zhi Chen, Chase Cutler, and Kimberly Vachal was published as Department Publication DP-264. This publication presents the application and calibration of the Highway Safety Manual (HSM) for rural local two-lane two-way highway segments in South Dakota.

published as Departmental Publication DP-265. It describes a traffic safety survey that provides baseline metrics for understanding perceptions and behaviors related to focus issues.

- "Seismic Vulnerability Analysis of Bridges in Mountainous States" by Matt Hardman, Thomas Wilson, and Suren Chen at Colorado State University was published as Mountain-Plains Consortium publication MPC-13-255. Bridge performance under various combined extreme and service loads is studied and findings are made about controlling cases for different bridge responses and the validity of the traditional superposition approach with consideration to load combinations is also discussed.

- "Commercial Motor Vehicle Enforcement: Identifying Appropriate Levels" was published by Jarret M. Brachman as Staff Paper SP-178. This study of approaches to CMV enforcement taken by four states shows a consistent increase in the willingness and ability use a wide array of mechanisms to minimize the number and seriousness of truck crashes on public roads.

To view these reports and others, go to the UGPTI Research Reports Page.

Submit news and events to: UGPTI Communications Coordinator Tom Jirik at Thomas.jirik@ndsu.edu.