

# Transportation Tidbits



April 2017

## Greetings,

Welcome to the April issue of the Transportation Tidbits Newsletter! This issue features the latest happenings within the transportation industry along with a list of upcoming transportation conferences and webinars. You can also find some of the latest news from our faculty and students! If you have questions or comments about this month's issue, please [let us know](#). Enjoy!

### Important Dates for NDSU Students

**4/3-4/23: Summer/  
Fall registration begins  
online**

**4/14-17: Holiday-  
Spring Recess (no  
classes)**

**4/14: Graduate  
student initial  
disquisition submission  
for May graduation**

### Transportation and Logistics Students to Present Research at Transportation Research Forum

Six North Dakota State University Transportation and Logistics Ph.D. students will present their research at the Transportation Research Forum's 2017 Annual Forum April 20-21 at the University of Illinois in Chicago. The Transportation Research Forum is an independent organization of transportation professionals dedicated to providing an impartial meeting ground for carriers, shippers, government officials, consultants, university researchers, suppliers and others seeking an exchange of information and ideas.

**Fangzheng Yuan** will present "Bus Route Design for Homeless Shelters in Fargo-Moorhead Metropolitan Area." The study examines a new bus route that connects major homeless shelters in the Fargo-Moorhead area to provide a safe, continuous and more efficient bus route for homeless individuals. The researchers studied the background of related groups to find out the shortcomings of current bus route for the homeless shelters. Two bus route plans were generated; a corresponding route timetable was made after the optimal route plan identified. Two transport tool options provided and a cost analysis was conducted help to select the better option.

**Yuan Xu** will present "Age-Based Policy for Blood Transshipment in a Two-Echelon Inventory System." Co-author is Joseph Szemerekovsky, NDSU professor of management. The researchers developed an optimization model for blood transshipment for a two-echelon platelet inventory system. The model was

<b>4/15: Late fees applied to unpaid account balances</b>	developed to manage blood resources more efficiently, reduce the loss of perishable blood products, reduce costs and improve service.
<b>4/18: spring commencement participation deadline</b>	<b>Poyraz Kayabas</b> will present "The Impact of the Graduated Driver Licensing Program in Preventing Motor Vehicle Crashes in North Dakota." In this study, researchers analyzed motor vehicle crashes involving teen drivers in North Dakota to evaluate the changes in crash rates and crash characteristics after the introduction of new graduated driver licensing components such as a minimum amount of supervised driving and a nighttime driving restriction.
<b>4/24: Open registration for summer/fall</b>	<b>N. Muhammad Aslaam Mohamed Abdu "Nick" Ghani</b> will present "Potential Biogas Production from Animal Manure: A Supply Chain Perspective." Co-authors are transportation and logistics student Yong Shin Park, NDSU assistant professor of industrial and manufacturing engineering Chrysafis Vogiatzis and NDSU professor of management Joseph Szmerekovsky. The researchers studied the manure biogas supply chain to identify potential locations for anaerobic digesters (plants). A case study is done for North Dakota which has no anaerobic digester for animal manure but many animal farms that have a huge potential for biogas production.
<b>Recent News Updates</b>	<b>Yong Shin Park</b> will present "Carbon Sensitive Optimization of Biogas Supply Chains Produced from Animal Waste." Co-authors include transportation and logistics student Yong Shin Park, NDSU professor of management Joseph Szmerekovsky, and transportation and logistics student N. Muhammad Aslaam Mohamed Abdu "Nick" Ghani. Biogas from animal manure not only more energy efficient than existing biomass products, but also minimize the carbon emissions. Consequently the researchers studied a mixed integer linear programming model that minimizes total supply cost and carbon emissions from animal waste sourced biogas supply chain. The researchers also incorporated carbon policy into the model to see the impact of different carbon policies on supply chain decisions. To validate the model proposed, case study of North Dakota is adopted where high potential of biogas plant to be developed.
<u><a href="#">Connections</a></u>	
<u><a href="#">National Safe Digging Month: Call 811 Before Digging</a></u>	
<u><a href="#">Adam Savage Tests Safety Technology with NHTSA</a></u>	
<u><a href="#">National Transportation Noise Map</a></u>	<b>Narendra Malalgoda</b> will present "Effect of Chapter 11 Bankruptcy Protection on Airfares in the U.S. Domestic Airline Industry." Co-author is Siew Hoon Lim, associate professor of agribusiness and applied economics at NDSU. The researchers examined the effects of Chapter 11 bankruptcy protection on airfares in the U.S. domestic airline industry using ticket 2001-2012 data. Results show that airfares charged by a bankrupt airline are approximately 4% lower than airfares of other airlines. Individually, two airlines lowered their airfares as much as 16-19% during bankruptcy protection.
<u><a href="#">Awardees Announced for US DOT's SBIR FY 17.1 Solicitation</a></u>	
<u><a href="#">US DOT Celebrates Women's History Month</a></u>	
	<b>RSVP for Staff-Student Social by April 13</b>
	UGPTI will hold a staff-student social event at the Recreation Center in the lower level of the NDSU Memorial Union April 27 from 3 to 5 p.m. Bowling, Table tennis, video games and other activities will be available. Free pizza, subs, water, pop, and cookies will be served. To help us assure there is enough food and refreshments, please RSVP to <u><a href="#">Jody</a></u> by April 13 if you plan to attend.

## UGPTI in the Spotlight

[Research Report- 400 South Corridor Assessment](#)

[Research Report- Building a Sustainable GIS Framework for Supporting a Tribal Transportation Problem](#)

[Research Report- Seismic Retrofit of Spliced Sleeve Connections for Precast Bridge Piers](#)

[North Dakota Truck-Weight Education](#)

[UGPTI Exhibits at Council of College and Military Educators](#)

[ITS Data Management Seminar](#)

## Webinars

- [Practical Technology-Based Approaches to Highway Infrastructure Maintenance](#)
  - April 12, 2017
- [Fundamentals of Resilient and Sustainable Buried Structures](#)
  - April 13, 2017
- [Bases/ Subbases For Concrete Pavements](#)
  - April 17, 2017
- [Reconstructing Old Traffic Circles into Modern Roundabouts](#)
  - April 19, 2017
- [Comparing the Volumetric and Mechanical Properties of Laboratory and Field Specimens of Asphalt](#)
  - April 20, 2017
- [Planning and Growing Intercity Passenger Rail Programs at the State and Regional Levels](#)
  - April 24, 2017
- [Reducing the Impact of Lead Emissions at Airports](#)
  - April 25, 2017
- [Civil Integrated Management: Moving Forward with Implementation](#)
  - April 26, 2017
- [Texture Measurements and Their Correlation with Pavement Functional Performance](#)
  - April 27, 2017

## Upcoming Conferences

- [11th International Bridge and Structures Management Conference: Abstracts Due November 12, 2016](#)
  - April 25-27, 2017, Mesa, Arizona
- [5th International Conference on Roundabouts](#)
  - May 8-10, 2017, Green Bay Wisconsin
- [16th TRB National Transportation Planning Applications Conference](#)
  - May 14-18, 2017, Raleigh, NC
- [2017 Ferry Safety and Technology conference](#)
  - May 11-12, 2017, New York, New York
- [2017 Conference on Ecology and Transportation](#)
  - May 14-18, 2017, Salt Lake City, Utah
- [International Conference on Transportation Infrastructure and Materials](#)
  - June 9-12, 2017, Qingdao, China
- [First International Roadside Safety Conference](#)
  - June 12-15, 2017, San Francisco, California
- [World Conference on Pavement and Asset Management](#)
  - June 14-17, 2017, Minneapolis, Minnesota

- Tenth International Conference on the Bearing Capacity of Roads, Railways, and Airfields
  - June 28-30, 2017, Athens, Greece
- Historic and Archaeological Preservation in Transportation Committee Summer Conference 2017
  - July 2017, Minneapolis, Minnesota
- Resource Conservation and Recovery Summer Conference
  - July 2017, Duluth, Minnesota
- GeoMEast International Conference: "Innovation Infrastructure Geotechnology"
  - July 15-19, 2017, Sharm ElSheikh, Egypt
- Transportation- Related Noise and Vibration Committee Summer Conference
  - July 23-26, 2017, Minneapolis, Minnesota
- 9th New York City Bridge Conference
  - August 21-22, 2017, New York, New York
- UC Davis Institute of Transportation Studies' 16th Biennial Asilomar Conference on Transportation and Energy
  - August 22-25, 2017, Pacific Grove, California
- American Society of Civil Engineers (ASCE) 2017 International Conference on Highway and Airfield Technology
  - August 27, 2017, Philadelphia, Pennsylvania

## Workshops/ Meetings

- Committee for a Study of the Future Interstate Highway System
  - May 17-18, 2017, Irvine, California
- Workshop on Future Highway Capacity Manual Updates
  - June 14-17, 2017, Minneapolis, Minnesota
- 56th Annual Workshop on Transportation Law
  - July 20- August 2, 2017, Salt Lake City, Utah

## New Student Biography



Jinat Rehana studied at Dhaka University in Bangladesh before attending North Dakota State University. She is currently studying transportation economics and plans to graduate with her PhD in transportation and logistics in 2020. Rehana is studying land use changes in North Dakota. In her spare time she enjoys origami, movies, and music.

## Kid President: How to Disagree



**NDSU** UPPER GREAT PLAINS  
TRANSPORTATION INSTITUTE