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Professor, Department of Civil & Environmental Engineering
Associate Director, Mid-America Transportation Center
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EDUCATION

Ph.D. Civil Engineering (Transportation), 1999.
Department of Civil Engineering, North Carolina State University, NC.
Master of Science in Civil Engineering (transportation), 1995.
Department of Civil and Environmental Engineering, Pennsylvania State University, PA.
Bachelor of Science (with honors) in Civil Engineering, 1988.
Department of Civil Engineering, University of Engineering and Technology, Peshawar (Pakistan).

SELECT ACCOMPLISHMENTS

Chair, Transportation Research Board Standing Committee on Highway/Rail Grade Crossings (AHB60).
National and international multidisciplinary collaborative research projects worth \$5.8 million.
National leader in highway-rail crossing safety.
Area editor, Journal of Transportation Safety and Security (SCI-indexed).
Associate editor, Journal of Transportation Research Forum (2015-2018).
Guest editor, Special Issue on Railroad Safety (2016).

EMPLOYMENT

07/2019–Present

Professor of Civil Engineering and Associate Director, Mid-America Transportation Center, University of Nebraska-Lincoln.

10/2018–06/2019

Professor and Interim Chair, Department of Civil Engineering, University of Nebraska-Lincoln.

08/2016–09/2018

Professor and Associate Chair, Department of Civil Engineering, University of Nebraska-Lincoln.

08/2006–07/2016

Associate professor, Department of Civil Engineering, University of Nebraska-Lincoln.

08/2000–07/2006

Assistant professor, Department of Civil Engineering, University of Nebraska-Lincoln.

03/1999–07/2000

Transportation researcher, Center for Transportation Research and Education, Iowa State University.

08/1996–02/1998

Research assistant, Department of Civil Engineering, North Carolina State University.

01/1994–07/1996

Research and teaching assistant, Pennsylvania Transportation Institute, Pennsylvania State University.

07/1989–12/1993

Assistant engineer, Government of NWFP Communications and Works Department, Pakistan.

REFREED JOURNAL PUBLICATIONS¹ (51)

1. Tang, Kun, Shuyan Chen, and Aemal J. Khattak. Deep architecture for citywide travel time estimation incorporating contextual information. *Journal of Intelligent Transportation Systems*, May 2019; <https://doi.org/10.1080/15472450.2019.1617141>.
2. Lee*, Myungwoo and Aemal J. Khattak. A case study of crash severity spatial pattern identification in hot spot analysis. *Transportation Research Record* 2673(9), *Journal of the Transportation Research Board*, May 2019; (page 684-695); <https://doi.org/10.1177/0361198119845367>.
3. Liu*, Huiyuan, Myungwoo Lee* and Aemal J. Khattak. Updating Annual Average Daily traffic estimates at highway-rail grade crossings with geographically weighted Poisson regression. *Transportation Research Record*, *Journal of the Transportation Research Board*, May 2019; <https://doi.org/10.1177/0361198119844976>.
4. Chen, Shuyan, Yingling Fan, Yang Cao, and Aemal J. Khattak. Assessing the relative importance of factors influencing travel happiness. *Travel Behavior and Society*, January 2019; <https://doi.org/10.1016/j.tbs.2019.01.002>.
5. Amirfarrokh Iranitalab*, Aemal J. Khattak and Eric Thompson. Statistical modeling of types and consequences of rail-based crude oil release incidents in the United States. *Journal of Reliability Engineering and System Safety*, December 2018; <https://doi.org/10.1016/j.res.2018.12.009>.
6. Kang*, Yashu, Amirfarrokh Iranitalab* and Aemal J. Khattak. Modeling railroad trespassing crash frequency using a mixed-effects negative binomial model. *International Journal of Rail Transportation*, November 2018; <https://doi.org/10.1080/23248378.2018.1550626>.
7. Iranitalab*, Amirfarrokh and Aemal J. Khattak. Train-level and tank car-level modeling of hazardous materials release in railroad incidents. *Transportation Research Record* 2672(9), *Journal of the Transportation Research Board*, October 2018 (p249-260); <https://doi.org/10.1177/0361198118801337>.
8. Zhao*, Shanshan and Aemal J. Khattak. Direct and indirect effects of Nebraska motor vehicle drivers' characteristics on inattentive driving at highway-rail grade crossings. *Transportation Research Record*, *Journal of the Transportation Research Board*, September 2018; <https://doi.org/10.1177/0361198118794067>. **Note:** This paper received the 2018 Best Paper Award from the Transportation Research Board Standing Committee on Highway/Rail Grade Crossings (AHB60).
9. Tang, Kun, Shuyan Chen, and Aemal J. Khattak. A spatial-temporal multitask collaborative learning model for multistep traffic flow prediction. *Transportation Research Record*, *Journal of the Transportation Research Board*, August 2018; <https://doi.org/10.1177/0361198118790330>.
10. Wali, Behram, Asad J. Khattak and Aemal J. Khattak. A heterogeneity based case-control analysis of motorcyclist's injury crashes: Evidence from motorcycle crash causation study. *Accident Analysis and Prevention*, 119, July 2018 (p 202-214); <https://doi.org/10.1016/j.aap.2018.07.024>.
11. Khan*, Waleed A., and Aemal J. Khattak. Injury severity of truck drivers in crashes at highway-rail grade crossings in the United States. *Transportation Research Record* 2672(10), *Journal of the Transportation Research Board*, June 2018 (p 38-47); <https://doi.org/10.1177/0361198118781183>.
12. Iranitalab*, Amirfarrokh, Yashu Kang* and Aemal J. Khattak. Modeling the probability of hazardous materials release in crashes at highway-rail grade crossings. *Transportation Research Record* 2672(10),

¹ Note: A * by the author's name indicates a graduate student under Khattak's supervision.

Journal of the Transportation Research Board, June 2018 (p 28-37);
<https://doi.org/10.1177/0361198118780885>.

13. Irfan, Muhammad, Ahmed N. Khurshid, Muhammad B. Khurshid, Yasir Ali, and Aemal J. Khattak. Policy implications of work-trip mode choice using econometric modeling. *ASCE Journal of Transportation Engineering, Part A: Systems*, 144 (8), May 2018; <https://doi.org/10.1061/JTEPBS.0000158>.
14. Tang, Kun, Shuyan Chen, Zhiyuan Liu and Aemal J. Khattak. A tensor-based Bayesian probabilistic model for citywide personalized travel time estimation. *Transportation Research Part C: Emerging Technologies*, 90, May 2018 (p 260-280); <https://doi.org/10.1016/j.trc.2018.03.004>.
15. Zhao*, Shanshan, Amirfarrokh Iranitalab* and Aemal J. Khattak. A clustering approach to injury severity in pedestrian-train crashes at highway-rail grade crossings. *Journal of Transportation Safety and Security*, February 2018; <https://doi.org/10.1080/19439962.2018.1428257>.
16. Tang, Kun, Shuyan Chen and Aemal J. Khattak. Personalized travel time estimation for urban road networks: A tensor-based context-aware approach. *Expert Systems with Applications*, February 2018; <https://doi.org/10.1016/j.eswa.2018.02.033>.
17. Zhao*, Shanshan and Aemal J. Khattak. Factors associated with self-reported inattentive driving at highway-rail grade crossings. *Accident Analysis and Prevention*, 109, December 2017, (p 113-122); <https://doi.org/10.1016/j.aap.2017.10.013>.
18. Zhao*, Shanshan and Aemal J. Khattak. Injury severity in crashes reported in proximity of rail crossings—the role of driver inattention. *Journal of Transportation Safety and Security*, June 2017; <https://doi.org/10.1080/19439962.2017.1323061>.
19. Iranitalab*, Amirfarrokh and Aemal J. Khattak. Comparison of four statistical and machine learning methods for crash severity prediction. *Accident Analysis and Prevention*, 108, 2017, (p 27-36); <https://doi.org/10.1016/j.aap.2017.08.008>.
20. Kang*, Yashu and Aemal J. Khattak. Cluster based approach to analyzing crash injury severity at highway-rail grade crossings. *Transportation Research Record 2608, Journal of the Transportation Research Board*, 2017, (p 58-69); <https://doi.org/10.3141/2608-07>.
21. Naik, Bhaven, Li-Wei Tung*, Shanshan Zhao* and Aemal J. Khattak. Weather impacts on single-vehicle truck crash injury severity. *Journal of Safety Research*, 58, 2016, (p 57-65); <https://doi.org/10.1016/j.jsr.2016.06.005>.
22. Lee*, Myungwoo and Aemal J. Khattak. Application of Light Detection and Ranging technology to assess safe passage of low-ground-clearance vehicles at highway-rail grade crossings. *Transportation Research Record 2545, Journal of the Transportation Research Board*, 2016, (p 131-138); <https://doi.org/10.3141/2545-14>.
23. Khattak, Aemal J. and Li-Wei Tung*. Severity of pedestrian crashes at highway-rail grade crossings. *Journal of the Transportation Research Forum*, 54(2), 2015 (p 91-100).
24. Tung*, Li-Wei and Aemal J. Khattak. Distracted motor vehicle driving at highway-rail grade crossings. *Transportation Research Record 2476, Journal of the Transportation Research Board*, 2015, (p 77-84); <https://doi.org/10.3141/2476-11>.
25. Gyawali*, Sunil, Anuj Sharma, Aemal J. Khattak, and Edward Smaglik. Use of decision assistance curves in advanced warrant analysis for indirect left turn intersections. *Transportation Research Record 2486, Journal of the Transportation Research Board*, 2015 (p 54-63); <https://doi.org/10.3141/2486-07>.
26. Zhao*, Shanshan, Aemal J. Khattak, and Eric Thompson. Safety and economic assessment of roundabouts on high speed rural highways. *Journal of the Transportation Research Forum*, 54(1), 2015 (p 131-144).

27. Zhao*, Shanshan and Aemal J. Khattak. Motor vehicle drivers' injuries in train-motor vehicle crashes. *Accident Analysis and Prevention*, 74, 2015 (p 162-168).
28. Khattak, Aemal J. Investigation of train warning times and gate violations. *Transportation Research Record* 2458, *Journal of the Transportation Research Board*, 2014 (p 104-109).
29. Khattak, Aemal J. and Zheng Luo*. Improving non-motorist safety at gated railroad crossings: Potential application of Intelligent Transportation Systems. *Journal of Intelligent Transportation and Urban Planning*, 1(1), 2013 (p 8-15).
30. Khattak, Aemal J. Gate violations by truck drivers at highway-rail grade crossings. *Journal of the Transportation Research Forum*, 52(1), 2013 (p 117-128).
31. Khattak, Aemal J., Miao Gao*, and Zheng Luo*. The impact of removing centerline barriers from highway-rail grade crossings on drivers' violations. *Journal of Transportation Safety and Security*, 4(4), 2012 (p 295-307).
32. Khattak, Aemal J. and Zheng Luo*. Pedestrian and bicyclist violations at highway-rail grade crossings. *Transportation Research Record* 2250, *Journal of the Transportation Research Board*, 2011 (p 76-82).
33. Khattak, Aemal J. Comparison of driver behavior at highway-railroad crossings in two cities. *Transportation Research Record* 2122, *Journal of the Transportation Research Board*, 2009 (p 72-77).
34. Naik, Bhaven*, Justice Appiah, Aemal J. Khattak, and Laurence R. Rilett. Safety effectiveness of offsetting opposing left-turn lanes: a case study. *Journal of Transportation Research Forum*, 48(2), 2009 (p 71-82).
35. McKnight*, Gregory A., Aemal J. Khattak, and Ram Bishu. Driver characteristics associated with correct roundabout negotiation. *Transportation Research Record* 2078, *Journal of the Transportation Research Board*, 2008 (p 96-99).
36. Khattak, Aemal J. and Gregory McKnight*. Gate rushing at highway-railroad grade crossings: Drivers' response to a centerline barrier. *Transportation Research Record* 2056, *Journal of the Transportation Research Board*, 2008 (p 104-109).
37. Khattak, Aemal J. Reducing undesirable motor vehicle driver actions at railroad-highway grade crossings. *Transportation Research Record* 2030, *Journal of the Transportation Research Board*, 2007 (p 54-58).
38. Khattak, Aemal J. and Huda A. Shamayleh*. Highway safety assessment through geographic information system-based data visualization. *ASCE Journal of Computing in Civil Engineering*, 19(4), October 2005 (p 407-411).
39. Gaber, Sharon L., John A. Gaber, and Aemal J. Khattak. Commercial truck parking analysis: Method to the madness or madness in the method. *Journal of Urban Planning and Development*, 131(1), March 2005 (p 50-56).
40. Khattak, Aemal J. Human fatalities in animal-related highway crashes. *Transportation Research Record* 1840, *Journal of the Transportation Research Board*, 2003 (p 158-166).
41. Khattak, Aemal J., Shauna L. Hallmark, and Reginald R. Souleyrette. Application of light detection and ranging technology to highway safety. *Transportation Research Record* 1836, *Journal of the Transportation Research Board*, 2003 (p 7-15).
42. Khattak, Aemal J., Michael D. Pawlovich, Reginald R. Souleyrette, and Shauna L. Hallmark. Factors related to more severe older driver traffic crash injuries. *ASCE Journal of Transportation Engineering*, 128(3), May 2002 (p 243-249).
43. Khattak, Asad J., Aemal J. Khattak, and Forrest M. Council. Effects of work zone presence on injury and non-injury crashes. *Accident Analysis and Prevention*, 34 (1), January 2002 (p 19-29).

44. Khattak, Aemal J. and Keith K. Knapp. Snow event effects on interstate highway crashes. ASCE Journal of Cold Regions Engineering, 15(4), December 2001 (p 219-229).
45. Khattak, Aemal J., and Keith K. Knapp. Interstate highway crash injuries during winter snow and non-snow events. Transportation Research Record No. 1746, Journal of the Transportation Research Board, 2001 (p 30-36). **Note:** This paper received the 2001 Young Researcher Award from the Transportation Research Board Standing Committee on Safety Data, Analysis, and Evaluation (A3B05, now ANB20).
46. Khattak, Aemal J., Joseph E. Hummer, and Hassan A. Karimi. Evaluation of infrastructure data collection technologies. Journal of Public Works Management and Policy, 6(1), July 2001 (p 18-31).
47. Khattak, Aemal J., Joseph E. Hummer, and Hassan A. Karimi. New and existing roadway inventory data acquisition methods. Journal of Transportation and Statistics, 3(3), December 2000 (p 33-46).
48. Karimi, Hassan A., Aemal J. Khattak, and Joseph E. Hummer. Evaluation of Mobile Mapping Systems for Roadway Data Collection. Journal of Computing in Civil Engineering, 14(3), July 2000 (p 168-173).
49. Hummer, Joseph E., Craig R. Scheffler, Aemal J. Khattak, and Hassan A. Karimi. Choosing an inventory data collection system. Transportation Research Record 1690, Journal of the Transportation Research Board 1999 (p 126-134).
50. Karimi, Hassan A., Xiaolong Dai, Aemal J. Khattak, Siamak Khorram, and Joseph E. Hummer. Techniques for automated extraction of roadway inventory features from high-resolution satellite imagery. Geocarto International, 14(2), June 1999 (p 5-16).
51. Khattak, Aemal J., and Asad J. Khattak. A comparative analysis of spatial knowledge and en route diversion behavior across Chicago and San Francisco: Implications for ATIS. Transportation Research Record 1621, Journal of the Transportation Research Board, 1998 (p 27-35).

JOURNAL EDITORIAL ASSIGNMENTS

- 1 Area Editor, Journal of Transportation Safety and Security, Taylor and Francis (SCI-indexed), August 2014—to date.
- 2 Associate Editor, Journal of Transportation Research Forum, spring 2015—2018.
- 3 Guest Editor (with Dr. Steve Richards), Special Issue on Rail Safety, Journal of Transportation Safety and Security, Taylor and Francis, Vol. 8 Supplement 1, May 2016.

FUNDED RESEARCH PROJECTS (Total: \$5.84 million)

Brief Title	Sponsor	Amount (\$)	Period	Personnel
1. Investigation of weather conditions and their relationship to crashes	NE Dept. of Transportation	191,758	07/2019-12/2020 Awarded	Khattak (Co-PI) Anderson (PI)
2. Research on school zone safety	NE Dept. of Transportation	177,888	07/2018-12/2019 Awarded	Khattak (PI) Piatkowski (Co-PI)
3. Nebraska rail crossing safety research	NE Dept. of Transportation	149,892	07/2018-12/2019 Awarded	Khattak (PI) Rilett (Co-PI)
4. Improving crash predictions-A more relevant exposure measure than AADT for rail crossings	USDOT/UTPA Rail Safety Center	72,250	09/2017-06/2018	Khattak (PI)
5. Shipments of oil by rail: Economic implications for safety and safety-related investments	USDOT/UTPA Rail Safety Center	71,650	09/2017-06/2018	Khattak (Co-PI) Thompson (PI)
6. Highway-rail crossing safety improvement by diverting motorists to alternate routes	USDOT/UTPA Rail Safety Center	84,300	07/2016-12/2017	Khattak (PI)
7. Offset right-turn lanes on state highway systems	NE Dept. of Roads	128,350	07/2016-12/2017	Khattak (PI) Sangster (Co-PI)

8. NDOR freight data needs assessment	NE Dept. of Roads	120,000	07/2015-12/2016	Khattak (PI) Rilett (Co-PI)
9. NDOR permitting fees	NE Dept. of Roads	60,000	07/2015-12/2017	Khattak (PI) Rilett (Co-PI)
10. Safety management system needs assessment	NE Dept. of Roads	60,123	07/2014-12/2015	Khattak (PI) Rilett (Co-PI)
11. Active traffic management case study	NE Dept. of Roads	117,362	07/2014-12/2015	Khattak (PI) Sharma (Co-PI)
12. Drivers' perceptions of highway-rail grade crossing safety and their behavior	USDOT/UTPA Rail Safety Center	74,691	07/2014-12/2015	Khattak (PI)
13. Improving safety at rural highway-rail grade crossings by utilizing LiDAR technology	USDOT/UTPA Rail Safety Center	75,284	07/2014-12/2015	Khattak (PI)
14. University Transportation Center for Railway Safety (Tier 1) with University of Texas Rio Grande Valley (year 1 + year 2 + year 3 + year 4)	USDOT/Research & Innovative Tech. Admin.	424,230 420,660 138,555 140,880	10/2013-09/2017	Khattak (Co-PI) Rilett (PI)
15. Investigation of freight data and operations in Nebraska	USDOT/MATC	63,685	07/2013-12/2014	Khattak (PI)
16. Rural/suburban high speed multilane roundabouts	NE Dept. of Roads	123,650	07/2013-12/2014	Khattak (PI)
17. Distracted highway users at highway-rail grade crossings	USDOT/MATC	60,100	07/2012-12/2013	Khattak (PI)
18. Characteristics of fatigued commercial motor vehicle drivers—A preliminary investigation	NE Dept. of Roads	46,934	07/2011 – 12/2012	Khattak (PI)
19. Freight transportation status in NE	NE Dept. of Roads	5,294	05/2011 – 07/2011	Khattak (PI)
20. Crash costs at highway-rail grade crossings in NE	USDOT/MATC	59,800	07/2010 - 12/2012	Khattak (PI) Thompson (Co-PI)
21. Assessment of freight flow through Nebraska	Military Dept./NE Emergency Mgmt.	300,000	07/2009 - 09/2013	Khattak (PI) Rilett (Co-PI)
22. Needs assessment for Nebraska commodity flow survey (CFS)	Military Dept./NE Emergency Mgmt.	40,000	06/2009 - 09/2009	Khattak (PI) Rilett (Co-PI)
23. Assessment of truck safety at railroad crossings in Nebraska	US DOT/MATC	60,000	07/2008 - 06/2009	Khattak (PI)
24. Investigation of factors associated with truck crashes in Nebraska	US DOT/MATC	60,505	07/2008 - 06/2009	Khattak (PI)
25. Safety improvements at railroad crossings for pedestrians and bicyclists	NE Dept. of Roads	199,510	07/2008 - 06/2011	Khattak (PI)
26. Optimal design of work zone crossover – Phase 2	NE Dept. of Roads	42,529	03/2007 - 12/2009	Khattak (PI) Schurr (Co-PI)
27. Mitigation of driver confusion at modern roundabouts	NE Dept. of Roads	119,126	07/2006 - 09/2009	Khattak (PI) Schurr (Co-PI) Bishu (Co-PI)
28. Conditions warranting offset right-turn lanes for improved intersection sight distance	NE Dept. of Roads	82,462	05/2006 - 06/2009	Khattak (Co-PI) Schurr (PI)
29. Centerline curbing at railroad crossings	NE Dept. of Roads	114,427	07/2004 - 06/2006	Khattak (PI), Schurr (Co-PI)
30. Multiple approach lanes at stop-controlled intersections	NE Dept. of Roads	100,636	07/2004 - 03/2009	Khattak (Co-PI), Schurr (PI)
31. UNL SMART Transportation: ITS decision support system development study	US DOT/ Federal Highway Admin.	159,000	05/2006 - 06/2012	Khattak (PI)
32. Needs assessment of intelligent at-grade railroad crossings	US DOT/Federal Railroad Admin.	110,000	08/2006 - 09/2008	Khattak (Co-PI), Stentz (PI), Rilett (Co-PI), Jones (Co-PI)
33. Intelligent grade crossings	US DOT/Federal Railroad Admin.	155,000 190,000	07/2004 - 06/2005 09/2005 - 10/2008	Khattak (Co-PI), Rilett (PI), Jones (Co-PI)

34. Raised pavement markings in work zones	Kansas Dept. of Transportation	26,576	01/2004 - 12/2005	Khattak (PI)
35. Decision tool for work zone traffic control	NE Dept. of Roads	39,174	07/2003 - 06/2006	Khattak (PI), Schurr (Co-PI)
36. Driver information systems at railroad crossings	NE Dept. of Roads	293,762	07/2003 - 06/2005	Khattak (PI)
37. Intersection safety	NE Dept. of Roads	120,333	08/2001 - 06/2005	Khattak (PI)
38. Safety evaluation of left-turn lane line width	NE Dept. of Roads	58,759	08/2002 - 12/2004	Khattak (PI)
39. Identification of vehicular impact conditions associated with serious ran-off-road crashes	NCHRP	499,999	11/2001 - 11/2005	Sicking (PI), Khattak (Co-PI), Mak (Co-PI), Jones (Co-PI)
40. Application of freeway video surveillance	NE Dept. of Roads	40,000	08/2002 - 04/2004	Khattak (PI) Pesti (Co-PI)
41. Emerging technologies for infrastructure management	UNL Research Council	9,995	05/2002 - 12/2002	Khattak (PI)
42. Remote sensing technology for asset management	US DOT/MTC, Iowa State University	47,982	08/2001 - 12/2002	Khattak (PI)
43. Prioritizing bridge deck anti-icing system installations	NE Dept. of Roads	30,709	07/2002 - 01/2003	Khattak (PI), Pesti (Co-PI)
44. Truck parking at interstate rest stops in Nebraska	NE Dept. of Roads	77,846	08/2000 - 06/2001	Khattak (Co-PI), Gaber (Co-PI), Gaber, (Co-PI)

REFREED CONFERENCE PROCEEDINGS AND PRESENTATIONS (53)

1. Tang, Kun, Yongfeng Ma, Shuyan Chen, Aemal J. Khattak, and Yingjiu Pan. Online aggressive driving identification based on in-vehicle kinematic parameters under naturalistic driving conditions. In proceedings of the 98th annual meeting of the Transportation Research Board, Washington DC, January 2019 (paper 19-05279).
2. Iranitalab*, Amirfarrokh and Aemal J. Khattak. Rollover and release of hazardous materials in cargo tank truck crashes. In proceedings of the 98th annual meeting of the Transportation Research Board, Washington DC, January 2019 (paper 19-00847).
3. Iranitalab*, Amirfarrokh and Aemal J. Khattak. Prediction of hazardous materials release in train incidents and cargo tank truck crashes. In proceedings of the 98th annual meeting of the Transportation Research Board, Washington DC, January 2019 (19-03821).
4. Wali, Behram, Asad J. Khattak, Numan Ahmad, Aemal J. Khattak. A heterogeneity based case-control analysis of motorcyclist's injury crashes: Evidence from motorcycle crash causation study. In proceedings of the 98th annual meeting of the Transportation Research Board, Washington DC, January 2019 (paper 19-05159).
5. Zhao*, Shanshan and Aemal J. Khattak. Motor Vehicle Drivers' Knowledge, Attitude and Inattentive Driving at Highway-Rail Grade Crossings—Direct and Indirect Effects. In proceedings of the 97th annual meeting of the Transportation Research Board, Washington D.C., January 2018 (paper 18-05424).
6. Khan*, Waleed A., and Aemal J. Khattak. Injury severity of truck drivers in crashes at highway-rail grade crossings in the United States. In proceedings of the 97th annual meeting of the Transportation Research Board, Washington D.C., January 2018 (paper 18-05356).
7. Iranitalab*, Amirfarrokh, Yashu Kang* and Aemal J. Khattak. Modeling hazardous materials release in crashes at highway-rail grade crossings. In proceedings of the 97th annual meeting of the Transportation Research Board, Washington D.C., January 2017 (paper 18-03375).

8. Liu*, Huiyuan and Aemal J. Khattak. A method for better estimation of motor vehicle crash exposure at highway-rail grade crossings. In proceedings of the 97th annual meeting of the Transportation Research Board, Washington D.C., January 2018 (paper 18-04778).
9. Iranitalab*, Amirfarrokh, Aemal J. Khattak and Eric Thompson. Investigation of United States rail-based crude oil incidents—types and consequences of crude oil release. In proceedings of the 97th annual meeting of the Transportation Research Board, Washington D.C., January 2018 (paper 18-03217).
10. Iranitalab*, Amirfarrokh and Aemal J. Khattak. Train-level and tank car-level modeling of hazardous materials release in railroad incidents. In proceedings of the 97th annual meeting of the Transportation Research Board, Washington D.C., January 2018 (paper 18- 00246).
11. Zhao*, Shanshan and Aemal J. Khattak. Motor vehicle drivers' injuries in crashes reported at or near highway-rail grade crossings. In proceedings of the 95th annual meeting of the Transportation Research Board, Washington DC, January 2016 (paper# 16-5919).
12. Zhao*, Shanshan, Amirfarrokh Iranitalab*, and Aemal J. Khattak. Investigation of pedestrian injury severity in crashes at highway-rail grade crossings using latent class analysis. In proceedings of the 95th annual meeting of the Transportation Research Board, Washington D.C., January 2016 (paper no. 16-3697).
13. Khurshid, Ahmed N., Muhammad Irfan, Anwaar Ahmed, and Aemal J. Khattak. Analyzing the effect of congestion pricing on work-trip mode choice using econometric modeling. In proceedings of the 94th annual meeting of the Transportation Research Board, Washington DC, January 2015 (paper no. 15-0893).
14. Gyawali*, Sunil, Anuj Sharma, and Aemal J. Khattak. LCCA-based decision assistance tool for indirect left turn intersections using Excel-driven Highway Capacity Software. In proceedings of the 94th annual meeting of the Transportation Research Board, Washington D.C., January 2015 (paper no. 15-4912).
15. Khattak, Aemal J. Modern roundabout safety assessment in the United States. In proceedings of the 1st International Road Federation Asia Regional Congress, Bali, Indonesia, November 2014.
16. Khattak, Aemal J. Gate violations by truck drivers at highway-rail grade crossings. In proceedings of the 92nd annual meeting of the Transportation Research Board, Washington D.C., January 2013 (paper 13-0742).
17. Luo*, Zheng and Aemal J. Khattak. Impact of education on non-motorists' gate violations at highway-rail grade crossings. In proceedings of the 92nd annual meeting of the Transportation Research Board, Washington D.C., January 2013 (paper 13-1681).
18. Khattak, Aemal J. Severity of pedestrian crashes at highway-rail grade crossings. In proceedings of the 92nd annual meeting of the Transportation Research Board, Washington D.C., January 2013 (paper 13-4587).
19. Khattak, Aemal J., Anuj Sharma, and Zheng Luo*. Implications of using annual average daily traffic in highway-rail grade crossing safety models. In proceedings of the 91st annual meeting of the Transportation Research Board, Washington D.C., January 2012 (paper 12-2549).
20. Sharma, Anuj, Jacob Schmitz, Aemal J. Khattak, and Virendra Singh. The impact of microscopic factors in evaluating the effects of pedestrian countdown timers on pedestrian decisions. In proceedings of the 91st annual meeting of the Transportation Research Board, Washington D.C., January 2012 (paper 12-3029).
21. Luo*, Zheng, Aemal J. Khattak, and Miao Gao. Long-term safety impact of median barriers at highway-railroad grade crossings. In proceedings of the 89th annual meeting of the Transportation Research Board, Washington D.C., January 2010 (paper 10-3893).
22. Khattak, Aemal J. Drivers of specialty vehicles and roundabout negotiation. In proceedings of the 88th annual meeting of the Transportation Research Board, Washington D.C., January 2009 (paper no. 09-3414).

23. Jones, Elizabeth G., Aemal J. Khattak, and Laurence R. Rilett. Highway-rail grade crossing test bed system at University of Nebraska-Lincoln. In proceedings of the 88th annual meeting of the Transportation Research Board, Washington D.C., January 2009 (paper no. 09-3705).
24. Khattak, Aemal J. and Gregory A. McKnight*. Gate rushing at highway-railroad grade crossings: Drivers' response to a centerline barrier. In proceedings of the 87th annual meeting of the Transportation Research Board, Washington D.C., January 2008 (paper no. 08-2351).
25. McKnight*, Gregory A., Aemal J. Khattak, and Ram Bishu. Driver characteristics associated with correct roundabout negotiation. In proceedings of the 87th annual meeting of the Transportation Research Board, Washington D.C., January 2008 (paper no. 08-2721).
26. McKnight*, Gregory A. and Aemal J. Khattak. Centerline curbing treatment at railroad crossings for improved safety. Mid-Continent Transportation Research Symposium, Ames, Iowa, August 16-17, 2007.
27. Khattak, Aemal J. Reducing undesirable motor vehicle driver actions at railroad-highway grade crossings. In proceedings of the 86th annual meeting of the Transportation Research Board, Washington D.C., January 2007 (paper no. 07-2636).
28. Khattak, Aemal J., Linna Zhang, Joshua L. Hochstein*, and Suid C. Tee*. Crash analysis of expressway intersections in Nebraska. In proceedings of the 85th annual meeting of the Transportation Research Board, Washington D.C., January 2006 (paper no. 06-2753).
29. Knapp, Keith K., Aemal J. Khattak, and Tanveer Oakasa. Development of a countywide deer-vehicle crash frequency model. In proceedings of the 84th annual meeting of the Transportation Research Board, Washington D.C., January 2005 (paper no. 05-1097).
30. Khattak, Aemal J., Geza Pesti, Vijay Kannan*, and Patrick T. McCoy. Data integration and planning for the installation of automatic bridge anti-icing systems. In proceedings of the 82nd annual meeting of the Transportation Research Board, Washington D.C., January 2003 (paper no. 03-2704).
31. Pesti, Geza, Aemal J. Khattak, Vijay Kannan*, and Patrick T. McCoy. Decision aid for prioritizing bridge deck anti-icing system installations. In proceedings of the 82nd annual meeting of the Transportation Research Board, Washington D.C., January 2003 (paper no. 03-2681).
32. Khattak, Aemal J., and Geza Pesti. Bridge prioritization for installation of automatic anti-icing systems in Nebraska. Mid-Continent Transportation Research Symposium, Ames, Iowa, August 21-22, 2003.
33. Shamayleh*, Huda A., and Aemal J. Khattak. Utilization of LiDAR technology for highway inventory. Mid-Continent Transportation Research Symposium, Ames, Iowa, August 21-22, 2003.
34. Khattak, Aemal J., John A. Gaber, and Sharon L. Gaber. A study of Nebraska truck stops, rest areas and commercial truck drivers. In proceedings of the 81st annual meeting of the Transportation Research Board, Washington D.C., January 2002 (paper no. 02-3277).
35. Souleyrette, Reginald R., Ali Kamyab, Zachary Hans, and Aemal J. Khattak. Systematic identification of high crash locations. In proceedings of the 81st annual meeting of the Transportation Research Board, Washington D.C., January 2002 (paper no. 02-3195).
36. Smadi, Omar, Zachary Hans, and Aemal J. Khattak. Integrating maintenance activities into pavement management systems. In proceedings of the 80th annual meeting of the Transportation Research Board, Washington D.C., January 2001 (paper no. 01-3308).
37. Khattak, Aemal J., Keith K. Knapp, Karen L. Giese, and Leland D. Smithson. Safety implications of snowstorms on interstate highways. In proceedings of the 79th annual meeting of the Transportation Research Board, Washington D.C., January 2000 (paper no. 00-0313).

38. Knapp, Keith K., Leland D. Smithson, and Aemal J. Khattak. The use of multiple data sources to evaluate the volume and safety impacts of winter storm events. ITE annual meeting at Nashville, Tennessee, Institute of Transportation Engineers, Washington D.C., August 6-8, 2000 (p 11).
39. Khattak, Aemal J., Michael D. Pawlovich, and Reginald R. Souleyrette. Crash injury severity of older drivers in Iowa. Mid-Continent Transportation Symposium, Ames, Iowa, May 15-16, 2000 (p 235-240).
40. Knapp Keith K., Leland D. Smithson, and Aemal J. Khattak. The mobility and safety impacts of winter storm events in a freeway environment. Mid-Continent Transportation Symposium, Ames, Iowa, May 15-16, 2000 (p 67-71).
41. Smadi, Omar, Zachary Hans, and Aemal J. Khattak. Integrating maintenance activities into pavement management systems. Mid-Continent Transportation Symposium, Ames, Iowa, May 15-16, 2000 (p 82-86).
42. Khattak, Aemal J., Joseph E. Hummer, and Hassan A. Karimi. A protocol for evaluation of descriptive inventory data. In proceedings of the 79th annual meeting of the Transportation Research Board, Washington D.C., January 2000 (paper no. 00-0124).
43. Khattak, Aemal J., Michael D. Pawlovich, and Reginald R. Souleyrette. An investigation of injury severity of older drivers in Iowa. In proceedings of the 79th annual meeting of the Transportation Research Board, Washington D.C., January 2000 (paper no. 00-0482).
44. Khattak, Asad J., Aemal J. Khattak, and Forrest M. Council. Analysis of injury and non-injury crashes in California work zones. In proceedings of the 78th annual meeting of the Transportation Research Board, Washington D.C., January 1999 (paper no. 99-1438).
45. Khattak, Aemal J., Hassan A. Karimi, Xiaolong Dai, and Joseph E. Hummer. High-resolution satellite imagery for automatic and cost effective collection of roadway inventory features. Public Works, November 1998 (p 28-30).
46. Khattak, Aemal J., and Joseph E. Hummer. Analysis of run-off-the-road collisions on two-lane rural highways in North Carolina, USA. ITE Journal, 68 (10), October 1998 (p 18).
47. Karimi, Hassan A., Xiaolong Dai, Aemal J. Khattak, and Joseph E. Hummer. Automated roadway feature extraction from one-meter resolution satellite images. In proceedings of the 1998 IEEE International Geoscience and Remote Sensing Symposium (IGARSS '98), Seattle, Washington, July 1998 (p 2065-2067).
48. Khattak, Aemal J., and Joseph E. Hummer. Analysis of major types of collisions on two-lane rural highways in North Carolina. In proceedings of the 68th Annual ITE Meeting, Toronto, Ontario, Canada, August 1998.
49. Khattak, Aemal J., Konstadinos G. Goulias, and Asad J. Khattak. A comparison of traveler perceptions regarding traffic congestion and route selection behavior across Chicago, San Francisco, and Centre County. In proceedings of the 75th annual meeting of the Transportation Research Board, Washington D.C., January 1996 (paper no. 96-0563).
50. Khattak, Aemal J., and Konstadinos G. Goulias. A comparison of Chicago, San Francisco, and Centre County commuter travel patterns and willingness-to-pay for ATIS in Centre County. In proceedings of the Intelligent Transport Systems World Congress at Yokohama, Japan, Vehicle Road and Traffic Intelligence Society (VERTIS), Tokyo, Japan, November 9-11, 1995 (p 2391).
51. Goulias, Konstadinos G., Jin H. Chung, Martin T. Pietrucha, Jun Ma, Aemal J. Khattak, and Karl Raynar. A method for congestion management, access control, and impact simulation using GIS. In proceedings of the ITE International Conference at Ft. Lauderdale, Florida, April 1995 (p 235-239).

52. Khattak, Aemal J., Konstadinos G. Goulias, and John M. Mason. Selecting strategies to mitigate Intelligent Transportation Systems (ITS) institutional issues. In proceedings of the ITE International Conference at Ft. Lauderdale, Florida, April 1995 (p 87-91).
53. Goulias, Konstadinos G., Jin H. Chung, Jun Ma, and Aemal J. Khattak. A method for access management-impact simulation. In proceedings of the Transportation Research Board 5th National Transportation Planning Methods Applications Conference, Seattle, Washington, January 1995.

OTHER PRESENTATIONS (44)

1. Khattak, Aemal J. Welcome address, Geo-Omaha 2019, 36th Annual Geotechnical Conference, Omaha Feb 08, 2019.
2. Khattak, Aemal J. Railway research projects at the University of Nebraska-Lincoln. IA-KS-MN-NE Rail Safety Conference, Lincoln, Nebraska, March 29-30, 2017.
3. Keynote Speaker, 2nd International Conference on Information Technology and Intelligent Transportation Systems. Safety at highway-rail crossings – Current US trends and ITS applications. Chang'an University, Xi'an, PR China, June 10-11, 2017.
4. Khattak, Aemal J. Railway engineering programs at the University of Nebraska-Lincoln. Presented at the 2016 Summer Rail Conference, Council Bluffs, Iowa, August 10, 2016.
5. Khattak, Aemal J. Safety at highway-rail crossings – Current US trends. Presented at the 1st International Road Federation Europe & Central Asia Regional Congress, Istanbul, Turkey September 2015.
6. Khattak, Aemal J. University of Nebraska-Lincoln transportation engineering research. Presented at the 2015 ASCE/LOCATE conference, Omaha, Nebraska, April 17, 2015.
7. Khattak, Aemal J. (100%). Modern roundabout safety assessment in the United States. Presented at the 1st International Road Federation Asia Regional Congress, Bali, Indonesia, November 2014.
8. Zhao*, Shanshan, Aemal J. Khattak, and Eric Thompson. Safety and economic assessment of roundabouts on high speed rural highways. Presented at the 94th annual meeting of the Transportation Research Board, Washington DC, January 2015 (paper no. 15-1983).
9. Khurshid, Ahmed N., Muhammad Irfan, Anwaar Ahmed, and Aemal J. Khattak. Analyzing the effect of congestion pricing on work-trip mode choice using econometric modeling. Presented at the 94th annual meeting of the Transportation Research Board, Washington DC, September 2014 (paper no. 15-0893).
10. Tung*, Li-Wei and Aemal J. Khattak. Distracted motor vehicle driving at highway-rail grade crossings. Presented at the 94th annual meeting of the Transportation Research Board, Washington DC, September 2014 (paper no. 15-4692).
11. Tung*, Li-Wei, Aemal J. Khattak and Shanshan Zhao. The role of distracted driving in severity of crashes reported in proximity of at-grade highway rail crossings. Presented at the 94th annual meeting of the Transportation Research Board, Washington DC, September 2014 (paper no. 15-2573).
12. Khattak, Aemal J. Nebraska commodity flow survey: Final Report. Commodity Flow Survey Workshop, Lincoln, NE, August 13, 2014.
13. Tung*, Li-Wei and Aemal J. Khattak. A preliminary assessment of distracted driving at highway-rail grade crossings in Nebraska. Presented at the 2014 Global Level Crossing Safety and Trespass Prevention Symposium, Urbana-Champaign, August 05 2014.
14. Khattak, Aemal J. Douglas, Sarpy, and Washington counties areas commodity flow data collection. Douglas county LEPC meeting, February, 2013.

15. Khattak, Aemal J. Severity of older driver traffic crash injuries. Fall 2010 Gerontology Interdisciplinary Colloquium, University of Nebraska-Lincoln, Nebraska, October 12, 2010.
16. Khattak, Aemal J., Terry Byrne, Jason Field, and Steve Laffey. Highway-rail crossing safety 101 – A primer on grade crossing safety. Transportation Research Board Webinar, September 16, 2010.
17. Khattak, Aemal J. Transportation systems research at Whittier Research Center. Presented at the LoCATE mid-year meeting, Lincoln, Nebraska, August 31, 2010.
18. Khattak, Aemal J. An overview of transportation systems engineering research at UNL. Presented at the NU Tour of NTC, Lincoln, Nebraska, August 19, 2010.
19. Khattak, Aemal J. Roundabouts in Nebraska – Issues and opportunities. Presented at the annual Nebraska Transportation Research Council meeting, Nebraska Department of Roads, Lincoln, Nebraska, January 2010.
20. Khattak, Aemal J. Highway safety – Concepts and research at the Nebraska Transportation Center, University of Nebraska-Lincoln. UNL 2009 Professional Development Science and Math Summer Technology Institute. Lincoln, Nebraska, June 18, 2009.
21. Khattak, Aemal J. Nebraska Transportation Center: Overview of research strengths. Presented at the Nebraska Innovation Campus Research Strength Summit, Lincoln, Nebraska, June 15, 2009.
22. Khattak, Aemal J. Highway infrastructure needs – past, present, and future. Presented at the American Planning Association National Infrastructure Investment Initiative, West North Central Regional Field Hearing, Lincoln, Nebraska, March 20, 2009.
23. Khattak, Aemal J. Highway safety research at the University of Nebraska-Lincoln. UNL 2008 Professional Development Science and Math Summer Technology Institute. Lincoln, Nebraska, June 13, 2008.
24. Khattak, Aemal J. Highway safety research at the University of Nebraska-Lincoln. Presented at the Nebraska Transportation Inaugural Summit, Lincoln, Nebraska, April 30, 2008.
25. Khattak, Aemal J. Centerline curbing at highway-railroad crossings. Presented at the 2008 Nebraska Transportation Research Council annual planning meeting, January 24, 2008.
26. Khattak, Aemal J. Median/centerline barriers at highway-railroad crossings for improved safety. Presented at the Eastern Region Rail Crossing Safety Conference, Albany NY, October 2-4, 2007.
27. Khattak, Aemal J. Effectiveness of median barriers in reducing unsafe driver actions at highway-railroad crossings. Presented at the Midstates highway/rail safety meeting, Omaha, NE, May 7-8, 2007.
28. Khattak, Aemal J. Reducing undesirable motor vehicle driver actions at railroad-highway grade crossings. Paper presented at the 86th annual meeting of the Transportation Research Board, Washington D.C., January 2007 (paper no. 07-2636).
29. Khattak, Aemal J. Safety at highway-railroad grade crossings in Nebraska. Presented at the 2006 NDOR-BNSF-UP annual meeting, Embassy Suites, Lincoln, NE October 11, 2006.
30. Khattak, Aemal J., Linna Zhang, Joshua L. Hochstein*, and Suid C. Tee*. Crash analysis of expressway intersections in Nebraska. Paper presented at the 85th annual meeting of the Transportation Research Board, Washington D.C., January 2006 (paper no. 06-2753).
31. Knapp, Keith K., Aemal J. Khattak, and Tanveer Oakasa. Development of a countywide deer-vehicle crash frequency model. Paper presented at the 84th annual meeting of the Transportation Research Board, Washington D.C., January 2005 (paper no. 05-1097).

32. Khattak, Aemal J. Transportation safety research at the University of Nebraska-Lincoln. Safety conscious planning forum, Ithaca, NE September 14, 2005.
33. Shamayleh*, Huda A. and Aemal J. Khattak. Applications of new remote sensing technologies to highway inventory. Paper presented at the 2003 Nebraska GIS Symposium, Lincoln, Nebraska, May 2003.
34. Gopalakrishna*, Mukunda and Aemal J. Khattak. Application of LiDAR technology to intersection sight distance assessment. Paper presented at the 2003 Nebraska GIS Symposium, Lincoln, Nebraska, May 2003.
35. Khattak, Aemal J., Geza Pesti, Vijay Kannan*, and Patrick T. McCoy. Data integration and planning for the installation of automatic bridge anti-icing systems. Paper presented at the 82nd annual meeting of the Transportation Research Board, Washington D.C., January 2003 (paper no. 03-2704).
36. Pesti, Geza, Aemal J. Khattak, Vijay Kannan*, and Patrick T. McCoy. Decision aid for prioritizing bridge deck anti-icing system installations. Paper presented at the 82nd annual meeting of the Transportation Research Board, Washington D.C., January 2003 (paper no. 03-2681).
37. Khattak, Aemal J., John A. Gaber, and Sharon L. Gaber. A study of Nebraska truck stops, rest areas and commercial truck drivers. Paper presented at the 81st annual meeting of the Transportation Research Board, Washington D.C., January 2002 (paper no. 02-3277).
38. Souleyrette, Reginald R., Ali Kamyab, Zachary Hans, and Aemal J. Khattak. Systematic identification of high crash locations. Paper presented at the 81st annual meeting of the Transportation Research Board, Washington D.C., January 2002 (paper no. 02-3195).
39. Smadi, Omar, Zachary Hans, and Aemal J. Khattak. Integrating maintenance activities into pavement management systems. Paper presented at the 80th annual meeting of the Transportation Research Board, Washington D.C., January 2001 (paper no. 01-3308).
40. Khattak, Aemal J., Joseph E. Hummer, and Hassan A. Karimi. A protocol for evaluation of descriptive inventory data. Paper presented at the 79th annual meeting of the Transportation Research Board, Washington D.C., January 2000 (paper no. 00-0124).
41. Khattak, Aemal J., Michael D. Pawlovich, and Reginald R. Souleyrette. An investigation of injury severity of older drivers in Iowa. Paper presented at the 79th annual meeting of the Transportation Research Board, Washington D.C., January 2000 (paper no. 00-0482).
42. Khattak, Aemal J., Keith K. Knapp, Karen L. Giese, and Leland D. Smithson. Safety implications of snowstorms on interstate highways. Paper presented at the 79th annual meeting of the Transportation Research Board, Washington D.C., January 2000 (paper no. 00-0313).
43. Khattak, Asad J., Aemal J. Khattak, and Forrest M. Council. Analysis of injury and non-injury crashes in California work zones. Paper presented at the 78th annual meeting of the Transportation Research Board, Washington D.C., January 1999 (paper no. 99-1438).
44. Khattak, Aemal J., Konstadinos G. Goulias, and Asad J. Khattak. A comparison of traveler perceptions regarding traffic congestion and route selection behavior across Chicago, San Francisco, and Centre County. Paper presented at the 75th annual meeting of the Transportation Research Board, Washington D.C., January 1996 (paper no. 96-0563).

PROJECT REPORTS (31)

1. Khattak, Aemal J. and Yashu Kang*. Offset-right turn lanes on state highway system in Nebraska. Draft final report to the Nebraska Department of Transportation, December 2018.

2. Khattak, Aemal J. and Myungwoo Lee*. Highway-rail safety improvement by diverting motorists to alternate routes. Final report to the University Center for Rail Transportation Safety, August 2018.
3. Khattak, Aemal J. and Huiyuan Liu*. Improving crash predictions—A more relevant exposure measure than AADT for highway-rail grade crossing safety models. Final report to the University Center for Rail Transportation Safety, August 2018.
4. Khattak, Aemal J. and Amirfarrokh Iranitalab*. Permitting Fees. Final report to Nebraska Department of Transportation, July 2018.
5. Thompson, E., Aemal J. Khattak, Amirfarrokh Iranitalab*, and Collin Greer. Shipments of oil by rail: Economic implications for safety and safety-related investments. Final report to the University Center for Rail Transportation Safety, August 2018.
6. Khattak, Aemal J. and Amirfarrokh Iranitalab*. Safety management system needs assessment. Final report to Nebraska Department of Roads, March, 2016.
7. Khattak, Aemal J., Zhenghong Tang, and Myungwoo Lee*. Application of Light Detection and Ranging Technology to assess safe passage of low ground clearance vehicles at highway-rail grade crossings. Final report to University Transportation Center for Rail Safety, December 2015.
8. Khattak, Aemal J. and Shanshan Zhao*. Drivers' perceptions of highway-rail grade crossing safety and their behavior. Final report to University Transportation Center for Rail Safety, December 2015.
9. Khattak, Aemal J., Eric Thompson, and Shanshan Zhao*. Investigation of rural/suburban high-speed roundabouts. Final report to Nebraska Department of Roads, April 2015.
10. Khattak, Aemal J., and Li-Wei Tung*. Investigation of distracted driving at highway-rail grade crossings. Final report to Mid-America Transportation Center, June 2014.
11. Khattak, Aemal J., Laurence R. Rilett, and Carrie A. Mohlman*. Nebraska commodity flow survey. Final report to Nebraska Emergency Management Agency, September 2013.
12. Khattak, Aemal J., and Carrie Mohlman*. Characteristics of fatigued commercial motor vehicle drivers – A preliminary investigation. Final report to Nebraska Department of Roads, December 2012.
13. Khattak, Aemal J., and Zheng Luo*. Safety improvements at highway-railroad grade crossings for pedestrians and bicyclists and assessment of long-term effects of centerline curbing. Final report to the Nebraska Department of Roads, June 2012.
14. Khattak, Aemal J., and Eric Thompson. Development of a methodology for assessment of crash costs at highway-rail grade crossings in Nebraska. Final report to Mid-America Transportation Center, June 2012.
15. Khattak, Aemal J., and Miao Gao*. Truck Safety at highway-rail grade crossings. Final report to Mid-America Transportation Center, June 2012.
16. Khattak, Aemal J., Zheng Luo*, and Miao Gao*. Investigation of truck crashes in Nebraska. Final report to Mid-America Transportation Center, June 2012.
17. Khattak, Aemal J. A report on the freight transportation status in Nebraska. Final report to the Nebraska Department of Roads, August, 2011.
18. Khattak, Aemal J., Gregory A. McKnight*, Karen Schurr, and Ram Bishu. Investigation and mitigation of driver confusion at modern roundabouts. Final report to the Nebraska Department of Roads, October 2009.

19. Khattak, Aemal J., Dwight Mosby*, Gregory A. McKnight*, and Brian R. Gardner*. Centerline curbing treatment at railroad crossings for improved safety. Final Report to the Nebraska Department of Roads, March 2007.
20. Khattak, Aemal J. Expressway intersection Safety. Final Report to the Nebraska Department of Roads, March 2006.
21. Khattak, Aemal J. and B. Naik*. The use of raised pavement markings in work zone applications – A synthesis of practice. Final report to the Midwest Smart Workzone Deployment Initiative, Kansas Department of Transportation, February 2006.
22. Khattak, Aemal J., Bhaven Naik*, and Vijay Kannan*. Safety evaluation of left-turn lane line width at intersections with opposing left turn lanes. Final Report to the Nebraska Department of Roads, December 2004.
23. Khattak, Aemal J., Yu Liu, and Geza Pesti. Application of freeway video surveillance for accident investigation. Final Report to the Nebraska Department of Roads, April 2004.
24. Khattak, Aemal J. and Mukunda Gopalakrishna*. Remote sensing (LiDAR) for management of highway assets for safety. Application of advanced remote sensing technology to asset management. Final report to the Midwest Transportation Consortium, Iowa State University, October 2003.
25. Khattak, Aemal J., Geza Pesti, and Vijay Kannan*. Guidelines for prioritizing bridge deck anti-icing system installations. Final Report on Phase 1 and Phase II to the Nebraska Department of Roads, February 2003.
26. Khattak, Aemal J., Geza Pesti, Vijay Kannan*, and Patrick T. McCoy. Guidelines for prioritizing bridge deck anti-icing system installations. Phase 1: Database creation and preliminary data analysis. Final report to the Nebraska Department of Roads, July 2002.
27. Gaber, Sharon L., John A. Gaber, and Aemal J. Khattak. Commercial vehicle parking along the interstate and major highways in Nebraska. Final report to the Nebraska Department of Roads, June 2001.
28. Souleyrette, Reginald, Ali Kamyab, Zachary Hans, Keith K. Knapp, Aemal J. Khattak, Raj Basavaraju, and Brandon Storm. Systematic identification of high crash locations. Final report to Iowa Department of Transportation IDOT TR-442, Center for Transportation Research and Education, Iowa State University, Ames, IA, May 2001.
29. Karimi, Hassan A., Joseph E. Hummer, and Aemal J. Khattak. Collection and presentation of roadway inventory data. NCHRP Report 437, National Academy Press, Washington D.C., 2000.
30. Karimi, Hassan A., Xiaolong Dai, Aemal J. Khattak, and Joseph E. Hummer. The emergence of high-resolution satellite digital imagery for acquisition of roadway inventory features. Space Energy and Transportation, 3(1), 1998 (p 19-30).
31. Xiaolong Dai, Hassan A. Karimi, Siamak Khorram, Aemal J. Khattak, and Joseph E. Hummer. Roadway feature extraction and delineation from high-resolution satellite imagery. EOM Magazine, May 1999 (p 34-37).

COURSES TAUGHT

Course	Title	Credit hours	Semester (S = Spring, F = Fall)
CIVE 361	Introduction to highway engineering	4/3	S01, S02, S03, S04, S05, S06, S07, S08, S09, S10, S12, S14, F14, S16
CIVE 461/861	Urban transportation planning	3	F00, F01, F02, F03, F04, F05, F06, F07, F08, F09, F10, F11, F12, F13, F14, F15, F16, F17, F18
CIVE 498/898/872	GIS in transportation engineering	3	S01, S02, S04, F05, F09, F11
CIVE 864	Analysis and estimation of travel demand	3	F03, F04, S06, S07, S08, S09, S10, S11, S12, S15
CIVE 963	Highway safety data analysis	3	S04, S05, F06, F08, F10, F12, S16
CIVE 989	Seminar in transportation	1	F02
CIVE 998	Special topics	3	F13, S14

GRADUATE STUDENT ADVISING

	Committee chair		Committee member	
	Graduated	In-progress	Graduated	In-progress
Masters (thesis-based)	12	2	6	1
Ph.D.	7	3	7	3

GRADUATED PHD STUDENTS (7)

1. Dr. Amirfarrokh Iranitalab (December 2018)
Dissertation: Statistical investigation of road and railway hazardous materials transportation safety.
2. Dr. Shanshan Zhao (August 2016)
Dissertation: An investigation of motor vehicle driver inattention and its effects at highway-rail grade crossings.
3. Dr. Wei Li (May 2016)
Dissertation: Safety and operational analysis of intersection approach lane width in the urban Nebraska environment. Co-advised by Dr. Anuj Sharma.
4. Dr. Sunil Gyawali (December 2014)
Dissertation: A new decision making approach for indirect left turn treatments by utilizing decision assistance curves. Co-advised by Dr. Anuj Sharma.
5. Dr. Li-Wei Tung (December 2014)
Dissertation: Investigation of distracted driving at highway-rail grade crossings.
6. Dr. Zheng Luo (December 2012)
Dissertation: A new approach to safety assessment at gated highway-rail grade crossings.
7. Dr. Dwight L. Mosby (December 2010)
Dissertation: Embedded radio frequency identification device license plates for roadside use in Nebraska. Co-advised by Dr. Eric Jones.

GRADUATED MASTERS STUDENTS - THESIS OPTION (12)

1. Timothy Adams (May 2019)
Thesis: Restricted crossing U-turns at rural intersections.
2. Waleed A. Khan (August 2017)

- Thesis: An investigation of motor vehicle driver inattention and its effects at highway-rail grade crossings.
3. Myungwoo Lee (December 2014)
Thesis: GIS-based route risk assessment of hazardous material transportation.
 4. Carrie A. Mohlman (August 2013)
Thesis: Driver fatigue enforcement strategies and their effects on crashes.
 5. Timothy J. Foss Jr. (December 2009)
Thesis: Improving the beneficial usage of offset right-turn lanes at two-way stop-controlled intersections.
 6. Gregory A. McKnight (August 2007)
Thesis: Examination of roundabout users for identification of driver characteristics that lead to incorrect roundabout negotiation.
 7. Daniel L. Sitorius (May 2006)
Thesis: Safety characteristics of multiple-lane approaches at stop-controlled intersections.
 8. Bhaven Naik (December 2004)
Thesis: An evaluation of the safety effectiveness of offsetting opposing left-turn lanes at intersections.
 9. Naresh Kotari (December 2004) Dual Master of Civil Engineering/Community and Regional Planning, Co-supervised by Dr. Gordon Scholz.
Thesis: Travel demand estimation for the City of Lincoln, NE.
 10. Jorge Abos Sanchez (December 2003)
Thesis: Effects of landscaping treatments for the central island at single-lane roundabouts.
 11. Huda A. Shameyleh (December 2003) Dual Master of Civil Engineering/Community and Regional Planning, Co-supervised by Dr. Brito Mutunayagam.
Thesis: Utilization of advanced remote sensing for rural highway safety.
 12. Mukunda Gopalakrishna (December 2002)
Thesis: Application of LiDAR technology to intersection sight distance assessment.

DISTINCTIONS AND AWARDS

2018 Best Paper Award (with Dr. Shanshan Zhao), Transportation Research Board Committee on Highway/Rail Grade Crossings, AHB60.
 UNL College of Engineering Service Award, 2016.
 UNL University-wide/Holling Family Master Teacher Award, 2015.
 American Society of Civil Engineers ExCEED teaching fellow (2005).
 Big 12 Faculty Fellowship Award 2003, University of Nebraska-Lincoln.
 2001 Young Researcher Award, Transportation Research Board Standing Committee on Safety Data Analysis and Evaluation (ANB20).

SERVICE

University of Nebraska-Lincoln and UNL College of Engineering
 Member, Search Committee for Full Professor, National Defense, UNL College of Engineering, 2018.
 Judge for UNL College of Engineering Graduate Teaching Assistant Competition, 2016.
 Member, University Parking Advisory Committee, 2014-to date.
 Senator, UNL Academic Senate, 2006–2012.
 Member, Advisory Committee for Ag Transportation Safety, NE Safety Center, University of Nebraska-Kearney (2007-08).
 Member, UNL College of Engineering Computer Committee, 2001–2008.
 Member, UNL College of Engineering Graduation with Distinction Committee, 2002–to date.

Member, Search Committee for GIS technician, UNL Facilities Management and Planning, 2005.
Chair/member, Search Committee for Nebraska Transportation Center Program Manager, 2009/2017.

Department of Civil Engineering

Co-Chair, Undergraduate Student Advising Committee, August 2016–to date.
Chair (August 2014–July 2016; August 2005–2012) and member (2001–2003; 2012–July 2014; August 2016–to date), Equipment, Space & Facilities Committee (Lincoln).
Chair, Teaching Support Committee, August 2011–2012.
Member, Recruiting Committee, 2000–2006.
Member, Curriculum Committee, 2011–2013.
Program Facilitator, Honors Program, May 2005–July 2008.
Institute of Transportation Engineers Student Chapter Advisor, Sept 2009–2016.
Chair, Ogee Scholarship Award Committee, 2016, 2017.
Chair, ASCE Student Award Committee, 2016, 2017.

Professional Organizations

Elected to the Intelligent Transportation Systems (ITS) Heartland Board of Directors, 2006–2010.
Member on the Metro Area Motorist Assist Steering Committee, Omaha Metropolitan Area Planning Agency, NE, 2005–2012.
Director of Education, Lincoln-Omaha-Council Bluffs Association of Transportation Engineers (LoCATE), 2008–2010.
Judge for the American Council of Engineering Companies/Nebraska (ACEC/N) Young Professional of the Year Award, 2010, 2011, and 2012.
Committee chair and judge for ITS Heartland Student Paper Award, 2010.
Committee member and judge for ITS Heartland Student Presentations, 2011.
Member on the NE Traffic Records and Coordinating Committee, 2012—to date

Journal Reviewer

Accident Analysis and Prevention, Canadian Journal of Civil Engineering, Journal of Cold Regions Engineering, Journal of Computer-Aided Civil and Infrastructure Engineering, Journal of Photogrammetric Engineering and Remote Sensing, Journal of Public Policy and Management, Journal of Transportation Engineering, Journal of Transportation Research Forum, Journal of Transportation Safety and Security, Transportation Research Part C, Transportation Research Records.

Research Proposal Reviewer

National Science Foundation.
Qatar National Research Fund.
Pacific Northwest Transportation Consortium.

PROFESSIONAL ACTIVITY

Chair, Transportation Research Board Committee AHB60–Highway-Rail Grade Crossings (04/2015—to date).

Transportation Research Board 98th Annual Meeting, Washington DC, January 2019:

- i. Presiding officer, AHB60 Committee Meeting
- ii. Presiding officer, Session 1268 “Current Highway-Rail Grade Crossing Research”
- ii. Presiding officer, Session 1564 “Highway-Rail Grade Crossings Research”

Transportation Research Board 97th Annual Meeting, Washington DC, January 2018:

- i. Presiding officer, Session 222 “Safety at Highway/Rail Grade Crossings”
- ii. Presiding officer, Session 324 “Analysis of Safety Concerns at Highway/Rail Grade Crossings”
- iii. Presiding officer, Session 613 “Human Behavior at Highway/Rail Grade Crossings”
- iv. Presiding officer, AHB60 Committee Meeting

Transportation Research Board 96th Annual Meeting, Washington DC, January 2017:

- i. Presiding officer, Session 447 “Highway/Rail Grade Crossing Accident Analysis”
- ii. Presiding officer, Session 583 “Current Trends in Highway/Rail Grade Crossing Research”
- iii. Presiding officer, Session 734 “Current Highway/Rail Grade Crossing Research”
- iv. Presiding officer, AHB60 Committee Meeting

Transportation Research Board 95th Annual Meeting, Washington DC, January 2016:

- i. Presiding officer, Session 355 “Innovations in Highway-Rail Crossing Safety”
- ii. Presiding officer, Session 591 “Railroad Safety Analysis: Methods and Applications”
- iii. Presiding officer, Session 695 “Railroad Trespassing and Right-of-Way Fatality Prevention”
- iv. Presiding officer, AHB60 committee meeting

Member, IA-KS-MN-NE Rail Safety Conference Planning Committee, 2018.

Member, Transportation Research Board Committee AHB60–Highway-Rail Grade Crossings (2009-03/2015).

Committee Research coordinator, AHB60 – Highway-Rail Grade Crossings, 2012-03/2015.

Member, International Road Federation (IRF) Technical and Scientific Committee for the 1st IRF Europe & Central Asia Regional Congress, Istanbul, Turkey, September 2015.

Moderator for one technical session at the 1st IRF Europe & Central Asia Regional Congress, Istanbul, Turkey, September 2015.

Member, International Road Federation (IRF) Technical and Scientific Committee for the 1st IRF Asia Regional Congress, Bali, Indonesia, November 2014.

Moderator of two technical sessions at the 1st IRF Asia Regional Congress, Bali, Indonesia, November 2014.

Member of Nebraska Transportation Research Council (2002 - 2007).

Member, Transportation Research Board Subcommittee ANB20(3)–Surrogate Measures of Safety (2010-2018).

Member, Transportation Research Board Committee AFB80–Geospatial Data Acquisition Technologies in Design and Construction (1999-2009).

Registered Professional Engineer (PE), Civil/10918 (Pakistan).

Associate Member, American Society of Civil Engineers (ASCE).

Member, Institute of Transportation Engineers (ITE).

Member of Chi Epsilon, the national honorary civil engineering fraternity (1998).

Member, Nebraska GIS/LIS Association (2002-2010).

Member of the Mid-Continent Transportation Symposium Planning Committee (2003, 2007 and 2009).