

**Aemal J. Khattak, Ph.D., Professor of Civil Engineering and Director of Mid-America Transportation Center, University of Nebraska-Lincoln**

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**Education:**

- Ph.D., Civil Engineering, North Carolina State University, NC, 1999
- M.S., Civil Engineering, Pennsylvania State University, PA, 1995
- B.S., Civil Engineering, NWFP University of Engineering & Technology, Pakistan, 1988

**Employment History:**

- 2016-Present (8 years), Full Professor, Civil and Environmental Engineering Department, University of Nebraska-Lincoln (UNL), Lincoln, NE
- 2021-Present (1 year), Director, Mid-America Transportation Center, UNL
- 2018-2019 (1 year), Interim Department Chair, Civil and Environmental Engineering Department, UNL
- 2006-2016 (10 years), Associate Professor, UNL
- 2000-2006 (6 years), Assistant Professor, UNL
- 1999-2000 (1 years), Transportation Researcher, Iowa State University, Ames, IA
- 1996-1998 (2 years), Graduate Research Assistant, North Carolina State University, Raleigh, NC
- 1994-1995 (1 year), Research and Teaching Assistant, Pennsylvania State University, State College, PA

**Relevant External Grants and Contracts as Principal/Co-Principal Investigator:**

- “Mid-America Transportation Center” USDOT Region 7 University Transportation Center, University of Nebraska-Lincoln, **\$2,583,300 (year 6 funding, Oct 1, 2021–Sep 30, 2023).**
- “Nebraska Railroad Crossing Safety Research,” Nebraska Department of Transportation, **177,888 (Jul 2017–Dec 2020).**
- “Risk Assessment of Hazardous Material Transportation for Small and Tribal Communities.” Mid-America Transportation Center, USDOT UTC Program, **\$221,338. (Jan 2020–Sep 30, 2022).**
- “Research on School Zone Safety,” Nebraska Department of Transportation, **\$177,888. (Jul 1, 2018–Aug. 31, 2022).**
- “Improving crash predictions-A more relevant exposure measure than AADT for rail crossings,” USDOT UPTA Rail Safety Center, **\$72,250 (Sep 2017–Jun 2018).**
- “Safety Improvements at Railroad Crossings for Pedestrians and Bicyclists,” Nebraska Department of Transportation, **\$199,510 (Jul 2007–Jun 2011).**
- “Crash costs at highway-rail grade crossings in Nebraska. Mid-America Transportation Center, USDOT UTC Program, **\$59,800 (Jul 2010–Dec 2012).**
- “Centerline curbing at railroad crossings,” Nebraska Department of Transportation, **\$114,427 (Jul 2004–Jun 2009).**

**Relevant Publications:** \* Graduate Student Co-Author

- Iranitalab\*, Amirfarrokh and **Aemal J. Khattak**. Probabilistic classification of hazardous material release events in train incidents and cargo tank truck crashes. *Journal of Reliability Engineering and System Safety*, Vol. 199, Jul 2020; <https://doi.org/10.1016/j.ress.2020.106914>.
- 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>.
- Iranitalab\*, Amirfarrokh, **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*, Vol. 185 May 2019 (p 232-239); <https://doi.org/10.1016/j.ress.2018.12.009>.
- 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*, Nov 2018; <https://doi.org/10.1080/23248378.2018.1550626>.
- 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*, Oct 2018 (p249-260); <https://doi.org/10.1177/0361198118801337>.
- 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*, Sep 2018; <https://doi.org/10.1177/0361198118794067>.
- 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*, Jun 2018 (p 38-47); <https://doi.org/10.1177/0361198118781183>.
- 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*, Feb 2018; <https://doi.org/10.1080/19439962.2018.1428257>.

**Relevant External Service:**

- (2021-Present) Editorial Board Member, *International Journal of Urban and Regional Planning*
- (2020-Present) Inaugural editorial board member (Handling Editor), *Transportation Research Records, Transportation Research Board*
- (2014-Present) Area Editor, *Journal of Transportation Safety and Security* (SCI-indexed)
- (2015-2021) Immediate Past Chair, *Transportation Research Board Standing Committee on Highway/Rail Grade Crossings (AR080)*
- (2016) Guest Editor, Special Issue on *Railroad Safety*