

Halil Ceylan, Ph.D. Dist.M.ASCE	
<p>Pitt-Des Moines, Inc. Professor of Civil, Construction and Environmental Engineering (CCEE), Geotechnical and Materials Engineering Group and Intelligent Infrastructure Engineering Program</p> <p>ISU Site Director, PEGASAS - FAA COE on General Aviation</p> <p>Director, Program for Sustainable Pavement Engineering & Research (PROSPER) at Institute for Transportation (InTrans)</p> <p>410 Town Engineering Bldg. Iowa State University 813 Bissell Road Ames, IA 50011-1066</p>	<p>Telephone Number: +1 (515) 294-8051 E-mail: hceylan@iastate.edu</p> <p>IOWA STATE UNIVERSITY Civil, Construction, and Environmental Engineering</p> <p>IOWA STATE UNIVERSITY Institute for Transportation</p>

EDUCATION

- PhD, Civil Engineering, University of Illinois at Urbana-Champaign, December 2002
- MS, Civil Engineering, University of Illinois at Urbana-Champaign, May 1995
- MS, Civil Engineering, Dokuz Eylul University, Izmir, Turkey, June 1993
- BS, Civil Engineering, Dokuz Eylul University, Izmir, Turkey, June 1989

PROFESSIONAL EXPERIENCE

- Professor, CCEE, Iowa State University, July 2015–present
- Associate Professor, CCEE, Iowa State University, July 2010–June 2015
- Assistant Professor, CCEE, Iowa State University, 2002–2010

SELECTED RESEARCH PROJECTS

Cumulative research funds for more than 130 research projects are approximately \$20.4 million (over \$23.6 million project funds including matching funds)

- Investigators: **Ceylan, H.**, S. Kim, and I. H. Cho. *Development of Approaches to Quantify Superloads and Their Impacts on the Iowa Road Infrastructure System*, Sponsor: Iowa Highway Research Board (IHRB), Duration: November 1, 2019–October 31, 2024; Total funding: \$389,926; Role: PI.
- Investigators: **Ceylan, H.**, S. Kim, Y. Zhang, I.-H. Cho, D. Waid, and B. Moore. *Development of Pavement Structural Analysis Tool (PSAT) for Iowa Local Roads*, Sponsor: IHRB, Duration: September 1, 2018–March 31, 2023; Total funding: \$309,618; Role: PI.
- Investigators: **Ceylan, H.**, S. Kim, Y. Zhang, S. De Vries, and D. Waid. *Development of Iowa Pavement Analysis Technique (IPAT)*, Sponsor: IHRB, Duration: January 1, 2018–June 30, 2021; Total funding: \$250,000; Role: PI.
- Investigators: **Ceylan, H.** and S. Kim. *Effect of Increased Precipitation (Heavy Rain Events) on Minnesota Pavement Foundations*, Sponsor: Minnesota Department of Transportation (MnDOT) and

Minnesota Local Road Research Board (LRRB), Duration: January 1, 2022–May 31, 2024; Total funding: \$169,999; Role: PI.

- Investigators: **Ceylan, H.**, C. Rutherford, B. Cetin, and D. J. White. *Base Stabilization Additives – Effect on Granular Equivalency (GE)*, Sponsor: MnDOT, Duration: December 16, 2019–May 31, 2024; Total funding: \$195,229; Role: PI.
- Investigators: **Ceylan, H.**, A. Buss, and B. Cetin. *Determining Pavement Design Criteria for Recycled Aggregate Base and Large Stone Subbase*, Sponsor: National Road Research Alliance (NRRRA) – MnDOT, Duration: October 1, 2017–June 30, 2021; Total funding: \$225,000; Role: PI.
- Investigators: **Ceylan, H.**, K. Gopalakrishnan, and S. Kim. *Implementing a Multiple-Slab Response Model for Top-Down Cracking Mode in Rigid Airport Pavements*, Sponsor: Federal Aviation Administration (FAA); Duration: August 15, 2015–February 14, 2018; Total funding: \$509,192; Role: PI.
- Investigators: Khazanovich, L. and **H. Ceylan**. *Effects of Implements of Husbandry “Farm Equipment” on Pavement Performance*, Federal Highway Administration (FHWA) Pooled-Fund Study; Total funding: \$433,000; Amount allocated to ISU (including the pavement construction and other costs): \$216,500; Role: Co-PI (PI for the project share for Iowa State University).

SELECTED PUBLICATIONS

Total: over 400 peer reviewed publications and over 400 presentations

- Koh, Y., **H. Ceylan**, S. Kim, and I. H. Cho. 2023. Mechanistic Basis for Permit Fee Decision of Superloads Traveling on Low-Volume Roads Using Structural Damage Evaluation. Presented at the *13th TRB International Conference on Low Volume Roads and Transportation Research Record: Journal of the Transportation Research Board*. <https://doi.org/10.1177/03611981231156577>.
- Citir, N., P. Gopiseti, **H. Ceylan**, and S. Kim. 2023. Evaluating the Impact of Overweight Trucks on Rigid Pavement Performance Using AASHTOWare Pavement ME Design. *Road Materials and Pavement Design*. <https://doi.org/10.1080/14680629.2023.2199879>.
- Kaya, O., N. Citir, **H. Ceylan**, S. Kim, and D. Waid. 2022. Development of Pavement Performance and Remaining Service Life Prediction Tools for Iowa Jointed Plain Concrete Pavement Systems. *ASCE Journal of Transportation Engineering, Part B: Pavements*, Vol. 149, No. 1, p. 04022070.
- Koh, Y., **H. Ceylan**, S. Kim, and I. H. Cho. 2021. Critical Responses of Flexible Pavements Under Superheavy Loads and Data-Driven Surrogate Model. *International Journal of Pavement Research and Technology*. <https://doi.org/10.1007/s42947-021-00146-7>.
- Satvati, S., A. Nahvi, B. Cetin, J. Ashlock, C. T. Jahren, and **H. Ceylan**. 2020. Performance-based Economic Analysis to Find the Sustainable Aggregate Option for a Granular Roadway. *Transportation Geotechnics*. <https://doi.org/10.1016/j.trgeo.2020.100410>.

PROFESSIONAL AFFILIATIONS, HONORS, AND SERVICE

- Member of more than 30 national and international committees and organizations, editorial board member for 9 international journals, 19 track organizer/chair, presided 49 sessions, 23 other professional activities (including international advisory committees), 25 services to Iowa State University since August 2002.

GRADUATE ADVISORS AND POSTDOCTORAL SPONSORS/ THESIS ADVISOR AND POSTGRADUATE-SCHOLAR SPONSOR

- 66 Graduate Students/Thesis Advised; currently, 11 Ph.D. students and 1 Master's Student advising as Major or Co-Major professor (As of Summer 2023); 16 Postdoctoral scholars/ Professional Staff Supervised

AWARDS, RECOGNITIONS

- 2022 Class of Distinguished Member, American Society of Civil Engineers (ASCE)
- 2021 ASCE James Laurie Prize