Hani H. Titi, Ph.D., P.E., M.ASCE
Professor
Department of Civil and Environmental Engineering
University of Wisconsin-Milwaukee

Education

Ph.D., Geotechnical Engineering, Louisiana State University, 1996
M.S., Geotechnical Engineering, Jordan University of Science and Technology, 1990
B.S., Civil Engineering, Yarmouk University, 1987

Academic experience

8/2019 – present	Professor with Tenure, University of Wisconsin-Milwaukee, Milwaukee, WI
8/2005 – 8/2019	Associate Professor with Tenure, University of Wisconsin-Milwaukee, Milwaukee, WI
9/2012 – 8/2018	Associate Director for Pavements at the Center for By-products Utilization (CBU), University of Wisconsin-Milwaukee, Milwaukee, WI
9/2007 – 6/2008	U.S. Fulbright Scholar, Jordan University of Science and Technology, Irbid, Jordan
8/2001 – 8/2005	Assistant Professor, University of Wisconsin-Milwaukee, Milwaukee, WI
8/1992 – 8/1996	Research Assistant, Louisiana State University, Baton Rouge, LA

Non-academic experience

5/2000 – 8/2001	Pavement Research Engineer Supervisor, Louisiana Transportation Research Center, Louisiana Department of Transportation and Development, Baton Rouge, LA
9/1996 – 5/2000	Research Associate, Louisiana Transportation Research Center, Louisiana State University, Baton Rouge, LA

Certifications or professional registrations

Professional Engineer, State of Louisiana (Active, License #28577)

Honors and awards

- Best Research Paper Award, Transportation Research Congress, Beijing, China, 2017
- Fulbright Teaching/Research Scholarship – U.S. Scholar to Jordan University of Science and Technology, 2007/2008
- The 13th Great Lakes Geotechnical and Geo-environmental Engineering Service Award, 2005
- Phi Kappa Phi, 1996
- 2006 - TRB paper nomination for the Transportation Research Board K.B. Wood Award on design and construction

Service activities

1. Handling Editor, Journal of the Transportation Research Board (2020 to present)
2. Editorial Board Member, International Journal of Pavement Engineering (2020 to present)
3. Editorial Board Member, International Journal of Geotechnical Engineering, Taylor and Francis (Fall 2016 – 2020)
4. Secretary, ASCE Geo-Institute Pavement Committee (2008 – 2019)
5. Member, TRB Committee on Geotechnical Instrumentation and Modeling, FS20, (2015 –2021)
6. Member (Academia Representative), Steering Committee, Wisconsin Highway Research Program, Wisconsin Department of Transportation (2018–2020, 2-year term)
7. Member, Technical Oversight Committee on Flexible Pavements, Wisconsin Highway Research Program
8. Member, Technical Oversight Committee on Geotechnical Engineering, Wisconsin Highway Research Program
9. Panel Member, NCHRP Project 20–05, Synthesis Topic 45–05 Current Practices for Design and Load Testing of Large Diameter Open-End Driven Pipe Piles, (2013 – 2015)
10. Panel Member, NCHRP Project 24–31, AASHTO LRFD Design-Construction Specifications of Shallow Foundations for Highway and Bridge Structures, (2007 – 2009)

Selected funded transportation infrastructure projects

1. *Quality Testing of Wisconsin Aggregates*, Wisconsin Highway Research Program (WHRPP, Wisconsin Department of Transportation (WisDOT) SPR#0092-15-06. **PI: Titi**, Budget: $174,980.
2. *Routing Oversize Overweight Truck in Wisconsin*, WisDOT. **PI: Titi**, Budget: $39,500.
3. *Evaluation of Recycled Base Aggregates*, WHRP/WisDOT, SPR#0092-15-06. **PI: Titi**, Project Budget: $99,990.
4. *Evaluation of the Long-Term Degradation and Strength Characteristics of In-situ Wisconsin Virgin Base Aggregates under HMA Pavements*, WHRP, WisDOT, SPR#0092-15-06. **PI: Titi**, Budget: $119,997.
5. *Base Compaction Specification Feasibility Analysis*, WHRP/WisDOT, **PI: Titi**, Budget: $106,936.

6. *Phase II Investigation of Testing Methods to Determine Long Term Durability of Various Types of Wisconsin Aggregate Resources*, WHRP/WisDOT, SPR#0092-10-08. PI: Tabatabai, **Co-PI: Titi**, Budget: $59,991
7. *Evaluation of Wisconsin Department of Transportation Quality Management Program Activities and Impacts on Pavement Performance*, WHRP/WisDOT, PI: Faheem (Temple University), **Co-PI: Titi**, Budget: $100,000.
8. *Feasibility Study for a Freeway Corridor Infrastructure Health Monitoring Instrumentation Testbed*, Wisconsin Department of Transportation SPR#0656-43-04, **PI: Titi**, Budget: $100,000.

Selected refereed journal publications

1. Saadeh, S., Katawal, P., Kabir, F., Fini, E., and **Titi, H.** (2024). "Performance of Reclaimed Asphalt Pavements Containing Recycled Waste Plastics," ***Journal of Cleaner Production***, Volume 442, 140935, https://doi.org/10.1016/j.jclepro.2024.140935
2. Jiang, X., Zhang, F., Huang, B., **Titi, H.**, Polaczyk, P., Ma, Y., Wang, Y., and Cheng, Z. (2024). "Full-Scale Accelerated Testing of Geogrid-Reinforced Inverted Pavements," ***Geotextiles and Geomembranes****, An official Journal of the International Geosynthetics Society*, in press, https://doi.org/10.1016/j.geotexmem.2024.01.005
3. **Titi, H.**, Sooman, M., and Tabatabai, H. (2024) "Characterization of Recycled Aggregates in Existing Pavement Base Layers," ***ASTM Geotechnical Testing Journal***, 47, no. 1, 22–44. https://doi.org/10.1520/GTJ2022026
4. Jiang, X., **Titi, H.**, Ma, Y., Polaczyk, P., Zhang, M., Gabrielson, J., Bai, Y., and Huang, B. (2022). "Evaluating the performance of inverted pavement structure using the accelerated pavement test (APT)*,"* ***Construction and Building Materials***, Volume 346, 128489, https://doi.org/10.1016/j.conbuildmat.2022.128489
5. **Titi, H.**, Qamhia, I., Ramirez, J., and Tabatabai, H. (2022). "Long-Term Performance Monitoring of Flexible Pavements Constructed on Recycled Base Layers," ***Journal of the Transportation Research Board***. https://doi.org/10.1177/03611981221092000
6. Hosseini, A., Faheem, A., and **Titi, H.**, and S Schwandt (2022). Deterioration Modeling of Flexible Pavements Based on As-Produced and As-Constructed Properties", ***ASCE Journal of Transportation Engineering****, Part B: Pavements* 148 (2), 04022025. https://ascelibrary.org/doi/10.1061/JPEODX.0000372
7. Bahumdain, A., Tabatabai, H., **Titi, H.** (2022). "Analysis of Soil Settlement Behind Bridge Abutments," ***Transportation Geotechnics***, Volume 36, 100812, https://doi.org/10.1016/j.trgeo.2022.100812
8. Jiang, X., Gabrielson, J., **Titi, H.**, Polaczyk, P., Zhang, M., Xiao, R., Hu, W., Bai, Y., and Huang, B. (2022). "Field Investigation and Numerical Analysis of Inverted Pavement System in Tennessee, USA," ***Transportation Geotechnics***, Volume 35, 100759, https://doi.org/10.1016/j.trgeo.2022.100759
9. Al-Barqawi, M., Aqel, R., Wayne, M., **Titi, H.**, and Elhajjar, R. (2021) "Polymer Geogrids: A Review of Material, Design and Structure Relationships," ***Materials***, 14 (16), 4745, https://doi.org/10.3390/ma14164745
10. Hosseini, A., Faheem, A., and **Titi, H.** (2020). "Effects of Quality Control Parameters on In-Service Performance of Flexible Pavements," ***ASCE Journal of Materials in Civil Engineering***, 32 (12), 04020378. https://doi.org/10.1061/(ASCE)MT.1943-5533.0003248.
11. A Hosseini, A Faheem, **Titi, H.**, and S Schwandt (2020). "Evaluation of the Long-term Performance of Flexible Pavements with Respect to Production and Construction Quality Control Indicators," ***Construction and Building Materials***, Volume 230, 116998, https://doi.org/10.1016/j.conbuildmat.2019.116998
12. **Titi, H.**, N Coley, DJ Mulder, and W Wondrachek (2019). "Wisconsin's Oversize–Overweight Truck Route Evaluation and Efficiency," *TR NEWS*, ***Transportation Research Board****, Research Pays Off*, pp. 37-39. http://onlinepubs.trb.org/onlinepubs/trnews/trnews324RPO.pdf
13. **Titi, H.** , Dakwar, M., Sooman, M., and Tabatabai, H. (2018). "Long Term Performance of Gravel Base Course Layers in Asphalt Pavements," ***Journal of Case Studies in Construction Materials***, e00208, https://doi.org/10.1016/j.cscm.2018.e00208
14. **Titi, H.**, and Matar, M. (2018). "Estimating Resilient Modulus of Base Aggregates for Mechanistic-Empirical Pavement Design and Performance Evaluation," ***Transportation Geotechnics***, 17 (2018) 141-153, https://doi.org/10.1016/j.trgeo.2018.09.014
15. **Titi, H.**, and Tabatabai, H., Faheem, A., Tutumluer, E., and Peters, J. (2018). "Spatial Variability of Compacted Aggregate Bases," ***Transportation Geotechnics***, Volume 17, Part B, Pages 56-65, https://doi.org/10.1016/j.trgeo.2018.06.007
16. Shatnawi, A. S., Coley, N., and **Titi, H.** (2018). "Interactive Data Framework and User Interface for Wisconsin's Oversize-Overweight Vehicle Permits," ***Journal of Data in Science***, 3(2), 20; https://doi.org/10.3390/data3020020
17. **Titi, H.** H., Coley, N., and Latifi, V. (2018). "Evaluation of Pavement Performance due to Overload Single Trip Permit Truck Traffic in Wisconsin," ***Journal of Advances in Civil Engineering***, Volume 2018, 11 pages, https://doi.org/10.1155/2018/1070653
18. Tabatabai, H., **Titi, H.**, Lee, C. W. (2018). "Assessment of Tests to Determine Long-Term Durability of Wisconsin Aggregates," ***ASCE Journal of Materials in Civil Engineering***, Volume 30, Issue 10, https://doi.org/10.1061/(ASCE)MT.1943-5533.0002463
19. **Titi, H. H.**, and Tabatabai, H. (2018). "Effect of Coarse Aggregate Type on Chloride Ion Penetration in Concrete," ***Journal of Construction and Building Materials***, Volume 162, pp. 871-880, https://doi.org/10.1016/j.conbuildmat.2018.01.090