





Dipartimento di Eccellenza 2023-2027

## Seminar Announcement

19 luglio 2024 ore 10:00 Aula ST2 "Giannini" – Dip. ICEA Area Strade

## Advanced Modeling and Analysis of Traffic Speed Deflectometer for Pavement Condition Evaluation

of Civil and Environmental F

Department of Civil and Environmental Engineering Rutgers, The State University of New Jersey

Prof. Francesco Canestrari

Traffic speed deflectometer (TSD) provides an efficient way for evaluating pavement condition. It is important to understand the uncertainties of data collection and develop cost-effective use of TSD measurements for decision making. This presentation will focus on advanced modeling and analysis of TSD on flexible pavements in four aspects: 1) the relationship between pavement responses under stationary and moving tire loading; 2) the impact of dynamic loading due to pavement roughness on TSD measurements of deflection velocity and deflection; 3) the backcalculation of pavement modulus; and 4) the prediction of critical strains from TSD measurements. The application of TSD for project level pavement design and network level pavement management will be discussed.

## CONTATTI

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