

FY 20/21 Request for Research Funding
November 30, 2020

D5-21-01		Artificial Intelligence (AI) Use in Post Natural Disaster Damage Assessment	Mo Hassan	Approved Scope under review
D6-21-01		Assess the Impacts of Autonomous Connected Electric and Shared (ACES) Mobility	Neil Lyn	Approved Scope under review
AV-21-01		Counting Airport Operations Using Aircraft Transponder Signals and/or Aircraft Automatic Dependent Surveillance-Broadcast (ADS-B) Data	Abdul Hatim	Approved Scope under review
OPP-21-01		Incorporation of Climatic and Hydrologic Nonstationarity into FDOT Planning and Design Guidelines and Processes	Jennifer Carver	Approved Scope under review
OPP-21-02		Development of Geospatial Framework to Support Robust Analysis of Transportation Infrastructure to Climate Impacts	Jennifer Carver	Approved
OPP-21-04		Focused Law Enforcement Survey Design	Brian Watts	Approved
OPP-21-07		Crashes Related to Driveway Access in the Vicinity of Interchanges	Gina Bonyani	Approved Scope under review
OPP-21-08		Crashes Related to Types of Driveway Access	Gina Bonyani	Approved Scope under review
PTO-21-01		Assessment of the Mobility Energy Productivity (MEP) Metric for Public Transit Applications in Florida	Gabe Matthews	Approved Scope under review
PTO-21-02		Examining Data Needs and Implementation Process of AV-based Microtransit Service: A Case Study in Lake Nona	Gail Holley/Raj Ponnaluri/Gabe Matthews	Approved Scope under review
SMO-21-01	BDV31 977-136	NEXTGEN Concrete - The Tests of the Future	Tim Ruelke	Executed
SMO-21-02		Improved Resilience of Asphalt Pavements Due to Flooding	Greg Sholar	Approved Scope under review
SMO-21-03		Practical Mix Design Guidelines for Reflective Cracking Resistant Mixtures - continuation study	Howie Moseley	Approved Scope under review

SMO-21-04		Peak Temperature Determination of Drilled Shafts Excluded from Mass Concrete Consideration in Current Specifications	Jose Armenteros	Approved Scope under review
SMO-21-05		Impact of Increased Allowable Truck Loads on Pavement Life	James Greene	Approved Scope under review
SMO-21-06		Improved Resilience of Rigid Pavement Systems	Nour Nazef	Approved Scope under review
SMO-21-08		Open-Graded Friction Courses Suitable for Suburban Environments	Wayne Rilko	Approved Scope under review
SMO-21-09		Development of a Test to Quantify Organic Content in Silica Sand	John Shoucair	Approved Scope under review
SMO-21-10		Evaluation of Pavement ME Design Software for Flexible Pavements	Mary Jane Hayden	Approved Scope under review
STR-21-01		Detailing of Externally Bonded FRP for Shear Strengthening	Will Potter	Approved Scope under review
STR-21-02		Wound FRP Shear Reinforcement for Concrete Structures	Will Potter/Steve Nolan	Approved On hold
STR-21-03		Quantifying the Effect of UHPC Fiber Dispersion and Orientation in Structural Members	Christina Freeman	Approved Scope under review
STR-21-04		Anchorage Zone of PT Pier Caps Integral with Steel Girders	Will Potter	Approved Withdrawn
STR-21-05		Confinement Effect of Narrow Baseplates or Reaction Area on Anchor Breakout, Part 2	Will Potter/Steve Nolan	Approved
STR-21-06		Straight Steel I-Girder Bridges with Skew Index Approaching 0.3	Will Potter/Vickie Young	Approved Scope under review
TDA-21-01		Development of Motorcycle VMT Estimation Method Using a Hybrid Approach	Joey Gordon	Approved
TEO-21-01		Human Factors Study on the Use and Effectiveness of Innovative Safety Messages on Dynamic Message Signs	Dana Knox/John Easterling	Approved Scope under review

TEO-21-02		Environment for Testing and Assessing Infrastructure Support of Connected Vehicle and Cooperative Highway Automation Applications	Raj Ponnaluri/Javier Rodriguez (D6)	Approved Scope under review
TEO-21-03	BDV25 977-73	Development of Crash Modification Factors for Speed Management Using Pedestrian-friendly Traffic Signal Progression	Alan El-Urfali	Executed
TEO-21-04		Guidelines for Activating Ramp Meters During Off-peak Hours	Alejandro Motta	Approved Scope under review
TEO-21-05		Performance Evaluation of Connected Vehicle (CV) and Transportation Systems Management and Operations (TSM&O) Projects in Florida	Raj Ponnaluri	Approved Scope under review
TEO-21-06	BDV24 977-37	Study of Operational and Safety Impacts of Disabled and Abandoned Vehicles on FDOT Roadways	Eric Gordin	Approved to university for signature