

FY 20/21 Request for Research Funding  
January 31, 2021

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 Scope under review
OPP-21-04		Focused Law Enforcement Survey Design	Brian Watts	Approved
OPP-21-07	BDV25 977-76	Crashes Related to Driveway Access in the Vicinity of Interchanges	Gina Bonyani	Executed
OPP-21-08		Crashes Related to Types of Driveway Access	Gina Bonyani	Merged with OPP-21-07
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	BDV31 977-137	Improved Resilience of Asphalt Pavements Due to Flooding	Greg Sholar	Executed
SMO-21-03	BDV31 977-138	Practical Mix Design Guidelines for Reflective Cracking Resistant Mixtures - continuation study	Howie Moseley	Approved To university for signature

SMO-21-04	BDV25 977-75	Peak Temperature Determination of Drilled Shafts Excluded from Mass Concrete Consideration in Current Specifications	Jose Armenteros	Executed
SMO-21-05	DOT-RFP-21-9052-VM	Impact of Increased Allowable Truck Loads on Pavement Life	James Greene	Approved In Procurement
SMO-21-06	DOT-RFP-21-9051-SD	Improved Resilience of Rigid Pavement Systems	Nour Nazef	Approved Scope under review
SMO-21-08	DOT-RFP-21-9053-SD	Open-Graded Friction Courses Suitable for Suburban Environments	Wayne Rilko	Approved In Procurement
SMO-21-09	DOT-RFP-21-9039-CA	Development of a Test to Quantify Organic Content in Silica Sand	John Shoucair	Approved In Procurement
SMO-21-10	DOT-RFP-21-9036-SJ	Evaluation of Pavement ME Design Software for Flexible Pavements	Mary Jane Hayden	Approved In Procurement
STR-21-01	DOT-RFP-21-9033-CA	Detailing of Externally Bonded FRP for Shear Strengthening	Will Potter	Approved In Procurement
STR-21-02		Wound FRP Shear Reinforcement for Concrete Structures	Will Potter/Steve Nolan	Approved On hold
STR-21-03	BDV30 977-34	Quantifying the Effect of UHPC Fiber Dispersion and Orientation in Structural Members	Christina Freeman	Executed
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 Scope under review
STR-21-06	DOT-RFP-21-9028-SD	Straight Steel I-Girder Bridges with Skew Index Approaching 0.3	Will Potter/Vickie Young	Approved In Procurement
TDA-21-01		Development of Congestion Factors for Adjusting Traffic Counts During Congested Periods	Joey Gordon	Approved Scope under review
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	BDV29 977-63	Environment for Testing and Assessing Infrastructure Support of Connected Vehicle and Cooperative Highway Automation Applications	Raj Ponnaluri/Javier Rodriguez (D6)	Executed
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	BDV29 977-62	Guidelines for Activating Ramp Meters During Off-peak Hours	Alejandro Motta	Executed
TEO-21-05	BDV29 977-64	Performance Evaluation of Connected Vehicle (CV) and Transportation Systems Management and Operations (TSM&O) Projects in Florida	Raj Ponnaluri	Executed
TEO-21-06	BDV24 977-37	Study of Operational and Safety Impacts of Disabled and Abandoned Vehicles on FDOT Roadways	Eric Gordin	Executed