FY 21/22 Request for Research Funding
July 31, 2021

D4-22-01		Application of Dynamic Crash Predicition Methodologies to FDOT Safety and Transportation System Management and Operational (TSM&O) Programs, Phase II	Nicole Forest	Approved
ENV-22-01		Opaque Visual Barriers Use on Road Shoulders to Minimize Visual Impacts and Improve Aesthetics	Robert McMullen	Approved
FTO-22-01		Florida's Transportation Revenue Forecasting and Allocation Process and Modeling - Phase I	Thomas Hill	Approved
FTO-22-02		Evaluating the Adoption and Impacts of Telecommuting for Incorporation into the Modeling Process	Thomas Hill/ Vladimir Majano	Approved
FTO-22-03		Implementation of Florida Index for Transportation (FIT) for Decision Making in Transportation Planning - Phase 2	Jessica VanDenBogaert	Approved
FTO-22-04		Development of a High-resolution Statewide Socio-demographic and Land Use Module for Transportation Planning	Thomas Hill	Approved
GEO-22-01		Use of 3D Seismic Waveform Tomograpnhy with SPT-Source for Geotechnical Site Characterization	David Horhota	Approved Scope under review
GEO-22-02		Measuring While Drilling (MWD) Quick Method for Geotechnical Site Investigation and Characterization	Larry Jones/ David Horhota	Approved
GEO-22-03		Estimating Grout Volume of Auger Cast Piles	Juan Castellanos/ Rodrigo Herrera	Approved Scope under review
GEO-22-04		Relaxation of Driven Piles in Florida Soils - Phase I	Juan Castellanos/ Rodrigo Herrera	Approved
GEO-22-05		Using the PENCEL PMT to Reevaluate Foundation Requirements on FDOT Shallow Foundation Sites	Larry Jones/ David Horhota	Approved
MNT-22-01		Best Practices for Steel Bridge Coating and Recoating Warranty Contract Requirements	Jeff Pouliotte/ Chase Knight	Approved

MNT-22-02		Effects of Cracks in Stiffener Welds on Miscellaneous Structures and their Structural Capacity	Felix Padilla	Approved
PTO-22-01		Evaluating and Validating Technology Options for Estimating Tranit Vehicle Occupancy in Real Time	Gabe Matthews	Approved Scope under review
RDO-22-01		Evaluation on Effectiveness of audible and Vibratory Treatment (AVT) Installations on Arterials and Collectors based on FDOT Context-based Design Criteria	Gevin McDaniel/ Brenda Young	Approved
SF-22-01		Development of Best Practice Guide and Toolbox Towards Leading Bicycle Interval (LBI) Implementation in Florida	Trenda McPherson	Approved
SMO-22-01		Evaluation of Corrosion Inhibiting Materials Applied by Impregnation (Pressure Injection)Methods to Prevent Corrosion of Post-Tensioned Tendons	Chase Knight	Approved
SMO-22-02		NEXTGEN Concrete - the Tests of the Future	Tim Ruelke	Approved
SMO-22-03		A Review of Protocols Used for Evaluating Defective Asphalt Materials and Pavements	Howie Moseley	Approved
SMO-22-05		Durability of Concrete Using Low Slag Cement Contents	Thomas Frank	Approved
SMO-22-06		Evaluation of Enhanced-Friction Asphalt Overlays and Surface Treatments	Ahmad Chami	Approved
SMO-22-07		Evaluation of Concrete Permeability Reducing Admixtures	Ron Simmons	Approved
SMO-22-08		Determining the Effect on Asphalt Mixture Performance by Increasing New Asphalt Binder Content Due to Inactive RAP Binder in the Mixture	Greg Sholar	Approved
SMO-22-09		Modeling the Stainless Steel Corrosion Propagation Stage	Chase Knight/ Ron Simmons	Approved
SMO-22-10		Factors that Influence the Variability of Concrete Surface Resistivity of Field Cast Samples	Elizabeth Weber/ Richard DeLorenzo	Approved

STR-22-01		Strengthening Piers to Resist Vehicular Collision	Will Potter/ Christina Freeman	Approved
STR-22-03		Bond Performance Between Precast UHPC Substrates and Field Cast UHPC Connections	Christina Freeman	Approved
STR-22-04		Split-pipe Stiffeners for Skewed Steel I-Girders	Will Potter/ Christina Freeman	Approved
STR-22-05		Acceptable Crack Width Limit for UHPC Structural Members Under Coastal and Marine Environment	Will Potter/ Christina Freeman	Approved
TDA-22-01		Development of Motorcycle VMT Estimation Method Using a Hybrid Approach	Joey Gordon	Approved
TEO-22-01		Using Computer Vision and Deep Learning Techniques to Extract Roadway Geometry Features from Aerial Images	Alan El-Urfali	Approved
TEO-22-02		Connected Vehicle Security Metrics and Threat Intelligence	Raj Ponnaluri	Approved
TEO-22-03		Exploring Micromobility Services	Raj Ponnaluri	Approved
TEO-22-04		Assessing Safety and Mobility Benefits of Autonomous Ride Sharing Services Among Older Adults in Florida	Gail Holley	Approved Scope under review
TEO-22-05		Research on Artificial-Intelligence for Data Integration with Arterials and Freeways	Raj Ponnaluri/ Mark Plass	Approved
TEO-22-06		Development of a Roadway Corridor Safety Approach to Identify High-Risk Corridors and Prevent Fatalities on Florida Roadway	Alan El-Urfali	Approved
TEO-22-07		Support for the I-STREET (Implementing Solutions from Transportation Research and Evaluation of Emerging Technologies) Testbed	Raj Ponnaluri	Approved
TEO-22-08		Toward a Florida Automated, Connected, Electric and Hsared (ACES) Transportation System Roadmap: Phase II	Raj Ponnaluri	Approved

TEO-22-10		Infrastructure Enablers for Reliable Cooperative Driving Automation (CDA) Phase I: Existing Infrastructure Evaluation	Ronald Chin/ Raj Ponnaluri	Approved
TEO-22-11		Privacy-Aware Artificial Intelligence Based Vido Analysis for Better Traffic Management	Ronald Chin/ Dererk Vollmer	Approved
TEO-22-13		Evaluation on Pilot Deployment of Portable Visual Barriers to Reduce Rubbernecking Impact During Freeway Crashes	Megan Arasteh/ Shawn Kinney	Approved
TEO-22-14		Evaluation of CARMA for I-STREET Testbed Implementation	Raj Ponnaluri	Approved