

FY 23/24 Request for Research Funding
February 16, 2024

D4-24-01		Integrated Management and Decision Support of Arterial Street Operations	Daniel Smith	Approved Scope under review
GEO-24-01		Resiliency of MSE Wall Subjected to Surge and Wave Loading	Larry Jones	Approved Scope under review
GEO-24-02		Residual Stresses in Florida Bored Piles	Rodrigo Herrera	Approved Scope under review
GEO-24-03	BED31 977-27	Drilled Shaft Imaging with 2D Ultrasonic Waveform Tomography	Kelly Shishlova	Executed
MPO-24-01	BED25 977-18	Noteworthy Practices Performing MPO Administrative Functions	Mark Reichert	Executed
OPP-24-01		Enhancing Public Engagement; A Review of Resources and Recommendations on Emerging Practices	Jennifer Carver	Approved Scope under review
RDO-24-01		Stated Preference Survey of Pedestrian Street Crossings and Big Data Analysis of Suppressed Pedestrian Trips	Tiffany Gehrke	Approved Scope under review
RDO-24-02	DOT-RFP-9070-DG	In Service Performance of Pipe to Structure Connections	Tim Holley	Approved RFP being advertised
SMO-24-01a	BED25 977-20	Development of a Nondestructive Imaging Tool to Identify Deficiencies in External Tendons Containing Flexible Fillers	Adrian Steele	Approved Pending execution
SMO-24-01b	BED27 977-03	Corrosion Risk Assessment of Unbonded Post Tensioned Tendons Filled with Flexible Filler that Have Air Voids with and Without Water Including the Development of a Nondestructive Tool to Identify these Voids	Ron Simmons	Approved Pending execution
SMO-24-02	BEG65	Evaluation of Reclaimed Asphalt Pavement (RAP) in FC-5 Mixtures	Greg Sholar	Executed
SMO-24-03	DOT-RFP-9078-SD	Material and Design Analysis of Bridge Mounted Light Poles for Hurricane Readiness	Tim McCullough	Approved RFP being advertised

SMO-24-04		Concrete Pavement Overlay State-of-the-Practice for Florida Conditions	Ohhoon Kwon	Approved
SMO-24-05	DOT-RFP-9076-DG	Durability and Effectiveness Analysis of Solar and Wind-Powered Cathodic Protection Systems	Shannon Deese	Approved Pending advertisement
SMO-24-06	BED30 977-13	Evaluation of Reclaimed Asphalt Pavement (RAP) in Mixtures Containing High Polymer Binder	Jim Musselman	Executed
SMO-24-07		Extraction and Physio-Mechanical Testing of FRP Reinforcing from 5-year Seawater Concrete Test Blocks on Halls River Bridge Bulkhead	Alexander Lewis	Approved Pending submittal
SMO-24-08	BEG81	Enhancement of Traffic Control Tool for Reopening of Flooded Roadways	Hung-Wen Chung	Approved Pending execution
SMO-24-09	BEG77	Determining the Effect of Changing Relative Area on the Galvanic Corrosion Rate of Contacting Dissimilar Metals	Alexander Lewis	Executed
SMO-24-10		Evaluation of Concrete Specimens Prepared with Corrosion Resistant Reinforcement After Long Term, Greater than 15 years, Outdoor and Laboratory Exposure	Ron Simmons	Approved Scope under review
SMO-24-11	BEG84	Slip and Creep of High-Performance Bridge Coatings	Tim McCullough	Approved Pending execution
SMO-24-12		Determining Interaction of Organic Material in Silica Sand with Cement	John Shoucair	Approved Scope under review
STR-24-01		Experimental Evaluation of Strengthening Methods for Bridge Piers Against Vehicular Collision	Christina Freeman	Approved Scope under review
STR-24-02a		Combined Flexure and Axial Load Performance of UHPC Piles	Olga Iatsko	Approved Scope under review
STR-24-02b		Driving Assessment of UHPC Piles	Christina Freeman	Approved Scope under review
STR-24-03		Waterline Pile Cap Footings for Bridges Using Large Diameter FRP Reinforcing - material Characterization and Design	Steven Nolan	Approved Pending submittal

STR-24-05	DOT-RFP-9068-SD	Design and Detailing of Anchorages for Externally Bonded CFRP - Phase 2	Christina Freeman	Approved RFP being advertised
TEO-24-01	BED25 977-17	Mitigation of Cybersecurity Vulnerabilities for Traffic Control Infrastructure	Derek Vollmer	Executed
TEO-24-02	BED25 977-19	Guidelines and Toolbox for Reducing Pedestrian Crashes with Turning Vehicles at Signalized Intersections	Peter Hsu Emmeth Duran	Executed
TEO-24-03		Prediction of Safety Opportunities Using Automated Traffic Signal Performance Measures	Jeremy Dilmore/Dibakar Saha	Approved Scope under review
TEO-24-04		Implementation of Backup Power for Traffic Cabinets during Extended Power Loss	Derek Vollmer	Approved Scope under review
TEO-24-09		Evaluation of Promising Countermeasures and Innovative Techniques on Speed Management to Improve Pedestrian and Bicycle Safety	Emmeth Duran /Mariano Amicarelli/Brenda Young	Approved Scope under review
TEO-24-10		Exploring Hybrid Architecture for Data Processing/Storage Needs of FDOT	Jeremy Dilmore/Christine Shafik	Approved Scope under review
TEO-24-11		Intersection Safety and Mobility Analytics Using Sensor Fusion	Jeremy Dilmore/Mariano Amicarelli	Approved Scope under review
FTE-24-01	BED26 977-11	Development of a Traffic Incident Management Toolbox and Evaluation of Data Sources for Effective Early Warning and Detection of Abnormal Traffic Conditions	Eric Gordin/Amy DiRusso/Shawn Kinney	Executed