Request for Research Funding for FY 2023-2024			
Project Number (Research Center Use Only): SMO-24-04			
Requesting Office	SMO	**Priority**	4 of 12
Proposed Title	Concrete Pavement Overlay State-of-the-Practice for Florida Conditions		
Justification	Concrete pavement overlays provide a rehabilitation alternative that enhance structural capacity in areas where other materials may not be adequate. Increasing the structural capacity of roadways and mitigating roadway rutting and cracking is growing more critical as truck loads and frequencies grow. National level research has developed broad guidelines for the design and implementation of concrete overlays. The objective of this research is to synthesize this research to develop Florida specific guidelines on design, construction, and best use of concrete overlays.		
Impact	This research would provide guidelines on the design and construction of concrete overlays.		
Affected Offices	Pavement Design, State Materials Office		
Existing Work	National level research has been performed. The objective of this project is to synthesize the published literature and develop Florida specific guidelines.		
Keywords Used In Existing Work Search **(Cannot leave blank)**	Pavement Rehabilitation, Concrete Overlay, Pavement Design		
Related Contracts (Give contract numbers)	NA		
Funding Request	$60,000	**Anticipated Duration**	18 months
Project Manager	Ohhoon Kwon	**Contracting Method**	RFP
Equipment	Estimated equipment cost (or N/A)	N/A	
Urgency	Score 1-5 1= highest, most immediate need	3 Increased truck loads and frequencies have created the need for a wider range of pavement rehabilitation alternatives.	
Implementability	Score 1-5 1= greatest likelihood of and proximity to implementing results	2 The outcome of this research will be Florida specific guidelines on the design, construction, and appropriate selection of concrete overlays.	

Project Benefits (Succinct, complete explanation)

Increased truck loads and frequencies have created the need for a wider range of pavement rehabilitation alternatives. Concrete overlays provide improved structural capacity and can be economical when constructed in appropriate locations. Florida specific design and construction guidelines are needed to realize these benefits.

Project Benefits (Select all that apply and explain)	**Quantifiable Benefits (units, dollars, etc…if applicable)**	**Methodology or Data Sources Used to Determine Quantifiable Benefits. If not applicable, please give justification of project benefits**
o Materials Enhancement	Extension of pavement service life	The outcome of this research will be concrete overlay design and construction guidelines as well as guidelines on where to best implement concrete overlays. It is expected that when used appropriately, concrete overlays will extend pavement life.

○ Materials Savings	Extension of pavement service life	The outcome of this research will be concrete overlay design and construction guidelines as well as guidelines on where to best implement concrete overlays. It is expected that when used appropriately, concrete overlays will extend pavement life.
○ Time Savings	N/A	
○ Lives Saved/Injuries Prevented	N/A	
○ Other (Explain)	N/A	

*Comments should explain and support urgency, financial benefit, and implementability scores