

Request for Research Funding for FY 2021-2022

Requesting Office	SMO	Priority	6 of 10 (projects may not have the same ranking – no ties)
Proposed Title	Evaluation of Enhanced-Friction Asphalt Overlays & Surface Treatments		
Justification	On occasion, segments of FDOT's network are identified for friction enhancement. A high friction surface treatment (HFST) has typically been used to significantly improve the frictional characteristics of the pavement where needed. While effective, the cost and durability of HFSTs has been a concern. This project would evaluate alternative asphalt-based solutions, both mix and surface treatment, that may provide the same benefits of HFST, but with reduced cost and/or increased durability.		
Impact	If the research is successful, the impact would be more efficient/effective friction enhancement solutions available for future projects.		
Affected Offices	Materials, Design, Construction, Maintenance, Traffic Operations		
Existing Work	Similar work has been done at NCAT, rep18-04.pdf (auburn.edu) and others. This project would focus on using similar principles for Florida materials and mix types.		
Keywords Used in Existing Work Search (Cannot leave blank)	Enhanced friction overlay		
Related Contracts (Give contract numbers)	None		
Funding Request	\$240,000	Anticipated Duration	24 months
Project Manager	Ahmad Chami	Contracting Method	RFP to all registered vendors
Urgency	2	The findings of this project could provide more durable and/or cost-effective options for high friction surface treatments.	
Implementability	1	Results from this project, if positive, would be highly implementable.	

Project Benefits:

This project would explore and potentially identify alternative options to the currently used high friction surface treatments, which are costly and do not have the service life of asphalt friction courses. Any identified alternatives would be more durable and/or cost effective.

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
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○ Materials Enhancement	X	The goal of this project is to provide alternative high friction options that are more durable and/or economical.
○ Materials Savings	X	Increase durability and/or the option of getting the required frictional characteristics in a mixture would result in material savings over time.
○ Time Savings		
○ Lives Saved/Injuries Prevented	X	HFSTs have been shown to reduce vehicle crashes when used effectively. More economical and/or durable options may promote increased usage of friction safety courses which could further reduce crashes.
○ Other (Explain)		

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