

Request for Research Funding for FY 2021-2022

Requesting Office	SMO	Priority	3 of 10 (projects may not have the same ranking – no ties)
Proposed Title	A Review of Protocols Used for Evaluating Defective Asphalt Materials and Pavements		
Justification	When asphalt materials fail to meet specification requirements, the material represented by the failing test results is evaluated to determine if it can remain in place or must be removed and replaced. Good engineering judgement has been used to develop standard evaluation protocols for the various types of asphalt failures. However, the long-term performance of material that was left in place has not been evaluated. This project would evaluate the performance of several representative sections and determine if past evaluations were effective or if the evaluation protocol needs to be refined.		
Impact	The results of this project would be used to assure the best possible procedures are used to evaluate asphalt materials represented by failing test results.		
Affected Offices	Materials and Construction		
Existing Work	This project proposes to evaluate existing pavements in Florida where defective material was left in place. While substantial research has been performed on evaluating asphalt, no work exists correlating the long-term performance of pavements placed in Florida where engineering evaluations (using FDOT protocols) were performed.		
Keywords Used In Existing Work Search (Cannot leave blank)	Engineering Analysis Review (EAR)		
Related Contracts (Give contract numbers)	None		
Funding Request	\$180,000	Anticipated Duration	3 years
Project Manager	Howie Moseley	Contracting Method	RFP to all registered vendors
Urgency	2	This project is needed to enhance current methods	
Implementability	1	Findings from this project have a high probability of being implemented.	
<p>Project Benefits:</p> <p>This project will review the analysis protocols currently used to evaluate deficient asphalt materials and pavements, analyze the performance of defective material that was evaluated and left in place in the past, and determine if refinements to our protocols are needed. The researcher’s findings and recommendations will be used to improve our protocols and help district engineers make the most accurate assessment on the disposition of defective material in the future.</p>			

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
○ Materials Enhancement		
○ Materials Savings	X	Assuring that engineering analyses are as accurate as possible will help minimize premature pavement failures, which could result unnecessary repairs.
○ Time Savings	X	Improved analysis protocols may shorten the required time to evaluate defective materials.
○ Lives Saved/Injuries Prevented		
○ Other (Explain)	X	The removal of defective asphalt materials is always a contentious issue with Industry. Assuring our engineering analysis protocols are as accurate as possible, will promote a better relationship Industry.

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