



STATE OF GOOD REPAIR (SGR) LOCAL PAVING AND LOCAL BRIDGE WEBINAR

September 24, 2019

STATE OF GOOD REPAIR LOCAL BRIDGE UPDATE

PRE-SCOPING REQUIREMENTS & BEST PRACTICES FOR BRIDGE PROJECTS FOR SGR FUNDING

Todd Springer, PE, Program Manager
Bridge Maintenance & Management Program Area
Structure and Bridge Division

September 24, 2019

Background

- **SMART Portal**
 - Enter and submit Work Notification Forms
- **Structure and Bridge Division SGR Webpage**
 - SGR Scope Eligibility (IIM-S&B-95)
 - Virginia Structure Priority Score (VSPS) used in SGR
 - Smart Flags
- **Local Assistance Division SGR Webpage**
 - Old SMART Portal Presentation (11/8/2017)
- **Asset Management Division Webpage**
 - Eligible Locality Lists for Current Selection Round (FY2021 – FY2026)

SGR Fund Request – Required Documents

Pre-Scoping Documents

- **Cross Sections**
 - Existing Approach Roadway
 - Existing Bridge Deck
 - Proposed Bridge Deck
- **Concept/Site Plan – Existing and Proposed Features**
 - Showing limits of approach work
 - Showing general limits of proposed bridge
 - If applicable, other items such as significant MOT, ROW, Utility Impacts, etc.
- **Smart Flags – Support Documentation**

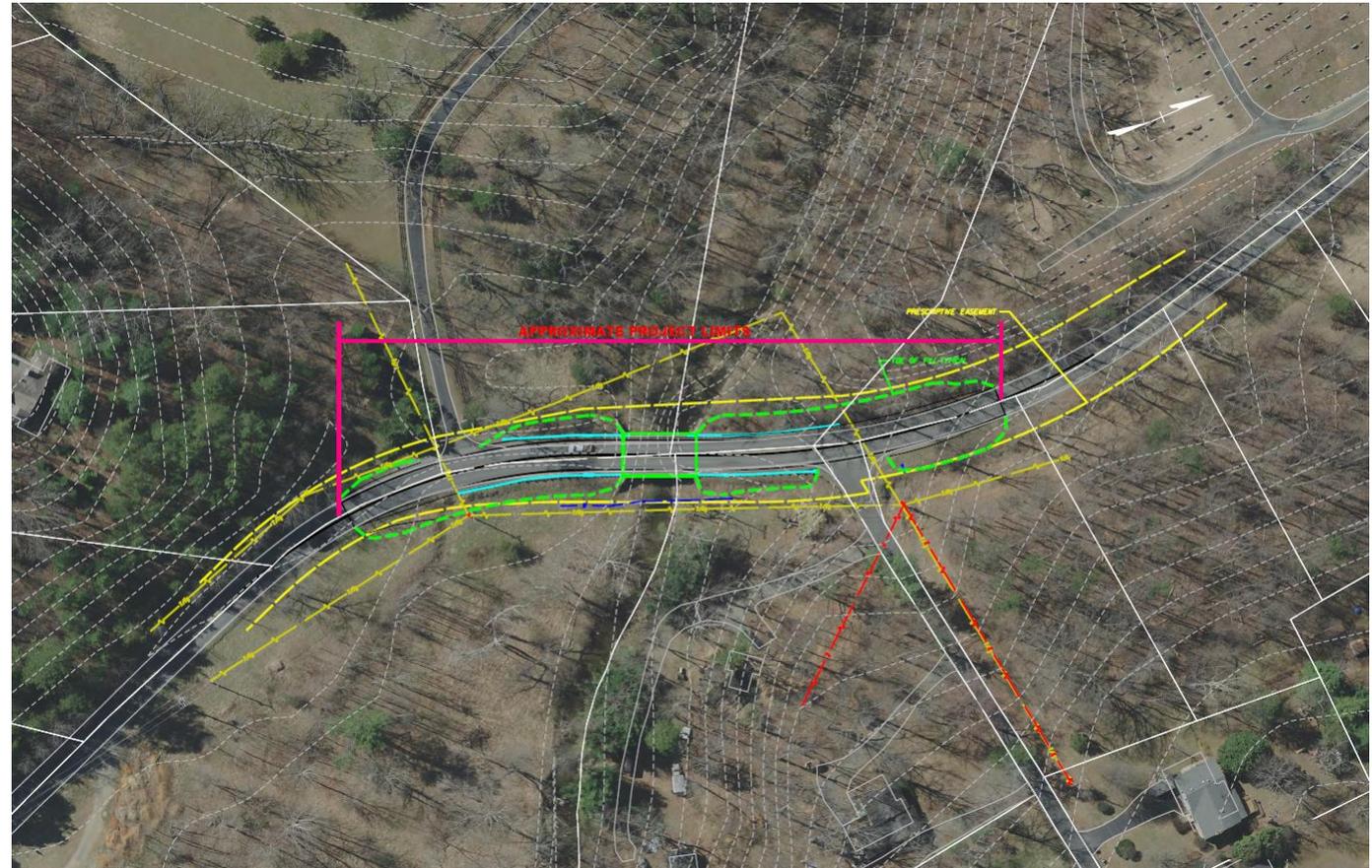
SGR Fund Request – Required Documents

Project Cost Estimates (from Pre-Scoping Efforts)

- **Deliverable Requirements**
 - PCES (or equivalent)
- **Required Estimates**
 - Proposed SGR Repair Scope
 - Proposed SGR Bridge Replacement
- **Usage**
 - **Establish SGR Project Allocations (Budget)**
 - $\text{SGR Fund Need} = \text{SGR Repair Cost Estimate} - \text{Other Funds}$
 - **SGR Prioritization**
 - Virginia Structure Priority Score (Cost Effectiveness Factor (CEF))
 - $\text{CEF} = \text{Function of SGR Fund Need} / \text{Bridge Replacement Cost Estimate}$

SGR Submittal: Concept/Site Plan

- **Aerial Background**
- **GIS**
 - Contours
 - Right-of-Way
 - Utilities
- **Concept Details**
 - Bridge
 - Limits of approach work
 - Fill impacts (ROW)
- **Offset Alignment**
 - Impacts more involved



SGR Submittal: Concept/Site Plan



GIS for Conceptual Plan View

A Conceptual plan view of the project must be provided on an 11 x 17 size map. The plan shall be developed using GIS data and include available information that will help develop an accurate cost estimate including the proposed bridge footprint, project limits (touchdown points), existing right of way, existing utilities and contours.

Suggested Method for Creating the GIS Basemap from VITA :

(Note: Some Cities/Counties have their own GIS Mapping)

Download Imagery

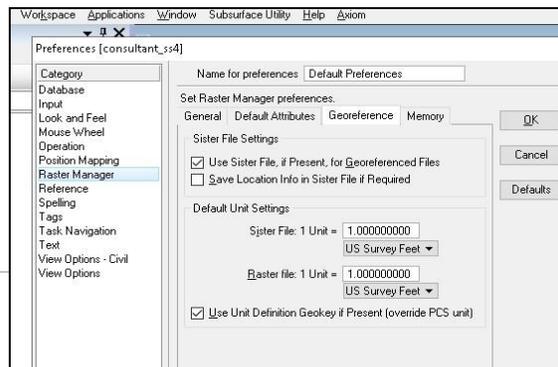
1. Go to VITA Virginia Base Map Program Site:
<https://vgin.maps.arcgis.com/apps/Viewer/index.html?appid=cbe6a0c1b2c440168e228ee33b89cb38>
2. Zoom to the project location, right click on the image file name, and download the MrSID zip file.

Download GIS Data

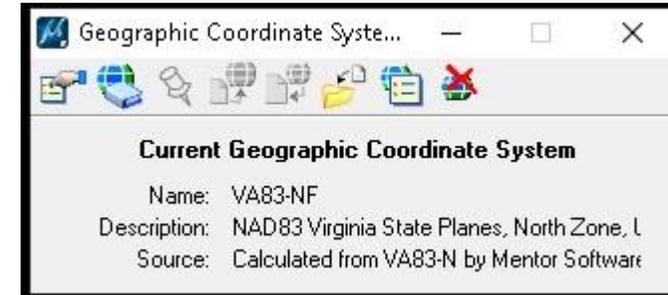
3. Download supporting GIS/shape files for project location (roadway edges, sidewalks, building, parcels, utilities, railroads, contours, etc.) from county GIS website (shapefiles or dwg).
4. Example: <https://www.albemarle.org/department.asp?department=gds&relpage=3914#Planimetrics>

Create Basemap File and Setup the Environment

5. Create new 2D dgn file (US Survey feet) using VDOT seed file (USFootSeed.dgn).
6. Save as Basemap.dgn
7. Select the “Workspace” menu/Preferences/ Raster Manager
 - Select the Georeference tab
 - Change the Default Unit Settings to US Survey Feet.



8. Select the “Tools” menu
open the Geographic toolbox
Click the Geographic Coordinate System and search Virginia.



9. Select the appropriate coordinate system name for your project location (VA83-NF or VA83-SF).

Build Basemap

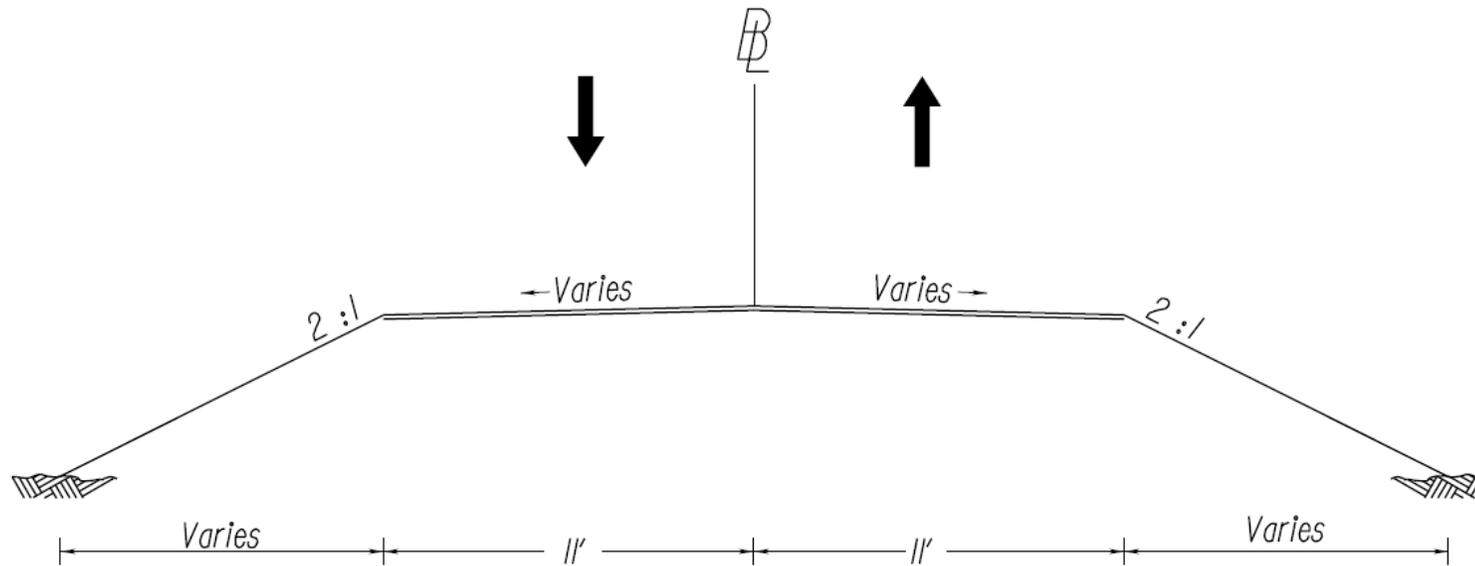
10. Select the “Raster Manager” menu and attach the downloaded imagery (*.sid) file from steps 1 and 2.
11. Select the “Tools” menu and reference in the downloaded planimetric files (*.shp or *.dwg) from step 3. (Note: when attaching these files, set the “Attachment Method” to Geographic – Reprojected).

Note: If elevation information is needed, lidar data can be download and converted to an existing surface TIN file (*.tin). Virginia LiDAR:

<https://vgin.maps.arcgis.com/home/item.html?id=1e964be36b454a12a69a3ad0bc1473ce>

SGR Submittal: Existing Approach Roadway Section

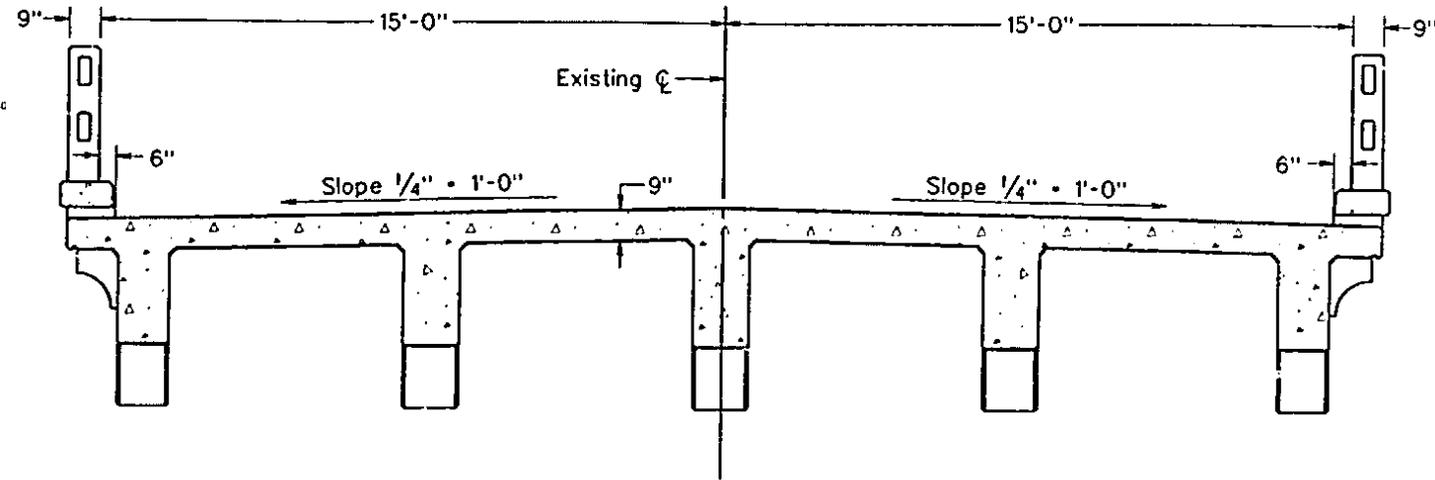
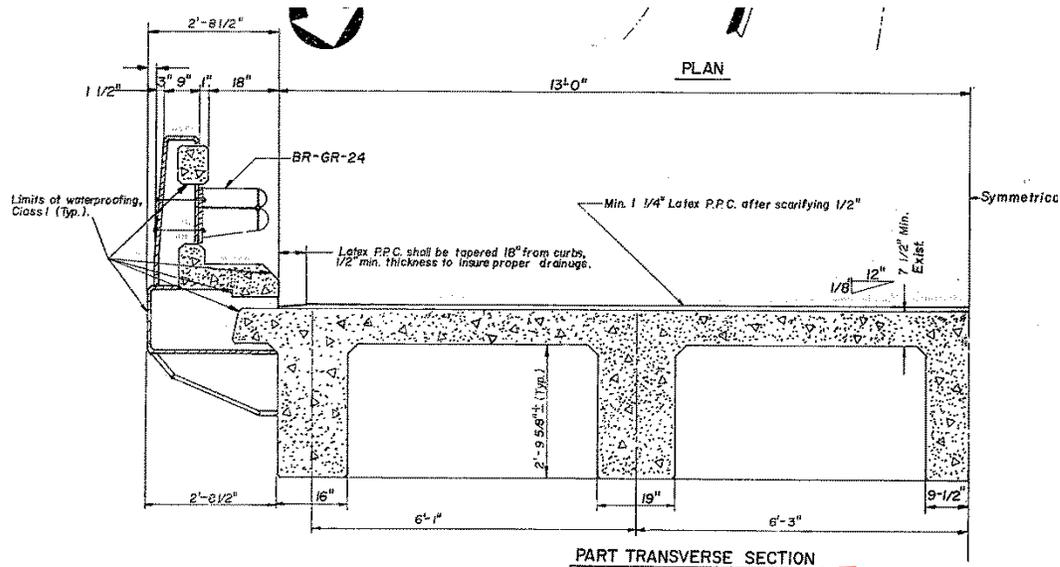
- Used to Assess Proposed Bridge Deck Section



EXISTING ROADWAY TYPICAL SECTION

SGR Submittal: Existing Bridge Deck Sections

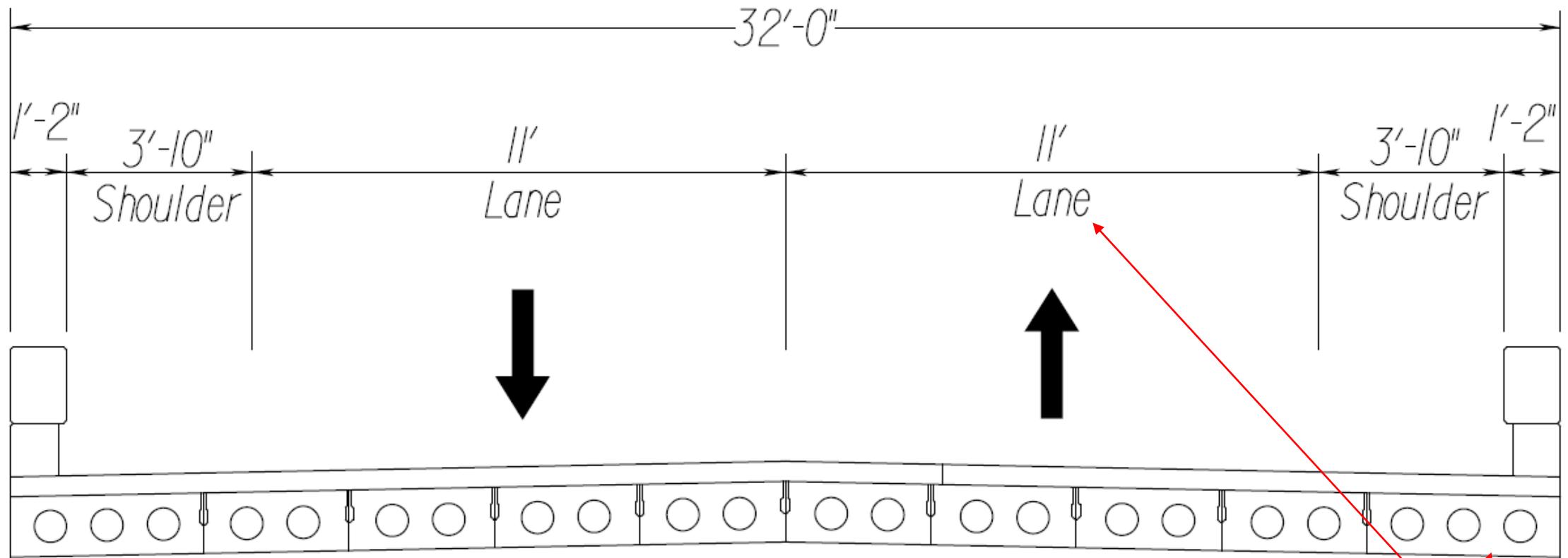
Used to Assess Proposed Bridge Deck Section



EXISTING TRANSVERSE SECTION

Source: Examples
Existing Bridge Plans
(or Safety Inspection Report)

SGR Submittal: Proposed Bridge Deck Sections



PROPOSED BRIDGE TYPICAL SECTION

- More interested in Section Geometry
- Less Interested in Superstructure

SMART Portal – Upload Documents

- Upload Concept Sketches
- Upload Project Cost Estimates
- SMART Portal Upload

The screenshot shows a web interface for filtering supporting documents. At the top left, there is a tab labeled "Supporting Documents" with a document icon. Below this, a "Filter By:" section contains two main areas. On the left, under "Description/File Name:", there is a text input field with the placeholder "Description/File Name...". Below this input is a checkbox labeled "Description". On the right, under "Attachment Type:", there is a dropdown menu. The dropdown is currently open, showing a list of options: "Other", "Proposed Plan View of Bridge & Approaches with Project limits", "SGR Project Cost Estimates – both Replacement and Repair Options", "Supporting Documentation for Smart Flag(s)", and "Typical Proposed Deck Section & Existing Approach Section". To the right of the dropdown menu is a "Reset Filters" button with a circular arrow icon. The word "Atta" is partially visible to the left of the dropdown menu.

Lessons Learned - Project Funding Items Needing Early Review

- **SGR Projects with SMART SCALE Funding/Scope**
- **SGR Projects with Other Funds With Specific Scope Req's ***
 - * Where other funding source has specific scope requirements
 - Examples: HSIP, Container Funds, etc.
- **SGR Projects with Other Funds Covering Non-SGR Scope ****
 - ** Where other funding does not have specific scope requirements
 - Examples: DBF, CTB, M&O, Locality, etc.

Early review helps to

- 1) Have all scope items are funded by the correct fund source
- 2) Reduce chance on rejection of WNF for SGR
- 3) Reduce chance of rejection of application for other fund source

Lessons Learned - Project Scope Issues Needing Early Review

- **Exceeding SGR Limits (Ex. Touchdown) in IIM-S&B-95**
 - Items requiring approval from District Structure & Bridge Engineer
 - Items requiring approval from Assistant State Structure & Bridge Engineer
- **Bicycle/Pedestrian/Shared-Use-Path Elements**
- **Railroad or Transit Element**
- **Uncommon / Complex Environmental Permits**
- **Navigational Waterways (clearances/permits)**
- **Accommodating Future Expansion**
- **Other Situations**
 - **High Risk**
 - **Unusual / Uncommon Elements**

Early review helps to include sufficient funding (budget) to cover estimate for all scope items

Lessons Learned – Additional Project Scope to Watch For

- **Maintenance of Traffic**
 - **Closed Road with Detour becomes Part-Width Construction**
 - Additional Costs: MOT bid items add cost, access, double mobilization
 - **Part-Width Construction becomes an Offset Alignment**
 - Additional Temporary ROW and Utility Impacts
- **Utilities**
- **Right-of-Way**
 - **Partial ROW takes become full takes**
 - **ROW Inflation Costs**
- **Schedule**
 - **Delays cost additional Inflation Costs**

Early review helps to include sufficient funding (budget) to cover estimate for all scope items

SMART Portal – Identifying Early Review Items

- **Contact the District ASAP to Advise of Situation**
 - District Locality Liaison
 - District Bridge Engineer
- **Note Early Review Items on Work Notification Form**

Short Project Description

* Includes Restorative Maintenance on all elements

Detailed Project Description

(2000 character limit)

PROVIDE DETAILS

Lessons Learned – Project Cost Estimating & Pre-Scoping

- **Documents Under Development** (Task Group / Project Management Office)
 - Pre-Scoping Summary Form
 - Project Cost Estimate Summary Form (all project phases)
- **Former Chief Engineer of VDOT**
 - Project Estimating Task Group (5/10/2019)
- **SYIP / 603 / Construction Programs**
 - **State of Good Repair**
 - SGR FY2021-FY2026 - **Strongly Recommended** (NOT REQUIRED)
 - SGR FY2022-FY2027 - Likely Required (future PMO Standard)
 - **SMART SCALE**
 - Likely required for coming round
 - **Other Programs**
 - Likely to become required (future PMO Standard)

Under Development
- These forms are not yet required for SGR
- Strongly Recommended
- As a Minimum, Serves and a Best Practice

Lessons Learned - Project Pre-Scoping Summary Form (Recommended / Not Required)

TOPIC AREAS

- **General Project Scope Description**
- **Construction Requirements**
(under water construction, cofferdams, causeway, temporary shoring)
- **Alternatives Evaluation**
(Replacement, Rehabilitation, Repairs)
- **SGR Funding Scope Eligibility Requirements (S&B-IIM-95)**
- **Non-SGR Scope Elements**
- **Project Cost Estimating**
- **Bridges over Waterways**
- **Bridges over Railroads / Transit**
- **Bridges over Roadways**
- **Traffic Requirements / MOT**
- **Bicycle and Pedestrian Accommodations**
- **Roadway**
- **Hydraulics**
- **Right-of-Way**
- **Utilities**
- **Materials / Geotechnical**
- **Environmental**
- **Community Impacts**

Most scope and estimate issues on projects with bridges are not the direct bridge items.

Lessons Learned - Project Pre-Scoping Summary Form (Recommended / Not Required)

Example:

<p>Item 3: Alternatives Evaluation (Replacement, Rehabilitation, Repairs)</p> <ul style="list-style-type: none"> Reviewed Safety Inspection report including the following: General Condition Rating (Deck = 5, Super = 4, Substructure = 5), Appraisal Ratings, and Element Quantities. Reviewed existing conditions during site visit. Reviewed the following options: Complete Bridge Replacement, Rehabilitation (Superstructure Replacement), Rehabilitation (Deck Replacement), Minor Rehabilitation (Comprehensive Condition Based Repairs), and Targeted Repairs <ul style="list-style-type: none"> Two most likely options are Complete Bridge Replacement and Rehabilitation (Superstructure Replacement). Conceptual Review leans towards Complete Bridge Replacement given the following: numerous beams have significant deterioration at the beam ends; extensive deterioration and patching of the substructure units; and bridge has a Scour Critical Bridge (Federal Item 113) rating of 3. Assuming Complete Bridge Replacement for purposes of SGR fund request, and will confirm during Scoping and Preliminary Design Phases.
<p>Item 4: SGR Funding Scope Eligibility Requirements (S&B-IIM-95)</p> <ul style="list-style-type: none"> All Scope elements are within the requirements of S&B-IIM-95
<p>Item 5: Non-SGR Scope Elements (funded by other sources)</p> <ul style="list-style-type: none"> N/A
<p>Item 6: Bridges over Waterways</p> <ul style="list-style-type: none"> Assumed hydraulically equivalent opening, and a H&HA analysis will be needed during design to verify the open. Risk that the hydraulic opening will increase. Risk: Existing bridge has a Scour Critical Bridge (Federal Item 113) rating of 3. Examine in further detail during H&HA analysis, Scour Analysis and determination of foundation type. Based on concept abutment and pier locations, a cofferdam will be required during construction Waterway is not navigable.

SIGNIFICANT SCOPE ITEMS

- Assumptions
- Moderate to high risks
- Unknowns

Indicate below when applicable

- N/A: Not applicable
- Nil: No significant scope items

Form to be published on VDOT S&B Website

http://www.virginiadot.org/business/state_of_good_repair_sgr.asp

Lessons Learned - Project Pre-Scoping Summary Form (Recommended / Not Required)

Example:

Item 7: Bridges over Railroads / Transit
<ul style="list-style-type: none"> N/A
Item 8: Bridges over Roadways
<ul style="list-style-type: none"> N/A
Item 9: Bicycle and Pedestrian Accommodations
<ul style="list-style-type: none"> Assumption: Proposed bridge deck to include sidewalk on north side of deck given existing sidewalk on north side of approach road on the immediate east approach to the bridge. No other bicycle-pedestrian improvements considered in immediate vicinity of bridge on in SYIP. County has shared-use-paths mentioned in Comprehensive Plan but no projects are planned in near term. County contacted, and for concur with above (see email in Bridge File).
Item 10: Traffic Requirements
<ul style="list-style-type: none"> Discussed maintenance of traffic with Traffic Engineering and Operations reviewed the following options for this Minor Local Road: Providing detour and closing bridge; part-width construction reducing two lanes reduced to one lane of traffic; and an offset alignment and maintaining two lanes of traffic at all items. <ul style="list-style-type: none"> Providing detour and closing bridge was not acceptable due to length of detour Part-width construction would be tolerable without significant backups. Offset alignment would have substantial ROW impacts Bridge is not on school bus route and does not provide access to any significant facilities Have completed initial coordination with local emergency needs (police, fire, EMT, etc.).

SIGNIFICANT SCOPE ITEMS

- Assumptions
- Moderate to high risks
- Unknowns

Indicate below when applicable

- N/A: Not applicable
- Nil: No significant scope items

Form to be published on VDOT S&B Website
http://www.virginiadot.org/business/state_of_good_repair_sgr.asp

Lessons Learned - Project Cost Estimate Summary (Recommended / Not Required)

- **Summary is Strongly Recommended**
 - Under development by VDOT PMO
 - Training and Guidance Being Developed
- **PCES Estimate (or equivalent)**
- **All phases (PE, RW, CN)**
 - VDOT Oversight Costs (LAP Manual)
 - Inflation
 - Contingency

SYIP PROJECTS DETAILED PROJECT COST ESTIMATE SUMMARY (Version: 9/20/2019)				
Project Name:		Project UPC:		
Prepared By:		Development Phase:	Creation/Pre Scope	
Reviewed By:		Date:		
County/City/Town:		Tier Level	1	
Preliminary Engineering				
Project Estimate Component		Proposed Project Cost Estimate (\$)		
Discipline	Source	Base (\$)	Contingency (%)	Total
Roadway				\$0
Hydraulics				\$0
In-plan Utilities				\$0
Traffic				\$0
Structures/Bridges				\$0
Materials/Geotech				\$0
Survey				\$0
Environmental				\$0
Other				\$0
VDOT Oversight Costs				\$0
Total PE Phase Estimate				\$0
Inflation factor (%) / Costs				\$0
Total Inflated PE Estimate				\$0
PE Base Estimate Date (XX/XXXX)				
Initial Baseline PE Start Date (XX/XX/XXXX)		4/1/2019		
Right-of-Way				
Discipline	Source	Base (\$)	Contingency (%)	Total
Right-of-Way				\$0
Out-of-Plan Utilities (power, cable, gas, etc.)				\$0
Railroad				\$0
VDOT Oversight Costs				\$0
Total RW Phase Estimate				\$0
Inflation factor (%) / Costs				\$0
Total Inflated RW Estimate				\$0
Base Estimate Date (XX/XXXX)				
Initial Planned RW Start Date (XX/XX/XXXX)		7/1/2021		
Construction				
Discipline	Source	Base (\$)	Contingency (%)	Total
Mobilization				\$0
MOT				\$0
Roadway				\$0
Hydraulics				\$0
In-plan Utilities				\$0
Traffic				\$0
Structures/Bridges				\$0
Materials/Geotech				\$0
Soundwalls				\$0
Other				\$0
Total Bid Items				\$0
Incidentals - Claims & W.O.s (5% to 10% max)	5%	\$0		\$0
Railroad Flagging/Coordination				\$0
State Forces				\$0
State Police				\$0
Contract Requirements (Incentive/Disincentive)	5%	\$0		\$0
Construction Engineering (Inspection)	Environmental Inspection (\$)			\$0
	VDOT or Locality (\$)			\$0
	VDOT Oversight (\$)			\$0
	Total CEI			\$0
Total CN Phase Estimate				\$0
Inflation factor (%) / Costs				\$0
Total Inflated CN Phase Estimate				\$0
CN Base Estimate Date (XX/XXXX)				
Initial planned CN Start Date (XX/XX/XXXX)		7/1/2025		
Initial Planned CN End Date (XX/XX/XXXX)		7/30/2027		
Total Project Cost Estimate				\$0

Lessons Learned - Project Cost Estimate Summary (Recommended / Not Required)

- **Base Costs**
 - Includes incidentals
 - 50th percentile
 - Current Rates
- **Contingency Costs**
 - Project Development
 - Risk
- **Inflation Costs**
 - Per Schedule
- **VDOT Oversight Costs**
 - LAP Manual

SYIP PROJECTS DETAILED PROJECT COST ESTIMATE SUMMARY (Version: 9/20/2019)				
Project Name:		Project UPC:		
Prepared By:		Development Phase:	Creation/Pre Scope	
Reviewed By:		Date:		
County/City/Town:		Tier Level	1	
Preliminary Engineering				
Project Estimate Component		Proposed Project Cost Estimate (\$)		
Discipline	Source	Base (\$)	Contingency (%)	Total
Roadway				\$0
Hydraulics				\$0
In-plan Utilities				\$0
Traffic				\$0
Structures/Bridges				\$0
Materials/Geotech				\$0
Survey				\$0
Environmental				\$0
Other				\$0
VDOT Oversight Costs				\$0
Total PE Phase Estimate				\$0
Inflation factor (%) / Costs				\$0
Total Inflated PE Estimate				\$0
PE Base Estimate Date (XX/XXXX)				
Initial Baseline PE Start Date (XX/XX/XXXX)			4/1/2019	

Project Cost Estimate Summary (PE Phase)

- **Disciplines**
 - By discipline
- **Reminder**
 - VDOT Oversight (LAP Manual)
 - Base
 - **Contingency**
 - On All Phase Items
 - Early Scope Validation
 - Redesign
 - Other Obstacles
 - **Inflation (on all phase items)**

SYIP PROJECTS DETAILED PROJECT COST ESTIMATE SUMMARY (Version: 9/20/2019)				
Project Name:		Project UPC:		
Prepared By:		Development Phase:	Creation/Pre Scope	
Reviewed By:		Date:		
County/City/Town:		Tier Level	1	
Preliminary Engineering				
Project Estimate Component		Proposed Project Cost Estimate (\$)		
Discipline	Source	Base (\$)	Contingency (%)	Total
Roadway				\$0
Hydraulics				\$0
In-plan Utilities				\$0
Traffic				\$0
Structures/Bridges				\$0
Materials/Geotech				\$0
Survey				\$0
Environmental				\$0
Other				\$0
VDOT Oversight Costs				\$0
Total PE Phase Estimate				\$0
Inflation factor (%) / Costs				\$0
Total Inflated PE Estimate				\$0
PE Base Estimate Date (XX/XXXX)				
Initial Baseline PE Start Date (XX/XX/XXXX)		4/1/2019		

Project Cost Estimate Summary (RW Phase)

- **Disciplines**
 - Right-of-Way
 - Out-of-Plan Utilities
 - Railroad (including overhead easements)
- **Reminder**
 - VDOT Oversight (LAP Manual)
 - Base
 - Contingency
 - on all phase items
 - Inflation
 - On all phase items

Right-of-Way				
Discipline	Source	Base (\$)	Contingency (%)	Total
Right-of-Way				\$0
Out-of-Plan Utilities (power, cable, gas, etc.)				\$0
Railroad				\$0
VDOT Oversight Costs				\$0
Total RW Phase Estimate				\$0
Inflation factor (%)				\$0
Total Inflated RW Estimate				\$0
Base Estimate Date (XX/XXXX)				
Initial Planned RW Start Date (XX/XX/XXXX)			7/1/2021	

Project Cost Estimate Summary (CN Phase)

Disciplines

- Bid Items by discipline

Often Missed

- CEI
- Railroad
- Incidental Claims & WOs
- Contract Requirements
- State Forces, State Police

Reminder

- VDOT Oversight (LAP Manual)
- Base
- Contingency & Inflation
 - On all phase items

Construction				
Discipline	Source	Base (\$)	Contingency (%)	Total
Mobilization				\$0
MOT				\$0
Roadway				\$0
Hydraulics				\$0
In-plan Utilities				\$0
Traffic				\$0
Structures/Bridges				\$0
Materials/Geotech				\$0
Soundwalls				\$0
Other				\$0
Total Bid Items				\$0
Incidentals - Claims & W.O.s (5% to 10% max)	5%	\$0		\$0
Railroad Flagging/Coordination				\$0
State Forces				\$0
State Police				\$0
Contract Requirements (Incentive/Disincentive)	5%	\$0		\$0
Construction Engineering (Inspection)	Environmental Inspection (\$)			\$0
	VDOT or Locality (\$)			\$0
	VDOT Oversight (\$)			\$0
	Total CEI			\$0
Total CN Phase Estimate				\$0
Inflation factor (%)				\$0
Total Inflated CN Phase Estimate				\$0
CN Base Estimate Date (XX/XXXX)				
Initial planned CN Start Date (XX/XX/XXXX)			7/1/2025	
Initial Planned CN End Date (XX/XX/XXXX)			7/30/2027	
Total Project Cost Estimate				\$0

Questions

Contact your

- District Locality Liaison
- District Bridge Engineer

C. Todd Springer, P.E., Program Manager

Bridge Maintenance and Management Program Area

Central Office, Structure & Bridge Division, Virginia Department of Transportation

Phone: 804.786.7537 / Todd.Springer@VDOT.Virginia.gov

STATE OF GOOD REPAIR LOCAL PAVING FEDERALIZATION

Jennifer Ahlin, VDOT Asset Management Division

Yolanda Newton, VDOT Local Assistance Division

Harold Capels, VDOT Construction Division

Heather Williams, VDOT Environmental Division

Tanveer Chowdhury, VDOT Maintenance Division

September 24, 2019

State of Good Repair Program

Section 33.2-369, Code of Virginia

Description	Pavement	Bridge
Purpose	Reconstruction/Rehabilitation (Deteriorated)	Reconstruction/Replacement (Structurally Deficient)
System	Interstate/Primary/Primary Extensions	All Systems (VDOT and Locally Maintained)
Priority Ranking Consideration	Mileage, Condition, Costs	Number, Condition, Costs
Distribution	All nine construction districts receive allocations each year Based on needs Minimum allocation of 5.5% and maximum allocation of 17.5% per district per year	
CTB Approved Waivers (Optional)	Key Project - extraordinary circumstances only – the maximum allocation of 17.5% can be waived in a given year	
	20% - Secondary Pavements (Optional if VDOT secondary target not met)	N/A

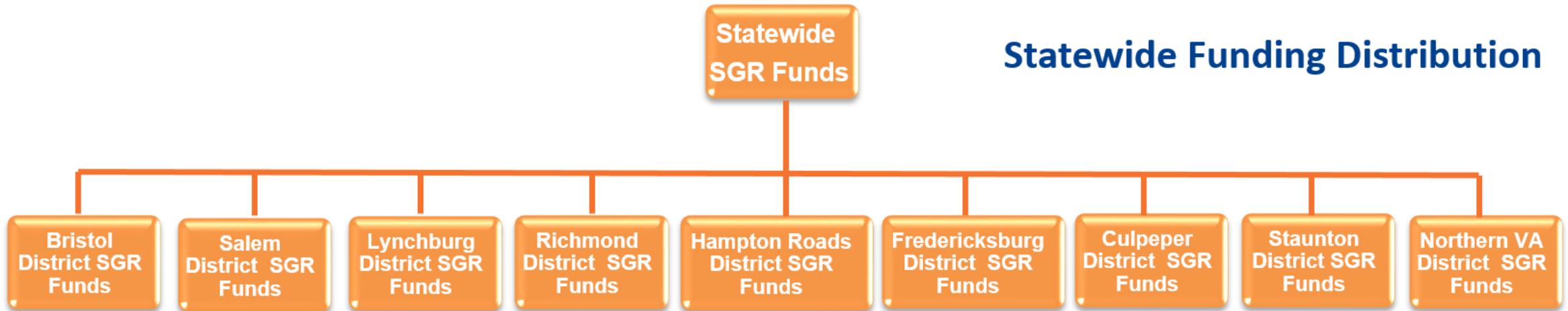
State of Good Repair Program

Three Test Requirement

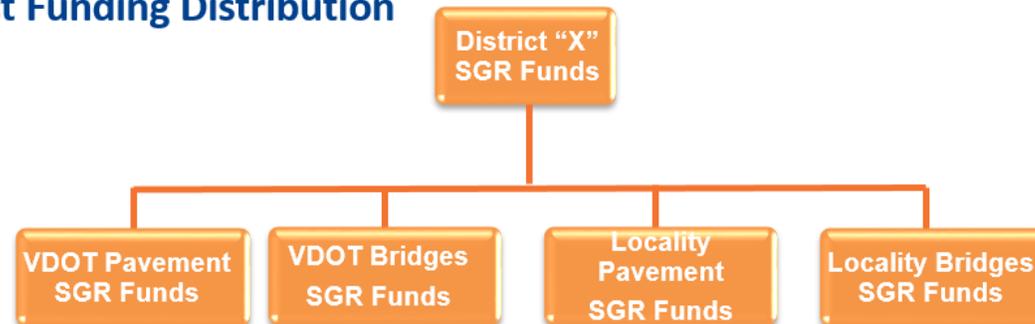
Tests*	Pavement	Bridge
1	Improves the pavement condition to “fair” or better status	Removes from structurally deficient status
2	Meets definition of pavement rehabilitation and reconstruction in Federal Highway Administration’s memo dated 9/12/2005 (see link below)	Meets definition of bridge rehabilitation and replacement in Federal Highway Administration’s Bridge Preservation Guide dated August 2011 (see link below)
3	Adds or restores strength	
FHWA Memo Links	FHWA’s Memo – September 12, 2005 - Pavement Preservation Definitions FHWA’s Memo - February 25, 2016 - Pavement Preservation	FHWA’s Bridge Preservation Guide – August 2011 – Maintaining a State of Good Repair Using Cost Effective Investment Strategies

State of Good Repair Program

Statewide Funding Distribution



Typical District Funding Distribution



State of Good Repair Program Primary Extension Paving Update

Primary Extension Policy Adopted June 2014

- **Allows CTB to set aside a portion of the reconstruction and paving allocations for deteriorated primary extension pavements maintained by municipalities**
- **Maximum request of \$1M per locality per year**
- **Combined Condition Index (CCI) rating of less than 60**
- **Projects must be advertised within 6 months of allocation of funds**
- **Maintenance of Effort Certification – funding supplements, not replaces, the current level of funding/level of effort on the part of the locality**

State of Good Repair Program Primary Extension Paving Update

Funding Source Background

- CTB Formula funds applied to projects were state funds beginning in FY 2015
- CTB Formula funding sunsets in FY2020
- State of Good Repair program funding was partially implemented in Fiscal Year 2017 using state funds
- State of Good Repair funding anticipated to be fully implemented in FY 2021
- Beginning FY 2021 primary extension projects must follow the federal process
 - Funding was anticipated to be federal in FY 2019
 - Exception was granted through FY 2020 to allow localities time to prepare for additional federal contract requirements

State of Good Repair Program Primary Extension Paving Update

- **Primary extension projects will utilize federal funding beginning FY 2021**
- **Changes are proposed to address the following:**
 - **Additional cost for projects to meet the federal requirements**
 - Contract Development:
 - Safety reviews (guardrails, ADA compliance, pavement markings, shoulder drop-offs, signs, etc.)
 - Environmental studies (Environmental review process, Environmental permits, and Draft environmental document)
 - NEPA document (designated as Activity 25) as a Programmatic Categorical Exclusion (PCE)
 - Contract Administration:
 - Contract enforcement
 - Buy America, DBE goals, Davis-Bacon wage rates, etc...
 - **Additional time to meet federal requirements and to obtain federal authorization**

State of Good Repair Program Primary Extension Paving Update

Environmental Update

- **VDOT has a streamlined environmental process for paving projects**
- **VDOT environmental will complete the necessary NEPA and threatened and endangered species environmental clearances for all federal SGR local paving projects utilizing the streamlined process**

State of Good Repair Program Primary Extension Paving Update

Environmental Update

Streamlined Process

- **A One-Time Programmatic Categorical Exclusion (OTPCE) has been created for paving projects**
 - OTPCE – PCE created for specific activities – In this case paving projects
- **Programmatic agreements have been executed with resource agencies for threatened and endangered species coordination**
- **Depending on project location and clearances received the locality may be required to include special provisions in contract documents**
 - VDOT will provided special provision template language when required

State of Good Repair Program Primary Extension Paving Update

Environmental Update

- NEPA Document is now required due to federal funds being applied to the projects
- All activities in the contract become federalized and all activities must be included in the NEPA document
- **Example 1:** One side of the road receives federal SGR funds, the other side of the road is in the same contract and paid for with locality funds. Since both sides of the road are in the same contract both sides of the road are federalized and are included in the NEPA document.

State of Good Repair Program Primary Extension Paving Update

Environmental Update

- **Example 2:** A roadway receives federal SGR funds to pave a portion of the roadway. The locality wants to build a turn lane in the same area as the paving project and the locality decides it would be best to include both activities in the same contract. Both activities would be considered federalized and the project would no longer qualify for the streamlined clearance process. (OTPCE could not be used and threatened and endangered species programmatic agreement not longer applicable)

State of Good Repair Program Primary Extension Paving Update

VDOT initiatives to assist localities with federalizing paving contracts

- **Construction Division will be providing a federal paving contract template with all required federal provisions for locality use**
- **VDOT could advertise/administer District wide contracts for locality SGR paving segments**
- **Localities could Federalize an existing contract and include the Primary Extension Routes in that contract**
- **Localities may use existing contracts if they were procured with federal aid contract provisions**

Safety Analysis Requirements for Paving Projects (FHWA-VDOT Stewardship and Oversight Agreement)

Project Category*		Net Elevation Change	State-Funded Projects	Federal Fund Eligible Projects
Category 1 (FHWA Preservation Projects)	PM CM1	Limited	<ul style="list-style-type: none"> General Highway Safety Analysis <u>Recommended</u> 	<ul style="list-style-type: none"> General Highway Safety Analysis <u>Required</u>
	CM2	1.5-2"	<ul style="list-style-type: none"> Detailed Guardrail Assessment <u>NOT</u> Required 	<ul style="list-style-type: none"> Detailed Guardrail Assessment <u>NOT</u> Required
Category 2 (FHWA 3R Projects)	RM1	Limited	<ul style="list-style-type: none"> General Highway Safety Analysis <u>Required</u> Detailed Guardrail Assessment <u>Required</u> Safety upgrades to be included in the paving project or through separate contract delivered in coordination with the paving project 	<ul style="list-style-type: none"> General Highway Safety Analysis <u>Required</u> Detailed Guardrail Assessment <u>Required</u> Safety upgrades to be included in the paving project or through separate contract delivered in coordination with the paving project
	RM2	1.5-2"		
	RM3 RC	>2"		

* Definitions of terms can be found on page 3 and 4 of the document "Agreement of Federal-Aid Maintenance Projects Between Federal Highway Administration & Virginia Department of Transportation"

Differences Between Category 1 and Category 2 Projects

Needed Actions	Category 1	Category 2
Validate the scope and purpose	Review to ensure it meets Category 1 projects	Review to ensure it meets Category 2 projects
Review of Signing, Pavement marking, Edge drop-offs, Guardrail, Rumble strip, and Other road elements	Conduct <u>windshield daytime observation</u> . General Highway Safety Analysis <u>Required</u> .	Conduct <u>windshield daytime and appropriate site specific observation</u> of road traffic assets in the paving corridor and check deficient areas if necessary. General Highway Safety Analysis <u>Required</u> .
PE sign & seal	Not required	Required

The details are in the document “VDOT Safety Analysis Guidelines”, at the following link:

<https://insidevdot.cov.virginia.gov/div/te/TAA/SitePages/Project%20Development%20Policy%20and%20Guidance.aspx>

State of Good Repair Program Primary Extension Paving Update

Proposals Submitted to CTB on September 17th

- Increase time limit from 6 months to advertise to 12 months to advertise projects
- Increase funding limit from \$1M annually per locality to \$1.5M annually per locality

Next Steps:

- Anticipate approval at the CTB action meeting in October
- Call for applications will be made October 1st
- Application period ends on December 13th

QUESTIONS?

Contacts

Primary Extension Guidance and Policy Questions:

Todd Halacy – Todd.Halacy@vdot.virginia.gov

Phone – 804.786.3438

Yolanda Newton – Yolanda.Newton@vdot.virginia.gov

Phone – 804.786.0334

State of Good Repair Funding Program Questions:

Jennifer Ahlin – Jennifer.Ahlin@vdot.virginia.gov

Phone – 804.786.6581

Contracting Questions:

Harold Caples – Harold.Caples@vdot.virginia.gov

Phone – 804.786.1630

Environmental Questions:

Heather Williams – Heather.Williams@vdot.virginia.gov

Phone – 804.786.1872

Safety Analysis Questions:

Tanveer Chowdhury – Tanveer.Chowdhury@vdot.virginia.gov

Phone – 804.786.0694

Raja Shekharan - Raja.Shekharan@vdot.virginia.gov

Phone – 804.786.0870