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Executive Summary

The Federal Highway Administration (FHWA) established Risk-Based Stewardship and Oversight in FY 2014. The goal of risk-based project stewardship and oversight is to optimize the successful delivery of programs and projects and help ensure compliance with federal requirements. In order to meet this goal, the Program Management Improvement Team (PMIT) established the Compliance Assessment Program (CAP), which is an annual review conducted by the FHWA Virginia (VA) Division in coordination with the Virginia Department of Transportation (VDOT) at both the Central Office and District Office. This year's national review focuses on locally administered projects.

The VA Division visited VDOT districts to review the 38 randomly selected projects’ supporting documentation for each review guide question. For this year’s cycle, the FHWA VA Division engineer leading the review used three CAP Review Guides, encompassing 28 questions. Overall, localities exhibited a basic understanding of the Federal requirements.

This report notes observations related to nine of the questions addressed during the review, which include the following.

- Proper documentation was not on file and easily accessible to support change orders (two localities), proprietary products (three localities), changes in Disadvantaged Business Enterprise (DBE) contracts (one project), and Buy America certifications (one project).
- Subcontracts were not properly approved by the State or locality, which can be based on a certification statement and procedure that is approved by the FHWA VA Division. (18 projects)
- Federal reimbursements were made on the wrong phase of work or were not properly supported by a contract that meets Federal regulations. (2 projects)
- The FHWA-1273, Federal requirements, document was not physically incorporated into every contract and subcontract. The Federal requirements were incorporated by reference, but this does not meet the Federal regulation.

A majority of the recommendations can be addressed by updating and clarifying the Locally Administered Projects (LAP) Manual. VDOT’s LAP Manual provides guidance and direction to all stakeholders, outlines Federal requirements for localities choosing to administer VDOT-funded projects with an emphasis on Federal-aid, and provides guidance to VDOT staff assigned an oversight role for locally administered projects.

Recommendations may also be addressed through future LPA seminars and workshops, which VDOT holds annually, to disseminate requirements that need further attention as evidence by FHWA’s CAP Review results. FHWA is available to assist in delivering training needs as well.
Background

CAP was established by the Federal Highway Administration (FHWA) on March 28, 2014 and is one aspect of FHWA’s Risk-Based Stewardship and Oversight.

The goal of risk-based project stewardship and oversight is to optimize the successful delivery of programs and projects and help ensure compliance with federal requirements. FHWA Risk-Based Project Stewardship and Oversight involves three main avenues of project involvement: 1) project approval actions, 2) data-driven compliance assurance, i.e., CAP, and 3) risk-based stewardship and oversight involvement in Projects of Division Interest (PoDI), including Projects of Corporate Interest (PoCI) which are a subset of PoDIs.

On August 14, 2014, FHWA issued Order 5020.2 for “Stewardship and Oversight of Federal-aid Projects Administered by Local Public Agencies (LPA),” which requires division review of LPA project-level compliance. In order to meet this requirement, FHWA’s performance year\(^1\) (PY) 2016 CAP Corporate Review Guide focused on LPA Federal-aid projects.

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\(^1\) FHWA’s performance year runs from June 1 until May 31.
Purpose and Objective

The purpose of CAP is to provide reasonable assurance, at both the national and local level, that Federal-aid highway construction projects are in compliance with key Federal requirements. It does this by providing a framework to make statistically valid inferences across national and local populations. The approach is objective and defensible, and it will inform the VA Division’s risk assessment with statistically valid information and data. The CAP is one element of project oversight, which will supplement and strengthen the Agency’s movement toward being more data-driven and risk-based.

The CAP review results will be used to inform the VA Division’s risk assessment and to develop a unit plan for FHWA PY 2017.
Scope and Methodology

The PMIT implements CAP each year for a pre-determined population of projects, which is a risk-based determination depending on National-level or division-level focus. To ensure consistency, the project population is a statistically-valid, random population drawn from the Fiscal Management Information System (FMIS).

For FHWA’s PY 2016, the PMIT randomly selected projects with construction authorizations between April 1, 2014 and March 31, 2015, identified as 'locally administered.' In order to provide a statistically valid sample, with a 90% confidence level, with a 10% margin of error, FHWA Headquarters provided the VA Division with 38 projects to review. However, not all projects in the sample had been awarded with costs incurred at the time of the review, and staff only responded to pre-construction CAP review questions.

The LPA Corporate Review Guide consists of the CAP Core, Finance, and Contract Administration Technical Question Guides (Appendix A). The CAP Core questions are required to be used annually to review all CAP projects because the questions are designed to solicit information about compliance with key Federal requirements and cover a cross section of project delivery technical areas. The Finance and Contract Administration Technical Question Guides, combined with the Core Technical Question Guide, will indicate compliance with key requirements for financial integrity and project delivery.²

The VA Division’s Engineers, in coordination with VDOT District Staff and FHWA program specialists, led the on-site review of documentation between June 1, 2015 and November 30, 2015. For instance, the planning/environmental specialists completed CAP questions related to the Statewide Transportation Improvement Program and National Environmental Policy Act. The results were reviewed by VA Division Leadership; the VDOT Executive Leadership was briefed on the findings on January 5, 2016; and the results will be submitted to FHWA Headquarters no later than May 31, 2016.

² Section 106(g) of Title 23, United States Code (U.S.C.), makes State Transportation Agencies responsible for determining that sub-recipients of Federal highway funds have adequate project delivery systems for Federal-aid projects and have sufficient accounting controls for proper management of such Federal funds.
Team Members

FHWA VA Division:
- Tammye Davis  Program Management Analyst, CAP Review Coordinator
- Gilberto DeLeon  Program Delivery Team Leader
- Jose Granado  Area Engineer
- Vanna Lewis  Area Engineer
- Tim Lewis  Area Engineer
- Elliott Moore  Area Engineer
- Iris Rodriguez  ITS/LPA Engineer
- Lorenzo Casanova  Senior LPA and Research Manager
- Karen King  Safety Engineer
- Rodolfo Maruri  Structures Team Leader
- Clementine Fleming  Financial Specialist
- Thanh Tran  Financial Specialist
- John Simkins  Environmental/Planning Team Leader
- Mack Frost  Environmental/Planning Specialist
- Kevin Jones  Environmental/Planning Specialist
- Barbara Middleton  Right of Way Manager

VDOT Central Office, including the Local Assistance Division, and District Staff assisted during each review for the applicable district, along with the applicable Project Engineer for each project reviewed. Thank you for all your time and effort in making this review period successful.
Observations and Recommendations

CAP Core Question #8: Are the DBE firms originally identified by the prime contractor at the time of contract award the same firms that are approved to work on the project at the time of this review?

Observation #1: On one project, the contractor provided a list of Disadvantaged Business Enterprises (DBEs) on the contract, but later changed them. No prior written approval was given; the contractor noted a verbal notification was given to the locality.

Recommendation: The DBE requirements were accomplished and an explanation of the proper procedure was given to the locality. No further action suggested.

CAP Core Question #10: Based on a minimum review of one contract change order or extra work order, did the State perform and adequately document a cost analysis for each negotiated change or extra work order?

Observation #2: Three localities did not follow the process defined in the LAP Manual or the processes used by VDOT to document and justify a change order, which includes preparing an independent estimate. Two localities did not document the analysis. The third locality utilized two prices of different materials from the contract in order to justify the price of a third material, which is not appropriate for price comparison purposes.

Recommendation: VDOT should meet with the locality to provide further guidance regarding the written procedures required regarding price analysis.

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3 49 CFR 26.53(b)(2) (f)(1) - You must require that a prime contractor not terminate a DBE subcontractor listed in response to paragraph (b)(2) of this section (or an approved substitute DBE firm) without your prior written consent. This includes, but is not limited to, instances in which a prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.

4 23 CFR 635.120 - The State shall perform and adequately document a cost analysis of each negotiated contract change or negotiated extra work order. The method and degree of the cost analysis shall be subject to the approval of the FHWA Division Administrator. Approval actions are outlined in the FHWA/VDOT Stewardship and Oversight Agreement.
CAP Finance Question #1: Are all eligible charges incurred after the date of construction authorization in FMIS?

Observation #3: On one project, the project is authorized for construction, but the costs billed to the project were for design work.

Recommendation: VDOT should process a credit to the construction project for all ineligible charges for the phase of work. Eligible design charges may be billed to the design project authorized by FHWA. VDOT Federal Programs Division should reiterate the requirement to charge only to the eligible phase of work to all VDOT staff processing payments.

CAP Finance Question #6: Based on review of one Federal-aid billing, were payroll, fleet, and equipment charges allocated properly to the project?

Observation #4: This occurred on one project. The observation isn’t directly related to “payroll, fleet, and equipment charges” properly allocated, but to the general allocation of proper payments to the project. The locality must properly support the payments made to the contractor and gain prior approval from FHWA for the use of in-kind contributions as the match. VDOT has provided documentation regarding the in-kind contribution usage for this project. However, further documentation is needed to support the payments to the contractors. Currently, the only documentation provided is a lump sum payment and the cancelled checks associated with those.

Recommendation: Further documentation supporting the payments to the contractors should be provided as soon as practical to the FHWA VA Division. VDOT should provide further guidance to localities on FHWA’s in-kind contribution policy and the establishment of contracts in accordance with Federal regulations.

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5 23 CFR 630.106(b) - Federal funds shall not participate in costs incurred prior to the date of a project agreement except as provided by 23 CFR 1.9(b).
6 23 CFR 630.108 - (b) The State may develop the project agreement in a format acceptable to the State and FHWA provided the following are included: … (5) The Federal-aid share of eligible project costs expressed as either a prorata percentage or a lump sum as set forth in § 630.106(f)(1); (6) A statement that the State accepts and will comply with the agreement provisions set forth in § 630.112. (c) The project agreement should also document, by comment, instances where: …(2) The project involves other arrangements affecting Federal funding or non-Federal matching provisions, including tapered match, donations, or use of other Federal agency funds, if known at the time the project agreement is executed.
CAP Contract Administration Question #2: Based on a minimum review of one contract time extension request involving federal participation, was the contract time extension request fully justified and adequately documented?

Observation #5: The locality had documentation justifying a contract time extension; however, the contract stated "Consecutive calendar days – 120 (includes 15 days for inclement)," and the contract took 180 days. The delay appears to be owner delay with locality-owned utilities and change in light pole standard and request is justified. However, if they were just waiting on light poles, then they should have had the roundabout constructed and opened to traffic. This occurred on one project.

Recommendation: VDOT, with FHWA support, should provide contract administration training to localities in order for staff to better understand the Federal-aid requirements.

CAP Contract Administration Question #5: Based on a minimum review of one applicable pay item paid in one progress payment, did the State ensure that all steel or iron material manufacturing processes, including application of coatings, for that pay item occurred in the United States?

Observation #6: The steel included on the project met Buy America requirement, but at the time of the review, the locality did not have the proper documentation in place. After discussions with the locality, the proper information was included with the project documentation. The Buy America requirement must be verified and documented at the time of installation.

Recommendation: Coordination should occur between VDOT’s Local Assistance Division and the municipalities to conduct Contract Administration training in order for staff to better understand Federal-aid requirements.

7 23 CFR 635.121(b) Contract time extensions granted by a State shall be subject to the concurrence of the Division Administrator and will be considered in determining the amount of Federal participation. Contract time extensions submitted for approval to the Division Administrator, shall be fully justified and adequately documented.

8 23 CFR 635.410(b)(1) (b) No Federal-aid highway construction project is to be authorized for advertisement or otherwise authorized to proceed unless at least one of the following requirements is met: (1) The project either: (i) Includes no permanently incorporated steel or iron materials, or (ii) if steel or iron materials are to be used, all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes which protect or enhance the value of the material to which the coating is applied.
CAP Contract Administration Question #6: Does the contract specify that the percentage of work that must be performed by the prime contractor is greater than or equal to 30 percent of the total original contract price excluding identified specialty items?

Observation #7: The regulation requires contracts to specify the minimum percentage of work that a contractor must perform with its own organization. On one project, the locality contract does not specify the 30% minimum in the contract documents.

Observation #8: During the review for the minimum percentage of work to be performed by the contractor’s organization, FHWA also noted it was not apparent if the locality or VDOT examined the unit bid prices for obvious unbalancing of unit prices. FHWA identified several unbalanced unit prices. Additionally, FHWA staff noted that there is no ability on the form to identify lump sum contracts, which affects the ability to be in compliance with the Federal regulations.

Recommendation: Coordinate with the Local Assistance Division and the Construction Division to emphasize and/or clarify the need to perform and document a unit bid price review for unbalanced items. Clarification of this requirement should be done in all pertinent documents (e.g., LAP Manual, Construction Division memorandums, forms).

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9 23 CFR 635.116(a) - Contracts for projects shall specify the minimum percentage of work that a contractor must perform with its own organization. This percentage shall be not less than 30 percent of the total original contract price excluding any identified specialty items. Specialty items may be performed by subcontract and the amount of any such specialty items so performed may be deducted from the total original contract before computing the amount of work required to be performed by the contractor's own organization. The contract amount upon which the above requirement is computed includes the cost of materials and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
CAP Contract Administration Question #9: Based on a minimum review of one subcontract, has the State authorized in writing the subcontract, or if FHWA has approved the State’s process has the contractor certified, that each subcontract has a written agreement containing all the requirements and pertinent provisions of the prime contract?

Observation #9: Throughout six districts, eighteen projects did not show evidence that the necessary Federal-aid requirements (e.g., Form FHWA-1273) were properly included in the subcontract.

Contracting agencies may reference Form FHWA-1273 in bid proposals or request for proposal documents; however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts, and lower-tier subcontracts. This form was developed to outline the requirements of various Federal agencies in order to safeguard the investment of Federal dollars on projects. Incorporating the form ensures that contractors have written notice that they must comply with those Federal requirements.

All subcontracts must be approved by the State or locality; a number of localities were not aware of this requirement, and therefore the subcontracts were not approved, which mostly occurred due to the absence of written procedures. On other subcontracted reviewed, the required Federal documents were not incorporated.

Recommendation: VDOT, including the Local Assistance Division, establish a written procedure and follow up with training the locals to execute the procedures. It's also suggested VDOT issue a memorandum to localities regarding the requirement to follow written procedures that require the subcontractor's approval and update the LAP Manual as appropriate. If VDOT would prefer not to review each subcontract, the regulation allows for VDOT to submit their procedures to FHWA for concurrence, which requires a certification process for the contractor, and the State must demonstrate an acceptable plan for monitoring such certifications.

10 23 CFR 635.116(b) - The State shall not permit any of the contract work to be performed under a subcontract, unless such arrangement has been authorized by the State in writing. Prior to authorizing a subcontract, the State shall assure that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. The Division Administrator may permit the State to satisfy the subcontract assurance requirements by concurrence in a State process which requires the contractor to certify that each subcontract arrangement will be in the form of a written agreement containing all the requirements and pertinent provisions of the prime contract. Prior to the Division Administrator’s concurrence, the State must demonstrate that it has an acceptable plan for monitoring such certifications.
CAP Contract Administration Question #11: If a specific patented or proprietary material or product is included in the approved PS&E, did the State certify either that such patented or proprietary item is essential for synchronization with existing highway facilities, or that no equally suitable alternate exists?

Observation #10: Three localities were unable to produce evidence following the proper process for the State to certify that either: (a) such patented or proprietary item is essential for synchronizations with existing highway facilities, or (b) that no equally suitable alternate exists was in place at the time of the review. On one project, the locality understood that the preselected item was the best alternative, but did not request a public interest finding or certificate to support the results. On another, a specific proprietary product was included in the approved plans, specifications, and estimate without a public interest finding or certification.

Recommendation: The process was recently reviewed and new forms were created. This topic was included on the program agenda for the September 2015 Local Programs Workshop. However, attention through a workshop and/or webinar may facilitate improvement.

11 23 CFR 635.411(a)(2) - Federal funds shall not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material, specification, or process specifically set forth in the plans and specifications for a project, unless (2) The State highway agency certifies either that such patented or proprietary item is essential for synchronization with existing highway facilities, or that no equally suitable alternate exists.
Successful Practices

- Norfolk established a policy that requires the contractor to provide all subcontracts for review and approval (related to Contract Administration Question #9), before they begin work, in accordance with the requirements of the FHWA-1273 and contract. At the pre-construction meeting, the district staff reiterated the requirement for the contractor to physically include the FHWA-1273 into each subcontract; it’s also required on the lower tier subcontracts and subsequent agreements, and all are required to follow the same Federal requirements. Their internal process begins at the pre-construction conference where they discuss with the contractor what is required by the FHWA-1273 and for the contractor to submit all civil rights documents to the Inspector, Management Analysis, and Construction Manager; they then log the submittals into a spread sheet, file the documents, and forward to VDOT to initiate their internal monitoring process. If the contractor has retained a consultant to help administer the project, the district requires them to verify Equal Employment Opportunity and Disadvantaged Business Enterprise compliance prior to forwarding any payment requests from the contractor to VDOT.

- The City of Hampton was well prepared and organized for the review. They provided every document requested and there were no findings.
Appendix A: CAP Questions Used for the Review

CAP Core Questions:

1. Was the project included in the FHWA/FTA approved/amended Statewide Transportation Improvement Program (STIP) at the time of authorization in FMIS?
2. Was the appropriate NEPA action completed prior to the date of authorization in FMIS, i.e. Record of Decision (ROD), Finding of No Significant Impact (FONSI), or Categorical Exclusion (CE) determination?
3. Did the State provide a statement regarding the status of all ROW, utility, and railroad work prior to the date of authorization in FMIS?
4. Is the Form FHWA-1273 contract provisions physically incorporated into the construction contract?
5. Do the approved project plans and specifications include a Transportation Management Plan (TMP) or provisions for the Contractor to develop a plan?
6. Following opening of bids, did the State examine the unit bid prices of the apparent low bid for reasonable conformance with the engineer’s estimated prices, including a thorough evaluation of an obvious unbalancing of unit prices or bid with extreme variations from the engineer’s estimate?
7. Is there a full time employed public employee in responsible charge for administering the project?
8. Are the DBE firms originally identified by the prime contractor at the time of contract award the same firms that are approved to work on the project at the time of this review?
9. Was the State’s request for obligation of federal funds supported by a documented cost estimate that is based on the State’s best estimate of cost?
10. Based on a minimum review of one contract change order or extra work order, did the State perform and adequately document a cost analysis for each negotiated change or extra work order?

CAP Finance Questions:

1. Are all eligible charges incurred after the date of construction authorization in FMIS?
2. Has the Federal-aid share of eligible project costs in the project agreement or in subsequent amendments to the agreement remained unchanged?
3. Has the project maintained the same category of Federal funds as originally obligated, except for the addition of Federal fund categories to cover an increase of eligible project costs?
4. Based on a review of one Federal-aid billing, were expenditures allocated to the appropriate Federal program fund category (program code) on multi-funded projects?
5. Were indirect charges billed under an approved indirect cost rate?
6. Based on review of one Federal-aid billing, were payroll, fleet, and equipment charges allocated properly to the project?
7. Does the project agreement in FMIS include a project agreement end date?

CAP Contract Administration Questions:

1. Are mitigation measures stated as commitments in the environmental document being implemented on the project?
2. Based on a minimum review of one contract time extension request involving federal participation, was the contract time extension request fully justified and adequately documented?
3. Did all major changes in the plans and contract provisions and all major extra work have formal approval by the Division Administrator in advance of their effective dates?
4. Was the reason, or reasons, for using force account procedures documented?
5. Based on a minimum review of one applicable pay item paid in one progress payment, did the State ensure that all steel or iron material manufacturing processes, including application of coatings, for that pay item occurred in the United States?
6. Does the contract specify that the percentage of work that must be performed by the prime contractor is greater than or equal to 30 percent of the total original contract price excluding identified specialty items?
7. Based on a minimum review of one applicable contract pay item paid in one progress payment, did the State provide adequate assurance that completed work quantities were determined accurately, in accordance with the State’s statewide uniform procedures?
8. Based on a minimum review of one applicable contract pay item paid in one progress payment, did the State provide adequate assurance that stockpiled material conformed with the requirements of the plans and specifications?
9. Based on a minimum review of one subcontract, has the State authorized in writing the subcontract, or if FHWA has approved the State’s process has the contractor certified, that each subcontract has a written agreement containing all the requirements and pertinent provisions of the prime contract?
10. Are erosion and sediment control measures and practices being monitored and maintained or revised to insure that they are fulfilling their intended function during the construction of the project?
11. If a specific patented or proprietary material or product is included in the approved PS&E, did the State certify either that such patented or proprietary item is essential for synchronization with existing highway facilities, or that no equally suitable alternate exists?
## Appendix B: CAP Review Dates

<table>
<thead>
<tr>
<th>District</th>
<th>Date (2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>October 27</td>
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<tr>
<td>Culpeper</td>
<td>October 29</td>
</tr>
<tr>
<td>Fredericksburg</td>
<td>November 3</td>
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<tr>
<td>Hampton Roads</td>
<td>July 2-3, August 27</td>
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<tr>
<td>Lynchburg</td>
<td>August 27</td>
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<tr>
<td>Northern Virginia</td>
<td>August 27</td>
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<tr>
<td>Richmond</td>
<td>June 23-24</td>
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<tr>
<td>Salem</td>
<td>October 27</td>
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<tr>
<td>Staunton</td>
<td>October 27</td>
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