Programmatic Work Plan for Utilizing Fixed Price Variable Scope Contracting for Design-Bid-Build Construction Projects (SEP‐14)

# Purpose and Scope

The Missouri Department of Transportation (MoDOT) and the Federal Highway Administration (FHWA) are entering into this programmatic work plan agreement to approve the use of Fixed Price Variable Scope Contracting (FPVS) on preventive maintenance and traffic control device installation types of work when deemed appropriate and beneficial. Currently, each individual project requires a written work plan and formal approval prior to utilizing the FPVS process. With this agreement, MoDOT and FHWA agree to programmatically approve the use of FPVS, a form of “alternative contracting” identified under the FHWA’s SEP-14 program, without requiring a specific work plan and approval for each individual project.

MoDOT will select projects with work that is repetitive in multiple locations. This project delivery method will be used when project budget is a priority on preventive maintenance and traffic control installation types of work. MoDOT intends to use this contracting method on 10 to 20 projects a year on NHS routes.

# Proposal

FPVS is a competitive bidding and contracting process that allows an agency to maximize the amount of work completed for a fixed budget amount. This contract method allows MoDOT to vary the amount of work to be completed to match the budget set for the project. MoDOT has successfully used FPVS contracting on two recent projects. The benefit of this procurement method is MoDOT’s ability to maximize the amount of work completed in a single contract while keeping total project costs from exceeding the project budget. An advantage to the contractor will be their ability to calculate their bid knowing the locations of work, based on priorities established in the bid proposal.

MoDOT proposes to use FPVS procurement to accomplish these projects. This contract method will allow MoDOT to vary the amount of work to be completed to match the budget set for the projects. The work included in the bid proposal is established in priority order to be completed and will exceed the amount of work that is expected to be completed by the budget in order to capitalize on getting better than expected bids. This procurement method will have the contractor bid a unit price for the estimated quantities for each item of work in the contract. The estimated quantities included in the contract represent the amount of work than can be completed for the budgeted amount. Once the project has been awarded, the MoDOT construction office would then manage the contract by adjusting the contract quantities to hit the budgeted amount.

## Procurement Overview:

Under the FPVS procurement method:

1. The budgeted amount is shown in the contract.
2. The contract indicates the project locations that are included in the initial bid quantities. The itemized bid quantities are based only on work at these locations.
3. The contract indicates the project locations that are included as the variable scope portion of the contract.
4. Contract work is listed in priority order: first, the locations included in the initial bid quantities; next, the locations included in the variable scope portion of the contract. The contractor shall begin work on the first route and continue down the list until all funds have been used.
5. The unit prices bid will apply for the work at the locations included in the initial bid quantities, as well as for those locations listed as variable scope.
6. The award of the contract will be based on the lowest responsible bidder based on their total bid for the itemized quantities in the proposal and unit price bid.
7. Once the project has been awarded, the MoDOT construction office would then manage the contract by using a change order to adjust the contract quantities upward or downward to reach, but not exceed the budgeted amount.

MoDOT will initially utilize pre-bid meetings and/or industry meetings with contractors to familiarize them with the FPVS bidding and contract process.

# Schedule

MoDOT proposes to implement the programmatic agreement for a period no longer than 3 years. Project advertisement, letting, and award will follow MoDOT standard procedures. Evaluations and reports will be completed on an annual basis.

# Roles and Responsibilities of MoDOT

MoDOT will designate various Project Managers on a project-by-project basis who will be responsible for delivering a FPVS project. The Project Manager is responsible for implementing the FPVS project in accordance with state and federal laws and regulations while meeting the project’s scope and budget. The Project Manager is responsible for coordinating with various project team members from design, bridge, construction, environmental, financial, etc. during project delivery. The Project Manager will hand-off project responsibility to a MoDOT Resident Engineer during construction of the project. MoDOT’s Design Division Bidding and Contract Services Engineer and the Design Liaison Engineer will serve as the main point of contact with FHWA for FPVS projects. Project specific submittals, approval requests, and coordination may be delegated to the Project Manager, with the approval and under the direction and supervision of the Central Office Design Division.

MoDOT will proactively coordinate and collaborate with FHWA to determine an agreed upon level of FHWA involvement in all facets of FPVS projects. The Project Manager will coordinate project actions, approval requests, project coordination meetings, submittals, and written or verbal coordination with FHWA. Written responses to FHWA submitted comments or inquiries will be provided in a timely manner.

# Roles and Responsibilities of FHWA

The FHWA designated Transportation Engineer (TE) will have primary responsibility for ensuring a FPVS project is executed in accordance with federal laws while implementing FHWA’s Performance Plan and required stewardship and project involvement. The designated TE will serve as MoDOT’s main point of contact for FPVS projects in their respective MoDOT District. Project specific submittal reviews, approvals, meeting attendance and coordination may be delegated to other FHWA staff members, with the approval and under the direction of the designated FHWA TE. FHWA will proactively coordinate and collaborate with MoDOT to determine an agreed upon level of FHWA involvement in all facets of the FPVS project. FHWA will provide timely reviews of project submittals and written review comments. If the FHWA TE becomes unavailable during a review period, the FHWA Project Implementation Team Leader or FHWA Deputy Division Administrator may be contacted regarding all project-related issues.

# MoDOT Policy and Guidelines

MoDOT developed basic guidance for FPVS contracting in MoDOT’s Engineering Policy Guide, Article 147.4. This article contains guidelines, procedures, benefits, and potential drawbacks for using FPVS contracts. EPG 147.4 will be updated with revised guidance and procedures as MoDOT gains additional experience with FPVS contracting.

# Evaluation/Performance Measures

MoDOT will evaluate the effectiveness of FPVS contracting as projects are completed. Periodic meetings will be conducted with MoDOT project staff and FHWA to modify and improve the guidelines for FPVS contracting. If significant changes are identified those changes will be communicated and coordinated with both Industry and the FHWA Missouri Division Office.

MoDOT reports use of innovative contracting methods under MoDOT Tracker Measure – Innovative Contracting Methods. This measure tracks use of non-traditional contracting methods by MoDOT such as Design-Build, A+B Contracting, Alternate Technical Concepts, and will also include FPVS Contracting. MoDOT’s target for innovative contracting is 10% of MoDOT’s total construction program (in dollars). MoDOT’s Tracker can be found at <https://www.modot.org/tracker-measures-departmental-performance>. The Tracker Measure is in the Deliver Transportation Solutions of Great Value section.

In addition to the performance measure above MoDOT will provide the following information:

1. FPVS Contracts Proposed: MoDOT will assess the types of FPVS contracts proposed and the types of FPVS projects approved for addition to MoDOT’s construction program.
2. FPVS Contracts Let: MoDOT will list all contracts awarded during the year using the FPVS contracting method and the bid analysis used to determine award.
3. Lessons Learned: MoDOT will provide a summary of any lessons learned from individual FPVS projects and include items that may be improved for future FPVS projects.
4. Industry Reaction: MoDOT will record and track responses from the contracting industry, including an assessment of FPVS process improvements proposed by industry.

# Reporting

MoDOT will provide the FHWA Division Office with initial, interim, and final reports on this SEP-14 Programmatic work plan.

1. Initial Report: At the end of Year 1, provide an initial report with the following information:
2. List all projects let during Year 1 using this contracting method
3. Report on Performance Measures above for Year 1 projects
4. Interim Report: At the end of Year 2 and each succeeding year before the final year, provide an interim report with the following information:
5. List all projects let during succeeding years using this contracting method
6. Report on Performance Measures above for projects awarded during that succeeding year
7. Final Report: At the end of the programmatic approval period, provide a final report with the following information:
   1. List all projects let during the programmatic approval period using this contracting method
8. Report on Performance Measures above for projects awarded during the programmatic approval period

Periodic meetings will be conducted with MoDOT Design, MoDOT Construction and Materials, and FHWA to modify and improve the guidelines for using FPVS, as necessary. In the event significant changes are identified as necessary, those changes will be communicated and coordinated with both Industry and the FHWA Missouri Division Office.

# Summary of Previous FPVS Projects

MoDOT has successfully used FPVS Contracting on the following projects over the past few years.

1. J7P3108B, Routes I-49, 249 & Loop 49, Wrong Way and Chevron signing, Federally Funded
2. J2I3225/J5I3303, Routes I-70, 61 and 63, Wrong Way and Do Not Enter ramp signing, Federally Funded
3. J6M02786, Routes UU, V, M, AB, AD, and AT, Chip Seal, State Funded