

**SEP-14 Work Plan**  
**Kentucky Transportation Cabinet**  
**Wrong Way Driving Prevention Grant/Advanced Traffic**  
**Congestion and Mitigation Technology Deployment (ATCMTD)**  
June 29, 2023

**Introduction**

The Kentucky Transportation Cabinet (KYTC) received an Advanced Traffic Congestion and Mitigation Technology Deployment (ATCMTD) grant for the implementation of Wrong Way Driving prevention technology on selected corridors in Kentucky. KYTC is using the Progressive Design Build (PDB) Project Delivery method to procure a team for the implementation of Wrong Way Driving prevention technology in Kentucky.

**Purpose and Scope**

The purpose of the project is to install the wrong way driving countermeasures at various locations in Lexington and Louisville. The Wrong-Way Driving and Integrated Safety Technology System will use edge computing / video processing to detect and deter wrong-way incidents and will alert other drivers and emergency responders. Also, the new computing power also creates an opportunity to better leverage existing ITS equipment for freeway mainline monitoring, detecting other safety concerns including pedestrians, debris, and stopped vehicles. The Wrong-Way Driving and Integrated Safety Technology deployment has four main elements:

1. **Detection System** - Identifies wrong-way incidents and other safety concerns in real time
2. **Deterrent System** - Activates warnings designed to discourage the wrong-way drivers
3. **Alert System** - Notifies correct direction travelers and emergency responders
4. **Mainline Monitoring System** - Identifies mainline safety concerns

The total budget for the project is \$10,294,600 (50% ATCMTD, 50% State).

This letter constitutes an application to the Federal Highway Administration (FHWA) by KYTC for review and approval of this workplan for delivery of the Project using a PDB delivery model under the provisions of Special Experimental Project No. 14 (SEP- 14).

Under 23 CFR 636.302(a)(1), “You must evaluate price in every source selection where construction is a significant component of the scope of work”. Since the total contract price will not be known upon the selection of the Design-Build Team (DBT) and the NEPA decision has been completed prior to executing the PDB procurement, SEP-14 approval by FHWA is required. KYTC, the contracting agency, is requesting SEP-14 approval for deviating from the 23 CFR 636.302(a)(1) requirement.

**Procurement Process**

The KYTC will be utilizing PDB to procure a Design Build Team. The PDB approach allows the Cabinet to discuss technology options all while considering their integration with current Intelligent Transportation Systems (ITS). Secondly, it allows for feedback from industry on this special and cutting-edge technology, from delivery methods, constructability, communications, and integration. KYTC staff also considered this delivery method because of its ability to implement technology products in the field sooner to prevent crashes. The procurement for a DBT schedule is as follows:

| Milestone/Activity                            | Timeline/Date         |
|---|-----------------------|
| Notice to Industry                            | June 10, 2023         |
| Informational Recording Posted                | June 16, 2023         |
| LOI Submittal Deadline                        | June 21, 2023         |
| Informational One-on-One Meetings             | June 26-27, 2023      |
| Issue Draft RFP                               | July 24, 2023         |
| Draft RFP Comments Due                        | July 31, 2023         |
| Deadline for One-on-One Meeting Submission    | July 31, 2023         |
| Formal One-on-One Meetings                    | August 8-10, 2023     |
| Issue Final RFP                               | August 22, 2023       |
| Proposals Due and Contractor Prequalification | September 12, 2023    |
| Interviews                                    | September 25-29, 2023 |
| Apparent Best Value Proposer Announcement     | October 4, 2023       |

***Procurement Overview:***

The DBT will be chosen on the following criteria:

|                      |  |            |
|----------------------|--|------------|
| Technical Experience | Experience of the firms                          | 10 Points  |
|                      | Key Personnel Experience                         | 25 Points  |
|                      | Pre-Construction Phase Approach and Organization | 20 Points  |
|                      | Construction Phase Approach and Organization     | 20 Points  |
|                      | Pricing Approach                                 | 5 Points   |
| <b>Interview</b>     |  | 20 Points  |
| <b>Total</b>         |  | 100 Points |

The Instructions to Proposers and Request for Proposals document will both contain language that will allow the Cabinet to at any time cease work, begin the “off-ramp” option, and choose another DBT. See Appendixes A and B.

Once the DBT is under contract, work will begin on finding a technology solution that can meet all the requirements outlined in the RFP. Plan Sheets will be produced for each location that will outline pay items and quantities. An independent cost estimator will submit costs for the pay items and those will be compared to the price submittals of the contractor. After agreement on price and quantity, work will begin on installation of the WWD systems at each location.

**Schedule**

It is anticipated that after the DBT is chosen, the initial design, and an initial technology deployment for proofing (Early Work Package (EWP)), will take place in the last of 2023 into the early of 2024. Widespread construction will begin mid-2024 and last until mid-2025. Burn-in and monitoring will last until 2026. Burn-in is the process by which components of a system are exercised before being placed in service

**Evaluation and Reporting**

***Industry and 3rd Party Reaction***

The Wrong Way Driving Project Team will record and track the response from Contractors, Designers, Integrators and Vendors regarding the procurement. This will also include an assessment of improvements to the procurement process that may be proposed by any of the above partners.

### ***Lessons Learned (benefits, difficulties)***

The WWD Project Team will provide a summary of any lessons learned throughout the Project, both from the KYTC and partners' perspectives, and will include any items that may be improved for any future projects that propose to utilize this technique. This will focus on the early identification and sharing of risks to reduce contingencies through assumption of how unknown and unmitigated risks could have affected a bid in a traditional DB procurement.

### ***Quality improvement/benefits/innovations***

The WWD Project Team will provide a summary of any noted innovations brought forth through the collaboration of the Contractor, Designer, Integrator, Vendor and WWD Project Team. The report will address how the collaboration efforts impacted the development of the innovation. The report will evaluate any innovations for long term implementation of WWD systems state or nationwide.

Some evaluation questions that could be answered in the final report are:

- Did the use of Progressive Design Build result in cost savings?
- What was the industry reaction to Progressive Design Build? Did it build a better partnership?
- What was difficult to administer for the Progressive Design build project?
- What were lessons learned?

### ***Interim Reporting (Early Work Deployment)***

After the deployment, and testing, of the Early Work Package (EWP), the WWD Project Team will prepare an interim report that will outline what systems were tested, what were the lessons learned in deployment, how did this improve the quality of the deployments and the outcomes of testing the initial systems.

### **Interim Reporting (Construction Phase)**

The WWD Project Team will prepare an interim report upon agreement on the scope and price for the deployments after the Early Works Package. This report will describe the WWD Project Team's experience with the "construction award" process, including with respect to competitive contracting and open book negotiation procedures, the team's approach to determining price reasonableness, and reactions in the subcontractor community, as well as any identifiable effects of the progressive design-build approach on the final pricing.

### **Final Report (Final Acceptance)**

A final report will be submitted upon completion of the design-build contracts for the Project and the KYTC final acceptance of the work. The final report will contain an overall evaluation of the Project and the progressive design-build delivery model, along with "lessons learned" and any suggestions and recommendations for improving the process. Along with assessing the quality improvements, cost savings, and time savings.

## Appendix A – Request for Proposals (Termination Clause)

### 26. TERMINATION FOR CONVENIENCE

The Cabinet may terminate the Design Build Agreement and the performance of the Work by the DBT for its own convenience if the Cabinet determines, in its sole discretion, that a termination is in the best public, state, or national interest. The Cabinet shall notify the DBT of its decision to terminate by delivering to the DBT a written Notice of Termination specifying the extent of termination, its effective date, and any remaining Work necessary to place the Project in an acceptable condition, as determined by the Cabinet in its sole discretion. Termination of the Design Build Agreement shall not relieve any Surety of its obligation for any claims arising out of the Work performed. Termination may occur before or after Work has begun.

#### *26.1. DBT Responsibilities Upon Termination*

After receipt of a Notice of Termination, and except as otherwise directed by the Cabinet, the DBT shall immediately proceed as follows, regardless of any delay in determining or adjusting any amounts due under this Section 26:

1. Stop Work as specified in the notice.
2. Communicate to all affected Subcontractors such notice of termination and that their Subcontracts are not to be further performed unless otherwise authorized in writing by the Cabinet.
3. Place no further Subcontracts or orders for materials, services, or facilities, except as necessary to complete the continued portion of the Work, if any, or for mitigation of damages.
4. Terminate all Subcontracts to the extent that they relate to the Work terminated.
5. Assign to the Cabinet in the manner, at the times, and as and to the extent directed by the Cabinet, all the right, title, and interest of the DBT under the Subcontracts so terminated, in which case the Cabinet will have the right, in its sole discretion, to accept performance, settle, or pay any or all claims arising out of the termination of such Subcontracts.
6. Settle all outstanding liabilities and claims arising out of such termination of Subcontracts, with the Approval or ratification of the Cabinet, to the extent it may be required, which Approval or ratification shall be final.
7. Provide the Cabinet with an inventory list of all materials previously produced, purchased, or ordered from Suppliers for use in the Work and not yet used in the Work, including its storage location, as well as any documentation or other property required to be delivered hereunder, which is either in the process of development or previously completed but not yet delivered to the Cabinet, and such other information as the Cabinet may request; and transfer title and deliver to the Cabinet, in the manner, at the times, and as and to the extent, if any, directed by the Cabinet of:
  - a. fabricated or unfabricated parts, the Work in process, completed Work, supplies, and other material produced or acquired for the Work terminated; and
  - b. the Design Documents and all other completed or partially completed drawings (including plans, elevations, sections, details, and diagrams), specifications, records, samples, information, and other property that would have been required to be furnished to the Cabinet if the Work had been completed.
8. Complete performance, in accordance with the Contract Documents, of all Work not terminated.

9. Take all action that may be reasonably necessary, or that the Cabinet may direct, for the safety, protection, and preservation of:
  - a. the public, including public and private vehicular movement.
  - b. the Work; and
  - c. the equipment, machinery, materials, and property related to the Contract Documents that is in the possession by the DBT and in which the Cabinet has or may acquire an interest.
10. As authorized by the Cabinet in writing, use its best efforts to sell, in a manner, at the times, to the extent, and at the price or prices directed or authorized by the Cabinet, any property of the types referred to in clause 7; provided, however, that the DBT:
  - a. is not required to extend credit to any purchaser; and
  - b. may acquire the property under the conditions prescribed and at prices Approved by the Cabinet.

The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Cabinet under the Contract Documents or paid in any other manner directed by the Cabinet.
11. If requested by the Cabinet, withdraw from the portions of the Sites designated by the Cabinet, and remove such materials, equipment, tools, and instruments used by, and any debris or waste materials generated by, the DBT and any Subcontractor in the performance of the Work as the Cabinet may direct.
12. Take other actions related to the Termination that are directed by the Cabinet.

## **Appendix B - Draft Instructions to Proposers (Termination Clause)**

The Cabinet reserves to itself all rights (which rights shall be exercisable by the Cabinet in its sole discretion) described herein and available to it by law, including, without limitation, with or without cause, and with or without notice, the right to:

- 1) Modify, withdraw, or cancel this solicitation in whole or in part at any time prior to the execution of the Agreement by the Cabinet, without incurring any costs, obligations, or liabilities.
- 2) Issue a new RFP after withdrawal of this RFP.
- 3) Accept or reject any and all submittals, responses, and Proposals received at any time.
- 4) Modify the RFP process (with appropriate notice to Proposers).
- 5) Issue addenda, supplements, and modifications to the RFP.
- 6) Add or delete Proposer responsibilities from the information contained in the RFP.
- 7) Require confirmation of information furnished by a Proposer, require additional information from a Proposer concerning its Proposal, and require additional evidence of qualifications to perform the work.
- 8) Waive any informalities, irregularities, or omissions in a Proposal, permit corrections, and seek and receive clarifications to a Proposal.
- 9) Terminate evaluation of any Proposal, submittal, response, or proposal at any time.
- 10) Negotiate with a Proposer without being bound by any provision in its Proposal.
- 11) Suspend, discontinue, or terminate negotiations with any Proposer at any time, or elect not to commence negotiations with any responding Proposer and engage in negotiations with other than the highest ranked Proposer, prior to the actual authorized execution of an Agreement by all parties.

The Cabinet assumes no obligations, responsibilities, and liabilities, fiscal or otherwise, to reimburse all or part of the costs incurred or alleged to have been incurred by parties responding to this RFP. All such costs shall be borne solely by the Proposer. Additionally, FHWA will need to concur with any of the decisions made by KYTC on the language above.