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| **Contact** |  |
| **Name:** | Click or tap here to enter text. |
| **Phone:** | Click or tap here to enter text. |
| **E-Mail:** | Click or tap here to enter text. |

**Section 1 Project Information**

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| **Title:** Click or tap here to enter text. |

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| **Location Map**  **Please attach a map illustrating the project location and the project limits. Please be very specific in the description of the project location as it will be used to determine the congestion score.**  **Congestion Score**  **DRCOG staff will use the information provided above to determine the congestion score as an average (weighted by segment length) of the DRCOG congestion score for the roadway links in your project. The current map of scores is provided for reference. Please enter additional pertinent information, if necessary.**  Click or tap here to enter text.  **Project Schedule**  **Please attach a Gantt-style project schedule including the design, procurement and construction milestones relative to date that the IGA execution with CDOT is complete.** | **Estimate**  **Please use the attached estimate template to prepare the project estimate. Please summarize here. The default non-federal match is a minimum of 20%. Attachment A lists the project types eligible for 100% federal-funding.**  State $  Federal $  Non-federal $  Total $ |
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| **Description** |
| Please provide an overview description of the project.  Click or tap here to enter text. |
| |  | | --- | | **Nature of Work**  Scoping  Design Software / Integration  Construction  Operations  Evaluation  Planning  Maintenance (Equipment Replacement)  Other  If Other explain: Click or tap here to enter text.  **Relationship to other projects and phases** | | If this project has relationships to other projects or phases, describe it here:  Click or tap here to enter text. | |

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| **Need** |
| Please describe and quantify the need or problem to be addressed by the project.  Click or tap here to enter text. |
| Please describe how the project will address the problem.  Click or tap here to enter text. |

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| **Program Objectives** |
| Identify the program objectives this project will address. |
| Increase trip travel time reliability on freeways and arterials for all modes |
| Reduce overall traveler stops and delay due to traffic control operations |
| Reduce average incident duration |
| Reduce occurrence of secondary incidents |

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| **Program Strategies and Initiatives**  This list of strategies and initiatives was developed and confirmed by the Regional Transportation Operations Working Group. Identify the strategies and initiatives that this project will implement. Provide brief descriptive text justifying the selection. Note that the initiatives under each strategy are listed in a general priority order. Projects implementing the same strategy will be differentiated by the number and priority of initiatives implemented. |

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| **Employ consistent incident management processes** |  | **30 points** |
| Establish and maintain a Regional Incident Management Program |  | Click or tap here to enter text. |
| Expand traffic monitoring capabilities and infrastructure |  | Click or tap here to enter text. |
| Expand incident management data sharing between public safety agencies and transportation operations |  | Click or tap here to enter text. |
| Establish shared monitoring and operational data sharing between jurisdictions |  | Click or tap here to enter text. |
| Employ consistent interagency communications protocols |  | Click or tap here to enter text. |
| Employ consistent regional traveler information strategies |  | Click or tap here to enter text. |
| Employ performance measurement systems to optimize services provided to the public |  | Click or tap here to enter text. |
| **Expand transportation operators’ situational awareness** |  | **25 points** |
| Expand traffic monitoring capabilities and infrastructure |  | Click or tap here to enter text. |
| Establish shared monitoring and operational data sharing between jurisdictions |  | Click or tap here to enter text. |
| Establish regional coordination for work zone planning |  | Click or tap here to enter text. |
| Establish regional coordination for major weather events |  | Click or tap here to enter text. |
| Establish regional coordination for special event management |  | Click or tap here to enter text. |
| Expand data warehouse and data management processes |  | Click or tap here to enter text. |
| **Coordinate regional, multimodal traveler information** |  | **20 points** |
| Expand traffic monitoring capabilities and infrastructure |  | Click or tap here to enter text. |
| Establish shared monitoring and operational data sharing between jurisdictions |  | Click or tap here to enter text. |
| Consolidate traveler information data to serve as a source of user’s improved situational awareness |  | Click or tap here to enter text. |
| Develop and implement coordinated traveler information strategies to support regional coordination for incident management, work zones, special events, and major weather events |  | Click or tap here to enter text. |
| Expand traveler information access, capabilities, coverage, and partnerships |  | Click or tap here to enter text. |
| **Employ good interjurisdictional transportation operations coordination and cooperation for all modes** |  | **15 points** |
| Maintain interjurisdictional traffic signal timing coordination program |  | Click or tap here to enter text. |
| Establish shared monitoring between jurisdictions |  | Click or tap here to enter text. |
| Establish and expand multimodal signal operations support implementations |  | Click or tap here to enter text. |
| Implement traffic signal control strategies that support incident response, event management, and work zone coordination. |  | Click or tap here to enter text. |
| Develop and implement coordinated traveler information strategies to support regional coordination for incident management, work zones, special events, and major weather events |  | Click or tap here to enter text. |
| Employ performance measurement systems to optimize services provided to the public |  | Click or tap here to enter text. |
| **Coordinate management of freeway and arterial operations** |  | **10 points** |
| Expand traffic monitoring capabilities and infrastructure |  | Click or tap here to enter text. |
| Establish shared monitoring between jurisdictions |  | Click or tap here to enter text. |
| Deploy work zone monitoring and management systems |  | Click or tap here to enter text. |
| Develop and implement coordinated traveler information strategies to support regional coordination for incident management, work zones, special events, and major weather events |  | Click or tap here to enter text. |
| Employ performance measurement systems to optimize services provided to the public |  | Click or tap here to enter text. |
| **Provide multimodal traveler support** |  | **5 points** |
| Develop and implement coordinated traveler information strategies to support regional coordination for incident management, work zones, special events, and major weather events |  | Click or tap here to enter text. |
| Support implementation of dynamic ride-sharing |  | Click or tap here to enter text. |
| Implement support for bicycle roadway operations |  | Click or tap here to enter text. |

**Section 2 Alternatives Analysis**

**Please describe the alternative concepts considered and document the analysis that resulted in selection of this project. A separate document may be attached.**

Click or tap here to enter text.

**Section 3 Benefits Assessment and Performance Measurement**

**Using the framework documents attached to this application, estimate the CMAQ benefits that will result from this project. Attach the analysis and enter the results here.**

Click or tap here to enter text.

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| **Performance Measures** |
| Identify the associated program performance measure results to be improved. |
| Travel Time index (TTI) |
| Planning Time Index (PTI) |
| Transit on-time reliability |
| Average roadway clearance time |
| Average incident clearance time |
| Number of secondary incidents |

**Estimate the improvement in the performance measures selected above. Please either describe the rationale for the estimate or attach the estimate analysis.**

Click or tap here to enter text.

**Section 4 Regional ITS Architecture**

**Identify the portion of the Regional Architecture being implemented. Please include the following from the Regional Architecture:**

**Data Flow Diagram**

**List of project stakeholders**

**List of stakeholder roles and responsibilities**

**List of project functional requirements**

**List of standards related to the project**

**Does the regional architecture need to be revised due to the project?**  No  Yes

**If yes, please describe the necessary revisions:**

Click or tap here to enter text.

**Section 5 Brief Systems Engineering Plan**

**Identify the status of the project systems engineering documentation. Documents to be modified or prepared should also be identified in project schedule. Existing documents should be attached.**

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|  | Existing | To be Modified | To be Completed | Comments: |
| Concept of Operations |  |  |  | Click or tap here to enter text. |
| Validation Plan |  |  |  | Click or tap here to enter text. |
| Traceability Matrix |  |  |  | Click or tap here to enter text. |
| System Functional Requirements |  |  |  | Click or tap here to enter text. |
| Detailed Design |  |  |  | Click or tap here to enter text. |
| Operations & Maintenance Plan |  |  |  | Click or tap here to enter text. |
| Testing and Evaluation Plan |  |  |  | Click or tap here to enter text. |
| Click or tap here to enter text. |  |  |  | Click or tap here to enter text. |
| Click or tap here to enter text. |  |  |  | Click or tap here to enter text. |
| Click or tap here to enter text. |  |  |  | Click or tap here to enter text. |

**Section 6 Procurement**

**Procurement method** \*\*Check all that apply

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| Construction Contract  Request for Proposal  Invitation to Bid  State Price Agreement Contract  Other Click or tap here to enter text. |

**Section 7 Operations and Maintenance**

**Prepare an estimate of the additional cost of operations and maintenance considered over the life cycle of the new equipment/system. Illustrate the basis of the cost estimate (e.g. each piece of equipment will require 2 hours of preventative maintenance per year; operator monitoring each device will amount to 20 hours over the year, etc.). Attach the estimate (showing basis and assumptions) and enter the total here.**

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| Click or tap here to enter text. |

**Identify the stakeholder(s) responsible for maintenance and operations (including funding responsibility).**

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| Click or tap here to enter text. |

**Section 8 Agreements**

**List any agreements needed or utilized for this project**

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| Click or tap here to enter text. |

**Attachment Checklist**

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|  | Project location map |
|  | Project schedule |
|  | Project engineering estimate |
|  | Alternative Concepts Analysis |
|  | Project Benefits Assessment |
|  | Performance Measures Improvement Estimate |
|  | Existing Systems Engineering Documents (if applicable) |
|  | Operations & Maintenance Life Cycle Estimate |

**Attachments**

**Attachment A**

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| **Eligible for 100%**  **Federal Share** |
| Traffic signal system  Traffic signal controllers  Traffic signal cabinets (varying specifications)  UPS for traffic signal controllers/cabinets  Traffic signal communications equipment at intersections  Traffic signal communications medium between intersections and between intersections and TMC  Traffic signal communications equipment at TMC  TSP field equipment, firmware, and software  System/advance detectors (expressly for signal timing coordination purposes)  Communications equipment and medium between TMCs (for primary use of traffic signal coordination) |