



U.S. Department
of Transportation
Federal Motor
Carrier Safety
Administration

GRANT PROGRAM

HIGH PRIORITY INNOVATIVE TECHNOLOGY DEPLOYMENT

An aerial view of a complex highway interchange with multiple lanes and overpasses. A digital network overlay of white lines and nodes is superimposed on the image, connecting various points across the road network. A large, semi-transparent blue square is positioned in the lower-left quadrant, containing the text 'BEST PRACTICES GUIDE'.

BEST PRACTICES GUIDE

Preparing an HP-ITD Grant Application



FMCSA BEST PRACTICES: PREPARING AN HP-ITD GRANT APPLICATION



KEEP IN MIND

FMCSA recommends that grant applicants take several steps before preparing their application. Read the **FMCSA Discretionary Grants Toolkit**, available at ai.fmcsa.dot.gov/Grants, for information.



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This guide is meant as a helpful summary of the content and format requirements. For complete information on content and formatting requirements, see section 2 (Content and Form of Application Submission) of the HP-ITD Grant NOFO.

Thank you for considering applying for FMCSA’s High Priority Innovative Technology Deployment (HP-ITD) Grant Program!

We are eager to hear about your proposal for a project, or projects, to deploy, operate, and maintain innovative road safety technologies, including commercial motor vehicle (CMV), commercial driver, and carrier-specific information systems and networks.

The HP-ITD Grant Program is a discretionary grant program—meaning, this is a competitive application. No applicant is guaranteed HP-ITD grant funding, and each application is evaluated on its merit. This document is meant to help you prepare a competitive, high-quality HP-ITD grant application that showcases the potential of your project.

Before you start your application, make sure your organization is eligible. Review eligibility information on the [HP-ITD Grant webpage](#), or see the HP-ITD Notice of Funding Opportunity (NOFO).

HP-ITD Grant Application Structure

To be considered by FMCSA, all HP-ITD grant applications must include the following:

- Project Plan Narrative
- Supplemental attachments, if any.
- Required forms, as specified in the NOFO. Forms may be filled out electronically in Grants.gov.

Project Plan Narrative

The main part of your HP-ITD grant application, the Project Plan Narrative where you will tell FMCSA what challenge your project will address, what activities you will take to address it, how much it will cost, and how you will track your success.

The Project Plan Narrative must include the following sections:

- | | | |
|--------------------------|---------------------------------|---|
| A. Introduction | D. Performance Activity Plan | F. Monitoring and Timeline/Milestone Plan |
| B. Problem Statement | E. Performance Measurement Plan | G. Budget Narrative |
| C. Performance Objective | | |

Project Plan Narrative By The Numbers:

| | | | | |
|------------------------------------|---|---|---|---|
| No more than 35 pages total | Up to 4 projects per application | No more than 5 pages per Narrative section | ALL Narrative sections, in order, for each project, including separate budgets | 1 comprehensive/summary budget, if proposing multiple projects |
|------------------------------------|---|---|---|---|



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Give yourself plenty of time to write your application—FMCSA’s deadline is firm. Don’t wait until the last minute to click “submit”—give yourself some time to handle any technical issues that may arise.

How to Write a Complete Narrative

Providing a complete narrative will help your proposal move through the merit review process. FMCSA considers an application incomplete when the Project Plan Narrative provides insufficient information and context.

What Makes a Complete Narrative?

| ✘ Incomplete | ✔ Complete |
|---|--|
| <ul style="list-style-type: none"> • Very general description • Does not prioritize FMCSA’s stated goals for this funding opportunity • Monitoring plan contains no substantive or realistic information | <ul style="list-style-type: none"> • Cites U.S.DOT strategic priorities and specific goals from the NOFO that the project will seek to address • Names and quantifies the specific proposed activities • Identifies clear, measurable project goals • Provides context for whether this is a new project or an extension of an existing project • Demonstrates that a monitoring plan is ready to enact |

Does Your Application Contain Multiple Projects?

If so, each project must be listed separately and include all the sections in consecutive order.

For example:

| Project 1 | Project 2 |
|---|---|
| 1.1. Introduction | 2.1. Introduction |
| 1.2. Problem Statement | 2.2. Problem Statement |
| 1.3. Performance Objective | 2.3. Performance Objective |
| 1.4. Performance Activity Plan | 2.4. Performance Activity Plan |
| 1.5. Performance Measurement Plan | 2.5. Performance Measurement Plan |
| 1.6. Monitoring and Timeline Milestone Plan | 2.6. Monitoring and Timeline Milestone Plan |
| 1.7. Budget Narrative | 2.7. Budget Narrative |



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Include supplemental documents only if they are relevant to your proposed project. Be sure to refer to them in your project narrative and include them as attachments. These attachments may not take the place of any narrative sections.

And so on, until all projects are accounted for. You will also need to include a comprehensive or summary budget that includes expenses per project/per line item. The comprehensive budget must match the application's forms SF-424 and SF424A.

SECTION A: Introduction

Explain the project purpose. Be sure to specify which grant priorities the project will address.

| ✘ Incomplete | ✔ Complete |
|---|--|
| [The Applicant] will upgrade X weigh stations along two high-traffic commercial routes in [jurisdiction A] and [jurisdiction B], in an effort to improve safety and enforcement activities. | [The Applicant] will upgrade [X number] weigh stations along two high-traffic commercial routes in [jurisdiction A] and [jurisdiction B]. The improvements include license plate readers, variable message signs included in the weigh-in-motion system, and additional equipment to accommodate virtual weight station functionality. The project will improve safety and allow for more efficient enforcement operations to focus on commercial carriers with a history of poor safety performance, for example. <i>Note: If the project is a deployment project, list the project name and page number in the PP/ITLD.</i> |
| [no certification statement] | The [Applicant] certifies that it is the ITD lead agency, or if it is not the ITD lead agency it has a current MOU in place with the ITD lead agency. |
| [no certification statement] | [The Applicant] certifies that it meets the four conditions of 49 CFR § 350.405(b). |
| [no certification statement] | [The Applicant] certifies that the current Program Plan/Top Level Design was approved on [date], as outlined in the FAST Act. |





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Include statistics to show how your proposal is data-driven. FMCSA provides data on crashes involving large trucks and buses, roadside inspection activity, and motor carrier registration information on FMCSA's Analysis & Information Online (A&I) website: ai.fmcsa.dot.gov.



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Performance objects should be SMART—Specific, Measurable, Achievable, Realistic, and Time-bound.

SECTION B: Problem Statement

Describe the problem(s) the project will address, using qualitative and quantitative measures. Be specific, citing data sources, explaining your rationale, and showing at least three years of trend analysis for the specific problem(s), driver behaviors, and/or location(s). Requested projects for electronic safety screening technologies must include baseline violation data from previous years for requested location(s).

| ✘ Incomplete | ✔ Complete |
|--|---|
| [The Applicant] needs to replace the State's web-based Motor Carrier Portal. | [The Applicant] has identified the systems needed to run the State's web-based Motor Carrier Portal [Portal] are either standalone Oracle or mainframe systems that can no longer be supported by the current, outdated technology. This will allow [the Applicant] to have a modernized technology system that will continue connectivity to FMCSA's systems. <i>*Note: Requested projects for electronic safety screening technologies must include baseline violation data from previous years for requested location(s).</i> |

SECTION C: Performance Objective(s)

Describe the anticipated quantifiable goal(s) related to the problem statement. They can be measured in numbers, percentages, or other forms that accurately measure the outputs and outcomes. Objectives should reference at least three years of data and trend analysis.

| ✘ Incomplete | ✔ Complete |
|--|--|
| EXAMPLE 1: [The Applicant] is seeking to deploy a CVIEW. | EXAMPLE 1: [The Applicant] will procure and deploy a new Commercial Vehicle Information Exchange Window (CVIEW) through a competitive bid process which will require regular maintenance updates to ensure acquired technology remains current. With CVIEW's connection to the Safety and Fitness Electronic Records (SAFER) system, [the Applicant] will be able to efficiently screen CMVs and determine which CMVs are high-risk operators. Currently, [the Applicant] does not have CVIEW and deploying a CVIEW will help the State become one step closer to Core Compliance. This project is referenced on [page number] of the approved PP/TLD. |



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Requested projects for electronic safety screening technologies should also include baseline violation data and metrics for collecting violations data after implementation for each identified location(s). This data must be readily available and reported to FMCSA ITD Program Office.



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Include specific benchmarks that you can track—if awarded grant funding, you will report on these in your quarterly progress reports.

SECTION D: Performance Activity Plan

Provide a description of the project activities your team believes will help mitigate the identified problem(s). Include details such as the number and frequency of activities.

| ✘ Incomplete | ✔ Complete |
|---|--|
| [The Applicant] will implement the XYZ electronic screening system. | [The Applicant] will deploy the XYZ electronic screening system to efficiently utilize safety technologies to aid in detecting non compliance and safety issues at [location]. These technologies include: WIM, LPR, thermal imaging and U.S. DOT Number readers. Inspections conducted as part of this system will be tracked and analyzed to determine safety benefits versus locations without this technology. The Period of Performance for this project will be from October 1, 2025-September 31, 2027. |

SECTION E: Performance Measurement Plan

Provide a description of how the applicant will measure progress towards the performance objective goal(s), such as quantifiable and measurable outputs (hours, carrier contacts, inspections, etc.) and in terms of performance outcomes.

| ✘ Incomplete | ✔ Complete |
|--|---|
| [The Applicant] will deploy five virtual weigh stations. | [The Applicant] will deploy five virtual weigh stations along bypass routes and high crash corridors in the western two counties where traditional weigh/inspection areas are not conducive to the geography. The technologies at the virtual weigh stations will include: LPR, WIM and Thermal imaging. Roadside enforcement officers will be trained in using this technology remotely to effectively enhance their enforcement activities to reduce crashes and imminent threats to the safety of the motoring public. |



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Remember, the goal of monitoring is to quickly identify when a project is falling short of its performance goals, giving the project team the opportunity to make the adjustments needed to make the project as successful as possible.

SECTION F: Monitoring and Reporting Plan

Provide a description of how you will monitor the progress of the project on an ongoing basis. This should include who will conduct the monitoring, the frequency with which it will be carried out, and how and to whom reports will be made to FMCSA.

| ✘ Incomplete | ✔ Complete |
|---|---|
| <p>The ITD Program Manager will assess how effective the monitoring of inspections are done by a mobile roadside inspection team.</p> | <p>The ITD Program Manager will evaluate monthly onboard sensor data. Clerical administration personnel will assist with authenticating vehicle identification data in systems such as the Automated License Plate Reader / Automated USDOT Reader.</p> |





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FMCSA strongly recommends that applicants use or refer to the Budget Narrative Template included in the current NOFO application package on Grants.gov. Use the 2023 Budget Template as an example; check the NOFO Appendix for the current year's preferred content and format.

SECTION G: Budget Narrative

Provide a description of the expenses by budget category which match the application's SF-424a Budget Category columns for each project. The narrative explains the "what," "how," and "why" of costs proposed to carry out grant project goals and objectives. You must provide clear detail to demonstrate that all proposed costs are allowable, allocable, reasonable, and necessary.

Your budget narrative must also meet the following requirements:

- Expenses must be itemized to demonstrate how the total cost was determined. For example, travel cost must not be bundled, but must show how the total was determined by itemizing cost for airline, lodging, taxi, etc.
- All line items must be rounded to the nearest whole dollar amount.
- Salaried and/or supervisory staff must be budgeted only for their time actively spent on project tasks.

✘ Incomplete

The annual cost of this project will be \$1,035,000 for all related personnel, equipment, and contractual expenses.

✔ Complete

BUDGET NARRATIVE SECTION

| Overall Budget | |
|-------------------|--------------------|
| Budget Categories | Total |
| Personnel | \$10,000 |
| Fringe Benefits | \$0 |
| Travel | \$0 |
| Equipment | \$475,000 |
| Contractual | \$550,000 |
| Construction | \$0 |
| Program Income | \$0 |
| Total | \$1,035,000 |

| Equipment Category Budget | | |
|---------------------------|------------------|----------|
| Technology | Amount | Units |
| WIM | \$10,000 | 3 |
| Thermal Imaging | \$250,000 | 1 |
| LPR | \$15,000 | 2 |
| Tire Anomaly | \$200,000 | 1 |
| Total | \$475,000 | 8 |

Alternative format:

WIM: \$10,000 per unit
LPR: \$15,000 per unit
Thermal imaging: \$250,000
Tire Anomaly: \$200,000.

The equipment costs include purchasing the following technologies: Weigh-In-Motion (WIM), License Plate Readers (LPR), Thermal imaging, and Tire Anomaly at the [List locations]. The breakdown for the equipment category is in the table below.

NOTE: If costs for e-screening systems are under equipment or contractual categories, then a similar breakdown should be provided as shown above.



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It can be hard to proofread your own work! Ask a colleague who has not worked on the narrative to read it through and provide feedback before you submit. Ask them to read the NOFO for reference.

Before You Submit

Use the checklists below to make sure your application meets all FMCSA criteria. Don't let your application be declined due to missing one of these important points!

REQUIRED for a COMPLETE Application:

- Have you checked the NOFO to confirm you are an eligible applicant?**
 - Make sure you are applying under HP-ITD grant portal in Grants.gov.
 - Ensure proposed ITD projects will be used to for the deployment of new and innovative advanced technology solutions that support CMV information systems and networks, for planning activities, including the development, or updating of program or top-level design plans in order to become eligible or maintain eligibility for the HP-ITD awards; and for the operation and maintenance costs associated with innovative technology. Please read the HP-ITD NOFO to understand if your proposed project aligns with the program requirements.
- Are you submitting the application by the deadline (date and time)?**
- Has the applicant submitted a well thought out application that does not duplicate language from other grant applications?**
- For your Title VI Non-Discrimination Program Compliance Plan:**
 - New applicants: Have you contacted the FMCSA Office of Civil Rights (OCR) at FMCSATitleVI@dot.gov prior to applying to discuss requirements?
 - Have you created or updated your existing Title VI Plan? (Must be done annually.)
 - Have you requested approval of your Title VI Plan from the FMCSA Office of Civil Rights (OCR)?
 - Have you submitted your approved or draft Title VI Plan with this application?
 - Have you prepared and submitted your Title VI/Non-Discrimination Assurance form (in the NOFO)?

***Note: While this is not required as part of your application, it is required to be completed before grant agreement execution, if selected for an award. Therefore, applicants are strongly encouraged to include their Title VI Plan in their applications.*
- Does the application include, for each proposed project, a complete Project Narrative including Budget Narrative?**
- If the State agency applicant is not the ITD lead agency responsible for the Program Plan/Top Level Design (PP/TLD), does the application demonstrate that it has a Memorandum of Understanding, or other agreement with the ITD lead agency and confirm that the applicant has coordinated with the ITD lead agency regarding all projects requested in the application to ensure State-wide effectiveness and efficiency and to avoid any duplication of effort or other wastefulness in federal funding initiatives, as required per the HP-ITD NOFO?



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While the recommended steps below are not required, they will help make sure you anticipate the questions FMCSA will have when reviewing your application, which may get your application through the merit review more smoothly.

REQUIRED for a COMPLETE Application (continued):

- Have you prepared and submitted with this application all required forms in your [Grants.gov Workspace](#), including:
 - Application for Federal Assistance (SF-424)?
 - Budget information for Non-Construction form (SF-424A)?
 - Assurances for Non-Construction form (SF-424B)?
 - Certification Regarding Lobbying form, if applicable?
 - Disclosure of Lobbying activities form (SF-LLL), if applicable?
 - Key Contacts, with your Principal Investigator/Project Director (PI/PD) and Administrative Official (ADO) contact information?
 - Current Indirect Cost (IDC) agreement, if applicable?
- If submitting multiple projects in this application, have you included a comprehensive or summary budget that includes expenses per project/per line item and which matches the application's SF-424 and SF424A above?

RECOMMENDED for a HIGH-QUALITY Application (more likely to receive funding):

- Have you explained how your project(s) directly supports the [purpose of the HP Grant program](#) and statutes?
- Have you explained how each project directly addresses specific priorities named in:
 - U.S. DOT's [strategic goals](#)?
 - FMCSA Priorities?
 - This HP-ITD Grant's current-year Notice of Funding Opportunity (NOFO)?
- Does the application propose SMART (Specific, Measurable, Achievable, Relevant, and Time-Bound) goals, or a similar proposed deliverable?
- If you have applied for an HP-ITD Grant before, does this application directly address the feedback provided by FMCSA on previous submissions?
- Is the proposed project budget reasonable, appropriate, and proportionate to the services provided and the applicant's staff time required to execute?
- Is your office/organization well-positioned to accept and manage Federal funding and its reimbursement model?



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Need More Information?

GRANT PROGRAM

For questions about the HP Grant Program,
please contact:

Email: FMCSAHPGrants@dot.gov

APPLICATION SUBMISSION

For application submission questions please contact
FMCSA's Grants Management Office:

Email: FMCSA_GrantMgmtHelpdesk@dot.gov

<https://ai.fmcsa.dot.gov/Grants/ITD.aspx>