Developing Grant Proposals:
A Guide for Municipalities

INTRODUCTION

The landscape for transportation funding has changed significantly since 2021. The volume and level of competition has increased nationwide. In this new landscape, grant applications must differentiate themselves through innovation, sound benefit-cost rationale, and a compelling case for the value of the project to diverse stakeholders.

In April 2023, the initial Guide for Developing Grant Proposals was released to aid municipalities in developing high-quality, competitive grant proposals. It identified key steps and defined relevant roles and responsibilities in the grant development process. It also addressed key considerations for the common components of most Notice of Funding Opportunity (NOFO) applications. This document (referred to hereafter as Guide) is a revised version of the original guide.

Since that time, municipalities and their partners have learned valuable lessons that served as the basis for this updated Guide. Content was informed and enhanced through discussions with experienced representatives from Metropolitan and Rural Planning Organizations (MPOs/RPOs), the Pennsylvania Association of Township Supervisors (PSATS), subject matter experts within PennDOT, various municipal associations, and other stakeholders throughout the Commonwealth.

This Guide is built upon the five stages in the grant development process: Positioning for Success, Organizing the Effort, Building Support, Making the Case, and Performing Post-Submission Activities. Collectively, these stages and their associated process considerations integrate the lessons learned with elements of the initial version. In using the Guide, applicants should also be mindful of federal emphasis areas and priorities that may include factors such as equity, innovation, safety, sustainability, resiliency, and environmental impacts. These focus areas must be recognized as key competitive factors to be addressed strategically in proposal development.

The Guide narrative also incorporates process steps with links to tools and external resources to use in approaching a grant application and post-submission activities. Overall, the design is intended to ensure a shared understanding among those involved and to promote efficient and orderly grant applications.

Organization of the Guide

The Guide is organized in three major sections: *GRANT DEVELOPMENT RECOMMENDATIONS*, *DETAILED INSTRUCTIONS*, and *APPENDIX*.

GRANT DEVELOPMENT RECOMMENDATIONS

This section presents high-level strategic recommendations for proposal development by stage, as reflected in this diagram:
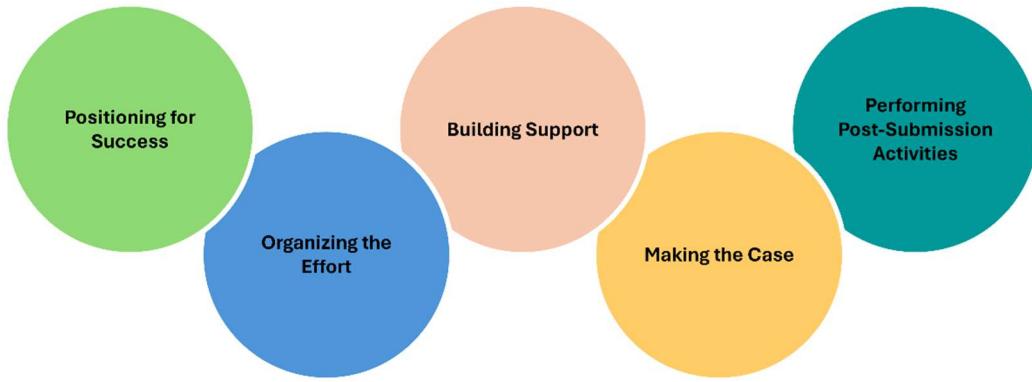
This section may suffice for applicants familiar with proposal development. However, for those seeking more comprehensive guidance, each of the recommendations includes a link to step-by-step considerations in the *DETAILED INSTRUCTIONS* section of the Guide. Clicking on the link will take users to the appropriate page of the Guide; clicking on the "Back to Page 3" button allows users to return to the Grant Development Recommendations.

DETAILED INSTRUCTIONS

This section provides more detail on the Grant Development Recommendations. Major process considerations within each of the recommendations are presented numerically, which does not imply order of importance or a strict sequence of activities. Many activities may be carried out concurrently.

This section also incorporates Resources (within sidebars throughout the document) with links to tools in the Appendix and/or external resources. Clicking on a **Tools** link will take users to the appropriate supporting tool within the Appendix. Clicking on the "Return to This Section at Top" found below that tool takes you back to the page with the original Tools link. For the **External Resources** link, simply click on the link.

APPENDIX

This section contains all the resources accessible through the Tools links within the sidebars. They are also organized by stage.

GRANT DEVELOPMENT RECOMMENDATIONS

Below are overarching recommendations for each of the five stages of the proposal development process.

Positioning for Success
- Regularly monitor websites for upcoming grant opportunities to identify and analyze opportunities and maintain situational awareness .... Link
- Prescreen the Notice of Funding Opportunity (NOFO) to ensure that a compelling case can be made for pursuing the grant with the appropriate level of resources and support .... Link
- Prioritize and align projects and applications .... Link
- Pull the team together as soon as possible prior to the grant announcement and NOFO .... Link

Organizing the Effort
- Identify project leads and define their roles and responsibilities .... Link
- Aggressively manage the schedule .... Link
- Know your scope, schedule, budget, and administrative responsibilities .... Link

Building Support
- Seek support early in the process .... Link
- Build trust with key organizations that can help reach deeply into the community and share a vested interest in the grant outcomes .... Link
- Actively manage the acquisition of letters of support (LOS) .... Link

Making the Case
- Understand that a grant application is foremost an exercise in following directions and will be evaluated against the NOFO in exacting detail .... Link
- Engage in the data identification, collection, and analysis processes as early as possible .... Link
- Ensure that the data reinforces the application .... Link
- Build a compelling case through good writing, editing, and visual appeal .... Link
- Correctly assemble the grant proposal for submission .... Link

Performing Post-Submission Activities
- Recognize how to manage the awarded grant .... Link
- Recontact project champions and stakeholders to thank them for their support .... Link
- Examine why the project was—or was not—selected .... Link

DETAILED INSTRUCTIONS

The section is organized by the five stages of the overall proposal development process. Steps and sub-steps in addressing the process recommendations are provided as checklists to facilitate easier navigation of the grant application assessment, grant application development, and post-submission activities.

Positioning for Success

It is imperative that opportunities be identified and analyzed in advance of the NOFO. The competitive nature of grants means that many other organizations will also offer proposals, so any work performed before the NOFO is an investment that will pay off significantly.

1. **Regularly monitor websites for upcoming grant opportunities to identify and analyze opportunities and maintain situational awareness.**

   ☐ Become familiar with how to access upcoming and posted grant opportunities.

   ☐ Make use of USDOT Navigator and other online resources.

   ☐ Develop an annual schedule for grant applications as a timeline for when NOFOs will be issued and how long each grant application will be active/open.

   ☐ Continually gather data on potential projects from various sources and screen them for matches with grant program goals.

   ☐ Include a checklist approach for how to know when you have a good project for popular grant programs.

   ☐ Review active project lists and match with grant programs projected to be active over a long-term planning horizon. Update the list periodically (e.g., quarterly) to keep opportunities in view on a multi-year rolling basis.

2. **Prescreen the Notice of Funding Opportunity (NOFO) to ensure that a compelling case can be made for pursuing the grant with the appropriate level of resources and support.**

   ☐ It is critical to recognize that every NOFO is different, and the criteria are not the same for all. Thoroughly review and understand the NOFO and the level of effort required for the specific program.

     o Instructions (e.g., deadlines, format, permitted/prohibited cost, performance data)

     o Overarching themes and emphasis areas

     o Specific requirements, including all forms and certifications to be submitted

     o Selection criteria

   ☐ Think about the big picture—not transportation only, but how the grant will influence bigger outcomes, such as economic and community development. Understand that grants are selected in large part for the ripple effects of impacts.

   ☐ Conduct a Go/No-Go Review based on a careful analysis of the NOFO.

3. **Prioritize and align projects and applications.**

☐ Coordinate with PennDOT to ensure there are no PennDOT plans to pursue the same NOFO and to gain support for the proposal.

☐ Communicate with local governments to avoid duplicate or conflicting grant submissions.

☐ Understand larger scale priorities and plans (i.e., those of higher-level entities).

☐ Begin to develop the level of the partnership/support needed to compete for a federal grant program. Engage PennDOT Districts, MPOs, RPOs, and other local and regional stakeholders from the start.

☐ Budget for and secure non-federal matching funds.

☐ Identify the data needed to support project importance.

Determine which projects may be most ready for funding, which may be the highest priority based on locally or regionally defined needs, and which may be the best fit for federal funding versus other types of local or state funding.

4. **Pull the team together as soon as possible prior to the grant announcement and NOFO.**

☐ Recognize that upfront time is essential for any chance of developing a competitive application.

☐ In addition to staff and other planning partners, include available consultants and technical experts.

☐ Initiate dialogue with likely stakeholders and project champions, educating them about proposed projects and their benefits.

☐ Screen potential partners to ensure their eligibility in obtaining grants.

Organizing the Effort

Many of the activities within the Organizing the Effort stage should be an extension of the initiatives undertaken in the Positioning for Success stage and situated to advance the Building Support stage.

1. **Identify project leads and define their roles and responsibilities.**

   ☐ Assign a project manager for the entire grant application process.

   ☐ Ensure the appropriate level of staffing. The team should include (at a minimum):

   - o Application Manager – Individual assigned oversight for the overall completion of a high-quality competitive grant application.

   - o Section Authors – Individuals assigned responsibility for section(s) of the application.

   - o BCA Lead – Individual with oversight responsibility for completion of a thorough and defensible benefit-cost analysis (BCA).

   - o Support Letter Coordinator – Individual responsible for overseeing the complete letters of support (LOS) process.

   - o Editor – Individual responsible for editing to ensure a highly readable, cogent application.

   - o Quality Assurance/Quality Control (QA/QC) – Individual responsible for ensuring that all requirements have been satisfied and that all statements are substantiated.

   ☐ Ensure that all potential partners understand their roles and the components, dynamics, and input required to pursue the grant (such as understanding reimbursement implications) and, if awarded, to implement the grant.

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2. **Aggressively manage the schedule.**

☐ Recognize that the timeline from the NOFO announcement to the submission will be short. Plan to gain traction quickly.

☐ Consider creating an outline based on the NOFO and employ a "workback schedule" based on analyzing the required steps backward from the submission date. Allow for necessary lead time.

    o Develop a Grant Application Development Summary for outlining key milestones in pursuing the grant and timing considerations based on the due date.

☐ Establish a regular meeting structure. Assign "homework" at each meeting to prepare for the next meeting.

☐ Regularly communicate with various municipal and regional agencies, such as those responsible for planning, engineering, infrastructure, community development, and government affairs, for ongoing support and involvement.
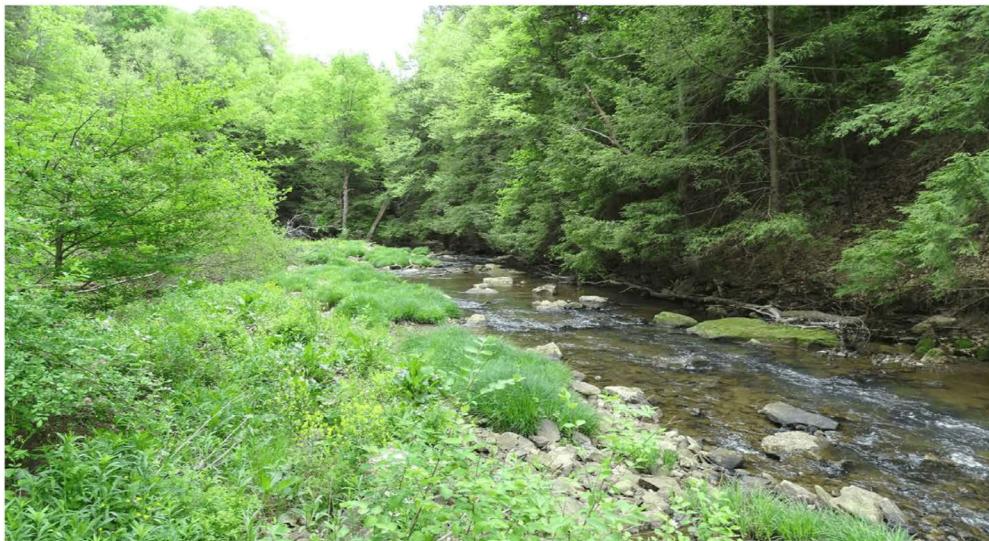
3. **Know your scope, schedule, budget, and administrative responsibilities.**

☐ Thoroughly review the entire grant application, with particular attention to the following:

   o Instructions (e.g., deadlines, format, permitted/prohibited costs, performance data).

   o Overarching themes and emphasis areas.

   o Requirements, including all forms certifications to be submitted.

   o Selection criteria.

☐ Chart the grant proposal strategy:

   o Develop a high-level outline.

   o Create a list of the information requested and in each section of the NOFO.

   o Identify key winning themes.

   o Identify potential sources of critical support.

   o Identify critical data and sources, particularly in support of the win themes.

   o Gather maps, photos, graphics, and other images to support your compelling narrative.

   o Create a good, vetted cost estimate that anticipates realistic expenditures needed throughout the project's implementation.

☐ Access case studies, examples, and resources (like standard costs), where available.

☐ Establish an organized file and folder system.

☐ Create a shareable central repository for project documents and work in progress.

☐ Understand audit requirements, especially federal audits.

Building Support

Securing critical support for the project and the grant application itself is an early action item in the application process. For example, LOS from project stakeholders are essential for an application to be competitive. In addition to identifying target support organizations, consider the political implications when seeking support. A given opportunity may be highly visible in the communities affected, and the support requested should be consistent with support organizations' own interests, objectives, and positions. Groundwork for this "ask" should have been laid in the Positioning for Success stage, at which time the opportunities would have been introduced to stakeholders and their benefits emphasized.

1. **Seek support early in the process.**

   □ Identify key decision makers early.
      o Consider various agencies, local governments, elected officials, local civic and neighborhood associations, businesses, chambers of commerce, and other key stakeholders.
      o Leverage PennDOT District personnel and their contacts with regional stakeholders.
      o Explore what support PennDOT Central Office can offer.

2. **Build trust with key organizations that can help reach deeply into the community and share a vested interest in the grant outcomes.**

    ☐ Engage with locals about potential partners within their communities and regions. Advise them to talk to planning partners and contacts early and throughout the planning process.

    ☐ Use established contacts to reach out to elected officials (federal, state, and local) for their support. Emphasize the benefits of the project for their constituents.

    ☐ Reach out to local economic development groups, chambers of commerce, and government affairs organizations for their perspectives on engaging certain entities, such as private companies, educational organizations, and healthcare organizations.

    ☐ Emphasize coalition building with labor unions, minority organizations, and community advocates. Know that equity matters.

3. **Actively manage the acquisition of letters of support (LOS).**

☐ The Support Letter Coordinator serves as the primary point of contact for the various stakeholders. This ensures that requests for LOS are consistent and communication can continue throughout the grant process. The Coordinator's responsibilities include:

   o Collecting all letters and apprising the Grant Team of progress on the LOS. (This does not include LOS from federal officials or those from the chairs of the House and Senate Transportation Committees. Municipalities can request and obtain these LOS through PennDOT's Central Office and the Governor's Office.)

☐ Include the following for the template LOS (for use by various stakeholders as a model):

   o Name of the grant opportunity.

   o Any identifiers in the NOFO that are mandatory (e.g., unique number that is provided when the application is opened in the grant portal).

   o Correct official and address of grantor agency (e.g., USDOT).

   o How the grant project satisfies and achieves the criteria of the NOFO.

   o How the grant project benefits the individual stakeholders and/or their constituents.

   o A one-page summary of the project and its benefits.

☐ Transmit the template with basic background information on:

   o Why the request is being made.

   o Whom to contact for questions.

   o What the due date is.

   o Other relevant details.

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☐ Inform stakeholders of the deadline for the letters (which should be several days prior to grant submission) and follow up with the stakeholders, if necessary.

    o Ensure that the LOS process is informative and as easy as possible for those to whom requests are being made.

    o Stress the value and importance of the project beyond its transportation benefits. Emphasize how the project and the grant program will improve the economy, equity, and other measures through job creation and other benefits, both locally and across the region.

☐ Consider alternative approaches to LOS. For example, provide a list of potential support letter points and ask stakeholders to choose their own points and build their own letters. Perhaps ask related entities to sign a single LOS, which may demonstrate coordinated and dedicated support.

☐ Establish a small network of recognized organizations to help make the LOS requests (e.g., chambers, associations).

Making the Case

The grant application must have a compelling, well written narrative, telling a persuasive story—backed up by meaningful support, data, and visuals—as to why grant funding will advance a project with far-reaching impacts beyond just transportation.

1. **Understand that a grant application is foremost an exercise in following directions and will be evaluated against the NOFO in exacting detail.**

    □   Follow the NOFO structure for your application and be clear in your answers.

    □   Understand that you're writing to a prompt. Link your project to the specific objectives named in the NOFO (e.g., merit criteria, statutory requirements).

    □   Identify some key themes as the broad frame for the narrative but be strategic. Emphasize "winning" themes, such as economic development, accessibility, and safety, and align them with the overall objectives of the grant program (through means such as a BCA).

2. **Engage in the data identification, collection, and analysis processes as early as possible.**

☐ Thoroughly review the NOFO, noting data requirements, data types, and after-award evaluation needs.

☐ Pull in all the modal elements associated with the project.

☐ Develop data gathering methods and identify data sources.

    o Collect current and historical internal data.

    o Collect current and historical external data. Provide lead time for external agencies.

☐ Coordinate the assessment of data and information requirements with the MPOs/RPOs, tapping into their rich repository of detailed information that will strengthen the approach.

☐ Gather the necessary analytics needed to support the project.

    o Collect modeling and GIS data.

    o Collect mobile device data and Direct-from-Vehicle data (e.g., StreetLight Data, Wejo).

    o Use third-party vendors to gather and analyze "big data."

☐ Determine mapping requirements and enhancements.

    o Some maps may be required, such as those that document federally designated Disadvantaged Communities.

    o Maps should be drafted as early as reasonably possible to ensure data completeness and accuracy.

    o Maps should be part of the overall strategic messaging and win themes approach. Determine how maps can most effectively bolster each.

    o Consider the GIS resources of the various organizations involved to determine what data layers might help in telling the story of the proposed project's merit.

RESOURCES

TOOLS:

- Generalized Data Types

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3. **Ensure that the data reinforces the application.**

☐ The analysis must follow the latest BCA methodology guidance from USDOT, which is generally updated annually.

☐ Recognize that optimizing the various data is essential to telling a compelling story.

☐ The BCA must be defensible and conservative, as the USDOT will scrutinize it closely. Realize that the BCA can make an application ineligible even when all other sections are solid.

☐ Review the NOFO for the required BCA components. Note any NOFO-suggested elements/formatting to include in the application.

   o The BCA is submitted in two parts that must be mutually supportive: the Excel workbook and the discussion of the BCA in the grant proposal narrative. In addition, the key benefits of the project and the major findings of the BCA should be summarized in the grant narrative.

☐ The framing of the BCA should consider the entire range of quantifiable benefits, including those related to the immediate community and to the region, state, and nation. Most NOFOs also invite a discussion of unquantifiable benefits in the BCA narrative.

☐ Consider outside expert assistance if a BCA is required.

4. **Build a compelling case through good writing, editing, and visual appeal.**

☐ Hire grant writers or consultants early in the process to assist in the grant development, if feasible.

☐ Use the network of stakeholders to help in crafting a persuasive case about the benefits of the grant beyond infrastructure improvement.
  o Draft elements of the proposal should be reviewed against the initial win themes to ensure that each has been sufficiently demonstrated in the proposal.

☐ Create an attractive cover page, including photos and pertinent information, such as the:
  o Name of project.
  o Funding opportunity number.
  o Application type.
  o Location.
  o Area type.
  o Amount requested.
  o Primary contact.

☐ Each separately submitted section should have a matching cover clearly labeled with the section name (e.g., Project Narrative).

☐ Incorporate meaningful and interesting visuals throughout, such as photos, maps, images, and charts, being mindful of page limits.

☐ Schedule enough time to allow for document review and editing. In addition to team members, include others who may not be as familiar with the subject matter.

☐ Ensure sufficient and ample time for QA/QC of all materials.

☐ Enlist knowledgeable reviewers who can examine the draft with "fresh eyes."

☐ Review the NOFO scoring criteria and ensure that the narrative reflects the NOFO requirements.

  o Before and after the narrative is complete, the description of each criteria needs to be reviewed and the specific descriptions must be answered according to the NOFO. The reviewers look for specific answers to each of the description within the ratings.

  o Ensure that all statutory requirements have been met.

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- ☐ NOFO direction may result in some repetition of text within the project application. Minimize text duplication to that which is necessary to reinforce key win themes or major points.
- ☐ Consider what is appropriate for inclusion in the appendices, such as:
    - o LOS.
    - o All data/information gathered through the process that supports the narrative and approach.
    - o Maps and data sets.
    - o Links to data platforms to facilitate access to and the exchange of larger files.

5. **Correctly assemble the grant proposal for submission.**

- ☐ Discuss appropriate coordination of the submission, according to the submission steps outlined in the NOFO.
- ☐ Confirm all elements are completed and ready for uploading.

Performing Post-Submission Activities

Post-submission activities are critical in understanding obligations once the grant has been awarded. Failure to meet these obligations may jeopardize continued funding and compromise future grant applications. It is also important to explore why the grant application may have been rejected as a means for identifying a better approach to resubmission and new opportunities.

1. **Recognize how to manage the awarded grant.**

   ☐ Once awarded, include strategies for managing the grant to ensure capacity for implementation.

   ☐ Manage subrecipients and reporting.

   ☐ Understand what to expect for grant administration.

2. **Recontact project champions and stakeholders to thank them for their support.**

   ☐ If not selected, keep champions and stakeholders apprised of the intent, if appropriate, to pursue the project at a later date, but maintain confidentiality on details.

3. **Examine why the project was—or was not—selected.**

   ☐ Identify shortcomings and improvement steps through a disciplined After Action Review (AAR).
      o Request a debrief from grant agency staff to help establish why the project was not selected and factors that could help make the project more competitive for future applications.
      o Assemble the work group as soon as you have received an agency debrief to critically and creatively analyze the processes used.
      o Use the AAR to identify both practices to continue and practices to discontinue or change.

APPENDIX

Positioning for Success

Sample Work Group Meeting Agenda

- Project Overview
- Team (Work-Group Composition)
    - Roles and responsibilities
- Schedule and Milestone Reviews
    - NOFO requirements review and facilitated walk-through
- Grant Proposal Strategy
    - Data available and data needed
    - Mapping
    - Win themes
    - BCA
    - Critical support—including (but not limited to) LOS
    - Communication, document sharing, collaborative platform
    - Other (may add other items to this list)
- Scheduling Team/Work-Group meetings in line with schedule

Organizing the Effort

Grant Responsible, Accountable, Consulted, and Informed (RACI) Approach

The multiple roles in the grant development process are organized by the RACI categories below (Responsible, Accountable, Consulted, and Informed). The RACI roles will be further defined in the grant proposal strategy. Potential players in the RACI categories are listed in the Roles Checklist that follows.

- **Responsible** – Perform grant development activities, including:
  - Project Manager
  - Application Manager
  - Section Authors
  - BCA Lead
  - Support Letter Coordinator
  - Editor
  - QA/QC Lead
  - Other Work Group members
  - Consultants
  - Others TBD as required by particular grants

- **Accountable** – Process "Owners" who submit the proposal:
  - Applicant Lead (e.g., municipal leader or representative, MPOs/RPOs)
  - Joint Applicant Lead (in some cases)

- **Consulted** – Engaged as appropriate throughout the process, including:
  - PennDOT Department Personnel (Central Office and Districts, including support staff)
  - Governor's Office
  - Critical Supporters
  - Stakeholders (selectively)

- **Informed** – Kept apprised of grant pursuit and developments, including:
  - Executives
  - Stakeholders

Roles Checklist

The following list of potential roles is intended to be fairly comprehensive, recognizing that involvement will be dictated by the specifics of the opportunity. The list may serve best as a means of ensuring that no valuable player has been overlooked rather than as a set of required roles.

- **Grant-Development Activities**
  - Oversight (QA/QC) – consultants in a purely oversight role
  - Consultants in a development role
  - Required disciplines
  - Technical/engineering expertise (see below)
  - Staffing (internal and external) and timing commitments
  - Editorial and graphics
  - Benefit-cost analysis

- **Expert Support** (as required by grants)
  - Planners
  - Engineers
  - Environmental specialists
  - Economists (e.g., benefit-cost analysis)
  - Writers/editors
  - Graphics specialists
  - GIS
  - QA/QC

- **PennDOT Partners**
  - Municipal Services Representatives
  - District Executives
  - Key District Personnel

- **Stakeholders/Advisory**
  - MPOs/RPOs
  - Local development districts
  - Local governments
  - Local government associations
  - Transit agencies
  - Airport and port authorities
  - Freight rail
  - Amtrak
  - Chambers of commerce
  - Employers/industry
  - Workforce development boards
  - Economic development agencies
  - State Transportation Commission (STC)
- **Interagency and Intergovernmental**
  - Governor's Office
  - DCNR
  - PHMC/SHPO
  - DCED
  - PEMA
  - Department of Agriculture
  - Department of Health
  - Department of Human Services
  - State Police
  - Turnpike Commission
  - Resource/Regulatory agencies
    - Fish & Boat Commission
    - PA Game Commission
    - DEP
  - Federal agencies
    - USDOT
      a. FHWA
      b. FTA
      c. FRA
    - USACE
    - USCG
    - USDOD

- **General** (Depending on the project, the following entities may be able to strengthen the approach by identifying benefits and outcomes for their respective communities and constituencies.)
    - Municipal Advisory Committee
    - Transportation Advisory Committee
    - Modal Advisory Committees
    - State Transportation Innovation Council
    - Public/private nonprofit beneficiaries in the project area, including educational institutions, healthcare facilities, and major employers
    - Organizations supporting minority and diversity, equity, and inclusion interests
   - Other supportive project champions/stakeholders

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Grant Application Development Summary

NOFO:	
Project Name:	
Owner:	
Key Stakeholders:	
Brief Description:	

Grant Application "Workback" Schedule	
Key Step	**Target Date**
Go/No-Go Decision (If Go, proceed with summary)	
Due Date and Time	
Final Draft Application QA/QC	
Final Draft Application Review	
Draft Application QA/QC (Draft with BCA and forms completed)	
Draft Application Review	
Annotated Outline Review	
Annotated Outline	
Data Collection Requests with Deadlines	
LOS Requests with Deadlines	
Outline	
Team Roles	
Application Manager	
Section Authors	
BCA Lead	
Support Letter Coordinator	
Editor	
QA/QC	

Sample Application Cover Page*
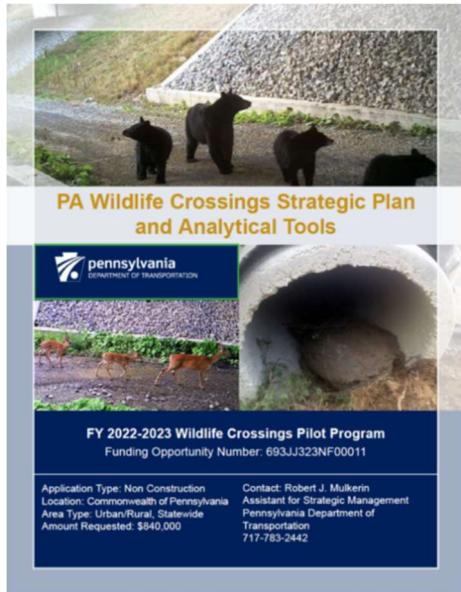
Sample Section Cover Page*

*These sample cover pages (provided by PennDOT) can serve as a template for grant proposals submitted by municipalities and their project partners.

Sample Folder Structure

The folders listed below may be useful for organizing grant information. Setting up these folders in a shared environment will help make grant information easily accessible to all who will work on the application. Additional folders and subfolders can be added as the application develops.

- Background Materials and Data
- Benefit-Cost Analysis
- Drafts
- Final Deliverables for Upload
- LOS
- Maps and Visuals
- Meetings
- NOFO and Related Guidance

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Sample Maps

S.R. 02090 SECTION 007
ALIGNMENT 3D1-MOD3

LEGEND

▮	SHINER HABITAT
▨	VERNAL PONDS
▨	WETLANDS
▭	HISTORIC PROPERTY
▮	PROPOSED WILDLIFE STRUCTURES
▭	FLOODPLAIN
▮	TERRESTRIAL PRES./ ENHANCEMENT
▮	WETLAND PRESERVATION
▮	REPLACEMENT WETLAND
▭	PROPOSED CONSERVATION EASEMENT (Dependent on amicable owner agreements with landowners)
▮	RIPARIAN BUFFER

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PROJECT AREA / PROJECT LOCATION
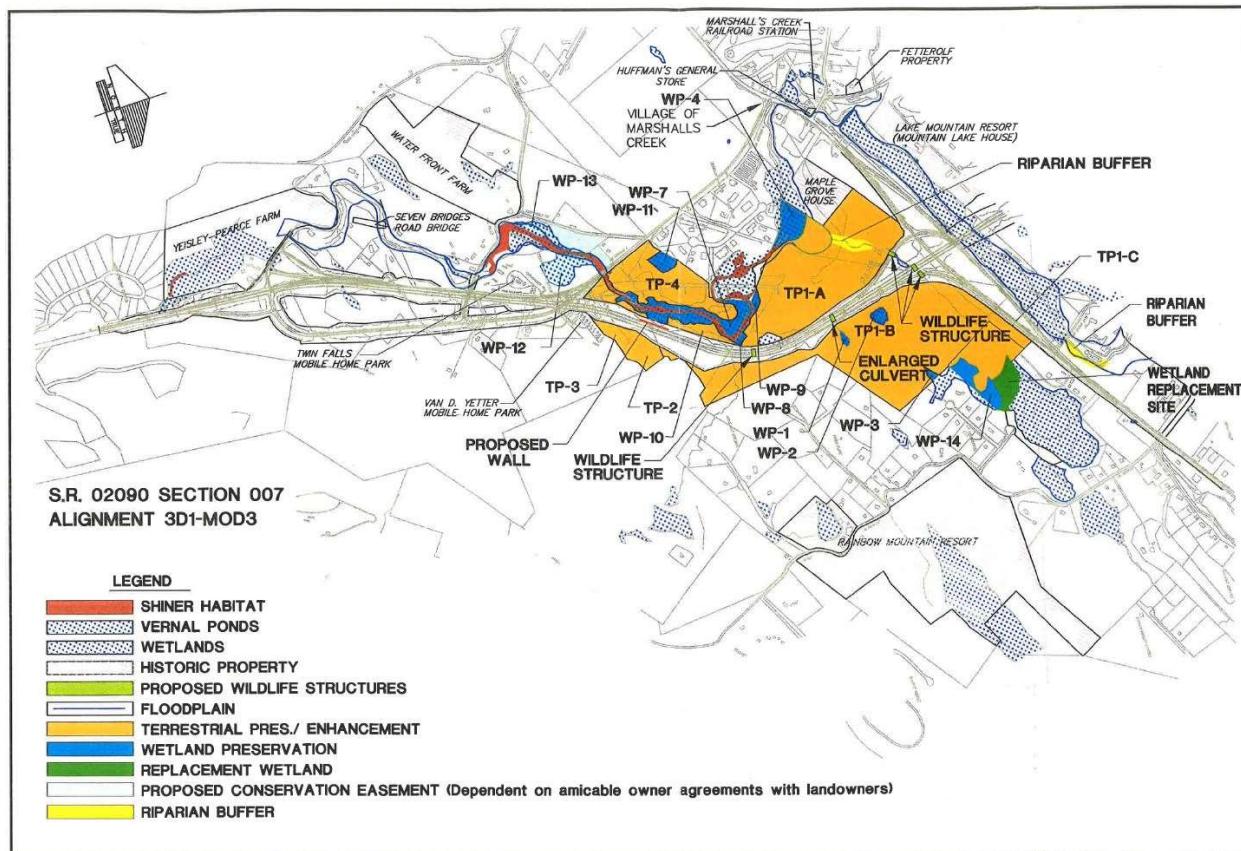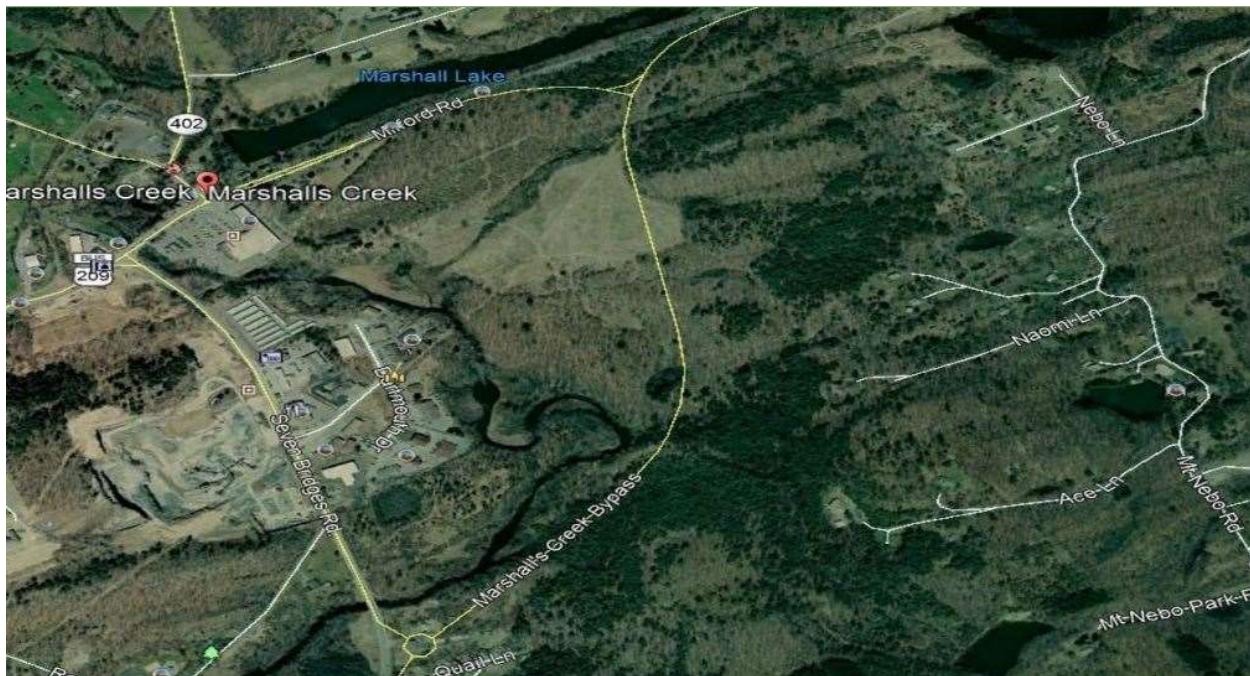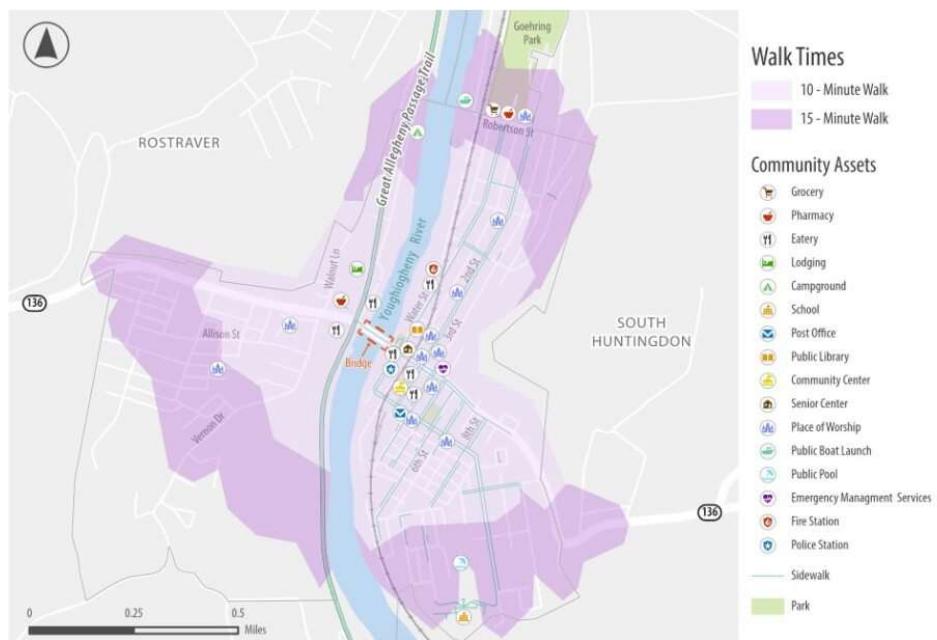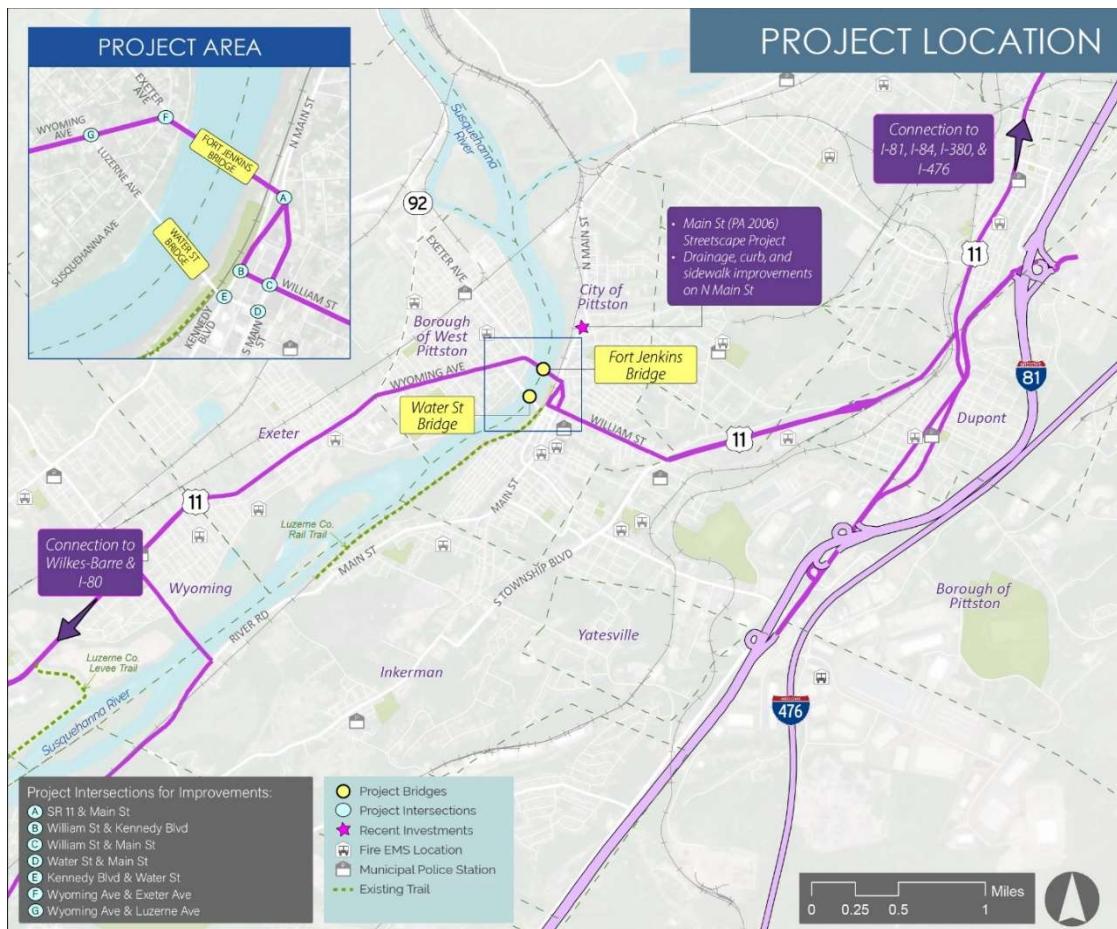
[Return to This Section at Top](#)

Sample Graphics

PROTECT THE PARKWAY IMPROVEMENTS

FORT PITT BLVD WESTBOUND

FORT PITT BLVD EASTBOUND

SMITHFIELD STREET BRIDGE

Increased floodwall height

Increased floodwall height

I-376 EASTBOUND

I-376 WESTBOUND

I-279 TO I-376 EASTBOUND INTERSTATE CONNECTOR RAMP

MONONGAHELA WHARF

MONONGAHELA RIVER

Hydrostatic Pressure Mitigation Measures

Diagram not to scale
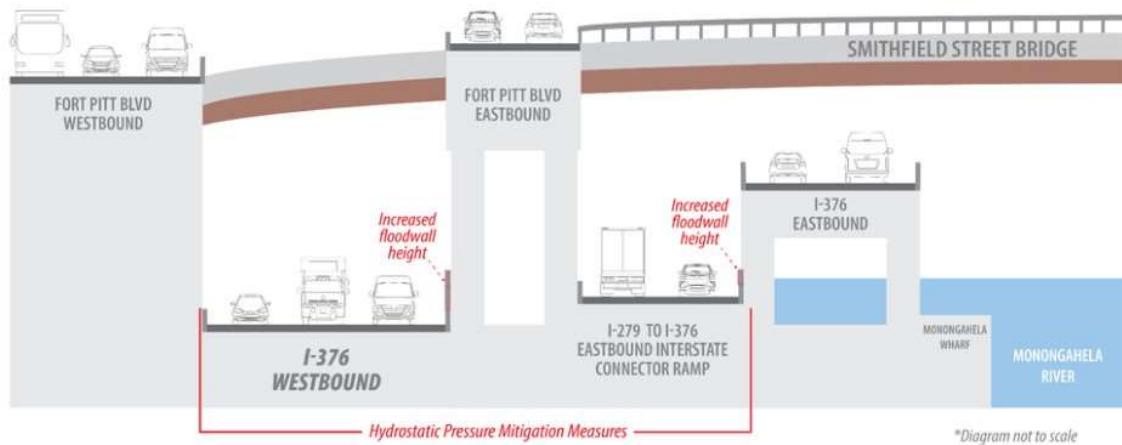
EXISTING EAST BOUND LANE

36' 6"

1'9" | 4' 6" | 12' | 12' | 4' 6" | 1'9"

33'
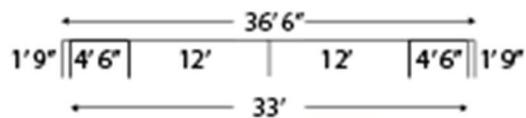
PROPOSED EAST BOUND LANE

59' 4.5"

1' 8.25" | 24' | 12' | 12' | 8' | 1' 8.25"

56'

31
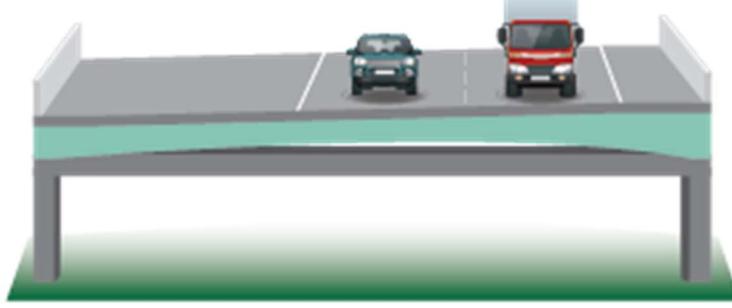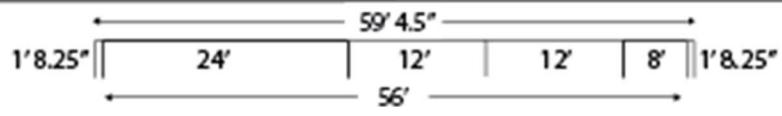
Sample Data

By: NAL DATE: 2/27/2019
CHK'D BY: JEB DATE: 2/27/2019

FIGURE 3.3
DESIGN CRITERIA MATRIX
MPMS NO. 90021
SR: 80 SECTION: 365 COUNTY: Clarion

(1)

(2) PROJECT DESCRIPTION: I-80 Bridge Replacement Over Canoe Creek and Tippecanoe Road

NHS? (Y / N) Yes   STRAHNET? (Y / N) Yes

(3) **DESIGN DESIGNATION**
SR I-80 Eastbound
DESIGN CRITERIA New Construction / Reconstruction
AREA SYSTEM (Urban / Rural) Rural
FUNCTIONAL CLASSIFICATION Interstates/Freeways
ROADWAY TYPOLOGY Limited Access Freeway, Rural Interstate
TOPOGRAPHY Rolling
REMARKS

(4) **TRAFFIC DATA**
OPENING YEAR ADT (Average Daily Traffic)	14994 (2025)
DESIGN YEAR ADT (Average Daily Traffic)	22456
DESIGN YEAR (for Design Year ADT)	2045
DHV (Design Hourly Volume)	1572
D (Directional Distribution)	53%
T (Truck Percentage)	41%

(5)

CRITERIA*	LOCATION (ENTIRE PROJECT OR BY STATION)	EXISTING VALUE	REQUIRED VALUE	PROPOSED VALUE	CRITERIA MET?	SOURCE OF DESIGN CRITERIA (AASHTO or DM-2 Reference)	REMARKS (NOTE ANY DESIGN EXCEPTIONS)
Design Speed	Entire Project	70 mph	75 mph	75 mph	Yes	DM-2	70 mph Posted Speed. 75 mph Design Speed selected based on DM2, 2.9.B
Lane Width	Entire Project	12'	12'	12'	Yes	DM-2	
Shoulder Width	Entire Project	10'-0" Right, 4'-0" Paved Left	12'-0" Right, 8'-0" Left	12'-0" Right, 8'-0" Left	Yes	DM-2	DDHV (Trucks) > 250, therefore 12'-0" shoulder is required
Minimum Bridge Width	Entire Project	33'	Lane Widths Plus Shoulders Each Side	44'	Yes	DM-2	44' required. Proposed structure width will be evaluated for future maintenance considerations.
Minimum Horizontal Radius	Entire Project	1910'	2210'	2210'	Yes	AASHTO	
Maximum Superelevation Rate	Entire Project	8.00%	8.00%	8.00%	Yes	DM-2	
Vertical Grade Minimum	Entire Project	1.00%	0.50%	3.00%	Yes	DM-2	
Vertical Grade Maximum	Entire Project	3.80%	4.00%	3.80%	Yes	AASHTO	
Minimum Stopping Sight Distance (SSD/HLSD) (vertical and horizontal)	Entire Project	620'	820'	1444'	Yes	AASHTO	
Minimum Intersection Sight Distance (ISD)	Entire Project	N/A	N/A	N/A	Yes	AASHTO	Limited Access Facility - Intersection Sight Distance is not applicable.
Minimum Cross Slope	Entire Project	1.00%	2.00%	2.00%	Yes	DM-2	
Minimum Vertical Clearance	Entire Project	Exceeds 14'-6"	14'-6"	110'	Yes	DM-2	Over SR 4005 (Rural Minor Collector)

* FHWA has established thirteen (13) controlling criteria requiring formal approval of design exceptions. Refer to Publication 10X, Design Manual Part 1X, Appendix P for more information.

(6) Any pedestrian and bicycle concerns / needs? Explain. N/A - Limited Access Facility
Any ADA compliance issues? Explain. N/A - Limited Access Facility
Any transit issues? Explain. None
Any additional design issues? Explain. None

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Sample Appendices

As appropriate, the following items may be included as appendices to the grant application (if not already part of the submission per the NOFO):

- ☐ Maintenance Commitment Letter
- ☐ Costs
- ☐ BCA
- ☐ Maps and Data Sets
- ☐ Project Schedule
- ☐ Letters of Commitment
- ☐ Other LOS

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Building Support

Additional Considerations for LOS

PennDOT may also consider providing LOS for municipal grant applicants, as requested. Generally, the Department will provide LOS for regionally supported projects (such as those coordinated through MPOs/RPOs) if PennDOT is not submitting or is not prohibited from supporting by regulation. When appropriate, supporting a project will entail:

- The requirement of reviewing a draft of the grant application prior to providing the requested LOS.
- Willingness to consider draft LOS text provided by the requesting grant applicant.
- Efforts to have the PennDOT LOS signed by the Secretary of Transportation, whenever possible, to reflect support at the highest level.
- Recognition that the Department may choose not to provide LOS.

PennDOT Central Office is responsible for obtaining LOS from members of Congress and from the Chairs of the State House and Senate Transportation Committees. Districts are responsible for obtaining LOS from other legislators and from counties, municipalities, and others (e.g., private sector, chambers of commerce) regionally.

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Sample Request for LOS

REQUEST: Letter of Support for [title of proposed project] Federal Grant

I am reaching out on behalf of [municipality or regional entity] regarding the pursuit of a major competitive grant from the [*name of specific grant program*]. The proposed grant would fund [*proposed project title*].

Letters of support from leaders across the Commonwealth are an essential element of a competitive grant application. Please strongly consider providing a letter of support for this project given its critical importance to the **[***brief statement on the benefits of the grant***].**

I have attached more information on the grant opportunity and how to provide a letter of support, along with a template to get you started and ideas for customizing your letter. The following talking points provide basic information on the project to assist in the personalization of the letter.

The proposed project comprises the following phases:

[*Briefly describe the major phases (as applicable) of the project. Stress the value and importance of the project beyond its transportation benefits. Emphasize how the project and the grant program will improve the economy, equity, and other measures through job creation and other benefits, both locally and across the region.*]

The deadline to submit your customized letter is **[***date***]**

This project addresses a very important need and opportunity. Discretionary funding is competitive, and stakeholder support is essential for municipalities and their regional partners in leveraging these funds.

Thank you for your assistance in helping us in our pursuit of this grant.

[*Name*], on behalf of [*municipality or regional entity*].

Sample LOS

The following samples (provided by PennDOT) can serve as a template for municipalities and their project partners for LOS.

Senate of Pennsylvania   House of Representatives

November 1, 2023

The Honorable Pete Buttigieg
Secretary, U.S. Department of Transportation
1200 New Jersey Avenue, S.E.
Washington, DC 20590

Subject : I-83 South Bridge (Harrisburg, PA) Bridge Investment Program (BIP) Large Bridge Project Grant Application

Dear Secretary Buttigieg:

This letter is to express our strong support for PennDOT's grant application to replace the John Harris Memorial (South) Bridge, which carries Interstate 83 over the Susquehanna River in Harrisburg, Pennsylvania. The replacement of the bridge is PennDOT's top priority. The Bipartisan Infrastructure Law and the associated discretionary grant programs are crucial to the replacement of the I-83 South Bridge. This is highlighted by the recent 2023 Multimodal Project Discretionary Grant application as total future eligible costs for Design Build-Construction of over $1.2 billion, securing Federal funds is pivotal to the completion of the project.

Interstate 83, connecting Harrisburg and Baltimore, serves major facilities at either end including the Norfolk Southern intermodal facilities, Harrisburg International Airport, and the Port of Baltimore. The entire multimodal system for moving people and goods relies on the I-83 South Bridge, which carries approximately 125,000 vehicles over the Susquehanna River daily. The bridge is a lifeline that supports the economic well-being of the Pennsylvania capital region and neighboring regions. The South Bridge is essential for goods movement. Commodities moving over the bridge daily are valued in the hundreds of millions of dollars.

The South Bridge has deteriorated to poor condition, and its functional limitations create a bottleneck on this busy Interstate corridor on the National Highway Freight Network. The bridge must be replaced and improved in as timely a manner as possible to avoid lane closures and weight restrictions (overweight permit loads have already been restricted).

PennDOT has demonstrated tremendous stewardship in its previous attempts to fund this project over the past several years. The I-83 South Bridge cannot advance without the requested federal grant funding. Provision of the BIP Large Bridge Project Grant will powerfully demonstrate how the federal–state partnership delivers regional and national benefits. Please have your staff contact our offices for any additional information that we can provide to demonstrate the overwhelming need and benefit for the South Bridge replacement to ensure mobility for people and freight within and through the region for decades.

Thank you for your consideration of this meritorious grant and your commitment to our nation's critical transportation system.

Sincerely,

Rep. Ed Neilson, Chair
House Transportation Committee

Senator Wayne Langerholc, Jr., Chair
Senate Transportation Committee

Rep. Kerry Benninghoff, Minority Chair
House Transportation Committee

Senator Marty Flynn, Minority Chair
Senate Transportation Committee

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ROBERT P. CASEY, JR.
PENNSYLVANIA

COMMITTEES:
FINANCE
HEALTH, EDUCATION,
LABOR, AND PENSIONS
SELECT COMMITTEE
ON INTELLIGENCE
SPECIAL COMMITTEE ON AGING

United States Senate
WASHINGTON, DC 20510

November 7, 2023

The Honorable Pete Buttigieg
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

Dear Secretary Buttigieg:

I write today in support of the application from the Pennsylvania Department of Transportation (PennDOT) to the U.S. Department of Transportation's Bridge Investment Program for its I-83 John Harris Memorial Bridge ("I-83 South Bridge") Replacement project. This project is a major priority for the Commonwealth, and I urge you to give this application full and fair consideration.

The I-83 South Bridge spans the Susquehanna River between Dauphin County, home to Pennsylvania's capital Harrisburg, and Cumberland County, one of the fastest growing counties in the Commonwealth. PennDOT has informed me that the bridge carries an average of over 125,000 vehicles every day, including passenger vehicles and trucks serving nearby rail terminals and the Harrisburg International Airport.

However, I understand that the I-83 South Bridge, which was originally build in 1960, has fallen into "poor condition" according to PennDOT. I am told that the main river spans are considered fracture critical, and that the failure of a single girder could lead to the collapse of one of the bridge's spans. I am also informed that there are cracks in the steel beam of the bridge that threaten its integrity. As a result of this, PennDOT officials have told me that the agency cannot rehabilitate the bridge, and that it must be fully replaced.

To do this, PennDOT officials have informed me that they intend to replace the current bridge with a new structure with a 100-year lifespan. This new I-83 bridge will be in good condition and will be able to handle the transportation needs of this rapidly growing region of Pennsylvania. I understand that the new structure will be wider than the current bridge, with better shoulders, improved on- and off-ramps, and more streamlined interchanges. PennDOT officials have also told me that there will be multimodal considerations as well, including the redesign of a West Shore interchange that currently hampers bicycle and pedestrian access and the complete replacement of an aging viaduct over Amtrak's Keystone Service route.

Due to the scope of this project, I understand that the cost of the work will total between $1.1 and $1.3 billion. While PennDOT had originally intended to fund this work through a tolling plan, that pay-for structure was struck down in court, leaving the agency with a massive outstanding, unfunded project. Without federal discretionary funding, PennDOT officials have

told me that they will have to fund the I-83 South Bridge project through formula funding, which would jeopardize the funding for dozens of projects across the Commonwealth. As such, this project is not only a priority for the immediate Harrisburg region, but the entire Commonwealth. This is demonstrated by the October 30th letter I sent to you about this project that was signed by the entire Pennsylvania congressional delegation.

In my time in the Senate, I have always pushed for increased funding to repair and replace bridges in Pennsylvania and across the Nation. I was happy to see my Bridge Investment Act included in the infrastructure law and I am hopeful that significant funding from this program will come to Pennsylvania, especially for critical projects like this.

Thank you in advance for your thoughtful consideration. Please include this letter in the official record of the application. Consistent with all applicable laws, rules, and regulations, I also respectfully request that you keep me informed of the status of this grant application. Finally, if you have any questions, comments, or concerns, please feel free to contact me or my staff at (202) 224-6324.

Sincerely,
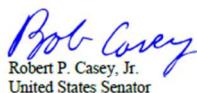
Robert P. Casey, Jr.
United States Senator

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Making the Case

Generalized Data Types

The sources below may also be best explored with the assistance of subject matter experts from MPOs/RPOs, as well as PennDOT's District and Central Office staff. Consider both quantitative data and qualitative benefits.

- ☐ Safety Data
- ☐ Operations Data
- ☐ Traffic Data
- ☐ Bike/Pedestrian Data
- ☐ Freight/Commerce Data
- ☐ Multimodal Freight Data
- ☐ Transit Data
- ☐ Bridge Condition Data
- ☐ Pavement Condition Data
- ☐ Environmental Data
- ☐ Environmental Justice Data
- ☐ Equity and Demographic Data
- ☐ Public Health Data
- ☐ Economic Data
- ☐ Housing Data
- ☐ Employer Data
- ☐ Workforce Development Board Data
- ☐ Chamber of Commerce Data
- ☐ Additional Grant-Specific Data
- ☐ Project Costs (Past, Present, and Future)

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BCA Checklist

- ☐ Review and reference the current USDOT BCA Guidance for Discretionary Grant Programs.

- ☐ Document all assumptions and methodology used to produce the BCA.

- ☐ Use present-value methodology in analysis.

- ☐ Link benefits with expected outcomes.

- ☐ Ensure that those assigned to draft the BCA are fully qualified with the requisite experience of preparing BCAs.

- ☐ Establish a list of all known direct and indirect benefits and the associated data (quantitative and qualitative) that will be used for each.

- ☐ Review the work group as early as possible to identify the associated data sources (quantitative and qualitative) and the contacts for each.

- ☐ Prepare a schedule for BCA development that fits with the overall grant proposal schedule and that is completed in successive drafts as early as possible as the completed BCA can positively shape the narrative.

- ☐ Ensure the narrative sections correctly integrate BCA results, such as the expected reduction in the crash rate or greenhouse gas emissions over the BCA period.

- ☐ Verify data accuracy and reliability, as well as the calculations in the spreadsheet and its completeness and logic.

- ☐ Considering requesting that a BCA expert not otherwise involved in the grant application development perform a detailed review of the BCA.

- ☐ Present the BCA to work group for review and comment.

Sample Submission Checklist

Category	Attachment Name	Description
Forms	SF424	High level project info
Forms	SF424C	Budget form
Forms	SF424D	Assurances - signature only
Forms	SF LLL	Signature only
Application	Application Template	Excel Sheet
Application	Supplemental Narrative	PDF Document
Application	Budget Narrative	PDF document required with the SF424C form
Attachments	Attachment 1. Letters of Support	Letters of Support
Attachments	Attachment 2. BCA Model	BCA Model
Attachments	Attachment 3. BCA Technical Memorandum	BCA Memo
Attachments	Attachment 4. Economic Impact Analysis	Economic Impact Analysis
Attachments	Attachment 5. Design Plans	Design Plans
Attachments	Attachment 6. Bike and Pedestrian Technical Memo	Ped Bike Technical Memo
Attachments	Attachment 7. Funding Committments	Funding Committments
Attachments	Attachment 8. Freight Analysis	Freight Analysis

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Performing Post-Submission Activities

Questions to Guide the After Action Review

The After Action Review (AAR) identifies both practices to continue and practices to discontinue/change. The following questions can guide your AAR:

- **What was the intended result?**
  - Define the intended outcome clearly, concisely, and comprehensively.
  - Beyond a successful application, what components were required for success? The agency debrief will inform this line of questioning. For example, a successful application requires strong, visible support from key stakeholders. What would be the result of this requirement being satisfied? Is it the number of LOS provided, their content, or the profiles of those providing them?

- **What were the actual results?**
  - Compare the actual results with the well-defined outcomes.
  - For each component of success, how well did the application measure up? In the example for LOS, how many letters did we request and how many did we receive? What did they contain? Who supported the effort and who did not?

- **What are the gaps between intended and actual outcomes?**
  - Consider the root causes of the shortcomings.
  - Your line of inquiry might examine whether processes and procedures were effective. Did we allow enough time for critical activities? In the example for LOS, did the prospective supporters understand the benefits to their communities and constituents? Did the BCA yield favorable outcomes?

- **What processes were effective and should be repeated?**
  - List the areas where results were aligned with expectations so that they can be replicated on other applications.
  - Consider ways to ensure the successful practices are sustained or even expanded upon.

- **What has to change?**
  - Identify and list ways to address shortcomings throughout the relevant application development steps.
  - Determine where submitted information was missing, inadequate, or confusing.
  - Consider ways to highlight critical information that was provided, but which did not "get through" to reviewers. Could it be more graphically striking? Was there possible doubt or confusion about claims made, particularly with the benefit-cost analysis?
  - Specify the steps that will be taken in research, writing, calculations, support-generation, and editing/proofreading to address inadequacies and strengthen future applications and their chances of success.

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Grant Application After Action Review Form

Grant application (title and program):				
Step 1: Intended Results	**Step 2: Actual Results**	**Step 3: Gaps**	**Step 4: Repeat**	**Step 5: Change**
Define clear, concise, and comprehensive intended outcomes	Describe actual results for each.	Define the gap, considering root causes of the shortcomings, if applicable.	List the areas where results were aligned with expectations.	Identify and list ways to address shortcomings.

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