

Montana Transportation Alternatives (TA) Program

2023 Pavement Preservation Project Instructions

Instructions:

Completed applications must be received by:

Wednesday, April 12, 2023 – 3:00 pm (MST)

MDT contact for questions: Dave Holien, TA Program Manager
406-444-6118
dholien@mt.gov

There are two types of applications accepted: one for Capital Improvement projects and one for Pavement Preservation projects of existing infrastructure. Contained herein are the instructions for a Pavement Preservation project.

Applications must be submitted on the PDF application form provided on the MDT TA Program website. Responses to the various sections need to be completed within the space available given in each section. Attachments are allowed at the end of the application in an Appendix (continue reading through the instructions for more information.)

Submit one (1) electronic version of the application. Hard copy applications will not be accepted.

The electronic version must be submitted by uploading to the State of Montana File Transfer Service site.

The State of Montana File Transfer Service website can be accessed at this link: <https://transfer.mt.gov>. To upload to the File Transfer Service, an account must be created, unless the person who is uploading already has an account. Uploading instructions can be accessed at: <https://transfer.mt.gov/Home/Instructions>. When your application has been uploaded the File Transfer System, it will prompt you for an email. Enter dholien@mt.gov and press send to submit your application.

MDT reserves the right to remove a project from further consideration should any of the following occur during the scoring process:

- The project receives a score of less than 25% in either “Project Benefits” or “Risk Analysis” sections
- A fatal flaw is identified. For example: incomplete application, lack of maintenance commitment by the applicant, the project will not meet ADA requirements, substantial right-of-way or environmental impact, etc.

Applications must be submitted on the PDF application form provided on the MDT TA Program website.

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Below are the instructions for completing a TA Application for a Pavement Preservation Project:

1. **Project Name**

Provide the name of the project as it is locally known.

2. **Project Sponsor:**

Provide the name of the local entity that is nominating the project as the Project Sponsor (i.e. City, County, Tribal Government, etc.).

3. **Project Contact (name, title, address, phone number, email)**

Provide the name, title, address, phone number, and email address of the main point of contact for the Project Sponsor. Please note that the project contact must be an employee or elected official representing the Project Sponsor. List the name of the person that wishes to be involved in the project, if selected.

4. **Is the Project Sponsor a Tribe?**

Select Yes or No. In the application reminders will be displayed regarding the match requirements depending on the selection.

5. **Population**

Using 2020 U.S. Census information select whether the project is within an area of population of **less than 5,000** or a **population of 5,000 to 50,000**. This is not the population of the Project Sponsor, rather, it is the population of the project location. If the project is in a rural area without a defined population, select the less than 5,000 category. If the project is within an Urban Area listed here (excluding Billings, Missoula, and Great Falls): [MDT Urban Maps | Montana Department of Transportation \(MDT\) \(mt.gov\)](#), then select the category of population of 5,000 to 50,000. If you are uncertain about how to declare the population, please contact the MDT TA Program Manager.

6. **Estimated Total Project Cost**

Fill out the cost estimate table in the application. Enter the total costs in the Total Cost column for PE, CN, CE, RW and IC. The MDT Indirect Cost Rate (IDC) is calculated below in this table, so these costs entered into the blue text boxes should not include IDC. However, the costs should include inflation and contingency. Enter any amount of Additional Compensation the Project Sponsor wishes to contribute in the Additional Contribution column. These costs are costs over and above any local match (or State match). If Additional Contribution is added, it will reduce the TA Federal Share and Match columns. The amounts on the Subtotal, IDC, and Grand Total lines will automatically calculate. The MDT IDC rate is currently 10.71% and it does change yearly in each State fiscal year, starting July 1. In the past, it has typically averaged around 10-11%. Cost does not affect the scoring of the application, but it is used to determine fundability and compliance with funding distribution. **The application cap for a Capital Improvement TA project is \$600,000 for Federal TA Share (100% or 86.58%) requested.** The estimated cost should be as accurate as possible, be developed using industry-accepted project estimating techniques, and be broken down as follows:

- **Construction (CN)** – this is the cost to construct/build/implement the project.

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- **Preliminary Engineering (PE)** – this is the cost to design the project and MDT’s management of the project. PE costs at 10-15% of Construction is a good starting point for estimating PE for a TA Pavement Preservation project.
- **Construction Engineering (CE)** – this is the cost to inspect and administer the project while it is being constructed/implemented. CE costs at 10% of Construction is a good starting point for estimating CE for a TA Pavement Preservation project.
- **Right-of-Way (RW)** – cost to purchase construction permits, easements, and right-of-way (if applicable).
- **Utility Costs (IC)** – cost to relocate utilities (if applicable).

Example of the methodology used to fill out the cost estimate table below:

We recommend that applicants start by estimating the construction cost. This is the estimated construction contract award amount (bid amount) submitted by a contractor (once the project is ready to bid). This starts with a detailed breakdown of bid items (unit prices and quantities for construction items such as mobilization, excavation, base course, asphalt, concrete, drainage elements, revegetation, traffic control, signs, etc.), which is the preferred method (which will not be explained here). Another option would be to estimate cost using cost per square yard/cost per mile. Again, this will not be explained here. The more detailed and accurate the estimate is, the better. We recommend working with an engineer who has experience in estimating the construction cost for the type of project being applied for. This detailed breakdown cost estimate for construction can be attached to the application in the Appendix section.

The explanation below will focus on filling out the cost estimate table as shown below. This assumes that a detailed construction cost estimate has been prepared to calculate estimated construction costs (estimated bid amount). For this example, let’s say we arrive at an estimated construction cost of \$300,000 for a pavement preservation project. Then it is advised to add on a contingency amount. A 20-30% contingency amount is a good starting point to account for unexpected items/costs and potential higher than anticipated bids. For this example, we will use 30%. So, \$300,000 multiplied by 1.30 (30% contingency) equals \$390,000. Adding an inflation amount of 4% per year from time of application to anticipated construction should also be added. Let’s assume that it will take this project 1.5 years from the time of estimating to construction, so we’ll take \$390,000 and multiple this by 4% times 1.5 years (6%). So, this will be $\$390,000 \times 6\% = \$23,400$. We now need to add this \$23,400 (calculated inflation amount) to the \$390,000. This equals \$413,400. This is the estimated construction cost (without IDC) and is the number to use in the cost estimate table for the Construction (CN) amount. The MDT IDC rate (currently 10.71% is automatically calculated in the table in the application.)

The next step would be to calculate the Preliminary Engineering (PE) and Construction Engineering (CE) amounts. As described above a good starting point for estimating PE is 10-15% and CE 10%. In this example we will use the 15% and 10% amounts for PE and CE. To calculate the PE amount, we would multiply \$413,400 by 0.15 (15% for PE) which equals \$62,010. This would likely be a more conservative number to use since it also included 1.5 years of inflation (6%). If the Project Sponsor wanted to remove this inflation before calculating, that would be okay as well; a lesser amount of inflation could be used such as 0.5 years or 1 year of inflation. Without factoring in inflation in this example, PE would be $\$390,000 \times 0.15 = \$58,500$. This \$58,500 or the previously calculated \$62,010 is the number to put in the Total Cost column for PE. To calculate the CE amount, we would multiply

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\$413,000 by 0.10 (10% for CE) which equals \$41,300. Again, it is up to the Project Sponsor if inflation should be included. It is more conservative if inflation is used. In this example, this \$41,300 is the amount to put in the cost table in the application.

In this example we are assuming no RW or IC phase. Any unused phases that are not needed can be left blank.

Enter any Additional Contribution that is desired to be added to the project. Again, these funds are in addition to any local or State match.

Next, select the Match Type below the Cost Table. If the project is all Local match, all State match, or No Match Required (Tribal projects), then nothing more is needed. You'll then see the total match appear in the State Match and Local Match fields below (if applicable). If your project requires a combination match (partial State and partial Local) then select Combination and then enter the State portion. When adding a percentage, enter the number as a decimal rather than a percentage. For example, enter 0.50 instead of 50%. The Local Match will be calculated based on what is entered for State Match, and together they will add up to 100%. **As a reminder, State Match is provided when the project is 1.) on-system (on an MDT route), 2.) is either an ADA upgrade project or a pavement preservation type project, and 3.) the original project that this project is improving used federal aid funding in its construction. If you are applying for State match, ensure you state that your project meets these requirements and describe how in the Project Description.**

Finally, ensure the Estimated Project Sponsor Cost line item is as expected.

7. **Project Description – 10 points**

Describe the overall project. What is being proposed? Why is the project being proposed? Describe why the project is needed by the local community. Discuss the project's consistency with local transportation plans or strategy. Does the project serve a need identified in a local transportation plan? Where is the project located? Maps and photos to provide further clarification should be provided in the Appendix and will be scored as part of this section. Be sure to include as much detail as possible. What treatment is being proposed? Be as complete and detailed as possible.

Pavement Preservation information: The two general surface types found on the shared-use paths and sidewalks are asphalt and concrete pavements (gravel surfaced paths are ineligible for maintenance).

1. The general treatments for asphalt pavement preservation can include, but are not limited to: crack sealing, patching, fog sealing, and overlays. For more information here is a link to MDT's Shared Use Paths Inventory and Detailed Maintenance Plan:

<http://leg.mt.gov/content/Committees/Interim/2015-2016/Revenue-and-Transportation/Meetings/Nov-2015/shared-use-trail-report-draft.pdf>

Upgrading ADA as necessary is allowable on asphalt pavement preservation projects.

2. Concrete can be considered in this pavement preservation category, but the pavement preservation needs to be minor and not total replacement. Stand-alone curb ramp ADA upgrade projects will not be considered in this pavement preservation category. Stand-alone ADA upgrade projects are considered new infrastructure and are eligible under the Capital Improvement TA project category. Concrete pavement preservation can be, but not limited to: slab jacking, diamond grinding, joint resealing, crack sealing, overlays, and

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partial-depth repair. Work can include replacing intermittent cracked, heaved, or deteriorated concrete, and may include ADA improvements as required.

8. Americans with Disabilities Act (ADA Compliance) – No score – pass/fail

Select whichever is most appropriate for your project

- Project will be fully ADA compliant (no explanation needed)
- Project will not be ADA compliant (explanation required below)

If the project will not be ADA compliant, describe why and if there is a technical infeasibility. As a reminder, projects that won't be ADA compliant will not move on in the scoring process, unless the project receives a technical infeasibility for ADA compliance.

9. Describe the operation and maintenance plan for the facility – No score – pass/fail

The local sponsor is responsible for project maintenance, including projects located within MDT right-of-way, unless a project is proposed on a facility where MDT is already responsible for maintenance. In this case, MDT will continue to maintain the facility. Describe who will be responsible for operation and maintenance of the completed project. What is the plan to ensure maintenance is performed in a timely and adequate manner? Maintenance may include sweeping, snow removal, crack sealing on asphalt surfacing, and other activities necessary for public use and safety. Does the local project sponsor have the equipment, personnel, and maintenance budget necessary accomplish this additional maintenance?

10. Project Benefits – 45 points

Describe why the project is needed by the local community. Discuss the project's consistency with local transportation plans or strategy. Does the project serve a need identified in a local transportation plan?

Describe how the project improves the surface condition and how it improves safety and how it addresses existing safety concerns. What is the anticipated design life of the pavement preservation treatment?

Describe how the project will improve or maintain connectivity to other pedestrian and/or bicycle facilities or other transportation alternatives. Also include discussions on the proximity to the existing transportation system and how the termini, or ends of the project, are logical and fit well within the local system. Describe how the project will satisfy an identifiable transportation need.

11. Risk Analysis – 45 points

This section should present the Sponsor's understanding of the risks associated with the project, as well as how these risks will be mitigated. All projects have risks associated with them. This section will be evaluated on how well the Sponsor understands the risks and how they are proposed to be mitigated. Inadequate discussion or a careless approach to any of these sections below will result in a low score.

Budget: Describe how the construction budget was developed, including supporting methods, resources, or comparisons. A thorough and accurate budget is critical to the application and will be scored accordingly. Generalities or gross approximations should be avoided. For infrastructure projects, the services of an engineer for development of the project cost estimate is strongly recommended and will result in a higher score. Attach a detailed construction cost estimate in the Appendix. In addition, describe how the other phases such as PE, RW, IC, and CE have been estimated. Remember to include MDT's IDC rate of 10.71% for all phases and also contingency and inflation.

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Matching Funds: A match by the local entity is required for most TA projects as per federal law (23 U.S.C. 120). State whether local matching funds are required, and describe the status of the local match, if required. Specify if the match is already in-hand and committed to the project, if it needs to be raised, or otherwise. **If a local match is required, the amount is 13.42% of each phase of the project (PE, CN, CE, RW, IC).** No soft or in-kind matches are permitted; a cash match is required. Local matching funds will also be subject to MDT's indirect cost rate (IDC). MDT is required by law to collect indirect costs associated with project development. The indirect cost rate can change from year to year. For State Fiscal Year 2023, the IDC rate is 10.71%. Please acknowledge in your discussion that you are prepared to pay the IDC on required local matching funds.

There are two types of projects that do not require a match by the local entity:

- **Projects that satisfy the following three requirements can qualify for State Match:** 1) projects on the designated State Highway System/within MDT right-of-way; 2) project that are applying for ADA upgrades and/or pavement preservation of a sidewalk or path; and 3) projects where the original construction of the facility used federal funds. If unsure whether the project is on-system or not, contact the appropriate MDT District or the TA Program Manager.
- **Projects that are within Reservation lands do not require matching funds and are 100% Federally Funded with TA funds.**

If your project is requesting the use of State Match, please describe how your project is eligible and provide sufficient information on the original construction of the facility including which funding source was used, project number(s) and other relevant information.

Public Involvement: Describe the public involvement of the project to date. The project must have had a public meeting to discuss the project where the public can provide input. If the project is within a community's long range transportation plan and that plan included public involvement, then a standalone public meeting for the specific project that is being applied for isn't needed; however, it is encouraged, especially if the transportation plan that the project is within is dated. Describe how the public was involved in the selection/determination of the project. Does the local community support the project, and is this demonstrated? Do other local entities other than the Sponsor support the project? Were adjacent and affected landowners contacted and do they support the project? Letters of support can also be included in the Appendix.

MDT Coordination: Describe your efforts to coordinate the project with MDT District personnel prior to the application submittal to determine how the project fits in with or impacts MDT facilities. This only applies to projects within MDT right-of-way. There is no need to coordinate with the MDT District office for off-system projects, though it is encouraged. A list of MDT District contacts can be found [here](#).

Project Right-of-Way and Railroad: Describe the status of right-of-way for the project along with the means and methods used to determine the status. Specifically, look at existing right-of-way plans, (State, County, City, Town) road plans showing existing right-of-way widths, or plats that show the existing street widths. The information used to determine the right-of-way should be attached in the Appendix.

Discussion should be provided to identify whether right-of-way is secured and free of conflicts. If it appears to the Scoring Committee that the right-of-way is confined and construction of the project

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within the existing right-of-way looks challenging, this is an increased risk and may result in lower scores. Cut or fill slopes of the proposed facility must be contained within the existing right-of-way or additional right-of-way may need to be purchased with the project through a right-of-way phase. If the existing right-of-way is narrow and could be challenging to fit in the project, consider adding a right-of-way phase. If it is not secured/free of conflicts, discuss the plan for securing the necessary right-of-way. Have landowners been notified of the right-of-way needs and are they agreeable with the project? If they have not been contacted and if there is opposition to the project, this is a risk and could result in a lower score. If right-of-way is not secured and either construction permits, easements, or acquisition are needed, ensure to estimate the costs for this phase. Additionally, does the project have any railroad involvement? Does the project either cross or parallel a railroad? Describe the communication and outreach done to date with the railroad company. Are they agreeable to the project? Are easements needed from the railroad to facilitate the work? If easements are needed from a railroad, ensure to estimate cost in the RW phase.

Project Utility Impacts: Describe any utility impacts related to the project and the means and methods used to determine the utilities status. Are any utilities impacted? Were contacts made with utility companies or owners? Are there possibilities to discover utilities during construction? Discuss the plan for dealing with known and unknown utility impacts. The MDT scoring committee may visually review the project area using aerial and ground-level photographs or other means. Utilities visible but not addressed in the application will have a negative impact on scoring. If utilities are present in the corridor where a project is proposed, all utility companies should be contacted, and those discussions should be summarized in this section.

Other Risks: Describe any other risks, how they have been addressed by the Project Sponsor, and how they will be mitigated through project development. This could be any risk the Project Sponsor considers a risk to project development or construction. These could be issues such as construction/constructability, traffic control, environmental issues/impacts (cultural resources, natural resources, hazardous materials, etc.), permits needed, etc.

12. Appendix

Please limit attachments to only those necessary and relevant. For example, do not attach an entire community Long-Range Transportation Plan. Instead, provide a link to the plan. Relevant items to include in the Appendix: maps showing project location, on-site project photos, drawings/sketches of design details, plats or right-of-way plans showing widths of existing easements, detailed cost estimate for a construction phase and other phases (if needed), and, letters of support (adjacent landowners, local citizens, and local community groups), etc.

13. Finalize the Application

First, the application needs to be complete. Once attachments are added, no additional edits can be made to the Application form (that is, unless you go through this process again after making the desired application edits). Once the application is complete, PRINT the Application form to a PDF file. This will create a “flat” PDF file. (The Application form is an interactive PDF that will not allow merging with other PDFs.) Once you have printed your file into a flat PDF file, you can then use a program such as Adobe Acrobat Pro DC to combine the “flat” PDF file that was printed from the Application form with

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other PDFs or documents (this will not be explained here). If you do not have Adobe Acrobat Pro DC to combine PDF files, there are free web-based and downloadable software options to merge PDF files. Simply search “merge PDF” to find options to merge multiple PDF files into a single file. **Once you have the combined PDF file containing the Application and all attachments, follow the steps on Page 1 of this document to upload your application to the State of Montana File Transfer Service site.**