

Massachusetts Project Intake Tool (MaPIT)

Submitting Chapter 90 Project Requests on MaPIT

March 2021



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Overview of Chapter 90

Authorized through Massachusetts General Laws (M.G.L) Chapter 90, Section 34, the Chapter 90 Program provides funding to municipalities for the implementation of capital improvements on local public ways. Every municipality in the Commonwealth is allocated a portion of total program dollars based on public roadway miles, population data, and employment levels.

For many municipalities, Chapter 90 funding is the primary source of funding for transportation projects. Generally, a large portion of these funds are utilized for capital improvement projects such as roadway construction and preservation. There are also many other eligible uses, including installing bicycle and pedestrian accommodations or purchasing roadway machinery.

Roles:

- **Municipal Project Proponent**
- **Reviewer / District State Aid Engineer**
- **MassDOT Project Manager (commonly state-aid engineer)**

Processes:

- **Initiating a Chapter 90 project in MapIT**
- **Chapter 90 Project approved in MaPIT**
- **Reimbursement forms submitted to District Aid Office**

As Chapter 90 project requests are migrated from paper forms to online, the following link will be utilized. Note users must use Google Chrome or Microsoft Edge. <https://gis.massdot.state.ma.us/mapit/>

More information on the Chapter 90 Program can be found on the state website at <https://www.mass.gov/chapter-90-program>.

Overview of MaPIT

MaPIT is a GIS-driven project initiation and screening tool developed by MassDOT that will now support Chapter 90 project requests. The former paper-based Chapter 90 request forms have been migrated to this software for municipalities to apply online, streamlining and simplifying the process.

The following steps must be taken in MaPIT:

- | | |
|----------------------|---------------------------------|
| 1) Start Here | 5) Construction Project Details |
| 2) Basic Information | 6) Environmental Screening |
| 3) Sketching | 7) Preliminary Estimate |
| 4) Geoprocessing | 8) Project Specific Forms |

Reimbursement will continue to be submitted as hard copies by mail or email; coordinate with the State Aid Engineer for preferred process.

Who Uses MaPIT?

Proponents of Chapter 90 projects are Municipalities, typically employees of Public Works, engineers, planners, or administrators. A GeoDOT account is required to access MaPIT. Municipal users can request a GeoDOT account here: <https://www.mass.gov/forms/request-a-geodot-account>, and indicate wanting access to MaPIT.

How to Use MaPIT

Start Here

Mapit is accessible through the GeoDOT Projects gallery shown below:



MaPIT can also be accessed at this link directly: <https://gis.massdot.state.ma.us/mapit/>

Upon Login you will land on the “Select Workflow” Page. The user will be prompted to select a Workflow - Please select “Local Aid”.

Please note that programs can have specific application deadlines and applicants should refer to the respective guidance and contacts to ensure eligibility.

Basic Information

Grant Type

The system supports the following local aid programs:

- Complete Streets
- Small Bridge
- Chapter 90
- SRTS (Safe Routes to Schools)

After selecting Chapter 90, a new drop-box will appear to select project type. Requestor should select “Construction” for projects with defined locations. There are also options for equipment, consultant services (design), and “other”. Eligible expenses can be found here: <https://www.mass.gov/info-details/massdot-chapter-90-funding-guidelines>

The screenshot shows the massDOT MaPIT interface. On the left is a sidebar with a 'Create Project' button and a list of steps: 1. Start Here, 2. Basic Information (selected), 3. Sketching, 4. Geoprocessing, 5. Construction Project Details, 6. Environmental Screening, 7. Preliminary Estimate, 8. Program Specific Forms. Below the steps is a note: 'Chapter 90 requires assistance'. The main content area is titled '2/3 Basic Information'. It contains three sections: 'GRANT TYPE' with radio buttons for 'Complete Streets', 'Small Bridge', 'Chapter 90' (selected), and 'SRTS'; 'Project Type' with a dropdown menu set to 'Construction'; 'APPLICANTS INFORMATION' with fields for 'Project Name' (Sample DS Ch.90 For Guide), 'Date of Application' (10/5/2020), 'District' (District 5), 'Municipality' (TAUNTON), and 'MUNICIPAL CONTACT' with fields for 'Name' (Evin O'Sullivan) and 'Title' (Civil Engineer I). A map of Massachusetts is visible on the right. At the bottom are 'Previous' and 'Save & Next' buttons.

Applicants Information

Project name – Follow the format “Grant Type-Town Name-Road Name”

- Example (Chapter 90 – Arlington – Mystic St)

Please fill out all other information, including date of application, municipality and district.

Municipal Contact

Fill out the contact information from the municipality, including full name and title (planner, engineer, etc.).

Nature of Request

Scope of Work - Please provide a detailed scope of work for your project. Entry should include all areas of activity proposed by the project. If the project type was specified as “Equipment,” please describe what will be purchased with the funds. Desired Start Date – Approximate start date of project, if approved

Once complete click “Save & Next.” If you close out of the wizard without clicking Save & Next, progress on this portion of the application will be lost.

Sketching Tool

For “Construction” project types with a defined location, the user will now define the project location. Map navigation is supported by the mouse, the search field in the top left-hand corner of the map, and/or using the plus and minus buttons on the top left-hand side of the application.

Once in the general vicinity of the project, the Project Proponent will define the project limits by clicking the purple sketching tool icon located above the toolbar.

Please see the screenshot on the next page for more tips on how to sketch your project.

Upon clicking “Sketching Tool,” you can either begin clicking to create a freehand polygon (the default), or select the “Add Project” Icon to draw projects with the various preset shape options.

Once your project limits have been created using the sketching tool, you will click “Save & Next”.

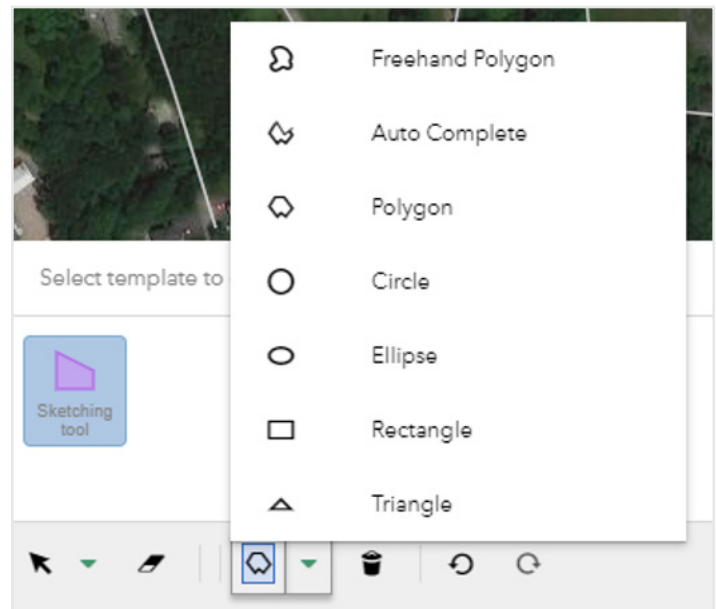


Figure 1. Sketching Tool

STEPS & TIPS TO SKETCHING A PROJECT

Once you zoom into your location, you can change the background to Imagery to better estimate project limits. (Street names go away, so find the location first)

Click on the purple Sketching Tool icon and draw your polygon by adding vertices to the project limits. Double click to close.

After closing the polygon, a list of Routes will show up. Toggle these on and off to find the corresponding yellow line. Uncheck any roadways that will not be involved under this project, such as Hillcrest Road at the southern intersection approach of this sample. Click “Select” when you are done.

This box showing Street Names can be re-accessed later by double-clicking on a polygon.

More than one separate project areas can be added under this same project. Click on the purple Sketching Tool icon again and follow the same steps.

Tools such as the ruler and editing options underneath the drawing template can be used to measure and adjust your polygon.

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MaPIT - Massachusetts Project Intake Tool (3.0)

1 Start Here
Local Aid

2 Basic Information

3 Sketching

4 Geoprocessing

5 Construction Project Details

6 Environmental Screening

ArcGIS World Geocoding S

8

1

2

4

7

5

9

3

6

Sketching tool

Save & Next

Select Routes

Choose which routes to use.

Route ID	Street Name	Jurisdiction
<input checked="" type="checkbox"/> N114 WB	WOOD STREET	
<input type="checkbox"/> L135331 EB	HILLCREST ROAD	City or Town accepted road
<input checked="" type="checkbox"/> N114 EB	BRYANT AVENUE	City or Town accepted road

Select

Dark Gray Canvas

Imagery

Imagery with Labels

Light Gray Canvas

MassGIS Orthos 2019

MassGIS Streets

National Geographic

Oceans

“Erase”: used to delete project areas that you have already put into your map on MapIT. This differs from the eraser tool discussed previously in the sense that it will delete additions that you have already finished, meaning if you added a project area 5 minutes ago and are working on a new one but you want to delete the old one, you can delete it using this delete tool.

“Add Project”: Add project areas using various shape options – see screenshot on next page.

“Redo”: Revert a previous “undo” action. If you undid something using the “undo” tool, you can reverse that using the “redo” tool

“Undo”: Undo the previous action you have done. This could be used in cases where you did something by accident, and you wish to reverse it.

“Delete Project”: Delete project areas that you have already put into your map on MapIT. This differs from the eraser tool discussed below in the sense that it will delete additions that you have already finished, meaning if you added a project area 5 minutes ago and are working on a new one but you want to delete the old one, you can delete it using this delete tool.

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CHAPTER 90 PROJECT REQUESTS ON MAPIT | MARCH 2021

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CHAPTER 90 PROJECT REQUESTS ON MAPIT | MARCH 2021

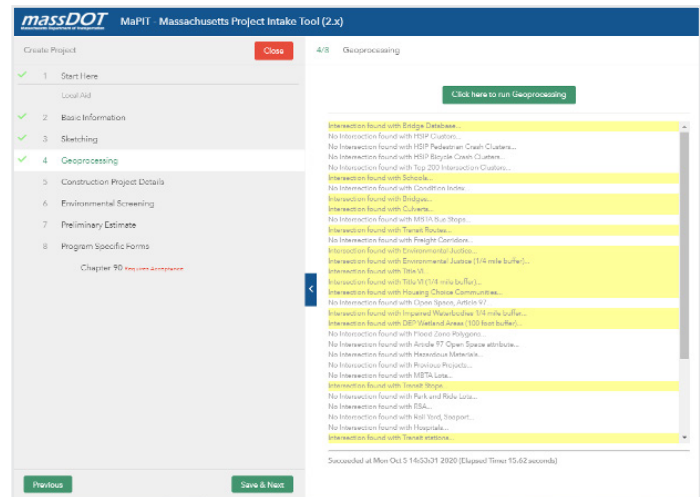
7

Geoprocessing

Press the “Click here to run Geoprocessing” button to run the project location against various map layers (including bridges, pavement condition, safety, transit, equity, schools, culverts) to alert the proponent to intersections for consideration in the scope and construction of the project.

In this example, the geoprocessing identified the highlighted layers as intersections with the project location.

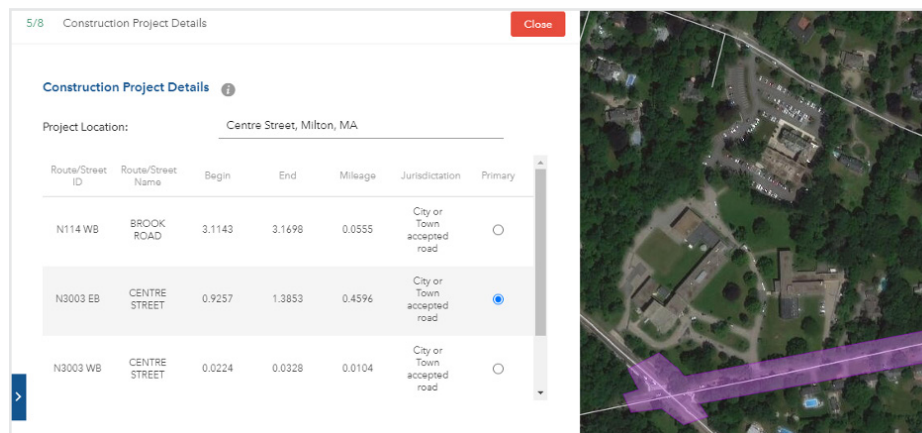
No action is needed, the data intersections will be saved and available later. To advance, click “Save & Next”.



Note: The Geoprocessing step allows municipalities to see various characteristics and features of the area surrounding a proposed project. The data provided in this step is for local informational purposes only. Municipalities may use the information presented to them by the Geoprocessing tool as they see fit.

Construction Project Details

The Grid at the bottom of this page will return all streets mapped during the earlier Sketching step. The user must select which road will be considered the “Primary Road”. MaPIT will default to the roadway that contains the most mileage according to the polygon drawn, but this can be changed. For Project Location, the applicant will type in the street and town in the format shown below.



Look out for **i** symbols and hover over them with your mouse for additional information related to it.

Construction Project Details

Project Location:

For Project Location summarize the roadways, intersections or off-road boundaries of individual or multiple projects. Check that the coordinates provided are consistent with the intended boundaries.

Centre Street, Milton, MA

Environmental Screening

The user will be prompted to answer the yes and no questions. There are a total of 11 questions – scroll to see them all.

massDOT MaPIT - Massachusetts Project Intake Tool (2.x)

Create Project Close 6/8 Environmental Screening

- 1 Start Here
- 2 Basic Information
- 3 Sketching
- 4 Geoprocessing
- 5 Construction Project Details
- 6 Environmental Screening**
- 7 Preliminary Estimate
- 8 Program Specific Forms

Chapter 90 Requires Assistance

Previous Save & Next

ENVIRONMENTAL SCREENING

1. Will the pavement width increase 4 ft. or more for an aggregate length of 1000ft. or more? ☐ Yes ☐ No
2. Will the bank or terrain (other than alteration required for installation of equipment or structures) be altered at a distance exceeding 10 ft. from the pavement? ☐ Yes ☐ No
3. Will the removal of 5 or more trees with diameters of 14 inches or more be required? ☐ Yes ☐ No
4. Will more than 300 ft. of stone wall be removed or altered? ☐ Yes ☐ No
5. Will the project involve construction of a parking lot with capacity of 50 cars or more? ☐ Yes ☐ No
6. Are any other MEPA review thresholds exceeded (see 301 CMR 11.00)? If your answer is YES to any of questions 1-6, you must file an Environmental Notification Form (ENF). ☐ Yes ☐ No
7. Will the project be on a "Scenic Road" (Acts of 1973, C. 67)? If your answer is YES, your Planning Board or Selectmen / City Council ☐ Yes ☐ No

Map showing project location in Taunton, MA, with a highlighted road segment.

Preliminary Estimate

The proponent is required to provide the estimated project cost and attach supporting documentation consistent with the program. For Chapter 90 Projects, please attach the usual Preliminary Estimate Form found on the Chapter 90 website.

A link to the MassDOT Construction Project Estimator (CPE) is provided for access to historical unit prices. This is not required. <https://hwy.massdot.state.ma.us/CPE/ItemSearch.aspx>

Preliminary Estimate

Project proponent must attach a detailed project estimate to support the project cost. Do not exceed MassDOT Allowances for Contingency, Construction Eng. Oversight, Mobilization, Police.

For Construction projects the MassDOT Construction Project Estimator (CPE) can be used for this purpose.

Click the button below to Estimate the Project Using MassDOT's Construction Project Estimator:

[Use MassDOT CPE](#)

Attach Preliminary Estimate:

None

Add: [Choose File](#) No file chosen

Total Estimated Project Cost: \$1,500,000.00

Program Specific Forms

The program specific forms are unique to the grant program (i.e. information required for Chapter 90, Small Bridge or Complete Streets). The form for Chapter 90 is described below:

The “Work to be done” section describes the procurement method for the project.

The relevant fields of the “Construction Details” section should be completed for the project.

The proponent must then review the terms of the Chapter 90 program and indicate approval by checking the box.

Final Step - Important

The proponent must now generate a PDF copy (.pdf) of the project request, using the print icon on the top of the form, attain the appropriate Town signatures, and then attach the signed project request form back onto the system. No project requests will be accepted without signatures. The form will automatically print with a signature block at the end.

Once the signed copy has been attached, the project request can be submitted for review.

The proponent can also use the Attachment button to include reports, plans or any other supporting documents relevant to the project.

8/8 Chapter 90

Save & Close

Project Request

Work to be done:

☐ Force Account
☐ Advertised Contract
☐ Other

Construction Details

Complete all applicable

Contract # _____

Bridge # _____

Length(Feet): _____

Width(Feet): _____

Surface: _____

Base Course: _____

Foundation: _____

Shoulders/Sidewalk: _____

<

- It is recognized that the purpose of this information is to assist the MassDOT Highway Division in approving the Chapter 90 Project Request Form (of which this is a part). Accordingly, the information provided here is intended to be complete and correct with no intentional errors or material omissions. Any action taken by MassDOT Highway Division on the basis of this information shall not legally or financially obligate MassDOT Highway Division to support or defend the municipality, and the municipality shall save harmless MassDOT Highway Division for any action.
- The design, engineering, construction, and future performance of the project, including maintenance, is the responsibility of the Municipality. The proposed work will conform to recognized engineering and construction methods. I/We hereby certify under penalty of perjury the following: that the project is on a public way, and any necessary takings have been made; that all materials will comply with approved established specifications; that all weights and quantities will be accurate; that equipment rental rates are those established by MassDOT Highway or the advertised low bid; that all documentation will be checked for accuracy, and will be endorsed in accordance with municipal procedures for accountability.

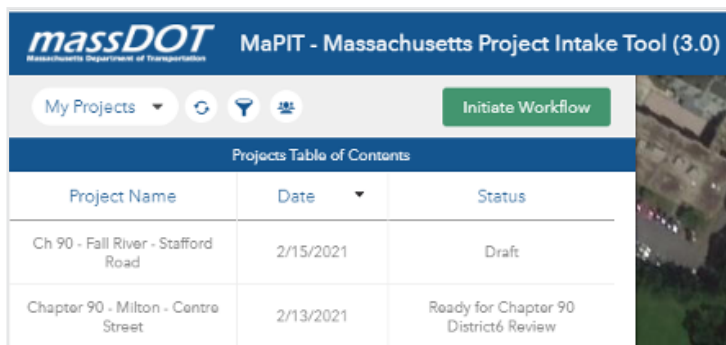
☐ Confirm you have read the above text

Next Steps

Once the project request has been submitted, the application will be forwarded to the appropriate MassDOT State Aid Engineer for review.

When logging into MaPIT, you can review the status of all of your projects by going to “My Projects.” Once a project has been submitted it will be listed as “Ready for Review”. Ultimately, once a project is approved, it will be removed from the work queue.

Once the State Aid Engineer updates the project status on MaPIT, the system will automatically send an email notification to the proponent. For approved projects, documentation verifying approval with signatures from the State Aid Engineer and District Highway Director will be attached to the email.



Projects Table of Contents		
Project Name	Date	Status
Ch 90 - Fall River - Stafford Road	2/15/2021	Draft
Chapter 90 - Milton - Centre Street	2/13/2021	Ready for Chapter 90 District Review

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