

Grade Crossing Management System

User Guide



Contents

Contents	2
User Setup and Login	7
Supported Browsers	7
GCMS Login	7
Registering to Use GCMS	7
Commonwealth Staff	7
Existing Business Partners with b- Login	8
Reset Password	8
User Roles	9
Main Page Menus and Features	10
Header	10
ECS Portal	10
What's New	10
Useful Links	10
Menu Bar	10
Create Projects	10
Admin	11
District Functions	11
Searching (Quick and Advanced)	11
My Upcoming Tasks	12
My Most Recently Accessed Projects	12
My Active Projects	13
Sorting and Filtering	13
View all Projects	13
Exporting	14
General GCMS Features	15
Notifications, Tasks, and Deadlines	15
Following a Project	15
Project Status	16
Progression from one Status to the Next	16
Placing a Project on Hold	18
Railroad Project Identifier	19

Project History	19
Project Milestones	19
Cost and Funding	20
Design and Construction Milestones	21
Project Documents.....	21
Integration with One Map	23
Project Team	24
PennDOT Project Team	24
Parent & Child Projects	26
Document Versioning	26
District Functions	28
Manage Railroad Flagger Resources.....	28
District Grade Crossing Inspections	29
Conditional Railroad Certifications	30
Railroads Setup and Updating	32
Creating a Railroad.....	32
Creating Contacts.....	33
Editing Railroad Company Information	34
Deleting Railroads	34
Grade Crossing Inventory List	35
Maintaining Grade Crossing Records.....	35
Grade Crossing Header	36
PennDOT Identified Owner and Operators.....	36
Crossing Details.....	36
Crossing Documents	38
PUC Documents	39
Projects	39
Inspections	40
Crossing History	41
Create a Project in GCMS	42
GCMS Project Types.....	42
Highway/Bridge Projects.....	42
Safety Projects	42

Creating a New Project	42
Project Priority	43
Set PennDOT Project Team	44
Project Status 1 - Scoping	46
Scope Railroad Involvement	46
Pennsylvania One Call	47
Impacted and Nearby Crossings	47
Adding a Crossing within the Vicinity to the Crossings Impacted or Nearby Crossings List	48
Manually Add and Remove Crossings that are Located Outside the Vicinity	48
Viewing Project Bridges	49
Adding Railroads and Contacts to Impacted Crossings	49
Adding and Removing Additional Railroads	50
Adding Railroad Contacts	50
No Railroad Involvement	51
Reopening a Completed Project	52
Entering Project Involvement	52
Entering PennDOT Involvement Details	52
Entering PUC Involvement Details	53
Entering Railroad Involvement Details	53
Scoping Railroad Costs	54
Enter Milestone Dates	54
Highway/Bridge Project Milestones	55
Safety Project Milestones	56
Complete Scoping	56
Project Status 2 - Authorization	58
Send Engineering Authorization	58
Railroad Work Summary Page	58
Forms D-4279 and D-4279A	59
Preliminary Project Plans	60
Sending the 30% Plans	60
Updating Plans	62
Railroad Work Type Selection	62
Close Out Authorization Status	63

Project Status 3 - Coordination	64
Railroad Plan Review	64
Sending 60% Plans and 90% Plans	65
Railroad Estimates	66
Create Railroad Estimates	66
Review and Accept Railroad Estimate	69
Entering Flagger Needs	70
Entering Planned Work	71
Final Design Plans.....	72
Sending the 100% Plans	72
Review Final Design Plans	73
PUC Coordination.....	74
PUC Parties of Record	74
Required PUC Activity Completion Dates and Uploads	75
PUC Appropriated Right-of-Way.....	77
Contractor Bid (Safety Projects Only)	78
Close Out Coordination Status.....	80
Close Out Coordination Status for Highway/Bridge Projects	80
Close Out Coordination Status for Safety Projects	80
Project Status 4 – Contract Development.....	81
Generate Railroad Certification	81
Preparing the Railroad Certification	81
Conditional Railroad Certifications	82
Railroad Certification Documents and Status of Project Deliverables.....	82
Generating the Railroad Certification by the Division Chief	83
PUC Coordination.....	84
Required PUC Activity Completion Dates	84
Sending the Notice to Proceed (NTP) Notification	86
Close Out Contract Development Status	87
Close Out Contract Development Status for Highway/Bridge Projects.....	87
Close Out Contract Development Status for Safety Projects.....	87
Project Status 5 - Construction	88
Project Status 6 – Closeout.....	89

Administrative Tasks	90
Assigning PennDOT Users and Consultants to Districts.....	90
Manage Template Signatures	91
Manage District Offices.....	92

User Setup and Login

Supported Browsers

GCMS works best when using the most recent versions of the following browsers:

- Google Chrome
- Microsoft Edge

The Mozilla Firefox browser may work with GCMS, but the system has not been tested and verified to operate properly on this browser.

GCMS Login

The Login page is the first screen a user sees on the GCMS site (gcms.penndot.pa.gov). Registered PennDOT staff use CWOPA credentials to enter the system, while business partners use the credentials received through the registration process. PennDOT users must also complete the registration process to be able to access GCMS.

Registering to Use GCMS

Users who do not yet have access to GCMS begin the process of requesting access by clicking the **Register for an Account** button on the main GCMS page. That takes you to a screen that lets you select your user type.

The image displays two screenshots of the GCMS user interface. The left screenshot shows the 'Login' page with fields for 'Username' and 'Password', a 'LOGIN' button, and links for 'Forgot your username?', 'Forgot your password?', and 'Don't have access to GCMS? Register for an Account'. The right screenshot shows the 'Register' page with the question 'What type of user are you?' and two buttons: 'BUSINESS PARTNER' and 'COMMONWEALTH STAFF', along with a 'Back to login' link.

PennDOT staff and consultants with a "c-" CWOPA login can select "Commonwealth Staff." Railroads and consultants must select "Business Partner."

Commonwealth Staff

PennDOT staff and consultants with a "c-" CWOPA login can select "Commonwealth Staff." Users must enter their CWOPA credentials on the resulting login page, which opens the PennDOT Request CWOPA Application Access for GCMS screen. Verify the contact information, then select the appropriate GCMS role from the dropdown and type a justification.

Available GCMS roles to choose from are:

- District Grade Crossing Admin
- District Grade Crossing Assistant

- Project Manager
- Central Office
- Central Office Section Chief
- Central Office Admin
- Central Office Consultant
- Attorney (OCC) (this role will become available in a GCMS future release)
- Finance (this role will become available in a GCMS future release)
- PUC (this role will become available in a GCMS future release)

Finally, click the **SUBMIT** button at the bottom right of the page to finish.

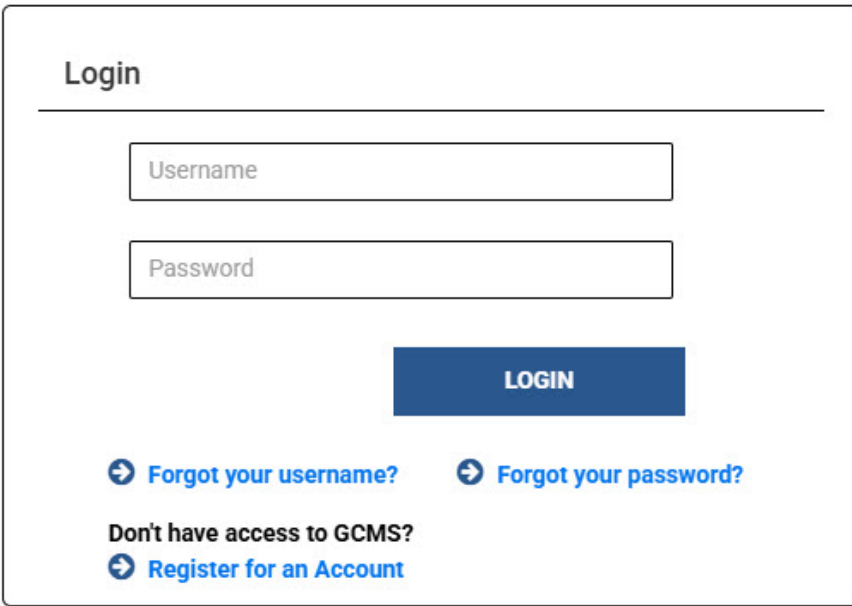
Existing Business Partners with b- Login

Railroads and consultants must select "Business Partner" on the What Type of User are You screen. On the next screen, existing business partners can press the button that says **Request Access**. This opens an additional login page on which the "b-" business partner credentials should be entered.

Reset Password

If you already have a registered account but have forgotten your password, use the **Forgot your password** link below the **LOGIN** button on the Login screen. This opens a new page on the PennDOT Identify Services Portal that requires the username for GCMS (User ID) and email address be entered. Once the user submits the information by clicking the **OK** button, further instructions for resetting your password will be provided by email.

If you forget your username, use the **Forgot your username** link. The following page requires the first name, last name, and email address of the user. Once the user submits the information by clicking the **OK** button, the GCMS user ID information will be provided by email.



Login

Username

Password

LOGIN

➔ [Forgot your username?](#) ➔ [Forgot your password?](#)

Don't have access to GCMS?

➔ [Register for an Account](#)

User Roles

Each user within the GCMS system has a user role, which is assigned when they are first registered as a new user. The user role defines which pages a user can see, what actions they can take on pages, and what types of system tasks can be assigned to them. The user role is constant for each user and does not change based on what projects they are working on. This contrasts with the [Project Team](#) Role, which can be different for each project.

Main Page Menus and Features

This section describes the menus and features available from the main page of GCMS.

Header

The dark blue header is available from every screen in GCMS.



This header provides quick access to the following features:

ECS Portal

This is the file repository use to store GCMS generated documentation, as well as user uploaded files.

What's New

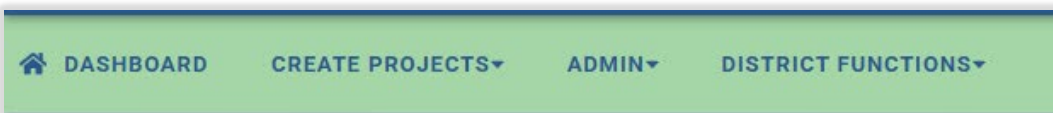
This link directs you to PennDOT's Grade Crossing webpage where GCMS related information and updates are shared.

Useful Links

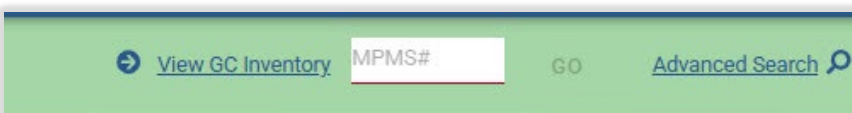
This links you to PennDOT's Grade Crossing webpage where you can find useful links and information.

Menu Bar

On any screen in GCMS, the top of the page always has the light green menu bar. The menu items are different for each user type and may include any of the following: Dashboard, Create Project, Admin, and District Functions.



The right side of the menu bar has the functions to **View GC Inventory** and to search. The input box with the **GO** button is for finding a specific project in the system using its MPMS number. The **Advanced Search** button opens the **Advanced Search** page that allows users to look up projects based on more detailed parameters. See the [Searching](#) section of this guide for instructions.



Create Projects

The **Create Projects** menu gives PennDOT users the options for adding a new project to GCMS. See [Create a Project in GCMS](#) for instructions.

Admin

The **Admin** menu has navigation options for a variety of PennDOT administrative capabilities. The items in this menu will change based on your user type, but may include any of the following:

- [Manage Template Signatures](#)
- [Manage District Offices](#)
- [Maintain Railroad Companies](#)
- [Assign Districts](#)

District Functions

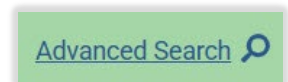
The **District Functions** menu for PennDOT users holds the link to the [Manage Railroad Flagger Resources](#) page, the [District Grade Crossing Inspections](#) page, and the [Conditional Railroad Certifications](#) page.

Searching (Quick and Advanced)

Find a project in GCMS using the search box near the upper right corner of the screen. Begin the search by typing the project's MPMS number in this box. Select the **GO** button or hit the Enter key to run the search. If the given MPMS number does not belong to any existing project, an "MPMS# does not exist" notice will show below the search box. If the search is successful, GCMS will navigate to the Project Information screen of the project.



For a more detailed search, click the **Advanced Search** button to the right of the entry box, which will open the **Advanced Search** screen. Here a more specified search is run by selecting location information and entering details of the project or an involved railroad.



The text entry boxes for Road Name, Title, DOT#, PUC Docket#, User, and Railroad Name provide autocomplete options that appear once the user begins typing. With the **User** field, GCMS searches projects for a registered project team member or a railroad contact name that matches what was entered.

In the Location and Railroad sections of the Advanced Search screen, the District and County names (in the Location section) and the names of a valid railroad (in the Railroad section) must be entered first before the other characteristics in these sections may be entered.

Click the **SEARCH** button at the bottom right corner of the screen to find a list of projects in GCMS that meet the given criteria. The results identify projects by their typical characteristics, and railroad users can see the railroad project identifier at the end of each row for easy identification.

Advanced Search

Search Criteria ^

Location

District:

County:

Municipality:

SR:

Sec:

Segment:

Road Name:

Project

Title:

Let Date: From To

Status:

DOT#:

PUC Docket#:

User:

Safety Project: ☐

Highway/Bridge Construction Project: ☐

Railroad

Railroad Name:

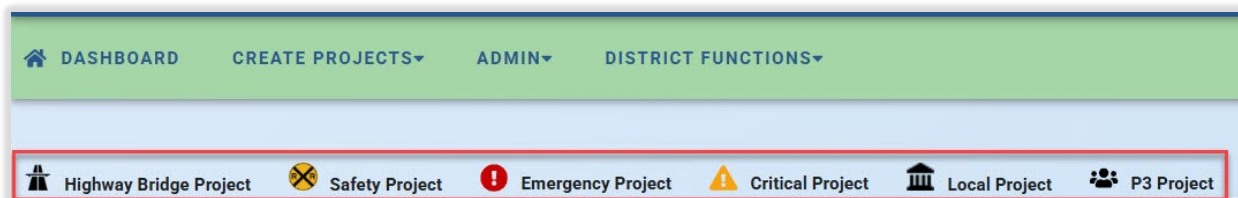
Agreement#:

My Upcoming Tasks

First on the Dashboard page is the **My Upcoming Tasks** table. Here the user sees the current tasks assigned to them that need to be addressed. By default, the Upcoming Tasks are sorted by their Due Date; the task with the soonest due date is listed first, then the list descends chronologically toward the task with the latest due date at the end. The tasks can be re-sorted by clicking on a column heading. Clicking the **View All Tasks** button expands the tasks to the full page and gives greater control over the filtering and sorting of tasks.

[View All Tasks](#)

Some tasks in the list may have icons in the column to the left of the project number to identify important characteristics. The legend of what each icon represents is located in the banner beneath the green Menu Bar on the Dashboard screen.



See the [Notifications, Tasks, and Deadlines](#) section of this guide for more information about tasks. The [Sorting and Filtering](#) section gives more detail on filtering list rows in GCMS based on selected criteria, including for the Upcoming Tasks.

My Most Recently Accessed Projects

The next section down on the **Dashboard** page has the **My Most Recently Accessed Projects** table. This table provides users with quick access to their five (5) most recently accessed projects, with the most recently accessed project showing at the top of the table.

My Active Projects

The next section down has the **My Active Projects** table, which lists all the in-progress projects in GCMS for which the user has been assigned a project team role. By default, the active projects are sorted by their Let Date in ascending order. Just as with the Upcoming Tasks table, the sorting on this list of projects can be changed by clicking on a column heading, which changes the arrow next to the column heading to show the sort order.

For an explanation of the icons in the leftmost column of the list, see the [My Upcoming Tasks](#) section above.

To see a comprehensive list of all projects in GCMS, refer to the [View All Projects](#) section for additional information.

Sorting and Filtering

Tables on the Dashboard page and throughout GCMS can be sorted by clicking on a column heading that has sorting arrows. Sorting arrows are hidden by default, but can be seen by hovering your cursor over a column heading. A sorting arrow will appear if the column is sortable.

MPMS# ↑	Project Title	SR	SEC	District	County	Task	Status
MPMS# ▾	Project Title ▾	SR ▾		Dist ▾	County ▾	Task ▾	Scop... ▾

Column headings with text boxes underneath can be filtered by using the box. Filtering provides an easy method of searching for a specific record in a table or of limiting a list to view only a focused category of projects, activities, locations, dates, etc.

Most fields are filtered based on selectable options. Click the drop arrow within one of the white filter boxes to reveal the checklist of possible values. Multiple values for each column can be selected. As the filter options are chosen, the records in the table reduce to only those meeting the chosen criteria.

Other fields are filtered by an entry box in which the user types the value. The records begin filtering as the user types the numbers or words.

APPLY ✓
CANCEL ✕

☐ Scoping
☐ Authorization
☐ Coordination
☐ Contract Development
☐ Construction

After a filter has been applied, reset the table to show all records using the **CLEAR ALL FILTERS** clickable text on the right side, above the table header.

View all Projects

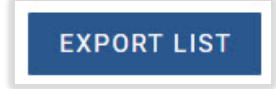
The **View All Projects** button, located above the **My Active Projects** table, directs users to the **GCMS Projects** page. This page provides a comprehensive list of all projects created in GCMS, offering a broader view beyond the **My Active Projects** table, which only displays projects assigned to the user.

➔ [View All Projects](#)

The **GCMS Projects** table includes filtering and sorting options, allowing users to efficiently locate specific projects based on relevant criteria. Additionally, users have the capability to export the project list to Excel for further analysis and reporting.

Exporting

Many tables and lists within GCMS can be exported to an Excel file, which allows more flexibility in searching and sorting. The export button (e.g., "Export List" or "Export Results") is at the right corner of any table that has exporting available. This button will generate and download the Excel workbook containing the data from all pages of the table. If a filter is set on the list, then only the records displayed will be exported; records that are filtered out will not be included in the Excel spreadsheet.



After clicking the button to export, look for the export file at the bottom of the browser window or in the computer's Downloads folder.

General GCMS Features

Notifications, Tasks, and Deadlines

The Dashboard page of GCMS displays a list of the Upcoming Tasks pertaining to the user. The Task column in this table gives the name of the next task to complete for that project. GCMS communicates the current requirements of a project through “Notifications”, “Tasks”, and “Deadlines”.

- **Notifications** alert users of actions that were taken or need to be taken. These are sent by email.
- **Tasks** are the actions themselves that must be completed in the system. These are assigned based on the Project Team roles and include an email notification. If a team role is changed to a different user, any open tasks are reassigned to that new team member.
- **Deadlines** are the dates that a task must be completed by in GCMS. These dates are denoted by the Due Date field shown in the My Upcoming Tasks table. These dates are driven either by the duration of the task or by the Milestone date to which the task is tied. If the deadline for a task passes, the red bell icon appears beside the date to indicate it is overdue.

If a railroad does not have any registered users designated for the project team, the notifications will be sent to the railroad’s [project contact\(s\)](#) assigned. The tasks would then need to be completed through email correspondence with the PennDOT District Grade Crossing Admin/Engineer, who could complete any entries in the system on the railroad's behalf.

By default, the **My Upcoming Tasks** are sorted by the **Due Date** column on the right, descending from the soonest deadline to the latest. Click a column title with a sorting arrow to resort the records. Use the controls at the bottom right of the table to display more rows on the page or to move across the pages of records.

Rows per page 15 Page 1 of 3 < 1 2 3 >

Click a row in the **My Upcoming Tasks** table to navigate to the project screen that holds the current task. For example, clicking anywhere in the first row of the table in the screenshot below would bring the user to the **Send Engineering Authorization** section of MPMS project #36075 in GCMS.

My Upcoming Tasks

	MPMS# ↑	Project Title	SR	SEC	District	County	Task	Status	Due Date
	MPMS#	Project Title	SR		Dist	County	Task	Status	
	36075	OTTAWA ROAD	4003	03R	3-0	Montour	Send Engineering Authorization	Authorization	02/19/2025
	98921	SR4018ovTbIndianSprngOrk	4018	018	3-0	Northumberland	Send Engineering Authorization	Authorization	02/19/2025
	106128	Union Co Industrial Corridor RRX #1	1008	09R	3-0	Union	Complete Scoping	Scoping	03/21/2025
	120888	Columbia County bridges paint and steel repairs	0254	060	3-0	Columbia	Complete Scoping	Scoping	03/21/2025

Following a Project

When a user is not assigned a role on the Project Team, they have the option to follow a project so that the project appears in their **My Active Projects** table.

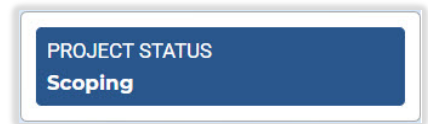
To follow a project, click the **Follow Project** button, located below the **MANAGE PROJECT** dropdown menu button. A confirmation message will display below the button saying, “You are following this project.” Once followed, the project will now appear in the **My Active Projects** table on your Dashboard.



To stop following the project, go to the project page and click the **Unfollow Project** button. This will change the button back to **Follow Project**. When you return to the Dashboard and search for the project, it will no longer appear in the **My Active Projects** table.

Project Status

The Project Status gives a general idea of the project's progress in the process, along with what steps may be required next. Find the status of a project in the top left of its project page or in its table row on the Dashboard.



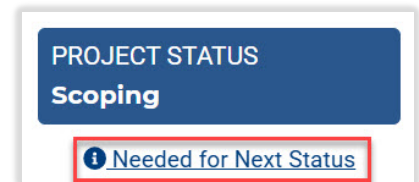
The statuses listed chronologically are:

- | | |
|-------------------------|-----------------|
| 1. Scoping | 5. Construction |
| 2. Authorization | 6. Closeout |
| 3. Coordination | 7. Complete |
| 4. Contract Development | |

Progression from one Status to the Next

A project advances from one status to the next based on one or more defined factors.

The **Needed for Next Status** feature in GCMS makes it easy to see what conditions must be met in order to progress a project to the next status. This list of conditions can be seen by clicking the **Needed for Next Status** text link located below the project status. This opens a modal window displaying the remaining conditions that must be met. As the conditions are met, they are automatically removed from this list.



For a full list of conditions for each status, see Table 1 below for the specifications of each status and its progression.

Table 1 – Status Progression

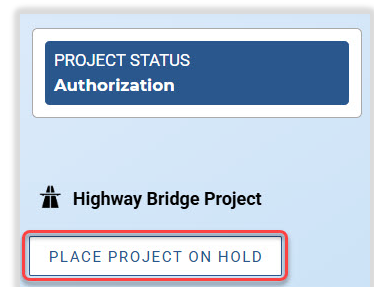
		Primary Activities	Progression Rules
Design Phase	Status 1 Scoping	<ul style="list-style-type: none"> Impacted Crossing and/or Nearby Crossing added to the project Railroads added to the project Contact identified for each Railroad Crossing scope description entered Determine if Railroads will be Authorized for Engineering 	<ul style="list-style-type: none"> Railroad Scoping completed via the COMPLETE SCOPING button
	Status 2 Authorization	<ul style="list-style-type: none"> Engineering Authorization sent to Railroads Work Type selected for all Railroads receiving an Engineering Authorization Send minimum 30% Plan Review to each Railroad that received an Engineering Authorization (Highway & Bridge Projects only) 	<ul style="list-style-type: none"> All Engineering Authorizations sent, Work Type(s) selected, and a <u>minimum</u> 30% plans sent to Railroads (Highway & Bridge projects) All Engineering Authorizations sent and Work Type(s) selected (Safety projects)
	Status 3 Coordination	<ul style="list-style-type: none"> PUC Order Date or PUC Secretarial Letter Date entered in system if PUC Review/Approval is required for the project PUC Order to be uploaded for the project if the project requires that ROW be acquired by PUC appropriation. Send 100% Plan Review to each Railroad (Highway & Bridge Projects only) Enter Railroad Planned Work for DOT(s) Awarded Contractors to be entered for each Railroad that has "Contractor Bid" selected as the Work Type (Safety projects only) 	<ul style="list-style-type: none"> PUC dates and documents entered/uploaded as required, final design plans sent to Railroad(s), and Railroad Planned Work provided (Highway & Bridge projects) PUC dates and documents entered/uploaded as required, Railroad Planned Work provided, and Awarded Contractors entered for Railroads with selected Work Type of "Contractor Bid" (Safety projects)

		Primary Activities	Progression Rules
Construction Phase	Status 4 Contract Development	<ul style="list-style-type: none"> Final Plans Approved by PUC date to be entered if PUC Review/Approval is required for the project (Highway & Bridge projects only) Situation and Circuit Plans Approved by PUC date to be entered if PUC Review/Approval is required for the project (Safety projects only) Send NTP notification to all Railroads with Planned Work of Construction or Construction and Flagging Generate the Railroad Certification 	<ul style="list-style-type: none"> Final Plans Approved by PUC dated entered as required, NTP sent to all Railroads, and Railroad Certification has been issued (Highway & Bridge projects) Situation and Circuit Plans Approved by PUC dated entered as required, NTP sent to all Railroads, and Railroad Certification has been issued (Safety projects)
	Status 5 Construction	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> TBD
	Status 6 Closeout	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> TBD
	Status 7 Complete	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> TBD

Placing a Project on Hold

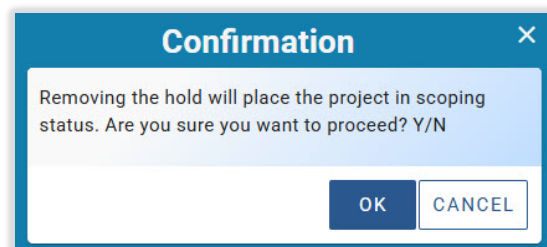
GCMS allows for an active project to be placed on hold. This changes the project's status to On Hold and can be used to suspend work on the project.

A District Grade Crossing Administrator/Engineer can place a project On Hold using the **PLACE PROJECT ON HOLD** button on the main project information page below the status heading. A confirmation message will appear asking, "Are you sure you want to place the project On Hold?". Once the user clicks **OK**, the project status changes to On Hold.



The District Grade Crossing Administrator/Engineer can remove the hold at any time using the **REMOVE HOLD** button.

As the message box notes, removing the hold returns the project to Scoping status, and any finished tasks must be completed again. The [Milestones](#) tab keeps the record of the original task completion dates. If members on the project team had open tasks for the project before it was put on hold, those tasks are cleared when the hold is placed and are added back if the hold is removed.



Railroad Project Identifier

A PennDOT or Railroad user may assign a Railroad Project Identifier code to a project in GCMS for ease of reference.

A PennDOT user can add the Railroad Project Identifier on either the **Project Involvement** page (**Manage Project > Project Involvement**) or on the **Railroad Work Summary** page (**Manage Project > Railroad Work Summary**) and it can take a combination of letters and numbers. Adding the Railroad Project Identifier to either page updates the value on both pages. Press the **SAVE** button at the bottom of the page to store any text entered.

Railroad Project Identifier

A Railroad user can add the Project Identifier on the **Railroad Work Summary** page (**Manage Project > Railroad Work Summary**). Press the **SAVE** button next to the input box to store any text entered.

Project History

GCMS records the history of actions taken in the system for a project. These details offer a timeline of the project's progression as well as insight into which users fulfilled each task and what data has been added.

To view a project's history, go to the **Project Information** page, click on the **Manage Project** button, and choose **Project History** from the dropdown menu.

The actions are organized by date by default. Click a column's title to sort the records by that field instead. As with other tables in GCMS, use the white input boxes below the column headings to type or select values by which to filter the project history.

[< Return to Project Information Page](#)

Project History

[CLEAR ALL FILTERS](#) [EXPORT LIST](#)

Date/Time	Category	Action	New Data	User	User Role	Company	Project Status
Date/Time	Category	Action		User	User Role	Company	Project Status
12/13/2024 15:58:36	Project Updates	Project Priority	Priority: Normal	t-pdgcmsdga3	PD-GCMS-DGCA	PennDOT	Scoping
12/13/2024 15:58:36	Project Updates	Project Created	MPMS#: 90005	t-pdgcmsdga3	PD-GCMS-DGCA	PennDOT	Scoping
12/13/2024 16:04:22	Project Scope	Added Impacted Crossing	DOT #: 051635T	t-pdgcmsdga3	PD-GCMS-DGCA	PennDOT	Scoping
12/13/2024 16:04:27	Project Scope	Added Railroad	RR Code: BLE	t-pdgcmsdga3	PD-GCMS-DGCA	PennDOT	Scoping
12/13/2024 16:05:49	Project Scope	PUC Review & Approval	Y	t-pdgcmsdga3	PD-GCMS-DGCA	PennDOT	Scoping
12/13/2024 16:06:00	Project Workflow	Status Change	Status: Authorization	System		PennDOT	Authorization
12/13/2024 16:19:22	Project Workflow	4279 uploaded	Railroad Code: BLE	t-pdgcmsdga3	PD-GCMS-DGCA	PennDOT	Authorization
12/13/2024 16:19:23	Project Workflow	4279A uploaded	Railroad Code: BLE	t-pdgcmsdga3	PD-GCMS-DGCA	PennDOT	Authorization
12/13/2024 16:19:24	Project Workflow	Engineering Authorization Sent		t-pdgcmsdga3	PD-GCMS-DGCA	PennDOT	Authorization

Project Milestones

The milestone dates in the **Project Milestones** help to keep a project on track to meet the overall highway project's schedule. GCMS gives suggested dates for the milestones that are calculated based on a certain number of days subtracted from the let date in MPMS (see Table 2 below). Project milestones also drive some task deadlines.

The [Enter Milestone Dates](#) section provides a walkthrough of inputting the **Project Schedule** dates. The **Actual Dates** column populates as the milestone activities are completed in GCMS throughout the grade crossing project process.

A down-pointing arrow button at the right end of each milestone row expands the milestone to show its required tasks in the system. Tasks that have already been completed will be shown in italics with a date in the **Completed Date** column, while remaining tasks are shown in regular font with no Completed Date.

Another indicator of incomplete tasks is in the milestone title itself, the text in parentheses after the name. As the column header states, the left number is the open, unfinished tasks, while the right number are the closed tasks for that milestone. In the example to the right, "Coordination" has one open task and three completed tasks ("1/3").

Project Milestone (opened/closed)	
Scoping	(0/1)
Authorization	(0/2)
Coordination	(1/3)

Table 2 – Calculations for Suggested Milestone Dates

Primary Milestones	Calculated Schedule (without Right-of-Way Acquisition from Railroad)	Calculated Schedule (with Right-of-Way Acquisition from Railroad)
Create Project	Create Project + 45 days	Create Project + 45 days
Scoping	Let Date - 338	Let Date - 448
Authorization	Let Date - 293	Let Date - 403
Coordination		
Contract Development	Let Date - 108	Let Date - 108
Let Date	Let Date	Let Date

Cost and Funding

The **Costs & Funding** tab, accessible from the Project page in GCMS, is designed for users to manage and track the financial aspects of a grade crossing project. This page includes a **Project Funding Information** section which allow users to view Estimated Project Funding and Department Approved Funding details across the project phases (PE, FD, UTL, ROW, CON). The system also calculates funding percentages for Federal, State, Local, and Other contributions.

COST & FUNDING

Additionally, the tab provides a section for WBS Information, where users can view the WBS data such as status, estimate amounts, and actual amounts.

The **Railroad Costs** section, located at the bottom of the tab, shows a list of the Railroad's Estimated Cost as well as Scoping Railroad Costs.

The Railroad's Estimated Cost section lists all Railroad Estimates (both draft and accepted) that have been submitted for the project.

Additionally, the Scoping Railroad Costs section allows users to capture and update "windshield estimates". See [Scoping Railroad Costs](#) for additional information.

Design and Construction Milestones

The **Design & Construction** tab, accessible from the Project page in GCMS, is designed for users to manage and track the design and construction milestones throughout the various phases of a grade crossing project. This page provides an overview of key milestones for each project phase, including Preliminary Engineering, Final Design, Right-of-Way, and Construction.

DESIGN & CONSTRUCTION

In addition to the milestone tracking, the tab displays both the **Federal** and **State Project Numbers** associated with the grade crossing project, allowing users to easily reference and cross-check project identifiers for coordination and reporting purposes.

Project Documents

Each project has a Project Documents screen that serves as the central storage for all documents associated with that project. These documents include files uploaded by the railroads, files uploaded by PennDOT on behalf of a railroad, and files generated by GCMS as part of the railroad coordination process.

[Return to Project Information Page](#)

Project Documents

Project Documents List

[CLEAR ALL FILTERS](#)

File Name	Version	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT#	Notes	Action
Sample Upload Document 1.pdf	1	Final Plan with PUG	12/13/2024	0.057				UPDATE
Sample Upload Document 1.pdf	1	100% Plan	12/13/2024	0.057				UPDATE
Sample Upload Document 1.pdf	1	30% Plan	12/13/2024	0.057				UPDATE
Eng_Auth_90005_BLE.pdf	1	Engineering Authorization	12/13/2024	0.036	Bessemer & Lake Erie Railroad		Engineering Authorization	

Note: The Project Documents screen is not to be the primary place to upload documents. Uploading documents here may not properly trigger a task to review the document. Instead, documents should primarily be uploaded on the page that is specific to that document or process.

From the Project Information screen, click the **Manage Project** button and choose **Project Documents**. The Project Documents screen shows all the files in the standard table list format.

Click on a document's name to download and view it. For user uploaded documents, the Action column of the table provides the user with a text link to **UPDATE** that specific document for the project. Additionally, PennDOT users can access the ECS portal from any page using the link provided at the top of the screen.



Upload new files to the Project Documents by clicking **Select Files to Upload** or by dragging and dropping a file onto the section below the existing list. After the file is selected, it will appear at the bottom of the screen below the "Drop Files Here" section. Choose a document type from the given options and type any notes if desired. Then click the **UPLOAD DOCUMENTS** button at the bottom to complete the upload.

Upload Documents

Maximum allowable file size is 500 MB.

SELECT FILES TO UPLOAD

DROP FILES HERE

File Name	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT	Notes	Action
Sample Upload Document 1.pdf	Draft Railroad Agreement	02/04/2025	0.06	Bessemer & Lake Er...			REMOVE X

UPLOAD DOCUMENTS

Integration with One Map

One Map is a PennDOT web application that serves as a primary map-viewing tool for many combinations of PennDOT's publicly available geospatial feature layers. The application has a collection of additional layers available for viewing, a search box to locate a project based on one of its attributes, and various tools to analyze projects or assets in greater detail as well as export spatial data. One Map is publicly accessible at: <https://gis.penndot.gov/onemap/>

GCMS has a button that quickly maps a project's features in One Map. From the Project Information screen, select the **Location Information** tab. The Location Information section has the heading for **Relevant Bridges and Roadways**, under which is a button to **SHOW MY PROJECT ON ONE MAP**. Click this button to open a new browser tab containing the map view.

PROJECT INFORMATION LOCATION INFORMATION GRADE CROSSINGS & BRIDGES MILESTONES COST & FUNDING DESIGN & CONSTRUCTION										
Relevant Bridges and Roadways										
Project Locations										
										SHOW MY PROJECT ON ONE MAP
County	SR	SEC	Begin Segment	Begin Offset	Begin Lat/Long	End Segment	End Offset	Road Name	End Lat/Long	
Sullivan	0487	063	0310	1010	41.4773210,-76.3776651	0310	1040	SR 0487 SH	41.4773962,-76.3777097	

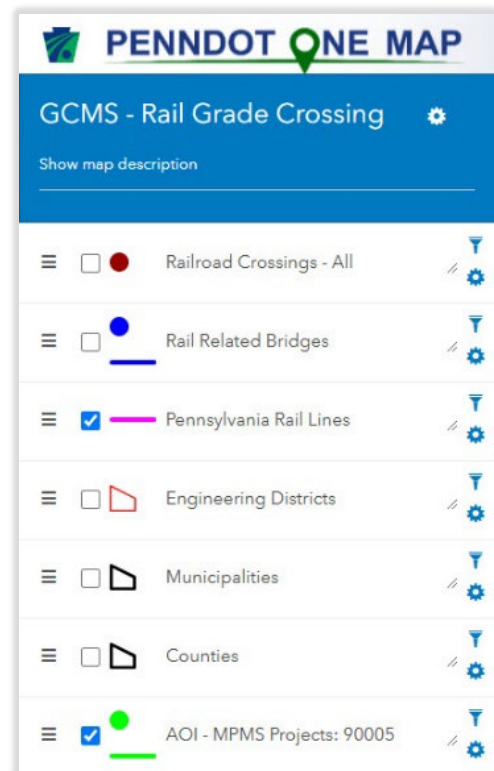
By default, the One Map view created through GCMS displays a handful of layers that may be relevant to the grade crossing project, as shown in the screenshot. Any layer can be hidden by unchecking the checkbox next to its name.

Click to select a feature on the map and open a "Layer Information" modal that lists all its fields. Where multiple layers overlap, the top-most layer in the Legend list will be selected. To change the selection to a layer below it, use the arrow buttons at the top of the modal window. Alternatively, move the desired layer to the top of the Legend by clicking and holding the four-line button to the left of the layer name and dragging it upward.

Clicking an open area on the map will select the boundary lines of the municipality containing that area.

Detailed help for One Map is available on the One Map website at:

<https://gis.penndot.gov/onemap/static/webHelp/Welcome.htm>



Project Team

PennDOT and each railroad must set their project teams for a project, which determines who gets tasks generated within the application.

For PennDOT, the PM or District Grade Crossing Administrator/Engineer selects the user who will fill each PennDOT Project Team role on the Project Team page.

The people assigned to team roles can be changed at any time. When a selection is changed, the tasks will transfer to the new user filling the role. See the [Set PennDOT Project Team](#) for a walkthrough of reassigning these team roles in GCMS.

PennDOT Project Team Roles	Railroad Project Team Roles
<ul style="list-style-type: none"> • Project Manager • Project Designer • PUC Application Coordinator • Grade Crossing Coordinator • District Agreement Coordinator • Central Office Coordinator • Construction Coordinator • Closeout Coordinator 	<ul style="list-style-type: none"> • Railroad Project Manager • Railroad Agreement Coordinator • Railroad Invoice Coordinator • Railroad Flagging & Construction Coordinator

PennDOT Project Team

The table below lists the PennDOT Project Team roles and the potential user roles that could be assigned to each.

Project Team Role	Potential User Roles	Tasks Assigned
Project Manager	<ul style="list-style-type: none"> • Project Manager • District Grade Crossing Administrator • Central Office 	<ul style="list-style-type: none"> • Complete Scoping • Send 30% Plans • Enter Flagger Needs x Railroad • Send 100% Plans
Project Designer	<ul style="list-style-type: none"> • Project Manager • District Grade Crossing Administrator 	<ul style="list-style-type: none"> • Send 30% Plans • Send 100% Plans
PUC Application Coordinator	<ul style="list-style-type: none"> • District Grade Crossing Administrator • District Grade Crossing Assistant 	<ul style="list-style-type: none"> • e-file PUC Application • Upload PUC Secretarial Letter or PUC Order
Grade Crossing Coordinator	<ul style="list-style-type: none"> • District Grade Crossing Administrator • District Grade Crossing Assistant 	<ul style="list-style-type: none"> • Complete Scoping • Send Engineering Authorization • Send 30% Plans • Send 100% Plans • Enter Flagger Needs x Railroad
District Agreement Coordinator	<ul style="list-style-type: none"> • District Grade Crossing Administrator • District Grade Crossing Assistant 	<ul style="list-style-type: none"> • Generate & Execute Agreement
Central Office Coordinator	<ul style="list-style-type: none"> • Central Office • Central Office Section Chief 	<ul style="list-style-type: none"> • Prepare Railroad Certification

Section Chief		<ul style="list-style-type: none">• Generate Railroad Certification
Construction Coordinator	<ul style="list-style-type: none">• District Grade Crossing Administrator• District Grade Crossing Assistant	<ul style="list-style-type: none">• TBD
Closeout Coordinator	<ul style="list-style-type: none">• District Grade Crossing Administrator• District Grade Crossing Assistant	<ul style="list-style-type: none">• TBD

Parent & Child Projects

When multiple projects are bundled for letting, each component MPMS number involved is treated as an individual project. Therefore, each MPMS project number must go through the grade crossing project processes in GCMS.

The system conveys the bundling of projects as a "Parent & Child" relationship. To see these relationships for a project in GCMS, go to the **Project Information** page and scroll down to the **Parent & Child Projects** section. The parent project will be shown in the light gray banner, and child projects, if they exist, will be listed below.

Parent & Child Projects						
MPMS#:119300	SEDA-COG Pedestrian Countdown Signals	0011-175	County: Columbia	Municipality: Berwick (BORO)	Status: Contract Development	
MPMS#:119551	NTIER Pedestrian Countdown Signals	0049-084	County: Tioga	Municipality: Westfield (BORO)	Status: Scoping	
MPMS#:119579	WATS Pedestrian Countdown Signals	0015-265	County: Lycoming	Municipality: South Williamsport (BORO)	Status:	Not created in GCMS

When viewing a specific project, the **Parent & Child Projects** section allows users to easily see the status of the other projects involved in the relationship, including if the other projects have not been created in GCMS. When parent and child projects that have been created in GCMS, the MPMS# text in this section become a blue clickable link allowing the user to easily navigate to these projects in GCMS.

The parent & child relationships are established in PennDOT's ECMS. If the **Parent & Child Projects** section only displays one MPMS project, the relationship between the projects has not yet been made in ECMS, or there is no parent-child relationship that exists for the project you are viewing.


Document Versioning

When the same document is generated multiple times in GCMS, the system records it having multiple versions. The "Version" number field in a file list tells how many times a document has been uploaded.

However, not all types of documents have this versioning. Any document created by GCMS itself can be versioned, while other uploaded documents are versioned only on a case-by-case basis.

To update a document's version, look for the **Update** text at the far-right side of the table in which the document is listed. Click **UPDATE** to open a modal window. In the **Update Documents** window, drag and drop the new version of the file into the drop space, or use the button to select the file from the computer's folders. Once the document uploads, optionally add a note and then click the **UPLOAD DOCUMENTS** button to finish. The new version number will now be displaying in the table, along with the note and the new file name, if there is one.

The **UPDATE** text button must be used for the new file to be considered the next version of the same document. Simply uploading another file with the same name will not version the document; it will be considered a different project document.

Scoping Field View Document List								
File Name	Version	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT#	Notes	Action
 Sample Upload Document 1.pdf	2	Scoping Field View Documents	02/05/2025	0.057				UPDATE

On any page that holds documents, the documents have a **Version** column. The version number in this column is clickable and opens a window that shows all the versions of the file.

District Functions

Manage Railroad Flagger Resources

GCMS provides users the ability to view and manage flagger needs across multiple projects for a selected railroad, including details like flagger counts, days, and crossing information, with sorting and export options.

To view flagger needs for a specific railroad across all Districts, navigate to the **Manage Railroad Flagger Resources** page by selecting **District Functions** from the green menu bar and clicking **Manage Railroad Flagger Resources**. The page will open, but no data will be displayed until a railroad is selected.

Next, select a railroad from the “Select Railroad” drop-down list. Alternatively, users can also begin typing the railroad name in the drop-down field, and the list will automatically filter to show matching names as they type.

The screenshot shows the 'Manage Railroad Flagger Resources' page. At the top, there's a header with the title. Below it, a 'Select Railroad:' dropdown menu is open, showing a search bar with 'norf' entered and a list of suggestions, with 'Norfolk Southern Railway Company' selected. There are also buttons for 'CLEAR ALL FILTERS', 'EXPORT PROJECT DETAILS', and 'EXPORT CROSSING DETAILS'.

Once the railroad has been selected by clicking the railroad name, the report will automatically populate with a summary of all projects where the selected railroad has been added.

The screenshot shows the 'Manage Railroad Flagger Resources' page with the 'Norfolk Southern Railway Company' selected. The table below displays a list of projects with various columns for project details.

	MPMS#	ECMS#	#Flaggers	#Flagger Days	Construction Start Date	Phys Work Cmpl Date	Project Class	SR	SEC	District	County	Agreement#
▼	120035	120035	2	2	09/12/2024	05/23/2025	General Maintenance	0040	DEL	12-0	Fayette	
▼	36075		0	0	02/15/1995	07/14/1995	Rail Highway Grade Crossing	4003	03R	3-0	Montour	
▼	103192		0	0	11/30/2017		Rail Highway Grade Crossing		RRX	3-0	Lycoming	
▼	112411		0	0	01/01/2019	05/01/2021	Rail Highway Grade Crossing			8-0	Lancaster	

You can review the details of each project by scrolling up and down or left and right in the table. The header will remain frozen when scrolling vertically, and the first three columns will stay fixed when scrolling horizontally to help navigate the data.

To expand a project’s entry and see the detailed crossing information, click the down arrow on the far left of the row. The expanded section will show the Crossing Details, including each DOT# the selected railroad has been added to.

Highway Bridge Project Safety Project Emergency Project Critical Project Local Project P3 Project													
MPMS#	ECMS#	#Flaggers	#Flagger Days	Construction Start Date	Phys Work Cmpl Date	Project Class	SR	SEC	District	County	Agreement#	Agreement	
	MPMS	ECMS		Constructi	Phys Work	Project Class			Dist	County	Agreement#	Agreement	
	120035	120035	2	2	09/12/2024	05/23/2025	General Maintenance	0040	DEL	12-0	Fayette		
DOT#	Owner	Operator	Region	#Tracks	Location	Activity	#Flaggers	#Flagger Days					
DOT# 367786J	Unknown	Norfolk Southern Railway Company		1	40.0242015,-79.8840466	Bridge Rehab	2	2					

Additionally, user can filter and sort the report by criteria, like District or County, to better analyze the data.

If needed, a report showing flagger needs at the Project Level, or Crossing Level, can be exported by clicking either the **EXPORT PROJECT DETAILS** or **EXPORT CROSSING DETAILS** buttons. This downloads the appropriate Excel file report, which will include all applied filters and sorts.

EXPORT PROJECT DETAILS

EXPORT CROSSING DETAILS

District Grade Crossing Inspections

This feature allows users to view, filter, and export recent District Grade Crossing inspections, as well as download inspection worksheets for field use.

To view the grade crossing inspections across all Districts, navigate to the **District Grade Crossing Inspections** page by selecting **District Functions** from the green menu bar and clicking **District Grade Crossing Inspections**.

District Grade Crossing Inspections											
										CLEAR ALL FILTERS	EXPORT LIST
DOT#	SR	Segment	District	County	City	Crossing Type	Crossing Status	PUC Status	Crossing Inspection Completed Date	GC Inspection Worksheet	
DOT#	SR	Segment	District	County	City	Public	Open	PUC Status	Crossing Inspect	GC Inspection	
051623Y	2082	0070	11-0	Allegheny	PLUM	Public	Open	Abandoned	01/24/2025	Worksheet	
051621K	2058	0250	11-0	Allegheny	BAKERSTOWN	Public	Open	Abolished	10/24/2024	Worksheet	
528229U			2-0	Clearfield	PENFIELD	Public	Open		08/14/2024	Worksheet	
528224K			2-0	Clearfield	DU BOIS	Public	Open		08/01/2024	Worksheet	
528236E			2-0	Clearfield	PENFIELD	Public	Open		08/01/2024	Worksheet	
528235X	0153	0620	2-0	Clearfield	PENFIELD	Public	Open		08/01/2024	Worksheet	

You can filter the list of inspections to focus on specific crossings within your District. Use the available filters to narrow down the list to crossings that you might inspect at the same time. For example, you can filter by crossings on a selected SR or in a specific County. The list will then update to show only the relevant Grade Crossing DOTs based on the filters you've selected. Additionally, clicking the DOT number under the "DOT#" header will take the user directly to the Grade Crossing record.

Note: By default, the grade crossing inspections list displays only crossings with a Crossing Type of "Public" and a Crossing Status of "Open." If you need to view both Public and Private, and Open and Closed, crossings, click on the **CLEAR ALL FILTERS** link at the top of the list, which will reset all filters and display a complete list of grade crossing inspections.

Crossing Type	Crossing Status ↑
Public ▼	Open ▼

To export the list of Grade Crossing inspections, click the **EXPORT LIST** button. This will download the file. Your browser will notify you once the file has been downloaded. The downloaded file will include the same information you see on your screen, with the applied filters and sorting.

If you need to perform an inspection in the field, you can download the "Grade Crossing Inspection Worksheet". To do this, click the **Worksheet** link in the last column of the District Grade Crossing Inspection list. This will open the Grade Crossing Inspection Worksheet in a new browser tab. The worksheet will display key fields from FRA Parts I-V that are relevant for the inspection, allowing you to reference these details while in the field.

Conditional Railroad Certifications

This feature enables users to access and view Conditional Railroad Certifications for all Districts. It provides a table listing all projects marked with an "Is Conditional" checkbox selected on the **Railroad Certification** page.

Is Conditional:	<input checked="" type="checkbox"/>	Cannot Issue NTP	Railroad Reimbursement Agreement(s) must be fully executed prior to Issuing NTP to the Contractor
	<input type="checkbox"/>	Cannot Open Bids	PUC must approve the Application (CO Override Required)
	<input type="checkbox"/>	Cannot Open Bids	PUC must approve the construction plans prior to bid opening

To view the list of all Conditional Railroad Certifications, navigate to the **Conditional Railroad Certifications** page by selecting **District Functions** from the green menu bar and clicking the **Conditional Railroad Certifications**.

The page will display a table that lists all projects for which the "Is Conditional" checkbox has been selected on the **Railroad Certification** page. The table will include key details such as the MPMS #, ECMS #, SR-SEC, Project Title, District, Certification Date, PS&E Date, Let Date, NTP Date, Conditional Type, and Reason.

Conditional Railroad Certifications										
										EXPORT LIST
MPMS #	ECMS#	SR-SEC	Project Title	District	Certification Date	PS&E Date	Let Date	NTP Date	Conditional Type	Reason
110305	110305	0504-P36	2024 Bridge Preservation	2-0			04/18/2024	06/03/2024	CIN_RRA	Test
100080	100080	0034-054	Spring Run Road Bridge	8-0	12/09/2024		08/08/2024	09/23/2024	CIN_RRA	Test
16214	16214	0611-MBR	PA 611 (Old York Rd) over SEPTA's W Trenton Ln - D/B activities limited to ADA ramps & ????	6-0	11/13/2024		07/24/2025	09/24/2025	CIN_RRA	Test
85158	85158	1005-A01	Trib to Elk Creek BOX	2-0	12/06/2024		01/30/2025	03/17/2025	CIN_RRA	Test
120070	120070	0081-ICS	Crack Sealing Contract Cumberland Franklin Dauphin	8-0	11/22/2024		02/15/2024	04/01/2024	CIN_RRA	Test
90447	90447	4020-POC	Surface Treatment 6A	5-0	12/09/2024		05/12/2011	06/27/2011	COB_CPPTBO	Test

To view more details for a specific project, click the MPMS number link in the MPMS# column. This will navigate you to the **Project Information** page for that project.

To export the Conditional Railroad Certifications list, click the **EXPORT LIST** button located in the upper right corner of the table. This will download an Excel file containing all the information shown in the table.

Railroads Setup and Updating

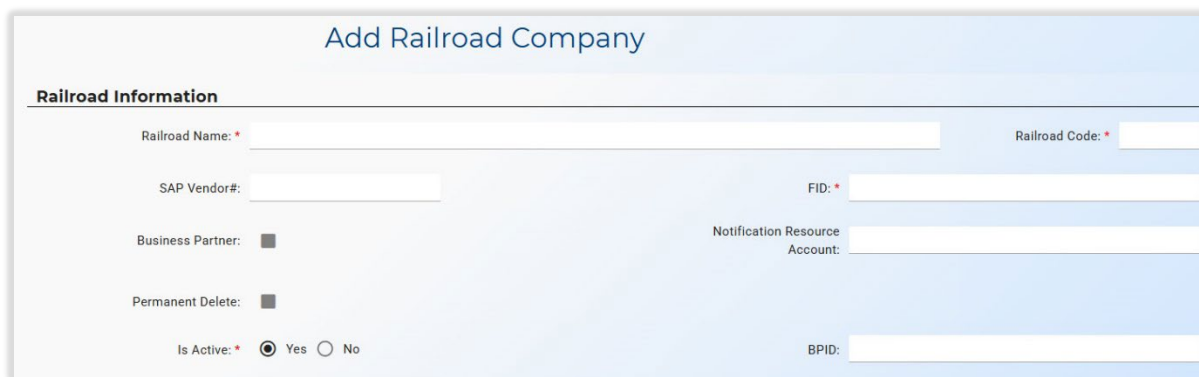
The following sections describe how to create a new railroad in GCMS and edit existing railroads.

Creating a Railroad

The option to create a new railroad is found in the Admin dropdown list on the menu bar across the top of the page. Navigate to **Admin > Maintain Railroad Companies**. Then, scroll to the very bottom left of the page and press the **ADD RAILROAD** button.

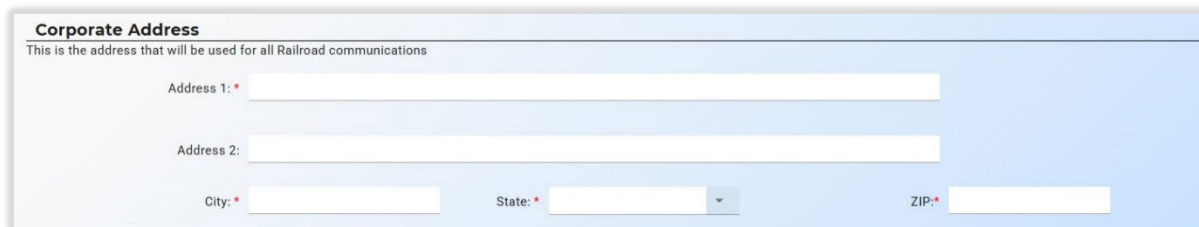
A blue rectangular button with white text that reads "ADD RAILROAD".

This button will open a page for creating a railroad. Enter the Railroad's information and ensure all required fields (as denoted by a red asterisk) have been completed.

A screenshot of the "Add Railroad Company" form. The form has a light blue header with the title "Add Railroad Company". Below the header is a section titled "Railroad Information". The form contains several input fields: "Railroad Name: *" (text), "Railroad Code: *" (text), "SAP Vendor#" (text), "FID: *" (text), "Business Partner:" (checkbox), "Notification Resource Account:" (text), "Permanent Delete:" (checkbox), "Is Active: *" (radio buttons for Yes and No), and "BPID:" (text).

If the railroad has a resource email account, they can enter that email address in the **Notification Resource Email Account** box to have a copy of each notification sent to that account. This email address will be CC'd on all GCMS workflow notification emails for the railroad; however, this only includes workflow notifications, not other GCMS emails, such as a message to alert a user that a submitted request was returned.

Next, add the corporate address for the railroad in the **Corporate Address** section.

A screenshot of the "Corporate Address" form. The form has a light blue header with the title "Corporate Address" and a subtitle "This is the address that will be used for all Railroad communications". Below the header are several input fields: "Address 1: *" (text), "Address 2:" (text), "City: *" (text), "State: *" (dropdown menu), and "ZIP: *" (text).

Lastly, if required, add an SAP Suffix in the **SAP Suffixes** section. Click the **ADD SAP SUFFIX** button, and in the Add SAP Suffix modal window that appears, enter the SAP Suffix and address information, and click **SAVE**. The new SAP Suffix will then appear in the table list.

SAP Suffix	Address 1	Address 2	City	State	ZIP	Action
No SAP Suffix added.						

ADD SAP SUFFIX

CANCEL SAVE

After adding the railroad's information, corporate address, and a required SAP suffices, click the **SAVE** button at the bottom right corner of the screen. If the new railroad's information is similar to that of an existing railroad, an error message will appear at the top of the window notifying the user what information for the new railroad already exists in the system. Examine the information displayed to determine if this is the case.

Creating Contacts

Creating contacts allows a railroad company to specify primary points of contact. These contacts can then be assigned to a railroad in GCMS on a project-by-project basis. Contacts are always railroad employees and not consultants. Contacts may or may not be users of GCMS.

On the **Edit Railroad Company** page, go to the **Contacts** tab on the left side of the screen, then select **ADD** at the bottom of the Contacts section. This button brings the **Add Contact** modal window into view.

Fill in all required fields and any additional information before clicking **SAVE** to close.

Add Contact

First Name: * Middle Name:

Last Name: * Suffix:

Primary Phone: * EXT:

Secondary Phone: EXT:

Email: *

SAVE CANCEL

The new railroad contact is then added to the Contact table list. This table shows the contact's name, email address, phone number, and user ID if they are a registered user in GCMS.

The information for an existing contact can be edited by clicking the **Edit** text in the Actions column on the right end of the line in the Contacts screen.

Outdated railroad contacts can be cleared out of the railroad's information if they are not assigned on any active projects. A project is active when it has been started in GCMS and has not reached "Completed" status yet. If an old railroad contact is only assigned on completed projects, the contact can be deleted from the railroad while remaining listed on the records of those completed projects. On the Contacts tab, a **DELETE** text button is found next to any contact that can be deleted.

Note that once a contact is removed, it cannot be reactivated.

Name	Email Address	Primary Phone	User ID	Action
Jim Smith	jsmith@anyemail.com	(111) 111-1111		EDIT DELETE

[ADD](#)

Editing Railroad Company Information

Both a railroad company and PennDOT can revise a railroad's information. Railroad company users go to **My Railroad > Railroad Profile**, while PennDOT users go to **Admin > Maintain Railroad Companies**.

In the PennDOT user's view, the **Maintain Railroad Companies** page has a table listing the existing railroads along with filtering options above the list. To search the records, type a railroad name in the **Railroad Name** input box under the Railroad Name heading. Existing railroads in the table will automatically filter as the name is being typed. The relevant railroad can be clicked and selected from that list.

The **Edit Railroad Company** page opens allowing the user to edit the details under the Railroad Information, Regions, and Contacts tabs. After completing the edits, click **SAVE** on each page.

Deleting Railroads

On occasion, a railroad profile may need to be deleted, typically because it is a duplicate, outdated, or some similar condition. After confirming this is accurate, checkmark the **Permanent Delete** box on the **Edit Railroad Company** screen. Selecting this box does not actually delete the railroad profile, but it flags the railroad for deletion by the system administrators. Periodically the system administrators will check for these railroads that have been marked and remove them from the system. Be sure to click **SAVE** at the bottom of the screen after making the selection.

Grade Crossing Inventory List

The GCMS provides an inventory of Grade Crossing Records based on Federal Railroad Administration (FRA) data. The list of Grade Crossing Records (i.e., DOT#s) can be accessed by clicking the **View GC Inventory** text link in the green Menu bar.

[View GC Inventory](#)

This opens the **Grade Crossing Inventory List** page. The system provides a quick and efficient way to search for specific grade crossings by DOT number. To do this, simply enter the DOT number in the **Search DOT#** text box and click **SEARCH**. The corresponding grade crossing record will display on your screen. This feature helps you quickly locate specific crossings by their unique DOT number.

Grade Crossing Inventory List													
Search DOT# :		SEARCH										CLEAR ALL FILTERS	
												EXPORT LIST	
DOT#	District	SR	Segment	Local Road	County	City	BR-Key	Crossing Position	Crossing Type	Crossing Protection	Crossing Status	Railroad Operator	Crossing Owner
DOT#	District	SR	Segment	Local Road	County	City	BR-Key	Crossing Pos	Crossing Ty	Crossing Prot	Open	Railroad Op	Crossing O
051620D	11-0	2084	0014	MILLTOWN RD	Allegheny	PLUM	1638	RR Over	Private		Open	Bessemer & Lake Erie Railroad	Bessemer & Lake Erie Railroad
051621K	11-0	2058	0250	Hulton Road	Allegheny	BAKERSTOWN		At Grade	Public	Lights & Gates Functional	Open	Bessemer & Lake Erie Railroad	Bessemer & Lake Erie Railroad
051622S	11-0	0076	3270	PA TURNPIKE	Allegheny	PLUM		RR Under	Public		Open	Bessemer & Lake Erie Railroad	Bessemer & Lake Erie Railroad

For users looking to narrow down the inventory list, several filters and sorting options are available. By default, the inventory list displays only crossings with a Crossing Status of "Open." If you need to view both Open and Closed crossings, click on the **CLEAR ALL FILTERS** link at the top of the list, which will reset all filters and display a complete inventory, including both Open and Closed crossings.

Crossing Status

Open ▼

For users who need to download the inventory data, the system provides an **EXPORT LIST** button located above the inventory list. Clicking this button will prompt the system to generate an Excel file containing the current list of crossings, including any active filters and sort preferences. Once the file has been downloaded, you can open it in your browser's default download location to review or share the records.

Maintaining Grade Crossing Records

Once a user searches for a specific DOT#, or clicks on a DOT# row within the Grade Crossing Inventory List, the user is taken to the Grade Crossing Record with the DOT# you are viewing showing at the top of the page. This page is designed to facilitate the management and updating of grade crossing records, ensuring accurate data is maintained for both PennDOT and FRA purposes.

The Grade Crossing Record page is comprised of a [Grade Crossing Header](#) as well as the six following tabs:

1. [Crossing Details](#)
2. [Crossing Documents](#)
3. [PUC Documents](#)
4. [Projects](#)
5. [Inspections](#)
6. [Crossing History](#)

Grade Crossing Header

The light blue Grade Crossing Header, which is displayed across all pages within the Grade Crossing record, contains important information about the crossing. This header includes data such as the

Effective Date, State Route, Street or Road Name, Segment, Offset, County, Municipality, Crossing Status, FRA Owner, and FRA Operator.

PennDOT Identified Owner and Operators

In cases where PennDOT has identified a railroad owner or operator that differs from the FRA's records, users can modify this information directly in the Grade Crossing Header. To do so, select a different railroad from the PennDOT Identified Owner drop-down menu and click **SAVE**. The new railroad name will be saved, and the Date Updated field will update to reflect the current date. Similarly, the PennDOT Identified Operator can be changed by selecting a different railroad from the drop-down menu and saving the changes. By default, GCMS will use the PennDOT Identified Owner and PennDOT Identified Operator when populating data on the **Add Railroads to Project** page.

Crossing Details

The **Crossing Details** tab within the Grade Crossing Record includes an **FRA Inventory Record** and **PennDOT Crossing Information** section where users can input, modify, and save important data related to various aspects of grade crossings.

FRA Inventory Record

Once the **Crossing Details** tab is selected, ensure the **FRA Inventory Record** section is expanded by clicking the arrow located on the right end of the section pane. Once open, user will have the ability to navigate through different sections for

data entry and updates. GCMS follows a structured process based on the FRA data requirements, which are divided into five main parts as shown across the top of this section.

Part I: Location & Classification

- The Location & Classification section (Part I) contains essential information about the crossing's location and classification.

Part II: Railroad Information

- The Railroad Information section (Part II) contains fields related to the railroad operating at the crossing.

Part III: Traffic Control Device Information

- The Traffic Control Device Information section (Part III) provides details about the traffic control devices used at the crossing.

Part IV: Physical Characteristics

- Part IV covers the Physical Characteristics of the crossing, including physical infrastructure details.

Part V: Public Highway Information

- The final section (Part V), Public Highway Information, pertains to the public highways in the vicinity of the crossing.

Users can navigate through the five parts of the FRA data entry forms, making updates to the necessary fields and ensuring that the grade crossing records are accurate and up-to-date.

After updating the necessary fields (as denoted by a red asterisk), click **SAVE**. The system will save the data and display a confirmation message once the changes are successfully recorded.

PennDOT Crossing Information

Once the **Crossing Details** tab is selected, ensure the **PennDOT Crossing Information** section is expanded by clicking the arrow located on the right end of the section pane. Once open, user will have the ability to view PennDOT's Crossing Information.



Users can navigate through the section, making updates to the necessary fields and ensuring that the grade crossing records are accurate and up-to-date.

After updating the necessary fields (as denoted by a red asterisk), click **SAVE**. The system will save the data and display a confirmation message once the changes are successfully recorded.

PennDOT Crossing Information

Status Details

PUC Status: Open Rail Bank: ☐

Tracks & Travel Lanes

Number of Active Tracks: * 1 ActiveTrack Number of Travel Lanes: * 2 Lanes Planning Organization: * SPC MPO

Main Track & Surface

Crossing Surface Material: Surface Condition: * 3 Surface Installed Date: mm/dd/yyyy

Advanced Warning Signs

Advanced Warning Signs Adequate: * No New Signs Required: * No Signs to be Relocated: * No

Pavement Markings

Pavement Markings Adequate: * No Date Pavement Markings Replaced: mm/dd/yyyy

SAVE

CANCEL

Crossing Documents

The **Crossing Documents** tab within a Grade Crossing Record brings users to the **Grade Crossing Documents** page which allows for managing and maintaining documents associated with grade crossings. This includes the ability to view, upload, and update documents related to the crossing.

The **Grade Crossing Documents** page displays all files related to the crossing, including those that have been uploaded through ECS and GCMS. Each file in the list includes key information, such as the File Name, Version, Document Type, Date Uploaded, File Size, DOT#, and associated Notes.

File Name	Version	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT#	Notes	Action
1 (108).jpg	1	Quadrant 2	04/19/2021	0.08		051620D		UPDATE
dscn2286.jpg	1	Quadrant 1	04/22/2021	0.375		051620D		UPDATE
1 (107).jpg	1	Quadrant 1	04/23/2021	0.083		051620D		UPDATE
New Graphic.jpg.jpg	1	Quadrant 1 Picture	12/06/2024	0.476		051620D		UPDATE
New Graphic.jpeg.jpeg	1	Quadrant 1 Picture	12/06/2024	0.433		051620D		UPDATE
New Graphic.jpeg.jpeg	1	Crossing Surface Picture	01/24/2025	0.433		051620D		UPDATE

For files originating from ECS, the **UPDATE** button in the Action column will be disabled, indicating that these documents cannot be modified within GCMS. However, documents uploaded directly through GCMS will have an active **UPDATE** button, allowing users to make necessary changes.

To upload a new document, click the **SELECT FILES TO UPLOAD** button or drag-and-drop a file into the designated area. Once the file is selected, it will appear in the Upload Grade Crossing Documents list. You will then need to choose a Document Type from a drop-down menu, which includes options such as Crossing Surface Pictures, Diagnostic Form Analysis, General PUC Crossing Documents, and others. You will also select the DOT# from the drop-down (which will match the DOT# shown in the page header) and enter any relevant Notes about the document.

File Name	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT	Notes	Action
Sample Upload Document 1.pdf	Crossing Surface Picture	02/05/2025	0.06		051620D		REMOVE X

Once the file is ready, click the **UPLOAD DOCUMENTS** button to successfully upload the file. The document will now appear in the list of Grade Crossing Documents.

If you need to update an existing document, locate the document in the list and click the **UPDATE** button in the Action column. This will open the **Update Documents** window, where you can select a new file to upload. Once a file is selected, it will appear in the upload list. You can choose the Document Type (which will default to the type chosen during the initial upload and is non-editable), enter new Notes, and click **UPLOAD DOCUMENTS** to upload the updated file.

UPDATE

PUC Documents

The **PUC Documents** tab within a Grade Crossing Record in GCMS offers users an efficient way to manage and review regulatory docket numbers associated with grade crossings. The system automatically links Docket numbers to specific DOT#s when available, displaying both MPMS and Source information to provide context on the origin of each Docket number.

If a new PUC Docket # needs to be added to the Grade Crossing Record, users can do so manually using the **Add PUC Docket #** function. To do this, enter the desired PUC Docket number in the text field located above the list of existing Docket numbers.

A-111111111

ADD PUC DOCKET #

Once entered, click the **Add PUC Docket #** button. The new Docket # will be added to the list, but this entry will not have an MPMS # associated with it, as it was manually entered rather than linked to a project in GCMS. For this reason, the MPMS field will be blank, and the Source will be labeled as Manual.

Projects

The **Projects** tab within a Grade Crossing Record brings users to the **Grade Crossing Projects** page which is a powerful tool for tracking the progress of projects associated with specific crossings.

For crossings with multiple projects, the Grade Crossing Projects table can be filtered and sorted using various criteria, such as Project Type, MPMS #, Project Status, Docket #, SR, and Section. This filtering and sorting functionality ensures that users can quickly find the relevant project for their needs.

Once the desired project is identified in the Grade Crossing Projects table, users can click the corresponding MPMS Project # to view the full details of the project.

Grade Crossing Projects							
<div> Highway Bridge Project Safety Project Emergency Project Critical Project Local Project P3 Project Historical </div> <div>CLEAR ALL FILTERS</div>							
MPMS#	Project Status	Docket #	District	County	SR	Section	
MPMS#	Project Status	Docket #			SR	Section	
98786	Construction		3-0	Union	2003	012	
98921	Scoping	T-1923012	3-0	Northumberland	4018	018	
118769	Contract Development		3-0	Columbia	0011	168	
112978	Contract Development		3-0	Lycoming	0044	86S	
90005	Contract Development		3-0	Sullivan	0487	063	

Inspections

The **Inspections** tab within a Grade Crossing Record brings users to the **Inventory Inspections** page. This page allows for capturing inspection data, managing changes to crossings, and ensuring that all necessary inspection details are stored accurately.

Once on the **Inventory Inspections** page, users can view a list of Previous Inventory Inspections as well as enter a New Crossing Inspection.

To add a new inspection, begin by scrolling to the **Add New Crossing Inspection** section. The system will prompt users to enter required data before the **SAVE** button becomes active. If any mandatory fields are left blank, the **SAVE** button will remain disabled. Specifically, users must enter a Crossing Inspection Date, which must be the current date or a date in the past. The system will not accept a future inspection date.

Add New Crossing Inspection

Inspection Date: *

Crossing Changes: *
☐ Yes ☐ No

Inspected By: *

Comments:

Additionally, users must select whether there were Changes to the Crossing by choosing **Yes** or **No** radio button in the Crossing Changes field. If **Yes** is selected, the Comments field becomes mandatory, and users must enter detailed comments about the changes observed during the inspection.

The Inspected By field allows users to enter the name of the inspector, who does not need to be a registered GCMS user.

Once all required fields are populated, users can click the **SAVE** button to store the inspection record. Once saved, the inspection record is added to the Previous Inventory Inspections list, which will display the most recent inspections at the top in descending order.

Previous Inventory Inspections			
Crossing Inspection Date	Crossing Changes	Inspected By	Comments
01/30/2025	Yes	Chris	Test
01/24/2025	Yes	Chris I	Test
01/21/2025	Yes	Chris	Test

The system does not allow users to modify or delete inspection records once they have been saved. This ensures that all inspection data remains accurate and intact for future reference.

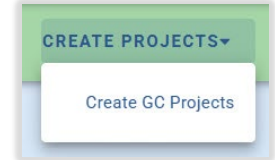
Crossing History

The **Crossing Details** tab within a Grade Crossing Record brings users to the **Grade Crossing History** page. The Grade Crossing History feature in GCMS plays a crucial role in maintaining the integrity of crossing data. By automatically tracking and documenting changes made to a crossing record, the system provides a clear and comprehensive audit trail. The ability to filter, sort, and review this history ensures that users can easily access relevant information, whether they are reviewing recent changes or tracking the complete history of a crossing.

Grade Crossing History					
				CLEAR ALL FILTERS	EXPORT LIST
Date/Time	Action	New Data	User	User Role	Company
Date/Time	Action	New Data	User	User Role	Company
02/05/2025 16:56:44	PUC Docket #	A-77777777	t-pdgcmstdga3	PD-GCMS-DGCA	Penndot
02/05/2025 16:54:08	PUC Docket #	56565	t-pdgcmstdga3	PD-GCMS-DGCA	Penndot
01/30/2025 13:30:06	Inspection Completed	Inspection Completed	t-pdgcmstdga3	PD-GCMS-DGCA	Penndot
01/30/2025 13:29:47	Inspection Completed	Inspection Completed	t-pdgcmstdga3	PD-GCMS-DGCA	Penndot
01/30/2025 13:22:26	PUC Docket #	AB-1827391	t-pdgcmstdga3	PD-GCMS-DGCA	Penndot
01/30/2025 11:56:16	Surface Condition	3	t-pdgcmstdga3	PD-GCMS-DGCA	Penndot
01/24/2025 17:02:45	PUC Docket #	B-999999999	t-pdgcmstdga3	PD-GCMS-DGCA	Penndot

Create a Project in GCMS

A project must be created in GCMS first before any work can be done on it in the system. Only a PennDOT user can create a project. To begin, move the mouse cursor over the **Create Projects** heading on the top menu bar and click **Create GC Projects**.



GCMS Project Types

Typically, the project manager creates a grade crossing project in GCMS when the railroad coordination phase is ready for initiation. In order to create a project in GCMS, the project must first exist in MPMS.

When the grade crossing project is created in GCMS, it will either be designated as a Highway/Bridge Project or a Safety Project which is determined by the Project Class in MPMS. Highway/Bridge and Safety Projects have slightly different workflows in GCMS.

Highway/Bridge Projects

Highway and/or Bridge Projects typically involve the construction of new highways or bridges, or improvements to existing ones, at highway-railroad crossings, including at-grade crossings within the project's limits of work.

When creating a project in GCMS, selecting an MPMS project with a project class other than "Rail Highway Grade Crossing" will create a Highway/Bridge Project. These projects are marked with a highway and bridge icon next to the MPMS number on the Dashboard lists.



Highway/Bridge Projects must have a Let Date that is 12 years or less in the future.

Safety Projects

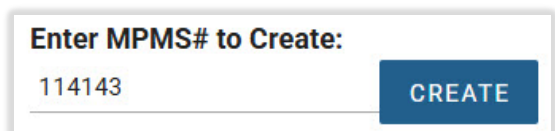
Safety Projects typically involve improvements to existing highway-railroad grade crossings and are considered "stand-alone" projects, independent of the Department's Highway Design Process. These projects are usually minor to moderately complex and are funded through the Section 130 Safety Program or Section 148 Safety funding. They often include the installation of warning devices such as lights, gates, cantilevers, or a combination of these.

When creating a project in GCMS, selecting an MPMS project with a project class of "Rail Highway Grade Crossing" will create a Safety Project. These projects are marked with a railroad crossing icon next to the MPMS number on the Dashboard lists.



Creating a New Project

Selecting **Create GC Projects** from the **Create Project** menu navigates to the **Create Grade Crossing Project from MPMS** page, which contains a table listing all the MPMS projects that are available to create in GCMS. Immediately above the table is a text entry box with the **CREATE** button. Use this box to begin a new project by typing in the MPMS number and clicking the button.



Enter MPMS# to Create:

114143

CREATE

If the number belongs to a valid MPMS project, GCMS will display the **Create New Grade Crossing Project** page. The first section shows the project information taken from MPMS.

Create New Grade Crossing Project

PROJECT INFORMATION | **LOCATION INFORMATION**

Project Information

MPMS & Environmental Information


MPMS #: 114143	SR-SEC: 3006-023
County: Snyder	Municipality: West Perry (2TWP)
Project Improvement Description: Bridge Replacement	Project Class: Bridge Replacement
Project Location Description: SR 3006 over Tributary of the West Branch of Mahantango Creek in West Perry Township, Snyder County	PM Email: bryamiller@pa.gov
Federal Project Status:	PM Phone: (570) 368-4330
Project Environment Documents: Categorical Exclusion Document	
Project Manager: Bryan S. Miller	


Review the project information to confirm it is the correct project you were expecting, then click the **CREATE PROJECT** button at the bottom right of the screen.

Cancel the creation of the new project while on this page using the **CANCEL** button at the bottom right of the screen. GCMS will return to the Dashboard and the new project will not exist in the system.

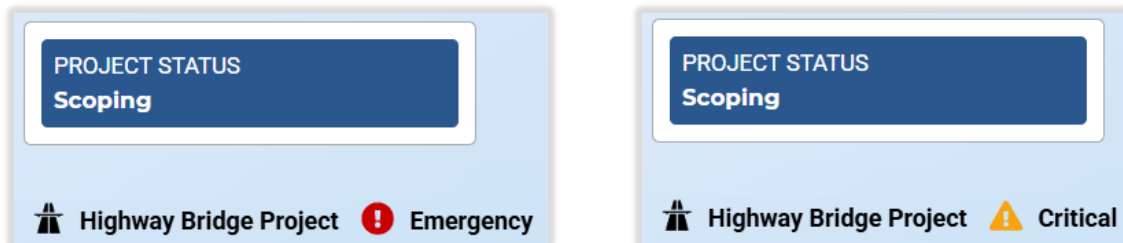
Project Priority

GCMS allows PennDOT users to designate projects as **Emergency** or **Critical** so that the project tasks are prioritized appropriately.

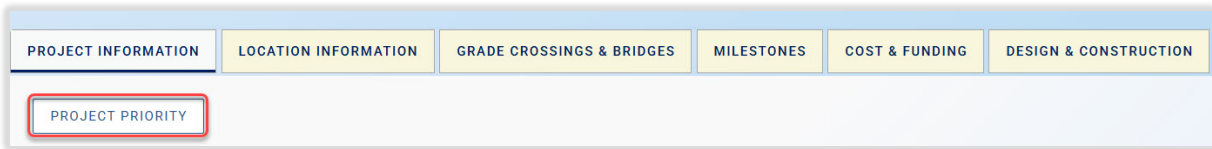
Emergency projects are those that must be started very soon to replace infrastructure damaged by catastrophic events like a natural disaster. For emergency designation, an emergency proclamation document is required to be uploaded. These projects are indicated by a red exclamation icon next to the MPMS number on the Dashboard lists. These projects are also prioritized in the My Upcoming Tasks section. 

A Critical project is one that the District has determined should be given priority. The project has a yellow exclamation icon next to the MPMS number on the Dashboard lists. Also, tasks associated with a critical project are prioritized to the top of the My Upcoming Tasks section. 

If a project is Emergency or Critical, that priority also shows beneath the Project Status on the Project Page.



To change the Project Priority, go to the Project Information page and click the **Project Priority** button beneath the Project Information tab.



This opens the **Update Project Priority** window that gives the options to update the Project Priority. A space is also provided to upload a file and assign the **Document Type** as the **Emergency Proclamation**, which is required for an emergency.

Click the **SAVE** button at the bottom right of the window. The priority update window closes and the project priority is updated and shown on the project page.

The 'Update Project Priority' window contains the following elements:

- Project Priority:** Radio buttons for Emergency (selected), Critical, and Normal.
- Reason:** A text input field containing 'Severe flooding events.' with a '127 characters remaining' indicator.
- Project Priority Document List:** A table with columns: File Name, Version, Document Type, Date Uploaded, File Size (MB), Railroad, DOT#, Notes, and Action. It contains one row for 'Sample Upload Document 1.pdf' with an 'UPDATE' action button.
- Upload Project Priority Documents:** A section with a 'Maximum allowable file size is 500 MB.' notice, a 'SELECT FILES TO UPLOAD' button, and a 'DROP FILES HERE' area with a dashed border and a hand icon.
- Document List Table:** A table with columns: File Name, Document Type, Date Uploaded, File Size (MB), Railroad, DOT, Notes, and Action. It currently shows 'No Documents Found.'
- Buttons:** 'UPLOAD DOCUMENTS' and 'SAVE' (highlighted) buttons at the bottom right, along with a 'CANCEL' button.

Set PennDOT Project Team

The PM or another PennDOT user assigns the PennDOT staff or consultants who will be involved in a project so they can complete their relevant tasks. These members comprise the Project Team.

As steps are completed in each status of a project in GCMS, new tasks are generated for the next requirements to complete. These tasks are assigned to users based on their roles indicated in the Project Team, so setting these PennDOT team roles soon after creating the project is important. Completing this page helps ensure that tasks are given to the correct staff in GCMS.

Go to the Project Page to begin establishing the project team. Click **Manage Project > Project Team**. GCMS will navigate to the Project Team page.

The Project Team page lists the team roles required for the project with a selection box beside each one.

Use these selection boxes to assign a user to each role from its respective dropdown options. A user will already be assigned by default, but these can be changed. After the whole team is assigned, be sure to click the **SAVE** button at the bottom.

See the [PennDOT Project Team](#) section for a list of user roles that can be assigned to each team role.

PennDOT Team	
Project Manager: *	GCA District3 (PD-GCMS-DGCA) ▼
Project Designer: *	GCA District3 (PD-GCMS-DGCA) ▼
PUC Application Coordinator: *	GCA District3 (PD-GCMS-DGCA) ▼
Grade Crossing Coordinator: *	GCA District3 (PD-GCMS-DGCA) ▼
District Agreement Coordinator: *	GCA District3 (PD-GCMS-DGCA) ▼
Central Office Coordinator: *	PD CO1 (PD-GCMS-CO) ▼
Construction Coordinator: *	GCA District3 (PD-GCMS-DGCA) ▼
Closeout Coordinator: *	GCA District3 (PD-GCMS-DGCA) ▼

Project Status 1 - Scoping

A project is set to the status of Scoping after it is created. During this project status, the details of the project are examined and PennDOT gathers and provides the information necessary for coordination with the railroad companies.

PROJECT STATUS
Scoping

Scope Railroad Involvement

Start entering crossing scope data on the **Project Information** screen. Go to the Project Information tab and scroll down to the **Scope Railroad Involvement** section.

Note: A Crossing Scope description must be provided and is a requirement to Complete Scoping.

Scope Railroad Involvement

[View/Upload Scope Field View Document](#)

Crossing Scope:

850 characters remaining.

Scoping Field View Comments:

850 characters remaining.

ADD COMMENT CANCEL

SAVE CANCEL COMPLETE SCOPING

The final section of the scoping information is for the optional Scoping Field View Comments. If a comment is entered, the user must click the **ADD COMMENT** button below the input box in order for it to be saved to the project information.

Be sure to use the **SAVE** button at the very bottom right of the page to store any information entered.

To view or upload associated scoping field view documentation, use the **View/Upload Scope Field View Document** link at the top of the section. This brings the user to the Scoping Field View Documents window, where the existing SFV files are listed and where additional ones may be added.

[View/Upload Scope Field View Document](#)

After uploading a file by selecting it or dragging it into the drop area, the file name shows at the bottom of the page, and the Document Type "Scoping Field View Documents" is automatically assigned. Press the **UPLOAD DOCUMENT** button just below to finish adding the file to GCMS—it will then appear in the SFV document list above.

File Name	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT	Notes	Action
Sample Upload Document 1.pdf	Scoping Field View Document	02/06/2025	0.06				REMOVE X

UPLOAD DOCUMENTS

Project scoping can be finished by using the **COMPLETE SCOPING** button at the bottom of the page if all the following are complete: Crossing Scope description has been entered for the project, at least one Impacted and/or Nearby Crossing has been added to the project, at least one Railroad has been added to the project, at least one Contact has been identified for each Railroad, and at least one Railroad has been authorized for engineering.

Pennsylvania One Call

The optional **PA1 Call** section follows the **Scoping Railroad Involvement** section and is only found on GCMS Safety Projects.

If no existing records are found, click the **+ ADD PA1CALL** button to open a modal window where a new entry is made. Complete all the fields in the window and **SAVE** the data to add the PA1Call information.

PA1 Call					
Serial#	Date	Project Phase	County	Municipality	Action
No records found					
ADD PA1 CALL					

Impacted and Nearby Crossings

From the project page in GCMS, click the **Grade Crossings & Bridges** tab. This brings users to the **Grade Crossings & Bridges** page which allows users to add and manage impacted and nearby crossings for the project.

For projects that have DOTs identified as impacted in MPMS, the **Crossings & Bridges** page displays a list of Crossings Impacted. These impacted crossings are automatically added to the list, and the Source field for each DOT will indicate MPMS, denoting that the DOTs were initially identified in the MPMS system.

Crossings Impacted									
Indicates a Railroad has been associated to an impacted crossing. In order to remove an impacted crossing you must first remove the Railroad.									
DOT#	RR Owner	BR-Key	RR Milepost	Crossing Status	Crossing Position	Lat/Long	Source	Action	View on Map
526739R			0235.140	Open	At Grade	41.1683201,-76.8773346	MPMS	REMOVE	
526740K			0235.050	Open	At Grade	41.1693005,-76.8760171	MPMS	REMOVE	
526741S			0234.940	Open	At Grade	41.1702676,-76.8745049	MPMS	REMOVE	

It is important to note that DOTs identified as impacting the project cannot be removed from the Crossings Impacted list, as they are sourced directly from MPMS. The **REMOVE** button will be inactive for these records, preventing users from deleting them.

The **Nearby Crossings** section allows users to designate crossings (and the associated Railroads) as being nearby, but not directly involved with the project.

Nearby Crossings									
DOT#	RR Owner	BR-Key	RR Milepost	Crossing Status	Crossing Position	Lat/Long	Source	Action	View on Map
No records found									

Adding a Crossing within the Vicinity to the Crossings Impacted or Nearby Crossings List


From the **Crossings Within the Vicinity (Non-Impacted)** list, users can utilize two key buttons under the Action column:





Action
ADD TO IMPACTED + ADD TO NEARBY +

- **ADD TO IMPACTED+:** This button adds a crossing from the Non-Impacted list to the Crossings Impacted list. The Source field for the added DOT will reflect “Within Vicinity” to indicate that it was manually selected as impacting the project.
- **ADD TO NEARBY+:** This button moves a crossing to the Nearby Crossings list.

Additionally, users can remove DOTs from the Crossings Impacted and Nearby Crossings lists by clicking the **REMOVE** button, which will return the DOT back to the Non-Impacted list.

Crossings Impacted

 Indicates a Railroad has been associated to an impacted crossing. In order to remove an impacted crossing you must first remove the Railroad.

DOT#	RR Owner	BR-Key	RR Milepost	Crossing Status	Crossing Position	Lat/Long	Source	Action	View on Map
526761D			0220.710	Open	At Grade	41.2396515;-76.987356	MPMS	REMOVE 	
589148L			0182.00	Closed	At Grade	41.1699604;-76.8741434	Within Vicinity	REMOVE 	

Manually Add and Remove Crossings that are Located Outside the Vicinity

For DOTs that are outside the 500 foot vicinity of the project, users can manually add them to the Crossings Impacted or Nearby Crossings lists. To add a DOT outside the vicinity, enter the DOT number into the **Add a Crossing Outside the Vicinity** field and click the **SEARCH** button.

Add a Crossing Outside the Vicinity

Once the DOT record is verified, users can click the **ADD TO IMPACTED LIST** or **ADD TO NEARBY LIST** button to add the DOT to the Crossings Impacted or Nearby Crossings list. The Source for this entry will be the user's ID, indicating that the crossing was manually added.

DOT#	RR Owner	BR-Key	RR Milepost	Crossing Status	Crossing Position	Lat/Long
051620D	CSX		0000.980	Open	RR Over	40.511160;-79.792450
<div> ADD TO IMPACTED LIST ADD TO NEARBY LIST CLEAR </div>						

If a user attempts to add the same DOT more than once, the system will prevent this by displaying an error message. The system also allows users to remove these manually added DOTs from both the Impacted and Nearby lists using the **REMOVE** button.

Viewing Project Bridges

The Project Bridges section displays all bridge-related data for the project. To access this information, users can scroll down the **Crossings & Bridges** page to view the **Project Bridges** panel. This panel can be expanded or collapsed by clicking the arrow on the far right. If a test project does not have any BR-Keys (bridge identifiers) in MPMS, the Project Bridges list will be empty.

Adding Railroads and Contacts to Impacted Crossings

Once impacted crossings and/or nearby crossings have been added to the project, a railroad company must be added to each crossing and a contact must be selected for each railroad. If no railroads will be impacted, that must be specified in GCMS as well. See the [No Railroad Involvement](#) section for additional information.

While on the Project Page, click the **Manage Project > Add Railroads** to access the **Add Railroads To Project** page. Alternatively, users can access this page from the Grade Crossings & Bridges tab by clicking the **Add Railroads to Impacted Crossings** text link located at the top of the Project Grade Crossings section.

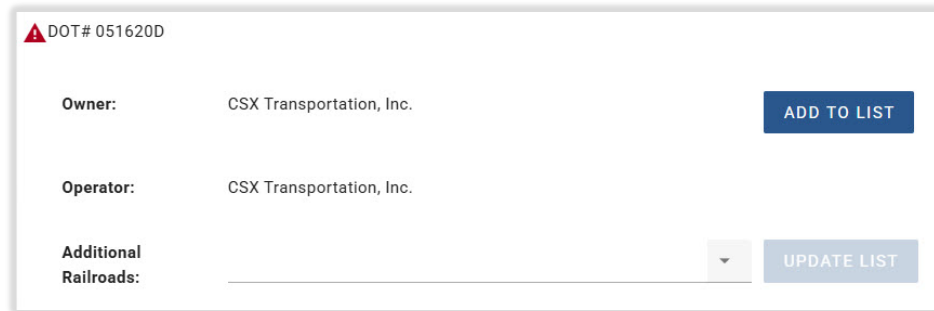
Project Grade Crossings
^

☐ No Railroad Involvement
☐ Project Pending New Crossing
[Add Railroads to Impacted Crossings](#)

Upon entering the **Add Railroads to Project** page, the system will alert the user if any crossings lack a railroad association, prompting them to add an owner or operator.

⚠ One or more Crossings do not yet have a Railroad associated with it. You must add an owner or an operator for each crossing.

To add a railroad to a crossing, users simply click the **ADD TO LIST** button to add the Owner or Operator to the desired crossing. Once added, the crossing will no longer display the warning icon, indicating that it now has an associated railroad. The **Railroads on Project** list will be updated to reflect the railroad's inclusion.



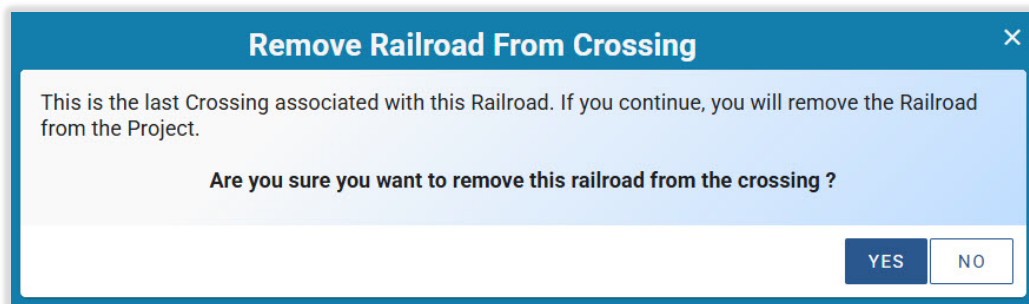
▲ DOT# 051620D

Owner: CSX Transportation, Inc. **ADD TO LIST**

Operator: CSX Transportation, Inc.

Additional Railroads: **UPDATE LIST**

If a user attempts to remove a railroad from a crossing, a confirmation prompt will appear, allowing the user to choose whether to proceed. If the removal is confirmed, the railroad will be removed from the **Railroads on Project** list, and the crossing will display a warning icon indicating it still needs a railroad association.



Remove Railroad From Crossing ✕

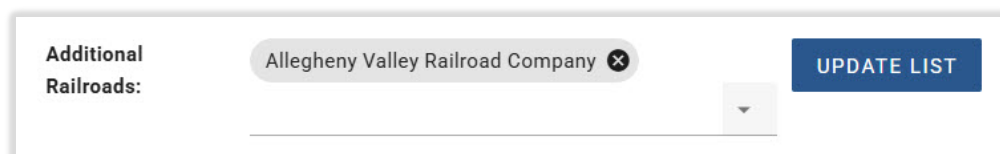
This is the last Crossing associated with this Railroad. If you continue, you will remove the Railroad from the Project.

Are you sure you want to remove this railroad from the crossing ?

YES NO

Adding and Removing Additional Railroads

For situations where additional railroads (ones not shown as the Owner or Operator) need to be added to a crossing, users can access the **Additional Railroads** drop-down list. By selecting one or more railroads from this list and clicking **UPDATE LIST**, the selected railroads are added to the **Railroads on Project** list for the associated crossing.



Additional Railroads: **UPDATE LIST**

To remove an additional railroad, users can click the “x” icon next to the selected railroad, prompting a warning message to confirm the removal. If confirmed, the railroad will be removed from the project, and if it is no longer associated with any other crossings, it will be removed entirely from the Railroads on Project list.

Adding Railroad Contacts

Adding contacts to a railroad can be done through the **Add Railroads to Project** page. Once a Railroad has been added to the project it appears in the **Railroads on Project** list.

Users will then click the **ADD CONTACTS** button located in the Action column of this list.

Railroads on Project

Railroad	Crossings	Contact(s)	Action
Allegheny Valley Railroad Company	DOT# 051620D		ADD CONTACTS
CSX Transportation, Inc.	DOT# 051620D		ADD CONTACTS

Users can then view and select from a list of contacts assigned to the railroad, by clicking the checkbox in the first column.

Add Contacts

	Name	Email	Phone	GCMS User ID	GCMS User Role
<input type="checkbox"/>	Tim Allen	tim@anyemail.com	(123) 456-7890		

SAVE

CANCEL

If the contact you want to add is not shown, the user can add a new railroad contact through the **Admin > Maintain Railroad Companies** menu. Once contacts are selected, users can click **SAVE**. When saved, the contact information will be associated with the railroad for the project.

No Railroad Involvement

For projects that have been identified to have no impacted crossings and railroads, select the **No Railroad Involvement** checkbox on the Grade Crossings & Bridges page under the Project Grade Crossings section heading.

Project Grade Crossings

☐ No Railroad Involvement

This will trigger a warning message confirming that you want to proceed. Clicking **OK** will update the project status to **Completed**. Once this occurs, a **Railroad Certification** letter certifying there is no railroad involvement will be automatically generated and saved in the **Project Documents** section. Additionally, this letter will be sent to the **District Contract Management Unit** for inclusion in the ECMS contract.

Warning

WARNING: By selecting 'No Railroad Involvement' you are certifying there are no railroad crossings and/or railroad tracks impacted by the limits of the project. A letter certifying there is no railroad involvement will be generated and sent to your District Contract Management Unit for inclusion into the ECMS contract.

Click OK to continue and set the Project Status to Completed.
Click Cancel to return to the page and clear the No Railroad Involvement checkbox.

OK

CANCEL

When a project status is marked as **Completed**, it will no longer appear in the **My Upcoming Tasks** or **My Active Projects** lists on the Dashboard.

Reopening a Completed Project

If you need to make changes or continue working on a project that has been marked as Completed, you can reopen it by following these steps:

REOPEN PROJECT

1. Click the **REOPEN PROJECT** button below the Project Status box.
2. A confirmation pop-up will appear, asking you to confirm whether you wish to reopen the project. If you click Cancel, no changes will be made, and the project will remain in the completed status.
3. If you click **OK**, the project status will be updated to Scoping, and the project will reappear in both the **My Upcoming Tasks** and **My Active Projects** lists.

Entering Project Involvement

To update the Project Involvement details for your project, open the Project Page and navigate to **MANAGE PROJECT> Project Involvement**. Once on the **Project Involvement** page, complete the PennDOT Involvement, PUC & Public Involvement, and Railroad Involvement sections.

Note: When completing fields on this page, users do not need to complete the entire page before saving. This allows users to leave the page and return to enter information at a later time, if needed.

Entering PennDOT Involvement Details

On the **PennDOT Involvement** section of the page, users will complete the following fields:

- **Does Railroad R/W need to be acquired?** (Default: No)
 - If **Yes** is selected, the user must also choose an Appropriation Type (i.e., PennDOT Amicable Settlement and/or PUC Appropriation) from the dropdown menu.
- **Is there Utility Involvement?** (Default: No)
 - This option is only shown for GCMS Safety Projects.
- **Additional PennDOT Involvement Detail** (Default: blank)
 - Here PennDOT users may add optional involvement details if needed.

Project Involvement

PennDOT Involvement

Does Railroad R/W need to be acquired?:

☐ Yes ☒ No

Appropriation Type:

Is there Utility Involvement?:

☐ Yes ☒ No

Additional PennDOT Involvement Details:

500 characters remaining.

Entering PUC Involvement Details

Next, review the **PUC & Public Involvement** section of the **Project Involvement** page. Users will complete the following fields:

- **Is PUC review/approval required?** (No Default)
 - Safety Projects - Selecting **Yes** activates the **Manage PUC Parties of Record** page (MANAGE PROJECT> PUC Involvement>PUC Parties of Record).
 - Highway/Bridge Projects - Selecting Yes activates the **PUC Communications** page (MANAGE PROJECT> PUC Involvement>PUC Communications) and the **Manage PUC Parties of Record** page (MANAGE PROJECT> PUC Involvement>PUC Parties of Record).
- **Have Objections been registered with the PUC?** (Default: No)
 - Select **Yes** or **No**.
- **Is Project in Litigation?** (Default: No)
 - Select **Yes** or **No**.
- **Additional PUC Involvement Detail** (Default: blank)
 - Here PennDOT users may add optional involvement details if needed.

PUC & Public Involvement

Is PUC review/approval required?: ☐ Yes ☐ No

Have Objections been registered with the PUC?: ☐ Yes ☒ No

Is Project in Litigation? ☐ Yes ☒ No

Additional PUC Involvement Details:

500 characters remaining.

Entering Railroad Involvement Details

In the **Railroad Involvement** section, review the list of railroads associated with the project, which is displayed based on the information entered in the **Add Railroads to Project** page. The section includes the following fields which are to be entered by the user:

- **Work Type** (Default: blank)
 - A PennDOT or Railroad user will enter the Work Type(s) for each Railroad on the project. Work Type options include Contractor Bid, Continued Contract, Lump Sum, and/or Force Account Work.
 - Alternatively, Work Type(s) can also be edited or entered by a Railroad User on the **Railroad Work Summary** page (Manage Project > Railroad Work Summary).
- **Authorize Engineering?** (Default: blank)
 - This question must be answered for each Railroad by selecting either **Yes** or **No**. A selection is required to complete scoping.
- **Railroad Project Identifier** (Default: blank)

- A PennDOT user can enter the unique Project Identifier used by the Railroad to reference the project. This Project Identifier can also be entered by a Railroad User on the **Railroad Work Summary** page (Manage Project > Railroad Work Summary).

After entering the necessary information, click **SAVE** to save the updates. A “Successfully Saved” message will appear at the top of the page, confirming your changes.

Railroad Involvement			
Railroad	Work Type	Authorize Engineering?	Railroad Project Identifier
CSX Transportation, Inc.	<input type="text"/>	<input type="radio"/> Yes <input type="radio"/> No	<input type="text"/>
			<input type="button" value="SAVE"/> <input type="button" value="CANCEL"/>

Scoping Railroad Costs

GCMS allows a PennDOT user to enter a scoping-level estimate of railroad costs. These costs can be used as a level of magnitude estimate and can be compared with the railroad funding programmed in MPMS.

These scoping costs are contained on the **Costs & Funding** tab of the Project Information page. On that screen, scroll down to the **Railroad Costs** section of the page. Then press the **ADD RAILROAD ESTIMATE** button under the Scoping Railroad Costs table. The system captures costs at the Railroad Company level, and notes can be added to specify details about the estimate. Press the **SAVE** button to save the estimate. The system totals all costs entered. Use the **EDIT** and **DELETE** buttons in the table rows to revise or delete an estimate.

Scoping Railroad Costs			
Railroad	Notes	Estimate	Action
Allegheny Valley Railroad Company		\$15,000.00	EDIT DELETE
CSX Transportation, Inc.		\$55,000.00	EDIT DELETE
TOTALS		\$70,000.00	
<input type="button" value="ADD RAILROAD ESTIMATE"/>			

Enter Milestone Dates

Depending on the type of project you are viewing (i.e., Highway/Bridge Project or Safety Project), the entry of Milestone Dates will be different. See the below two sections for guidance on completing milestone dates.

Highway/Bridge Project Milestones

For Highway/Bridge Projects the Scoping phase also involves entering dates for the [Project Milestones](#). Milestone dates should be set before sending the [Engineering Authorization](#) so the railroads' tasks are given correct due dates.

Select a project to go to its Project Information screen. Click the **Milestones** tab on the row of tabs above the project information.

The screenshot shows the 'Project Information' screen with a row of tabs: PROJECT INFORMATION, LOCATION INFORMATION, GRADE CROSSINGS & BRIDGES, MILESTONES (highlighted with a red box), COST & FUNDING, and DESIGN & CONSTRUCTION. Below these tabs is a 'PROJECT PRIORITY' button. The title 'Project Information' is displayed at the bottom right of the tab area.

Each milestone has a row of dates in the Project Milestones table. Click inside one of the boxes in the **Project Schedule** column to highlight the text and type a new date. Alternatively, click the calendar icon on the right side of the box to open a calendar and select a date. Be sure to click the **SAVE** button at the bottom right corner after making any changes.

Rather than entering or selecting each date individually, all the dates can be automatically generated for an MPMS project with the **USE MPMS SCHEDULE** button in the heading of the table. See Table 2 under the [Project Milestones](#) section for additional information on how this schedule is calculated. If Asta schedule dates are available for the project, the **USE ASTA SCHEDULE** button becomes active and allows for using those dates in the milestones table as well. GCMS fills the Project Schedule column with the suggested schedule dates it calculated.

The screenshot shows the 'Project Milestones' table. At the top, it says 'Suggested schedules are based on the ASTA Let Date or the MPMS Let Date.' and has links for 'Expand All' and 'Collapse All'. The table has five columns: Project Milestone (opened/closed), ASTA Suggested Schedule, MPMS Suggested Schedule, Project Schedule, and Actual Dates. There are buttons for 'USE ASTA SCHEDULE' and 'USE MPMS SCHEDULE'. The table lists various milestones with their corresponding dates and project schedule dates. At the bottom right, there are 'SAVE' and 'CANCEL' buttons.

Project Milestone (opened/closed)	ASTA Suggested Schedule	MPMS Suggested Schedule	Project Schedule	Actual Dates
Scoping (1/0)	10/18/2024	10/18/2024	mm/dd/yyyy	
Authorization (0/0)	11/17/2024	11/17/2024	mm/dd/yyyy	
Coordination (0/0)	05/26/2025	05/26/2025	mm/dd/yyyy	
Contract Development (0/0)	08/14/2025	08/14/2025	mm/dd/yyyy	
PS&E (0/0)		07/17/2025		07/17/2025
Let Date (0/0)	09/11/2025	09/11/2025		
Construction Notice to Proceed (0/0)		10/31/2025		
Construction Complete (0/0)				
PUC Closeout (0/0)				
Closeout (0/0)			mm/dd/yyyy	
GCMS Project Closed (0/0)				

Safety Project Milestones

Safety Projects do not require the entry of Project Schedule dates. Instead, Safety Projects track milestones on the **Safety Project Milestones** page (**Manage Project>Safety Project Milestones**). Here users can view the milestones associated with each project status in GCMS, enter completion dates for a milestone, and check milestone statuses. Milestones that have been completed are denoted with a green checkmark and will show a completion date next to the milestone. If a milestone is not relevant to a particular project, the milestone is inactive and the checkbox is greyed out.

The screenshot shows the 'Safety Project Milestones' page. At the top, there's a header 'Safety Project Milestones' with links for 'Expand All' and 'Collapse All'. Below this is a section titled 'Scoping' with an upward arrow. The list of milestones includes:

Milestone	Status	Completion Date
Environmental Clearance Obtained	Completed (Green Checkmark)	10/09/2012
Right of Way Clearance Obtained	Incomplete (Greyed Out)	
Utility Clearance Obtained	Incomplete (Greyed Out)	<input type="text" value="mm/dd/yyyy"/>
Construction Phase D-4232 Approved	Completed (Green Checkmark)	05/08/2013
Scoping Complete	Incomplete (Greyed Out)	

Some milestones will require that the user enter a completion date into the provided date field, as well as upload the required documentation. In these cases, a notification will appear next to the entered milestone date informing the user of what document upload is required to complete the milestone.

The screenshot shows the 'Coordination' section with an upward arrow. It displays a milestone 'PUC Application e-Filed' with a date '02/07/2025' and a notification: 'PUC Application must be uploaded to complete this milestone.'

Milestone	Status	Completion Date	Notification
PUC Application e-Filed	Incomplete (Greyed Out)	02/07/2025	PUC Application must be uploaded to complete this milestone.

The user can then upload the required documentation on the Project Documents page (**MANAGE PROJECT>Project Documents**), selecting the corresponding Document Type, to complete the milestone.

Complete Scoping

Once all of the following actions have been completed, project Scoping status can be finalized.

- Crossing Scope description has been entered for the project.
- At least one Impacted and/or Nearby Crossing has been added to the project.
- At least one Railroad has been added to the project crossing.

- At least one Contact has been identified for each Railroad.
- At least one Railroad must be authorized for engineering.

From the **Project Information** page, scroll to the bottom of the page and click the **COMPLETE SCOPING** button. If all requirements have been met, the project will progress to Authorization status. If all requirements have not been met, the user receives a notification at the top of the page noting what requirements have not yet been met.



Project Status 2 - Authorization

Once the project scoping has been completed and confirmed using the **COMPLETE SCOPING** button, the project status progresses to Authorization. During the Authorization status, the Engineering Authorization is sent the railroads, allowing them to proceed with preliminary engineering activities for the subject project.

PROJECT STATUS
Authorization

Send Engineering Authorization

Railroads are formally notified about the upcoming PennDOT project using the Engineering Authorization notification. To send this notification to a railroad, project scoping must have been completed using the **COMPLETE SCOPING** button on the Project Information tab.

Click the **Manage Project** button on the Project Page and choose **Project Workflow Notifications** in the dropdown menu. GCMS navigates to the **Project Workflow Notifications** page.

This page lists all Railroads that were selected to receive an Engineering Authorization. The Engineering Authorization notification can be sent to all railroads at the same time using the **SEND TO ALL RAILROADS** button or only to selected railroads using the **SEND** buttons shown below.

Project Workflow Notifications		
Railroads	Engineering Authorization	Notice To Proceed
	SEND TO ALL RAILROADS	SEND TO ALL RAILROADS
CSX Transportation, Inc.	SEND	SEND
Norfolk Southern Railway Company	SEND	SEND

The notification is sent to the railroad contact(s) designated on the **Add Railroads to Project** page. The recipient(s) can then use the link in the email to download the Engineering Authorization letter.

In addition to the Engineering Authorization letter, the email also includes a PDF of the D-4279 and D-4279A forms.

Railroad Work Summary Page




The Railroad Work Summary page is specifically designed for railroad companies to manage and document their involvement in grade crossing projects. Click the **Manage Project** button on the Project Page and choose **Railroad Work Summary** from the dropdown menu. On this page, users can enter or edit Work Types, and assign Project Identifiers. It also provides a comprehensive view of associated crossing details, such as DOT numbers, crossing types, and location information.

Additionally, the page allows railroad companies to document Planned Work, such as engineering reviews or construction, and upload relevant project documents.

This ensures that all project details are accurately tracked and updated, streamlining the management of railroad-specific project information.

Forms D-4279 and D-4279A

Forms D-4279 and D-4279A are used to gather necessary railroad crossing data for project design and contractor bids. These forms are sent to the railroads and included with the Engineering Authorization notification.

GCMS Attachments for Engineering Authorization Notification							
GCMS - Project MPMS Number: 106238, Bradford County, SR-Sec 4011-004							
File Name	Version	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT#	Notes
 Eng_Auth_106238_CSX.pdf	1	Engineering Authorization	02/10/2025	0.036	CSX Transportation, Inc.		Engineering Authorization
 D-4279_106238_CSX_051620D.pdf	1	D-4279 Form	02/10/2025	0.163	CSX Transportation, Inc.	051620D	
 D-4279A_106238_CSX_051620D.pdf	1	D-4279A Form	02/10/2025	0.321	CSX Transportation, Inc.	051620D	

The railroads complete and return the forms by uploading them to the **Railroad Work Summary** page in GCMS.

Once on the **Railroad Work Summary** page, scroll down to the Railroad Work Summary Documents section. Click the **Upload Railroad Work Summary Documents** text link and then select or drop the file into the space provided.

Once the document appears in the upload list, select the “D-4279 Railroad Crossing Data for Design” or the “D-4279A Railroad Crossing Data for Contractor” as Document Type depending on the form being uploaded. Optionally, add any notes, then click the **UPLOAD DOCUMENTS** button to complete the upload.

To ensure proper project development, these forms must be attached to the Project Development Checklist in ECMS to receive the Railroad Certification and should be returned before the PUC Field Conference and, at the latest, before plans are submitted to the PUC for approval.

View/Upload Railroad Work Summary Documents

Upload Railroad Work Summary Documents
Maximum allowable file size is 500 MB.

SELECT FILES TO UPLOAD

D-4279 Railroad Crossing Data for Design
D-4279A Railroad Crossing Data for Contractor
Railroad Insurance Requirements
Railroad Specification

File Name	Version	Date Uploaded	File Size	Railroad	DOT	Notes	Action
Sample Upload Document 1.pdf	Required	02/12/2025	0.06	Blairsville And Indiana Railroad			REMOVE X

UPLOAD DOCUMENTS

CLOSE

Preliminary Project Plans

One of the steps of the Authorization status is to upload and send a minimum 30% plan for the project.

Note: Providing plans to the Railroad is only required for Highway/Bridge projects and is not an option for Safety Projects.

Preliminary plans are those that will be used by the railroad to verify and review the scope of work involved on the project.

Sending the 30% Plans

A task to “Send 30% Plans” is created for the user assigned to the Grade Crossing Coordinator team role for the project, and that task will appear in the Grade Crossing Coordinator’s My Upcoming Tasks list on the Dashboard. The user can click the task to be taken to the **Railroad Plan Review** page. Alternatively, the user can go to the Project Page and click **Manage Project > Railroad Plan Review**.

From the **Railroad Plan Review** page, under the Project Plans section, click the text link to **Upload Project Plans**.

[< Return to Project Information Page](#)

Railroad Plan Review

Project Plans

Upload Project Plan

File Name	Version	Document Type	Date Uploaded	File Size	Railroad	DOT#	Notes	Action
No Data Available								

SEND 30% PLANS SEND 60% PLANS SEND 90% PLANS SEND 100% PLANS

Date Sent:

The **Upload Project Plan Documents** modal window opens. Use the button or the drag-and-drop feature to upload the plan. Once the file finishes uploading, assign the **Document Type** "30% Plan" in the dropdown selection on the row on which the file name appears.


Optionally type a note for the document, then click the **UPLOAD DOCUMENT** button at the bottom of the page.

Now the newly added plan file appears in the Project Plans list and the button to **SEND 30% PLANS** becomes active.

Clicking the **SEND 30% PLANS** button sends the 30% Plan file to all the railroads on the project that had been authorized for engineering on the **Project Involvement** page. Once sent, the current date populates in the "Date Sent" row below the **SEND 30% PLANS** button, denoting that the plan has been sent.

The notification is sent to the railroad contact(s) designated on the **Add Railroads to Project** page. The recipient(s) can then use the link in the email to download the plan file that was sent.

[Upload Project Plan](#)

File Name	Version	Document Type	Date Uploaded	File Size (MB)	Railroad
 Sample Upload Document 1.pdf	1	30% Plan	02/07/2025	0.057	

SEND 30% PLANS
SEND 60% PLANS
SEND 90% PLANS
SEND 100% PLANS

Date Sent: 02/07/2025

Updating Plans

If revised project plans become available, new documents can be added to the project and resent for review by the railroads. PennDOT can do this by replacing the existing plans file with a new one.

To replace the "30% Plan" document with a new version, find it in the list of uploaded files on the **Railroad Plan Review** page. The Action column on the right side of the list has an **UPDATE** button. Click the button, then select or drag-and-drop the new file in the modal window to upload.

Once the new plans document has been uploaded, resend the plans to the Railroads by clicking the **SEND 30% PLANS** button again. The new document is sent to the Railroads and the Date Sent text below the send button updates to reflect the current date.

Note: As preliminary design progresses towards final design, and 60% and 90% plans files become available, these new plans should be uploaded. In this case, the user should use the guidance in the [Sending 60% Plans and 90% Plans](#) section.

Railroad Work Type Selection

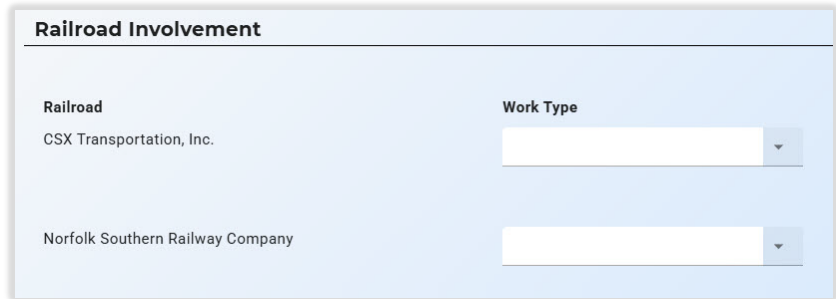
Before physical construction can be accomplished on a project, a construction contract must be in place. Work Type refers to the type of construction contracts that will be used by the Railroad to complete the work.

When selecting Work Type(s), one or more of the following options may be selected:

- **Contractor Bid** - Used mostly by the Short Line Railroads where their own forces cannot perform the work.
- **Continuing Contract** - Where the work is performed by an exclusive contractor for the Railroad.
- **Lump Sum** - Where the Railroad agrees to perform the work at an agreed-upon price.
- **Force Account Work** - Used mostly by the major railroads. Work is performed by the Railroad's own forces.

Work Type(s) can be entered by either a PennDOT or Railroad user.

A PennDOT user can enter the Work Type(s) on either the **Project Involvement** page (**Manage Project > Project Involvement**) under the Railroad Involvement section, or on the **Railroad Work Summary** page (**Manage Project > Railroad Work Summary**) under the Project Details section. Adding the Work Type(s) to either page updates the value on both pages. Press the **SAVE** button at the bottom of the page to store the selection(s).



Railroad Involvement	
Railroad	Work Type
CSX Transportation, Inc.	<input type="text"/>
Norfolk Southern Railway Company	<input type="text"/>

Close Out Authorization Status

A project transitions from Authorization status to Coordination status once all of the following actions have been completed:

- Engineering Authorization sent to the Railroads.
- A minimum of a 30% Plan has been sent to all Railroads that received an Engineering Authorization (only required for Highway/Bridge Projects)
- All Railroads that were sent an Engineering Authorization have a Work Type selected.

Project Status 3 - Coordination

Once Authorization status has been completed, the project moves into Coordination status. During this phase, PennDOT coordinates with the Railroad(s) on plan reviews, railroad estimates, flagger needs, and begins the Contractor Bid process if needed. Additionally, PennDOT will begin coordinating PUC involvement (as required by the project).

PROJECT STATUS
Coordination

Railroad Plan Review

After the Grade Crossing Coordinator has sent the preliminary or final design plans to the railroad(s), the railroad(s) will review the plans and provide their comments and review documentation.

Railroad responses can be uploaded by both PennDOT and Railroad users on the **Railroad Plan Review** page (**Manage Project > Railroad Plan Review**) under the Railroad Responses section.

Start by clicking the text link to **Upload Railroad Responses**. The **Upload Railroad Plan Review Documents** modal window opens. Use the button or the drag-and-drop feature to upload the review documentation. Once the file finishes uploading, the **Document Type** "Railroad Plan Response" is automatically assigned to the file.


[Upload Railroad Responses](#)

File Name	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT	Notes	Action
Sample Upload Document 1.pdf	Railroad Plan Response	02/07/2025	0.06	Norfolk Sout...			REMOVE X

If a PennDOT user, select the railroad you are uploading a plan review for using the dropdown menu under the Railroad column. This is only required when there is more than one railroad on the project. This field will be prefilled when viewing as a Railroad user.

Optionally type a note for the document, then click the **UPLOAD DOCUMENTS** button at the bottom of the page. The railroad response now appears in the Railroad Responses table.

View the uploaded railroad responses by clicking on the blue File Name, which downloads the file from the browser.

File Name	Version	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT#	Notes	Action
 Sample Upload Document 1.pdf	1	Railroad Plan Response	02/07/2025	0.057	Norfolk Southern Railway Company			UPDATE

Sending 60% Plans and 90% Plans

During the PennDOT and Railroad coordination process, preliminary design progresses towards final design and 60% and 90% plans become available. These plans can be sent to the Railroads' for review in the same manner as the 30% plans were sent during Authorization status.

The user should navigate to the **Railroad Plan Review** page by clicking **Manage Project > Railroad Plan Review**.

From the **Railroad Plan Review** page, under the Project Plans section, click the text link to **Upload Project Plans**.

[< Return to Project Information Page](#)

Railroad Plan Review

Project Plans

[Upload Project Plan](#)

File Name	Version	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT#	Notes	Action
No Data Available								

[SEND 30% PLANS](#)
[SEND 60% PLANS](#)
[SEND 90% PLANS](#)
[SEND 100% PLANS](#)

Date Sent:

The **Upload Project Plan Documents** modal window opens. Use the button or the drag-and-drop feature to upload the plan. Once the file finishes uploading, assign the **Document Type** "60% Plan" or "90% Plan" from the dropdown selection on the row on which the file name appears.

Optionally type a note for the document, then click the **UPLOAD DOCUMENT** button at the bottom of the page.

The newly added plan file appears in the Project Plans list and either the **SEND 60% PLANS** or **SEND 90% PLANS** button becomes active.

Clicking the button sends the 60% or 90% Plan file to all the railroads on the project that had been authorized for engineering on the **Project Involvement** page. Once sent, the current date populates in the “Date Sent” row below the **SEND xx% PLANS** button, denoting that the plan has been sent.

A notification is sent to the railroad contact(s) designated on the **Add Railroads to Project** page. The recipient(s) can then use the link in the email to download the plan file that was sent.

Railroad Estimates

An estimate of costs for the proposed highway-railroad crossing improvement is required by PennDOT in order to draft the appropriate agreement.

Create Railroad Estimates

The railroad user begins the process of creating the Railroad Estimate package. As a Railroad user, select **Manage Project > Estimates, Agreements, Invoices > Railroad Estimates**. The system navigates to the **Railroad Estimates** page.

Click the **ADD** button to open the Railroad Estimate form.

The screenshot shows the 'Railroad Estimate' form. At the top left is a link '< Return to Estimate list'. The title 'Railroad Estimate' is centered at the top. Below the title, the section 'Railroad Details' is on the left, and 'Status: Draft' is on the right. The form contains several fields: 'Railroad: *' with a dropdown menu showing 'CSX Transportation, Inc.', 'SAP Vendor #:', 'FID #:' with the value '5460000720', 'Corporate Address:' with the value '500 Water Street Jacksonville PA 32202', 'Billing Type: *' with radio button options 'Cost estimate for Actual' (selected), 'Lump Sum', 'Preliminary Engineering', 'Construction', and 'Combination', 'Agreement Type: *' with radio button options 'Preliminary Engineering', 'Construction', and 'Combination', 'Project Type:' with the value 'Highway Bridge Construction Project', and 'Agreement #:' with an empty text box.

< Return to Estimate list

Railroad Estimate

Railroad Details **Status: Draft**

Railroad: * CSX Transportation, Inc. SAP Vendor #: FID #: 5460000720

Corporate Address: 500 Water Street Jacksonville PA 32202

Billing Type: * ☒ Cost estimate for Actual
☐ Lump Sum

Agreement Type: * ☐ Preliminary Engineering ☐ Construction
☐ Combination

Project Type: Highway Bridge Construction Project Agreement #:

If you are a railroad user, the Railroad name box at the top will be prefilled. PennDOT users will choose the Railroad name from the dropdown selection.

Next in the Railroad Details section, choose one of the **Billing Type** options. Lastly, select one of the **Agreement Type** options.

PennDOT users can enter the **Agreement Number** in the Agreement # field based on the District's numbering scheme.

The next section down, **Estimated Costs**, has form fields in which costs for the various portions of the project are entered. The text boxes in the column on the right side require dollar value inputs. As values are entered into each lettered section, the totals are automatically calculated near the bottom of the form.

Estimated Costs		
A. PRELIMINARY ENGINEERING		
B. CONSTRUCTION ENGINEERING		
C. CONSTRUCTION - SAFETY WARNING DEVICES		
D. CONSTRUCTION - CROSSING SURFACE		
E. CONSTRUCTION - HIGHWAY & BRIDGE		
F. PROTECTIVE SERVICES		
G. ADMINISTRATION, INDIRECT OVERHEAD & SUPERVISION		
H. CONTINGENCY		
I. TOTAL ESTIMATED RAILROAD COSTS		
Less Credits		
1. Salvage		
2. Miscellaneous		
Total Estimated Railroad Costs		\$0.00
J. TOTAL PROJECT COSTS		
PennDOT Share		\$0.00
Railroad Share		
K. TOTAL RAILROAD REIMBURSEMENT		\$0.00

Click the **SAVE** button at the bottom at any time to save the progress. Saving puts the form into Draft status, allowing the user to leave and then return to the page at a later time to complete it. The status of the estimate form is shown in the upper right corner of the form, as well as on the Railroad Estimates list. To make updates to a Railroad Estimate in Draft status, click the **EDIT** button in the Action column.

Agreement#	Agreement Type	Railroad Name	Estimate Status	Action
268723	Combination	CSX Transportation, Inc.	Draft	EDIT DELETE REVIEW

PennDOT's Railroad Estimate review and acceptance process is in the [Review and Accept Railroad Estimate](#) section below.

Additionally, any associated railroad estimate documentation can be uploaded at the bottom of the **Railroad Estimate** page, through the Estimate Documents section. Click the **Upload Estimate Document** text link and then select or drop the file into the space provided.

Once the document appears in the upload list, select either "Railroad Estimate Supporting Documents" or "Railroad Estimate of Cost" as Document Type from the dropdown menu. Optionally, add any notes, then click the **UPLOAD DOCUMENTS** button to complete the upload.

Review and Accept Railroad Estimate

A District user may access and review the Railroad Estimate form from the Railroad Estimate page list at **Manage Project > Estimates, Agreements, Invoicing > Railroad Estimates**. Click the **Review** text in the Actions column to open the form to the Railroad Estimate page.

Review the entries for the Railroad Estimate. The District user can also make edits and **SAVE** the changes.

Once the review of all the entries, selections, and any supporting documents is finished, click the **ACCEPT** button at the bottom right of the screen to accept the Railroad Estimate form.

If Accepted, the status of the form then shows as "Accepted" on the Railroad Estimates page list. A user can still select the **Review** action to see the details of the form, but no changes can be saved.

Note: Making a change to the Railroad Estimate form once it is in Submitted or Accepted status will pull the form out of that status and back into Draft status. The PennDOT user would need to accept the form again by clicking the **ACCEPT** button.

Once an Estimate has been Accepted, the system automatically generates a PDF using the “Railroad Estimate of Cost” as the Document Type. This file is saved to the Estimate Document section of the **Railroad Estimate** page as well as on the **Project Documents** page.

Alternatively, if the District decides to return the form to the railroad for additional information, the **RETURN** button is used. A modal window prompts for a reason for the return, which will explain the case to the railroad.



Entering Flagger Needs

A task to “Enter Flagger Needs” is created for the user assigned to the Grade Crossing Coordinator team role for the project, and that task will appear in the Grade Crossing Coordinator’s My Upcoming Tasks list on the Dashboard. The user can click the task to be taken to the **Project Flagger Needs** page. Alternatively, the user can go to the Project Page and click **Manage Project > Flagger Needs**.

Here the Railroad user would see a table listing all DOT#s to which their railroad company had been assigned. If a PennDOT user, DOT#s for all crossings and railroads on the project will be shown in the list.

[< Return to Project Information Page](#)

Project Flagger Needs

DOT#	Railroad	# Tracks	RR Milepost	Crossing Position	Location	Activity	# Flaggers	# Flagger Days	Action
DOT# 051620D	CSX Transportation, Inc.	1	0000.980	RR Over	40.511160,-79.792450				EDIT
DOT# 051620D	Norfolk Southern Railway Company	1	0000.980	RR Over	40.511160,-79.792450				EDIT

To add or edit flagger needs for a DOT#, click the **EDIT** button in the Action column of the list.

The **Edit Flagger Needs DOT# xxxxx** modal window appears which allows the railroad user to enter the flagger needs for the DOT# they are viewing.

Start by entering a value for the number of flaggers into the “# of Flaggers” field. If the value entered is greater than “0”, the “# of Flagger Days” and the “Select Activity” fields become required.

If the value entered for number of flaggers is “0”, the “# of Flagger Days” field remains inactive and the “Select Activity” field, although editable, is not required.

Edit Flagger Needs DOT# 051620D

DOT# : DOT# 051620D

RR Operator:
CSX Transportation, Inc.

RR Owner:
CSX Transportation, Inc.

of Tracks: **RR Milepost:**
[0000.980]

Crossing Position: **Location:**
RR Over 40.511160,-79.792450

of Flaggers: *
|

of Flagger Days:

Select Activity:

SAVE CANCEL

Enter the appropriate values for all fields, including selecting at least one Activity from the following options: Aerial Easement, Bridge Preservation, Bridge Rehab, Bridge Replacement, No Cost Flagging, Potential Encroachment, Structure Demolition, and/or Track Outage.

Once all required fields are completed, click **SAVE**. The window will close, and the values for # Flaggers and # Flagger Days will appear in the **Project Flagger Needs** list.

Entering Planned Work

A requirement of the Coordination status in GCMS is to enter “Planned Work” for each DOT# that a railroad is associated with. This is typically completed by a Railroad user, but can also be completed by a PennDOT user on the railroad’s behalf.

This is done by navigating to the **Railroad Work Summary** page. Go to the Project page and click **Manage Project>Railroad Work Summary**.

From the **Railroad Work Summary** page, scroll down to the **Crossing Details** section. This section lists all DOT# on the project that the railroad is associated with. Under the Planned Work column of the Crossing Details table, choose a Planned Work value from the dropdown menu. Options include Engineering Review Only Flagging, Construction, or Flagging & Construction.

Crossing Details

Crossing	Crossing Type	Milepost	Local Road	County	Branch or Line Name	Map Link	Planned Work	Work Order
DOT# 051620D	Private	0000.980	MILLTOWN RD	Allegheny	MAIN	View On Map	<div> Engineering Review Only Flagging Construction Flagging & Construction </div>	<input type="text"/> <input type="button" value="CANCEL"/> <input type="button" value="SAVE"/>

In addition to the Work Planned selection, users may also record the Railroad's Work Order number assigned to the project using the field under the Work Order column of the table.

Final Design Plans

Sending the 100% Plans

A task to "Send 100% Plans" is created for the user assigned to the Grade Crossing Coordinator team role for the project, and that task will appear in the Grade Crossing Coordinator's My Upcoming Tasks list on the Dashboard. The user can click the task to be taken to the **Railroad Plan Review** page. Alternatively, the user can go to the Project Page and click **Manage Project > Railroad Plan Review**.

From the **Railroad Plan Review** page, under the Project Plans section, click the text link to **Upload Project Plans**.

[< Return to Project Information Page](#)

Railroad Plan Review

Project Plans

[Upload Project Plan](#)

File Name	Version	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT#	Notes	Action
Sample Upload Document 1.pdf	2	30% Plan	02/07/2025	0.057				UPDATE
Sample Upload Document 1.pdf	1	60% Plan	02/10/2025	0.057				UPDATE

Date Sent: 02/10/2025 02/10/2025

The **Upload Project Plan Documents** modal window opens. Use the button or the drag-and-drop feature to upload the plan. Once the file finishes uploading, assign the **Document Type** "100% Plan" in the dropdown selection on the row on which the file name appears.


Optionally type a note for the document, then click the **UPLOAD DOCUMENT** button at the bottom of the page.

Upload Project Plan Documents

Upload Railroad Plan Review Documents

Maximum allowable file size is 500 MB.

SELECT FILES TO UPLOAD



DROP FILES HERE




File Name	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT	Notes	Action
Sample Upload Document 1.pdf	<div style="border: 1px solid #ccc; padding: 2px; display: inline-block;"> 90% Plan 100% Plan </div>	02/11/2025	0.06			<input type="text"/>	REMOVE X

UPLOAD DOCUMENTS

Now the newly added plan file appears in the Project Plans list and the button to **SEND 100% PLANS** becomes active.

Project Plans

Upload Project Plan

File Name	Version	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT#	Notes	Action
 Sample Upload Document 1.pdf	2	30% Plan	02/07/2025	0.057				UPDATE
 Sample Upload Document 1.pdf	1	60% Plan	02/10/2025	0.057				UPDATE
 Sample Upload Document 1.pdf	1	100% Plan	02/11/2025	0.057				UPDATE

SEND 30% PLANS

SEND 60% PLANS

SEND 90% PLANS

SEND 100% PLANS

Date Sent: 02/10/2025 02/10/2025

Clicking the **SEND 100% PLANS** button sends the 100% Plan file to all the railroads on the project that had been authorized for engineering on the **Project Involvement** page. Once sent, the current date populates in the “Date Sent” row below the **SEND 100% PLANS** button, denoting that the plan has been sent.

The notification is sent to the railroad contact(s) designated on the **Add Railroads to Project** page. The recipient(s) can then use the link in the email to download the plan file that was sent.

Review Final Design Plans

Once the final design plans are uploaded and sent to the railroads, the railroad reviews and responds to them. See the [Railroad Plan Review](#) section for information on how railroads submit plan review comments and documentation.

PUC Coordination

GCMS streamlines the tracking of PUC coordination tasks for projects requiring PUC review and approval. The need for PUC involvement is determined during the initial Scoping phase and is noted in the **PUC & Public Involvement** section of the **Project Involvement** page.

PUC & Public Involvement

Is PUC review/approval required?: ☒ Yes ☐ No

When PUC review and approval are required, a task to "e-file PUC Application" is automatically created for the user assigned to the **PUC Application Coordinator** role. This task will appear in the coordinator's **My Upcoming Tasks** list on the Dashboard.

My Upcoming Tasks											
View All Tasks CLEAR ALL FILTERS EXPORT LIST											
	MPMS#	Project Title	SR	SEC	District	County	Task	Status	Due Date	Assigned Team Member	Days Remaining
	MPMS#	Project Title	S		Dist	County	e-file PUC Applicati...	Status			
	76157	SR4022 ov Chemung River	4022	017	3-0	Bradford	e-file PUC Application	Coordination	05/12/2025	GCA District3	90

PUC Parties of Record

The **PUC Parties of Record** page in GCMS (**Manage Project > PUC Involvement > PUC Parties of Record**) is designed to allow users to add, manage, and view the parties involved in a grade crossing project. This page allows users to add parties of record to the project by entering their contact information. Being a party of record ensures that the individual or entity is formally notified via email of proceedings, updates, and changes to the project.

Users can easily input and update relevant details for each party, ensuring that all involved entities are accurately documented throughout the life of the project.

To add a party of record, click the **ADD** button on the **Manage PUC Parties of Record** page, then enter the required contact information into the **Add Parties of Record** modal window that appears.

[< Return to Project Information Page](#)

Manage PUC Parties of Record

First Name	Last Name	Organization	Title	Address1	City	State	ZIP	Email	Action
	Last Name	Organization							
No Data Available									

ADD

Email Opt Out:



If a party of record wishes not to receive notifications regarding the project, the "Email Opt Out" checkbox may be selected on the **Add Parties of Record** modal window.

Required PUC Activity Completion Dates and Uploads

Recording PUC Application e-file Dates and Uploading the PUC Secretarial Letter or PUC Order for Highway/Bridge Projects

To record the PUC Application e-file date, click the task. Alternatively, users can navigate to the **PUC Communications** page (**Manage Project > PUC Involvement > PUC Communications**) for Highway/Bridge Projects.

Once on the page, users will see a list of PUC activities with date fields. To enter dates, either manually input them or use the calendar icon to select them. After entering the PUC Application e-file date, click **SAVE** to save your entries.

Once the PUC Application e-file date has been recorded, a task to "Upload PUC Secretarial Letter or PUC Order" is automatically created for the user assigned to the **PUC Application Coordinator** role. This task will appear in the coordinator's **My Upcoming Tasks** list on the Dashboard. A date can be entered for these PUC activities in the same way as the PUC Application e-filed date.

To upload the file(s), scroll to the bottom of the page to the Project PUC Documents section and click the **SELECT FILES TO UPLOAD** button or drop the file into the space provided.

Once the document appears in the upload list, select "PUC Order" or "PUC Secretarial Letter" as Document Type from the dropdown menu. Optionally, add any notes, then click the **UPLOAD DOCUMENTS** button to complete the upload.

The screenshot displays the "PUC Communications" form. It features a table with 13 rows, each representing a different PUC activity. Each row has a text label on the left and a date input field on the right. The date input fields are labeled "mm/dd/yyyy" and include a small calendar icon. The first two rows, "PUC Application e-filed" and "PUC Secretarial Letter", have their date input fields highlighted with red rectangles. At the bottom right of the form, there are two buttons: "SAVE" and "CANCEL".

Activity	Date Field
PUC Application e-filed	mm/dd/yyyy
Initial PUC Field Conference	mm/dd/yyyy
PUC Secretarial Letter	mm/dd/yyyy
PUC Order	mm/dd/yyyy
Right-of-Way Plans e-filed with PUC	mm/dd/yyyy
Right-of-Way Plans Approved by PUC	mm/dd/yyyy
Final Plans e-filed with PUC	mm/dd/yyyy
Final Plans Approved by PUC	mm/dd/yyyy
PUC Completion of Work e-filed	mm/dd/yyyy
File PUC Extension (Situational)	mm/dd/yyyy
PUC Final Inspection	mm/dd/yyyy
PUC Close out	mm/dd/yyyy

Recording PUC Application e-file Dates and Uploading the PUC Secretarial Letter or PUC Order for Safety Projects

To record the PUC Application e-file date, click the task. Alternatively, users can navigate to the **Safety Project Milestones** page (**Manage Project > Safety Project Milestones**) for Safety Projects.

Once on the page, open the "Coordination" panel of the accordion style menu to see a list of PUC activities with date fields. To enter dates, either manually input them or use the calendar icon to select them. After entering the PUC Application e-file date, click **SAVE** to save your entries.

Once the PUC Application e-file date has been recorded, a task to "Upload PUC Secretarial Letter or PUC Order" is automatically created for the user assigned to the **PUC Application Coordinator** role. This task will appear in the coordinator's **My Upcoming Tasks** list on the Dashboard. A date can be entered for these PUC activities in the same way as the PUC Application e-filed date.

Safety Project Milestones

[Expand All](#) | [Collapse All](#)

Scoping

Authorization

Coordination

☐ PUC Application e-Filed

mm/dd/yyyy

☐ PUC Field Conference Date

mm/dd/yyyy

☐ PUC Secretarial Letter Received

mm/dd/yyyy

☐ PUC Order Received

mm/dd/yyyy

☐ All Contractor Bids Approved

Contract Development

Construction

SAVE

CANCEL

PUC Appropriated Right-of-Way

When PUC appropriation of Right-of-Way is required for a project, the certified copy of the PUC Order appropriating the Right-of-Way must be uploaded to the project. This is requirement of Coordination and must be completed in order to transition the project to Contract Development status. The need for PUC Appropriated Right-of-Way is determined during the initial Scoping phase and is noted in the PennDOT Involvement section of the **Project Involvement** page.



The screenshot shows the 'Project Involvement' form. The 'PennDOT Involvement' section contains the following fields:

- 'Does Railroad R/W need to be acquired?': A radio button group with 'Yes' selected (indicated by a red box) and 'No'.
- 'Appropriation Type: *': A dropdown menu with 'PUC Appropriation' selected (indicated by a red box). Below the dropdown is a text input field labeled 'PUC Appropriation'.

Uploading the PUC Order appropriating the Right-of-Way for Highway/Bridge Projects

For Highway/Bridge Projects, navigate to the Project Page and select **Manage Project > PUC Involvement > PUC Communications**.

Scroll to the bottom of the page to the Project PUC Documents section and click the **SELECT FILES TO UPLOAD** button or drop the file into the space provided.

Once the document appears in the upload list, select "PUC Order" as Document Type from the dropdown menu. Optionally, add any notes, then click the **UPLOAD DOCUMENTS** button to complete the upload.

Uploading the PUC Order appropriating the Right-of-Way for Safety Projects


To upload the PUC Order for a Safety Project, go to the Project Documents page (**Manage Project > Project Documents**). Scroll to the bottom of the page to the Upload Documents section and click the **SELECT FILES TO UPLOAD** button or drop the file into the space provided.

Once the document appears in the upload list, select "PUC Order" as Document Type from the dropdown menu. Optionally, add any notes, then click the **UPLOAD DOCUMENTS** button to complete the upload.

Upload Documents

Maximum allowable file size is 500 MB.

SELECT FILES TO UPLOAD



DROP FILES HERE

File Name	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT	Notes	Action
Sample Upload Document 1.pdf	PUC Order	02/11/2025	0.06				REMOVE X

UPLOAD DOCUMENTS

Contractor Bid (Safety Projects Only)

When a railroad on a Safety Project has selected Contractor Bid as the Work Type (see [Railroad Work Type Selection](#) section), then an Awarded Contractor must be entered for the railroad. An awarded contractor can be added by either a PennDOT or Railroad user.

To add an awarded contractor for a railroad, navigate to the **Contractor Bid** page by going to the Project Page and clicking **Manage Project > Contractor Bid**. Once on the page press the **ADD AWARDED CONTRACTOR** button located below the railroad's name.

[< Return to Project Information Page](#)

Contractor Bid

Contractor Bid Details

Railroad Name: North Shore Railroad Company

ADD AWARDED CONTRACTOR

The **Add Awarded Contractor** pop-out window will appear. In this window, enter the contractor's name and cost.

Add Awarded Contractor

Awarded Contractor Name:

ABC Contracting Co.

Awarded Contractor Cost:

\$ 50,000.00

SAVE

CANCEL

If you wish to cancel the entry, simply click **CANCEL**, and the entered details will be discarded without saving. To save the information, click **SAVE**. The contractor name and cost will be saved and displayed beneath the railroad's name.

You can add additional contractors by clicking the **ADD AWARDED CONTRACTOR** button again. Each additional contractor's name and cost will be saved and displayed beneath the railroad's name.

To edit a contractor's information, click the **EDIT** button next to the contractor's name and cost. The **Edit Awarded Contractor** pop-out window will appear, allowing you to revise the contractor's name and/or cost. After making the changes, click **SAVE**, and the revised information will be updated and displayed on the **Contractor Bid** page.

The screenshot displays the 'Contractor Bid' page. At the top left is a link '< Return to Project Information Page'. The page title 'Contractor Bid' is centered at the top. Below the title is a section header 'Contractor Bid Details'. The main content area shows the following information: 'Railroad Name: North Shore Railroad Company', 'Awarded Contractor Name: ABC Contracting Co.', 'Awarded Contractor Cost: \$ 50,000.00', and 'Total Contract Value: \$ 50,000.00'. There is an 'ADD AWARDED CONTRACTOR' button at the bottom left and an 'EDIT' button with a pencil icon at the bottom right, which is highlighted with a red box.

Contractor Bid Details	
Railroad Name: North Shore Railroad Company	
Awarded Contractor Name: ABC Contracting Co.	Awarded Contractor Cost: \$ 50,000.00
	Total Contract Value: \$ 50,000.00
ADD AWARDED CONTRACTOR	EDIT

Close Out Coordination Status

Close Out Coordination Status for Highway/Bridge Projects

A Highway/Bridge Project transitions from Coordination status to Contract Development status once all of the following actions have been completed:

- When PUC Review/Approval is "Yes" on the Project Involvement page, a PUC Order or Secretarial Letter must be received, and the receipt date entered on the **PUC Communications** page.
- When PUC Appropriated Right-of-Way is required, as shown on the **Project Involvement** page, then the PUC Order must be uploaded to the project.
- 100% Plans have been sent to the railroads from the **Railroad Plan Review** page.
- All DOTs associated with a Railroad that received engineering authorization must have a Planned Work value on the **Railroad Work Summary** page.

Close Out Coordination Status for Safety Projects

A Safety Project transitions from Coordination status to Contract Development status once all of the following actions have been completed:

- When PUC Review/Approval is "Yes" on the Project Involvement page, a PUC Order or Secretarial Letter must be received, and the receipt date entered on the **Safety Project Milestones** page.
- When PUC Appropriated Right-of-Way is required, as shown on the **Project Involvement** page, then the PUC Order must be uploaded to the project.
- 100% Plans have been sent to the railroads from the **Railroad Plan Review** page.
- When "Contractor Bid" is selected as a Work Type on the **Project Involvement** page, an Awarded Contractor must be entered for the Railroad.

Project Status 4 – Contract Development

Once Coordination status has been completed, the project moves to Contract Development status. In this phase, PennDOT create and finalize agreements, a Railroad Certificate is generated as required, and a Notice to Proceed (NTP) is then sent to all Railroads involved in the construction work. PennDOT also continues coordinating with the PUC, as needed for the project.

PROJECT STATUS
Contract Development

Generate Railroad Certification

Preparing the Railroad Certification

The Railroad Certification must be prepared by the Central Office Coordinator for Highway/Bridge Projects. Look for a “Prepare Railroad Certification” task in the Upcoming Tasks list or go to the Project Page and select **Manage Project > Railroad Certification**.

The **Railroad Certifications** page will open. Here the user will see certification details for the Highway/Bridge project, including ECMS Contract #, Federal Project Status, PUC Involvement, Let Date, and a Notice to Proceed date.

The screenshot shows the "Railroad Certifications" page. At the top left is a link "< Return to Project Information Page". The title "Railroad Certifications" is centered at the top. Below the title, the page is divided into two main sections. The left section, titled "Certification Details", contains the following information: ECMS Contract #: 115905, Federal Project Status: Exempt On NHS -PENNDOT Oversight NHS, PUC Involvement: No, Let Date: 10/19/2023, and Notice to Proceed: 12/04/2023. The right section, titled "Companion MPMS Project(s):", contains a "VIEW FUNDING" button. Below these sections, there are three conditional options, each with a checkbox and a description: "Is Conditional: Cannot Issue NTP" (Railroad Reimbursement Agreement(s) must be fully executed prior to Issuing NTP to the Contractor), "Cannot Open Bids" (PUC must approve the Application (CO Override Required)), and "Cannot Open Bids" (PUC must approve the construction plans prior to bid opening). At the bottom, there is a "Reason for Conditional:" label followed by a text input field with a "1000 characters remaining." indicator.

To view the project’s funding details, click the **VIEW FUNDING** button located at the top of the page. This will open a modal window that shows the Estimated Project Funding and Department Approved Funding. Once done viewing the information, click **CLOSE** to return to the certification page.

To preview and review the railroad certification, click the **PREVIEW RAILROAD CERTIFICATION** button to open a new browser tab displaying a PDF preview of the railroad certification. Confirm that the certification reads as expected.

PREVIEW RAILROAD CERTIFICATION

If all is in order, the railroad certification can be marked as ready for Division Chief review, by selecting the “Ready for Division Chief Review” checkbox and clicking **SAVE**. This will notify the Division Chief that the certification is ready to be generated.

If preparing a [Conditional Railroad Certification](#), see the section below.

The screenshot shows a form with a checkbox labeled "Ready for Division Chief Review." which is checked. Below it are three buttons: "SAVE" (dark blue), "CANCEL" (light blue), and "GENERATE RAILROAD CERTIFICATION" (light blue). Above the "GENERATE" button is a button labeled "PREVIEW RAILROAD CERTIFICATION" (dark blue).

Conditional Railroad Certifications

If creating a conditional certification, from the **Railroad Certifications** page select one or more of the “Is Conditional” checkboxes corresponding to the reason why a conditional railroad certification is being issued. When an “Is Conditional” checkbox is selected, the **Reason for Conditional** textbox becomes required.

The screenshot shows the "Is Conditional:" section with three checkboxes. The first checkbox is checked, and its reason is "Cannot Issue NTP" with the note "Railroad Reimbursement Agreement(s) must be fully executed prior to Issuing NTP to the Contractor". The second checkbox is unchecked, with the reason "Cannot Open Bids" and the note "PUC must approve the Application (CO Override Required)". The third checkbox is unchecked, with the reason "Cannot Open Bids" and the note "PUC must approve the construction plans prior to bid opening". Below this is a text area labeled "Reason for Conditional:*" with a "1000 characters remaining." indicator.

Railroad Certification Documents and Status of Project Deliverables

The Railroad Certification Documents section on the **Railroad Certifications** page allows access to the generated railroad certification and date.

Note that the certification will only appear once the Division Chief has generated the clearance for the project.

The **Status of Project Deliverables** section provides easy access to key project deliverables and dates in an accordion-style menu. This section includes the following subsections:

- Right-of-Way
- PUC Documents
- Agreements
- Flagger Needs
- D-4279A
- Insurance Requirements and RR Specifications

Railroad Certification Documents								
File Name	Version	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT#	Notes	Action
No Data Available								
Status of Project Deliverables								
Right-of-Way								▼
PUC Documents								▼
Agreements								▼
Flagger Needs								▼
D-4279A								▼
Insurance Requirements and Railroad Specifications								▼

Click on the “View” links in these subsections to access additional details or download relevant documents.

Additionally, user can click the links and table rows in these subsection to be taken to the corresponding project pages in GCMS. For example, under the Right-of-Way subsection, clicking a table row will take the user to the **Project Involvement** page where the Right-of-Way details were originally provided.

Generating the Railroad Certification by the Division Chief

Once the railroad certification has been prepared and marked as “Ready for Division Chief Review” by the Central Office Coordinator, the Division Chief will receive a task to “Generate Railroad Certification”.

The Division Chief can click the task in the Upcoming Tasks list or go to the Project Page and select **Manage Project > Railroad Certification** to be taken to the **Railroad Certification** page.

Once on the page, the Division Chief can generate the certification by clicking **GENERATE RAILROAD CERTIFICATION**.

☒ Ready for Division Chief Review.


PREVIEW RAILROAD CERTIFICATION

SAVE

CANCEL

GENERATE RAILROAD CERTIFICATION

The generated railroad certification will then appear in the Railroad Certification Documents section of the page as well as on the **Project Documents** page.

Railroad Certification Documents								
File Name	Version	Document Type	Date Uploaded	File Size (MB)	Railroad	DOT#	Notes	Action
 Railroad Certification Memo_115905_.pdf	1	Railroad Certification	02/12/2025	0.065			Railroad Certification	

PUC Coordination

GCMS streamlines the tracking of PUC coordination tasks for projects requiring PUC review and approval. The need for PUC involvement is determined during the initial Scoping phase and is noted in the **PUC & Public Involvement** section of the **Project Involvement** page.

PUC & Public Involvement	
Is PUC review/approval required?:	<input checked="" type="radio"/> Yes <input type="radio"/> No

For Highway/Bridge Projects, the user can click the task to access the **PUC Communications** page. Alternatively, they can navigate to the Project Page and select **Manage Project > PUC Involvement > PUC Communications**.

For Safety Projects, the user can click the task to access the **Safety Project Milestones** page. Alternatively, they can navigate to the Project Page and select **Manage Project > Safety Project Milestones**.

Required PUC Activity Completion Dates

Required PUC Activity Completion Dates for Highway/Bridge Projects

As Highway/Bridge Projects with PUC involvement progress, a **Final Plans Approved by PUC** date must be entered to allow the project to transition from Contract Development to Construction status.

This date must be entered on the **PUC Communications** page (**Manage Project > PUC Involvement > PUC Communications**). Once on the page, users will see a list of PUC activities with date fields. To enter dates, either manually input them or use the calendar icon to select them. After entering the required dates, click **SAVE** to save your entries.

PUC Communications

PUC Application e-filed	mm/dd/yyyy
Initial PUC Field Conference	mm/dd/yyyy
PUC Secretarial Letter	mm/dd/yyyy
PUC Order	mm/dd/yyyy
Right-of-Way Plans e-filed with PUC	mm/dd/yyyy
Right-of-Way Plans Approved by PUC	mm/dd/yyyy
Final Plans e-filed with PUC	mm/dd/yyyy
Final Plans Approved by PUC	mm/dd/yyyy
PUC Completion of Work e-filed	mm/dd/yyyy
File PUC Extension (Situational)	mm/dd/yyyy
PUC Final Inspection	mm/dd/yyyy
PUC Close out	mm/dd/yyyy

Required PUC Activity Completion Dates for Safety Projects

As Safety Projects with PUC involvement progress, a **Situation and Circuit Plans Approved by PUC** date must be entered to allow the project to transition from Contract Development to Construction status.

This date must be entered on the **Safety Project Milestones** page (**Manage Project > Safety Project Milestones**). Once on the page, users will see a list of PUC activities with date fields. To enter dates, either manually input them or use the calendar icon to select them. After entering the required dates, click **SAVE** to save your entries.

Safety Project Milestones

[Expand All](#) | [Collapse All](#)

Scoping ▼

Authorization ▼

Coordination ▼

Contract Development ▲

☐

All Agreements Executed

Union County Industrial Railroad Company

mm/dd/yyyy

☐

Situation and Circuit Plans e-filed to PUC

mm/dd/yyyy

☐

Situation and Circuit Plans Approved by PUC

mm/dd/yyyy

☐

Final Traffic Control Plan Approved by District

mm/dd/yyyy

☐

NTP for Construction Issued

Union County Industrial Railroad Company

Construction ▼

SAVE

CANCEL

Sending the Notice to Proceed (NTP) Notification

To send the NTP Notification, start by navigating to the identified project. From the Project page, click **Manage Project > Project Workflow Notifications**. This will open the **Project Workflow Notifications** page where you can view all available notifications.

On the page, you will see the **SEND TO ALL RAILROADS** and **SEND** buttons in the table under the Notice To Proceed column. These buttons will be highlighted blue, indicating that they are ready to be used.

The NTP notification can be sent to all railroads at the same time using the **SEND TO ALL RAILROADS** button or only to selected railroads using the **SEND** buttons shown below.

Project Workflow Notifications		
Railroads	Engineering Authorization	Notice To Proceed
	SEND TO ALL RAILROADS	SEND TO ALL RAILROADS
North Shore Railroad Company	10/31/2024 SEND	SEND
Bessemer & Lake Erie Railroad	10/31/2024 SEND	SEND

Once you click the button, a confirmation message will appear at the top of the screen, confirming that the NTP notification was successfully sent. The current date will populate in the Notice to Proceed column next to the respective **SEND** button, showing the date the notification was sent. After the notification is sent, the buttons will be greyed out.

The notification is sent to the railroad contact(s) designated on the **Add Railroads to Project** page. The recipient(s) can then use the link in the email to download the NTP letter.

Note: To move the project from Contract Development to Construction status, the NTP notification must be sent to all Railroads listed on the **Railroad Work Summary** page with a Planned Work selection of "Construction" or "Construction & Flagging."

Close Out Contract Development Status

Close Out Contract Development Status for Highway/Bridge Projects

A Highway/Bridge Project transitions from Contract Development status to Construction status once all of the following actions have been completed:

- When PUC Review/Approval is "Yes" on the Project Involvement page, the final plans must be approved by the PUC and the "Final Plans Approved by PUC" date entered on the **PUC Communications** page.
- The Railroad Certification has been generated for the project.
- An NTP Notification must be sent to all Railroads with a Planned Work selection of "Construction" or "Construction and Flagging" on the **Railroad Work Summary** page.

Close Out Contract Development Status for Safety Projects

A Safety Project transitions from Contract Development status to Construction status once all of the following actions have been completed:

- When PUC Review/Approval is "Yes" on the Project Involvement page, the Situation and Circuit plans must be approved by the PUC and the "Situation and Circuit Plans Approved by PUC" date entered on the **Safety Project Milestones** page.
- An NTP Notification must be sent to all Railroads with a Planned Work selection of "Construction" or "Construction and Flagging" on the **Railroad Work Summary** page.

Project Status 5 - Construction

Once the requirements of the Contract Development phase has been completed and PennDOT has issued the Notice To Proceed notification to the railroads, the project moves into Construction status. The railroads may then proceed with the approved construction activities.

Project Status 6 – Closeout

A project enters Closeout status after the railroad has completed all physical work on the project.

During this last phase, the final bill is reviewed and approved, and the agreement is closed out. Prior to the final billing being submitted, all interim bills for a railroad must have been approved.

Administrative Tasks

Assigning PennDOT Users and Consultants to Districts

Assigning PennDOT users to specific Districts helps GCMS display the most relevant projects to them on the **My Active Projects** section. PennDOT staff and consultants can only be added to a project team if they are assigned to that District.

From the menu bar, choose **Admin > Assign Districts**. The **Assign Districts** page shows a table list of the users registered in GCMS who can be assigned. By default, they are listed alphabetically by last name. For the chosen user, click the **ASSIGN DISTRICT** button on the right side of the table row.

Assign Districts				
			CLEAR ALL FILTERS	EXPORT LIST
User Name	User Roles	Assigned Districts	Organization	Action
User Name ▾	User Roles ▾	Assigned Districts ▾	Organization ▾	
CO Consult	PD-GCMS-COConsult	01,02,03,04,05,06,08	PENNDOT	ASSIGN DISTRICT
CO Consult2	PD-GCMS-COConsult	11,12,09,C0,10	PENNDOT	ASSIGN DISTRICT

Then checkmark every desired District in the modal box and click **SAVE** to close it. The Districts assigned to a user will show in the table under the "Assigned Districts" column.

Assign District

Username: GCA District1

Districts:








☒ 01
☐ 02
☐ 03
☐ 04
☐ 05
☐ 06
☐ 08
☐ 09
☐ 10
☐ 11

The columns in the table can be filtered to narrow down the list. Another way to find a user is by typing part of the name in the text box below the "User Name" heading.

Manage Template Signatures

Template signatures are the names that are applied to documents generated by GCMS as signatures for that document. These names and signatures can be edited and updated as needed.

From the menu bar, choose **Admin > Manage Template Signatures**.

Manage Template Signatures							
CLEAR ALL FILTERS							
Signature Type	District	First Name	MI	Last Name	Title	Display Text	Action
Executive	CO	Captain		Comptroller	Comptroller Operations		EDIT 
Executive	3-0	Tom		Hanks	District Executive		EDIT 
Central Office	CO	Mark		Chappell	Chief, RW, Utilities, and Grade Crossing Division	Division Chief	EDIT 
Central Office	CO	Captain	J	DesignDelivery	Director, Bureau of Design and Delivery		EDIT 
District	3-0	James		Bond, P.E.	District Executive		EDIT 
District	2-0	Harry		Smith	District Executive		EDIT 
District	5-0	John		Doe	District Executive		EDIT 
District	11-0	District		Eleven	District Grade Crossing Administrator		EDIT 
District	1-0	District		One	District Grade Crossing Administrator		EDIT 

Central Office users (excluding CO Admin) have an active **EDIT** button on each line to make changes to any of the template signatures. They can also create new entries using the **ADD** button at the bottom of the page beneath the existing entries.

Add Signature Template

Signature Type:*

District:

Title:

Display Title:

First Name:*

Middle Initial:

Last Name:*

SAVE

CANCEL

Manage District Offices

When GCMS sends system notifications to District Contract Management (DCM), it uses the contact information for each DCM that is provided on the Manage District Offices page.

Go to the **ADMIN** menu heading in the light green bar across the top of the screen and click **Manage District Offices** from the options under the "District/CO Admin" subheading.

Every District has a minimum of one DCM email address and a maximum of three. A physical mailing address is given for each office as well. To edit any of the information, including adding a new email address, press the **EDIT** button on the right end of the row, which opens a modal window with text boxes for the fields.