Prioritization 8
Submittal Guidance

Strategic Prioritization Office of Transportation - SPOT

July 2025

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P8 Submittal and SPOT Online Notes

Project Database General Notes

- Coordination is required between Divisions and MPOs/RPOs on submittals (confirmation to be provided with a checkbox in SPOT Online).
- Transfer of submittal "slots" are allowed between MPOs/RPOs or between Divisions for projects that fall in a neighboring organization. To initiate a transfer, please email the SPOT office (spot@ncdot.gov) and include all associated MPOs, RPOs, and Divisions.
- Multiple projects (with different scopes) are allowed along the same section of roadway. If two conflicting projects along the same section score high enough to be funded, a discussion with the STIP Unit and the associated Division and MPO/RPO would be held to pick the solution that would remain in the STIP.
- Remember that Carryover projects require special attention as follows:
    - Carryovers for Bicycle/Pedestrian and Public Transportation will be visible to MPOs and RPOs, who must process and resubmit these projects due to local data needs and cost updates.
    - Carryovers for Highway, Aviation, Ferry, and Rail will be visible to Divisions. Do not touch these, as SPOT will process and resubmit.
    - No Carryover projects count against any organization's submittal allotments.

Deadlines

- Submittal window closes on Tuesday, September 30th, at 5pm.
- To ensure that the SPOT Office can proccess your requests and questions, submit your project transfer requests and submittal questions to SPOT Office by Wednesday, September 24th.

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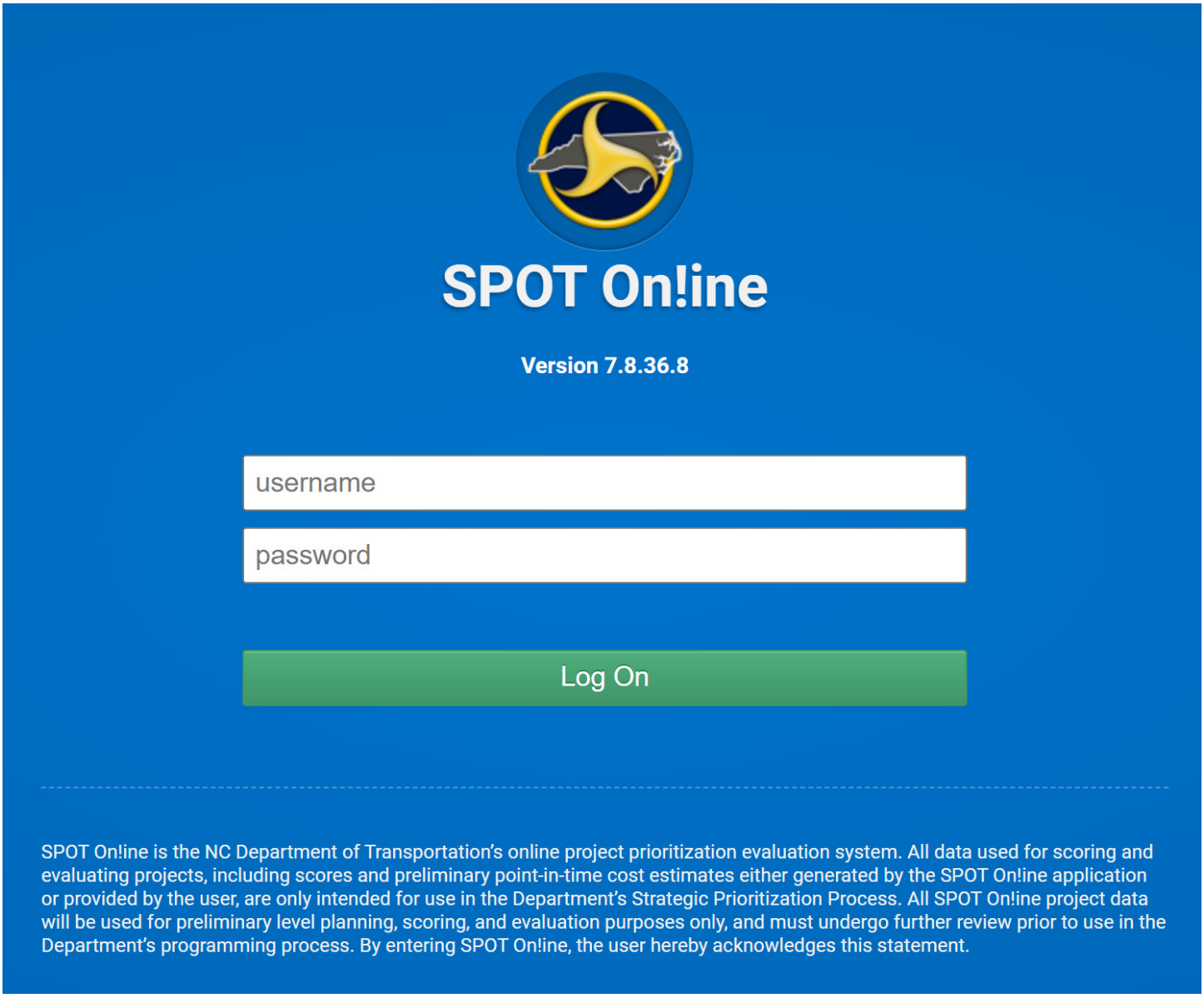
P8 SPOT Online Easy Step Guide

Introduction

SPOT Online is the web-based geospatial and analytical data entry application utilized to submit and evaluate projects in accordance with the STI law.

SPOT Online can be accessed at https://gis13.services.ncdot.gov/SpotOnline/login.aspx. Users must be granted access by providing their NCID username to the SPOT Office. (If you do not have an NCID account, you can create one at ncid.nc.gov.)



Main Screen Layout

When you log into SPOT Online, you will be taken to your organization's area in the map window. Following is a list of primary items on the main screen (see the accompanying screenshot below):

1. **Project Grid:** List of projects in your organization's area (Draft projects owned by your organization + Submitted projects owned by your organization and others).
   - Clicking on a project in the Grid zooms to its location in the Map and opens a pop-up window showing basic project information and other options.
   - **Flag:**
     - Question Mark = the 7 project entry steps are not yet complete.
     - Single Check = the 7 project entry steps are complete.
   - **Status:**
     - Draft = will not be scored in P8 (only visible to project owner).
     - Submitted = will be scored in P8 (visible to all organizations but cannot be edited).
   - **Filter:** Filter by Mode, Category, and Status; filters the Grid and Map simultaneously
     - At the top left of the Grid, a text field is available to auto-filter by SPOT ID.
     - At the top middle of the Grid, a text field is available to auto-filter by Project Owner.
       * Note 1: You must click the magnifying glass to highlight those projects in the map.
       * Note 2: When clearing the text filter, you must click the magnifying glass again to clear the highlighted projects in the map.
   -  : Expands the Grid view to include additional information and data.

2. **Map:** Displays projects (according to the Grid) and any data layers that are turned on.

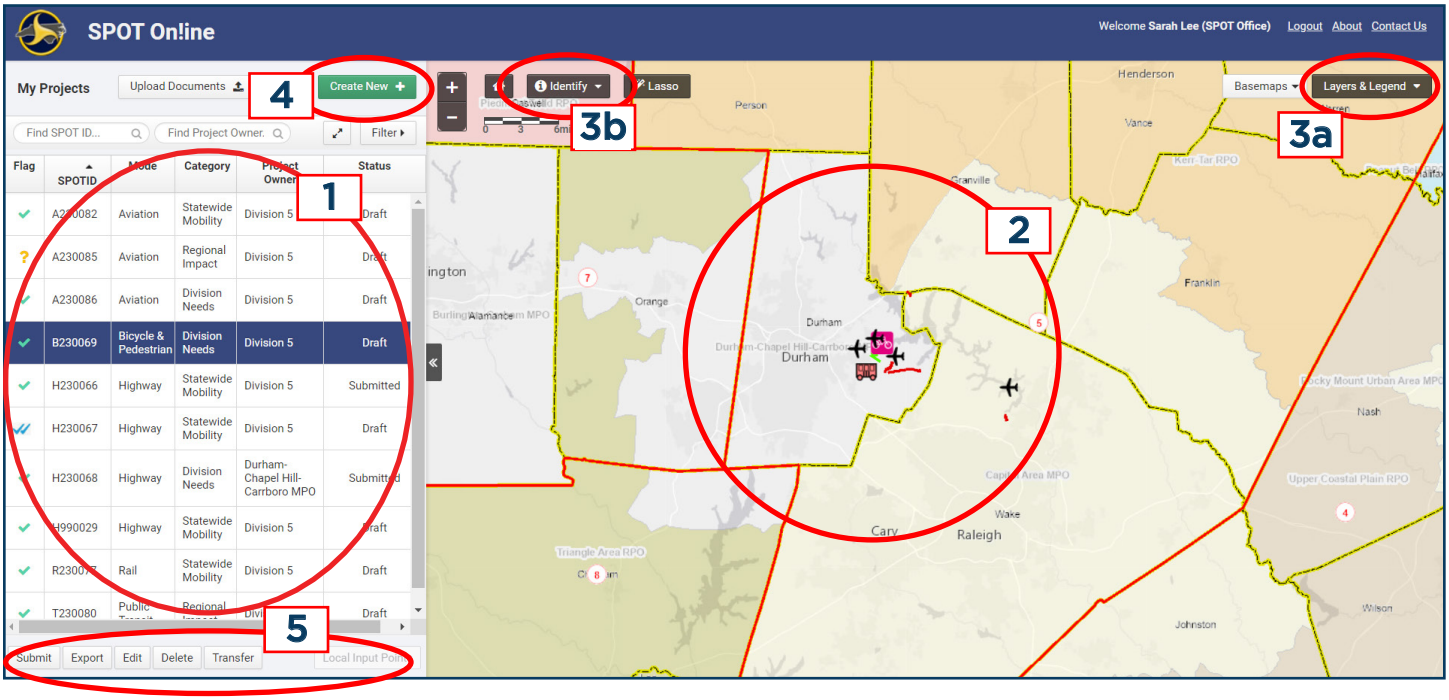
3. **Map tools**

   A. Layers & Legend: Turn on/off various data layers from the Map view.
   - Online layers can be added in this window to use in mapping projects.
   - Shapefiles can be uploaded in this window to use in mapping projects (must be locally stored as a single shapefile in a .zip file in order to upload).

   B. Identify: Choose a data layer from the drop-down list (layer must be turned on in Layers & Legend), click Start, then click a feature in the Map to view its attributes from the layer.

4. **Create New:** Click this button to begin the process of creating a new project.

5. **Grid buttons**
   - **Submit:** Change a project's status from Draft to Submitted.
     - Note 1: A project's Flag must be a Single Check ✔ in order to be submitted.
     - Note 2: Only a project's owner may Unsubmit a project.
   - **Export:** Opens a window of options to export project information in various formats.
   - **Edit:** Continue processing or make changes to a project already in the Grid.
   - **Delete:** Remove a project from the Grid and Map (do not delete Carryover projects!).
   - **Transfer:** Change project ownership to a different organization (not functioning for P8 – see below for details).

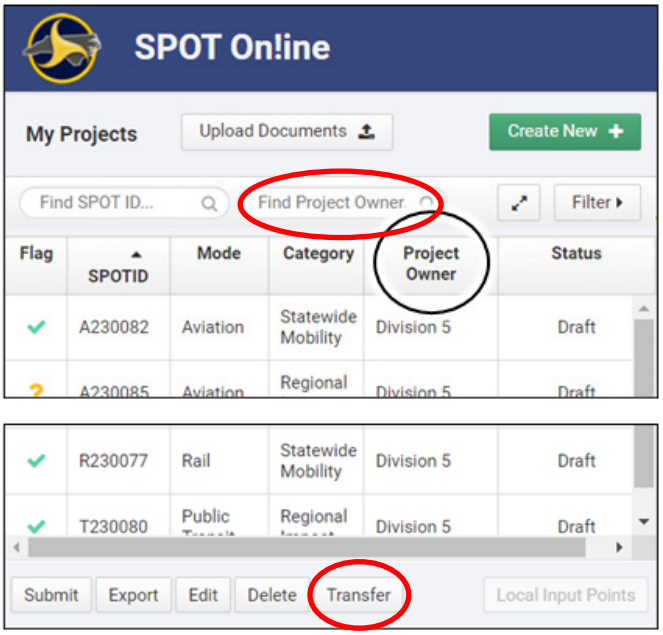


Project Ownership and Transfers

The Grid in SPOT Online displays the column header of "Project Owner". See the screen shot next page.

- This is the name of the organization that has control over the project, which is either assigned by creating the project or during the loading of Carryover/Holding Tank projects into the system. The Project Owner should be one of the MPO/RPO or Divisions where the project is located.

- If you can see a Draft project, your organization is the Project Owner.
- Submitted projects can be viewed by all organizations where the project is located, but only the Project Owner has control to Unsubmit and make edits.
- Project Owner can be filtered by using the text search box above the Grid. See the "SPOT Online Easy Step Guide" above for more tips on this tool.



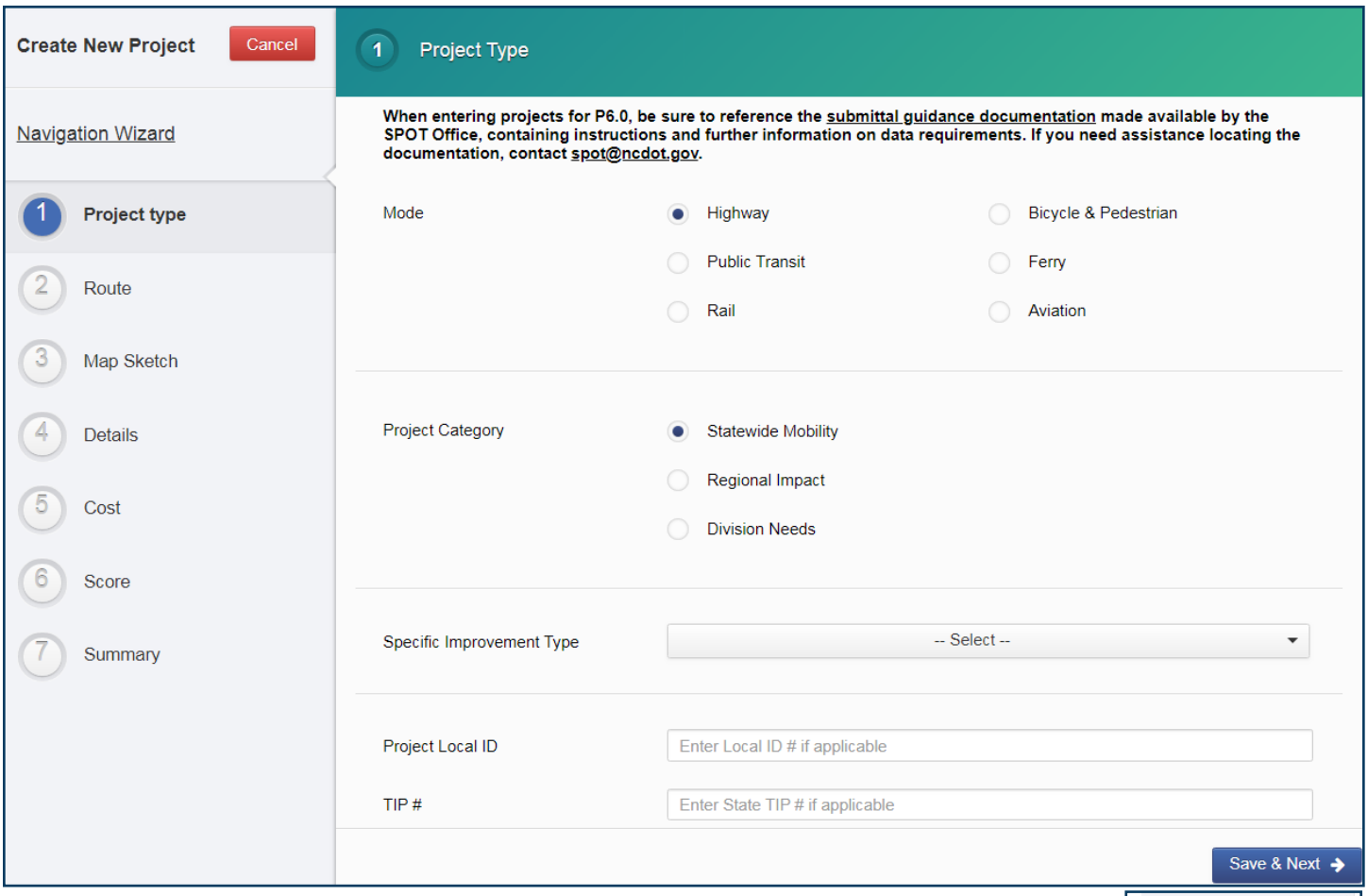
Note that the Transfer button (previously utilized to transfer a project from the Project Owner to another organization) will NOT function for P8.

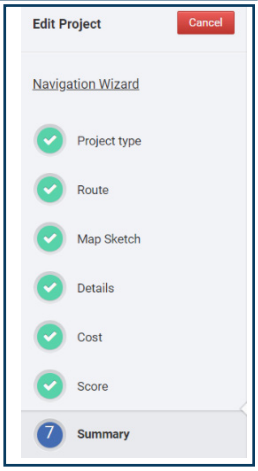
- If you need to transfer a project, contact the SPOT Office to facilitate the transfer.
- Transferring allows one organization to begin the project entry process and another to handle the submittal of the project. It also facilitates the shifting/sharing of projects between Divisions and MPOs/RPOs for any other needs.
- You must be the Project Owner to initiate a transfer.
- Only Draft projects can be transferred.

Create New Project / Edit a Project

Project creation and editing in SPOT Online utilizes a 7-step navigation wizard to complete entry of all necessary project information. Each of the 7 steps is a new screen with different inputs or information.

When creating a new project, you will be taken to begin on screen 1. The project's SPOT ID will be generated when moving from screen 1 to screen 2.





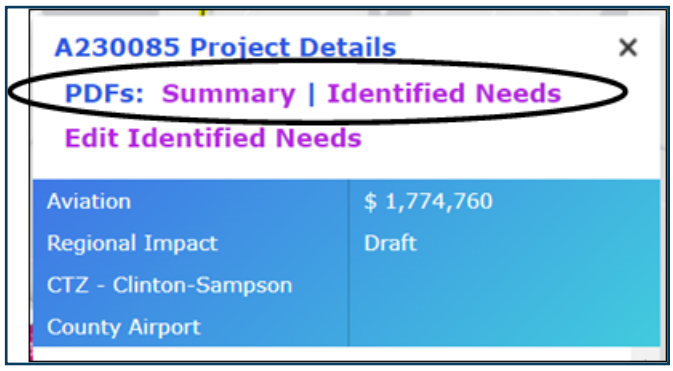
Your progress in the 7 screens is shown on the left side.

- You can navigate through the 7 screens by utilizing the "Save & Next" and "Previous" buttons at the bottom of the screens
  - To complete screen 7, choose either "Save & Return to Map View" or "Save & Enter Another Project" ("Continue to Identified Needs" does not function).
  - You must complete all 7 screens in order to change the project's Flag in the Grid from a Question Mark ? to a Single Check ✔ to be able to "submit".

- The "Cancel" button can be used to either delete a project during processing or to save a project's current progress anywhere during the 7 screens. Note that inputs on an open screen will not be saved until "Save & Next" is clicked.
- When editing an existing project, you will be taken to the last completed screen on which the project was saved. You can then continue processing the project through the remaining screens.
- You can also click on any completed screen's name to navigate directly to that screen but be aware that editing information on completed screens will often cause the subsequent screens to clear and reset.

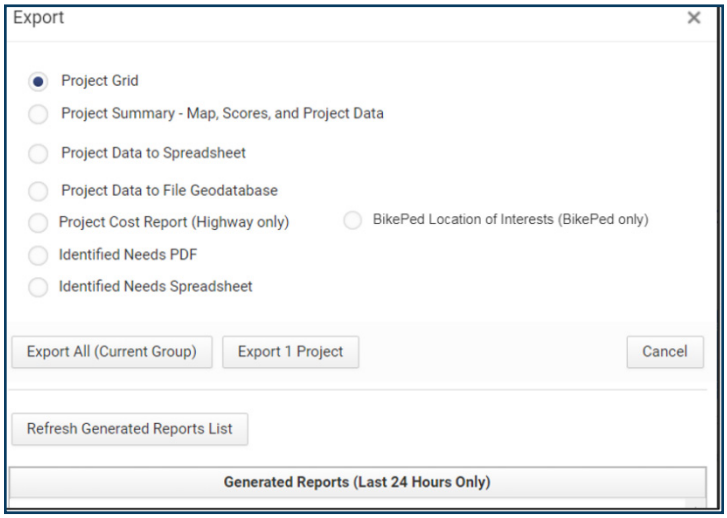
View/Export Project Information

There are two places in SPOT Online to view and export project information in various formats:



1. **Map pop-up**: Click on a project in the Map or Grid to open the pop-up window
   - **Summary** = creates a 4-page summary PDF of project information and map
   - **Identified Needs** = N/A for P8.

2. **Grid "Export" button**: Click on a project (or select multiple projects by using the 'Ctrl' or 'Shift' keys) in the Grid, then the "Export" button below the Grid. This will open a window of the following options to export project information in various formats:
   - **Project Grid** = table of data shown in the expanded Grid
   - **Project Details** = 4-page summary PDF of project information and map
   - **Project Data to Spreadsheet** = CSV file of all applicable project data
   - **Project Data to File Geodatabase** = spatial file of all project data and associated tables
   - **Project Cost Report** = PDF of details from the Highway Cost Estimation Tool
   - **Bike/Ped Locations of Interest** = CSV file of Bike/Ped automatic buffered Points of Interest



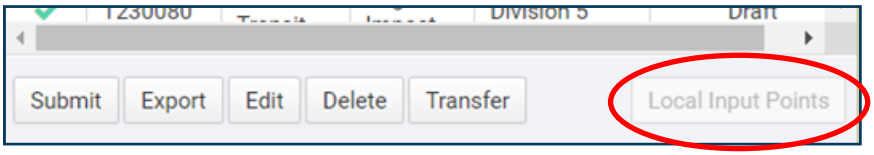
- **Identified Needs PDF** = N/A for P8.
- **Identified Needs Spreadsheet** = N/A for P8.

Once you have chosen the export format, click one of the following Export buttons:

- **Export All (Current Group)** = export the chosen format for all projects in your Grid
- **Export # Project** = export the chosen format for only the selected project(s). Once you have clicked one of the "Export" buttons, click "Refresh Generated Reports List" after a few moments. Once it is created, the export will display in the bottom window. When you select it, the file will open or download based on the chosen format.

Enter Local Input Points

During the Regional Impact or Division Needs Local Input Point assignment windows, the "Local Input Points" button will be available at the bottom of the Grid.



Click this button to enter the table in which to assign Local Input Points. The table will display Submitted projects, along with new columns for Regional Impact and Division Needs point assignment. Use these columns to apply up to 100 points to each of your chosen projects.

Above these columns is displayed the number of remaining points (in green) compared to the maximum number of points available to assign (the number allotted to your organization). As points are entered on projects in the table, the first value will adjust to reflect the number of remaining points left to assign. If you assign all of your available points, this number will be 0.

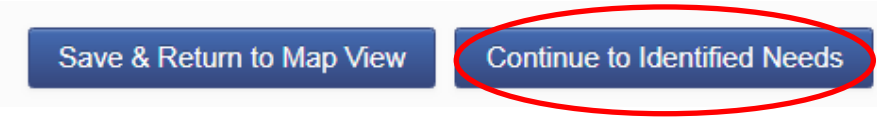
Once you have assigned your points, click "Submit" at the bottom. This will save your point assignments. You may return to this table and edit the point assignments at any point during the window, but be sure to "Submit" to save changes.

Local Input Points must be entered using this method in order to be counted in scoring.

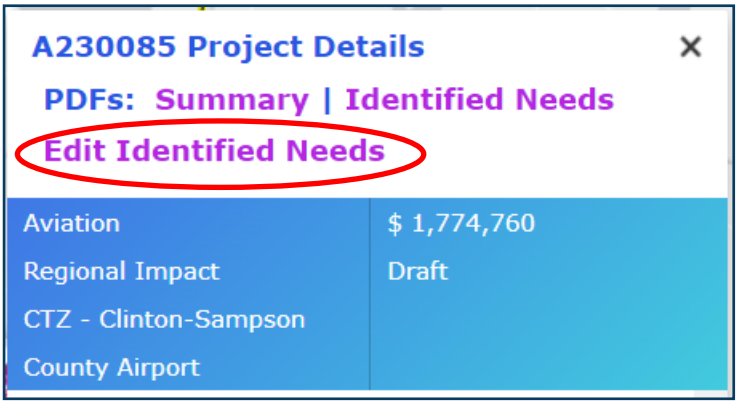
Identified Needs

SPOT Online previously contained an additional window of required information called "Identified Needs" (see screenshot on next page). This is no longer required for P8.

1. **Editing a project:** On the bottom of screen 7 during project entry, "Continue to Identified Needs" button will no longer function.



2. **Map pop-up:** When you click on a project in the Map or Grid to open the pop-up, "Edit Identified Needs" will not display any information.



P8 Project Entry – Highway

When entering a new highway project in SPOT Online for scoring, users will be required to enter certain project information using the Project Entry Wizard. The inputs consist of information common to all highway projects and inputs that are particular to the "Specific Improvement Type (SIT)" selected. There are 26 different SITs:

1. **Widen Existing Roadway (segment)** – Adding new through travel lanes to the roadway
2. **Upgrade Arterial to Freeway/Expressway (segment)** – Improving a signalized arterial to a signal-free freeway or expressway.
3. **Upgrade Expressway to Freeway (segment)** – Improving an expressway (signal-free facility that has at-grade access) to a full control of access freeway.
4. **Upgrade Arterial to RCI corridors (segment)** – Improving two or more intersections along a signalized arterial to an RCI corridors design. Formerly known as Superstreet.
5. **Construct Roadway on New Location (segment)** – Constructing a new roadway on a new alignment.
6. **Widen Existing Roadway and Construct Part on New Location (segment)** – Adding new travel lanes to the roadway and constructing a new roadway on a new alignment.
7. **Upgrade At-grade Intersection to Interchange or Grade Separation (point)** – Converting a signalized intersection to an interchange or grade separation.
8. **Improve Interchange (point)** – Improving traffic flow at an existing interchange by changing the ramp configuration or type of interchange.
9. **Convert Grade Separation to Interchange (point)** – Providing access from/to a freeway/expressway at an existing grade separation primarily for land access.
10. **Improve Intersection (point)** – Improving traffic flow at an existing intersection by changing intersection type (i.e., roundabout) and/or adding turn lanes
11. **Access Management (segment)** – Enhancing the capacity and safety of the roadway by installing a median, consolidating driveways, etc.
12. **Ramp Metering (segment)** – Installing ramp meters at interchanges along a freeway.
13. **Citywide Signal System (segment)** – Installing a citywide signal system.
14. **Closed Loop Signal System (segments)** – Installing a closed loop signal system along a single corridor.
15. **Install Cameras and DMS (segment)** – Installing traffic cameras and dynamic message signs along a roadway corridor.
16. **Modernize Roadway (segment)** – Improving roadway safety and traffic operations primarily by improving the roadway lane and shoulder width to current design standards. This could include needed safety and minor capacity improvements related to the

Modernization of the facility.

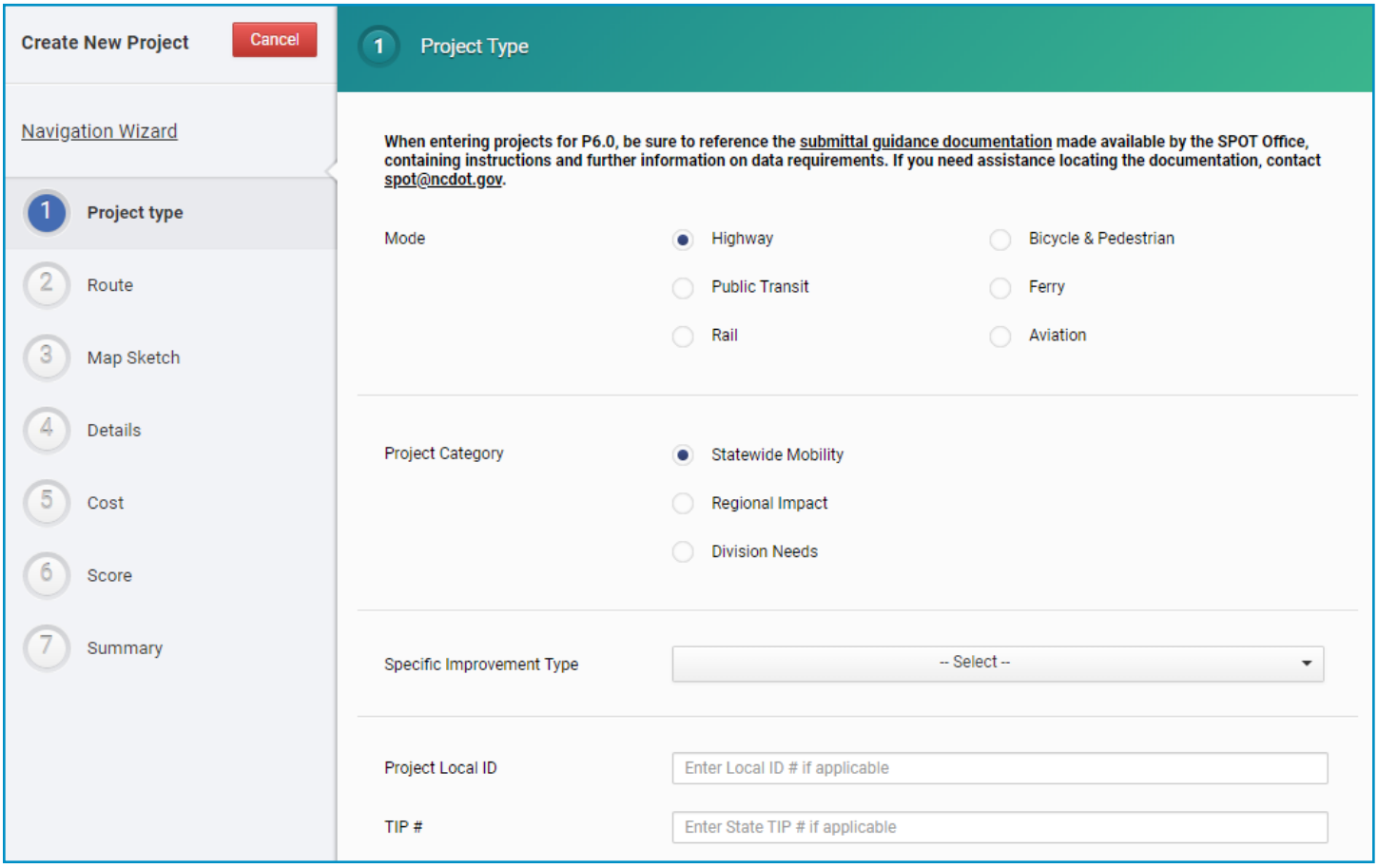
17. **Upgrade Freeway to Interstate Standards (segment)** – Improving an existing freeway to interstate design standards primarily by increasing shoulder width and/or bridge clearances.
18. **Widen Existing Local (Non-State) Roadway (segment)** – Widening roadway or construct a local roadway that is not on the state highway system.
19. **Improve Intersection on Local (Non-State) Roadway (segment)** – Improving an intersection of two or more local roadways that are not on the state highway system.
20. **Convert Grade Separation to Interchange to Relieve Existing Congested Interchange (point)** – Providing access from/to a freeway/expressway at an existing grade separation primarily in order to relieve a nearby congested interchange.
21. **Realign Multiple Intersections (point)** – Improving the geometric configuration at a single location of nearby offset intersections to enhance traffic flow.
22. **Construct Auxiliary Lanes or Other Operational Improvements (segment)** – Constructing one or more auxiliary lanes between interchange ramps along freeways or expressways
23. **Construct Grade Separation at Highway / Railroad Crossing** – Improving existing highway and railroad crossing intersections primarily by constructing grade separations separating the two modes.
24. **Implement Road Diet to Improve Safety (segment)** – Enhancing safety of a roadway by primarily reducing the lanes within the cross-section. This could include secondary capacity or multimodal improvements as well as the reallocation of roadway width to improve safety and function of the facility.
25. **Improve Multiple Intersections along Corridor (segment)** – Enhancement of multiple intersections along a single corridor
26. **Upgrade Roadway (segment)** – Collection of roadway improvements using mobility default criteria and weights

SITs 1-15 and 18-26 are considered MOBILITY improvements.
SITs 16 and 17 are considered MODERNIZATION improvements.

The Project Entry Wizard walks the user through a series of 7 screens for project entry. The first 5 screens are for project entry, and the last 2 provide preliminary criteria scores (when available) and summary of the information entered.

Screens 1, 2, and 5 are common to highway projects (with a few minor variations), while screens 3 and 4 vary based on the SIT (screen 3 is for mapping and screen 4 is for entering project details). Project entry requirements for each of the common screens (1, 2, and 5) are listed below. Each variation of inputs for screens 3 and 4 is shown next.

Screen 1 – Project Type



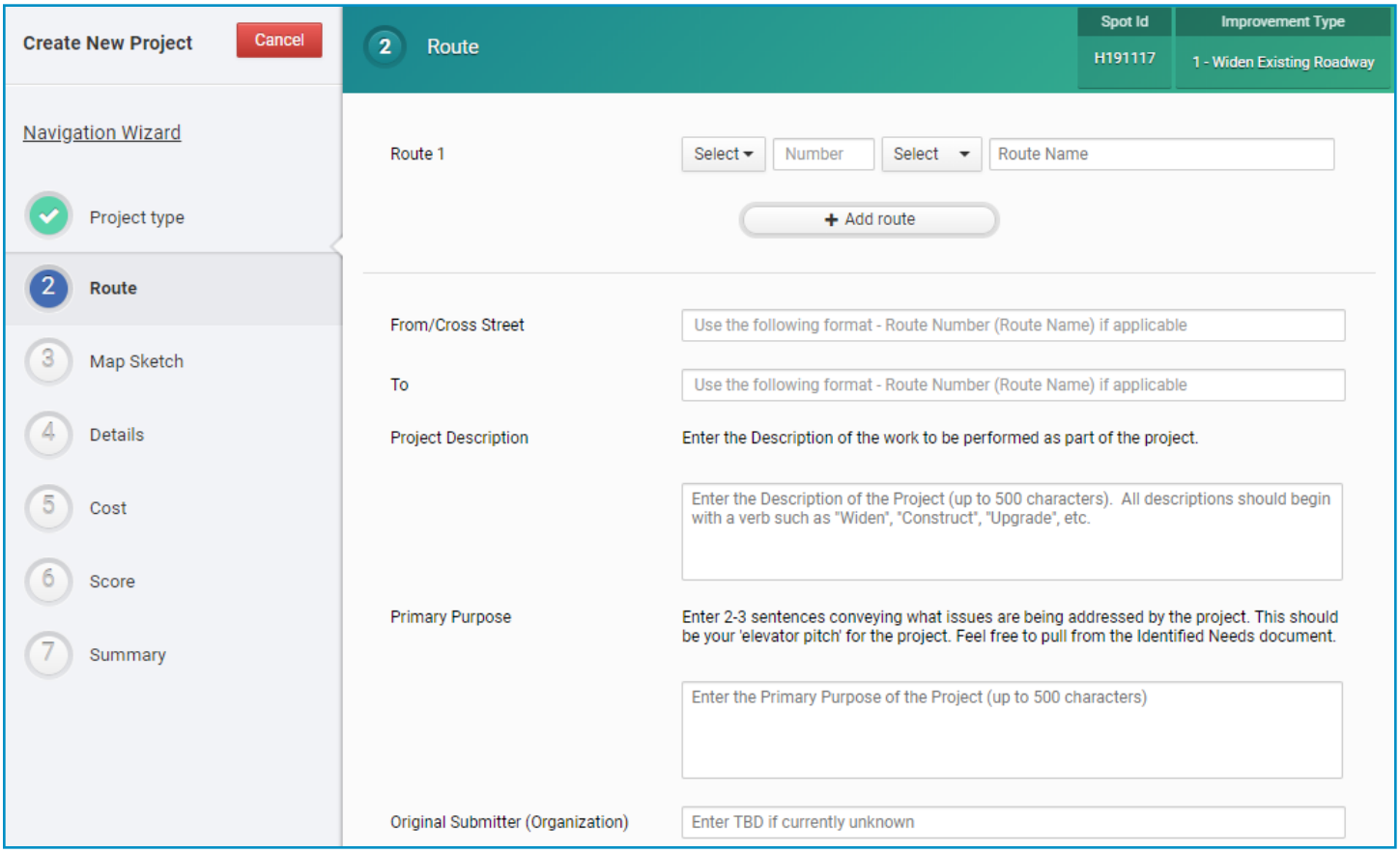
- **Mode** – Select Highway.

- **Project Category** – The STI category that the project is eligible for (see image below):
  - Statewide Mobility
  - Regional Impact
  - Division Needs

Mode	Statewide Mobility	Regional Impact	Division Needs
Highway	• Interstates (existing & future) • National Highway System routes (as of 2013) • STRAHNET[1] • Designated Toll Facilities	Other US and NC Routes	• All Secondary Roads (SR) • Federal-Aid Eligible Local Roads

- **Specific Improvement Type** – One of the 26 types noted above.
- **Project Local ID** – Free text field for Organizations to enter a Local ID if applicable (optional).
- **TIP #** – Free text field for Organizations to enter the State TIP number if applicable (optional).

Screen 2 – Route



- **Route Type** – Interstate, US, NC, SR Route (note the user can enter more than one Route Type/Number/Name)
- **Route Number** – the number associated with the Route Type
- **Route Suffix** – the suffix associate with the Route Type such as ALT, Business, Bypass, or Truck
- **Route Name** – Common name for the roadway – DO NOT USE PARENTHESIS
- **From/Cross Street** – Combination of the Route Type, Number, and Name of the project beginning location. If the project is an intersection/interchange, this field is for the Cross Street. Please use the notation shown in the box below.
- **To** – Combination of the Route Type, Number and Name of the project end location. If the project is an intersection/interchange, this field should be blank.

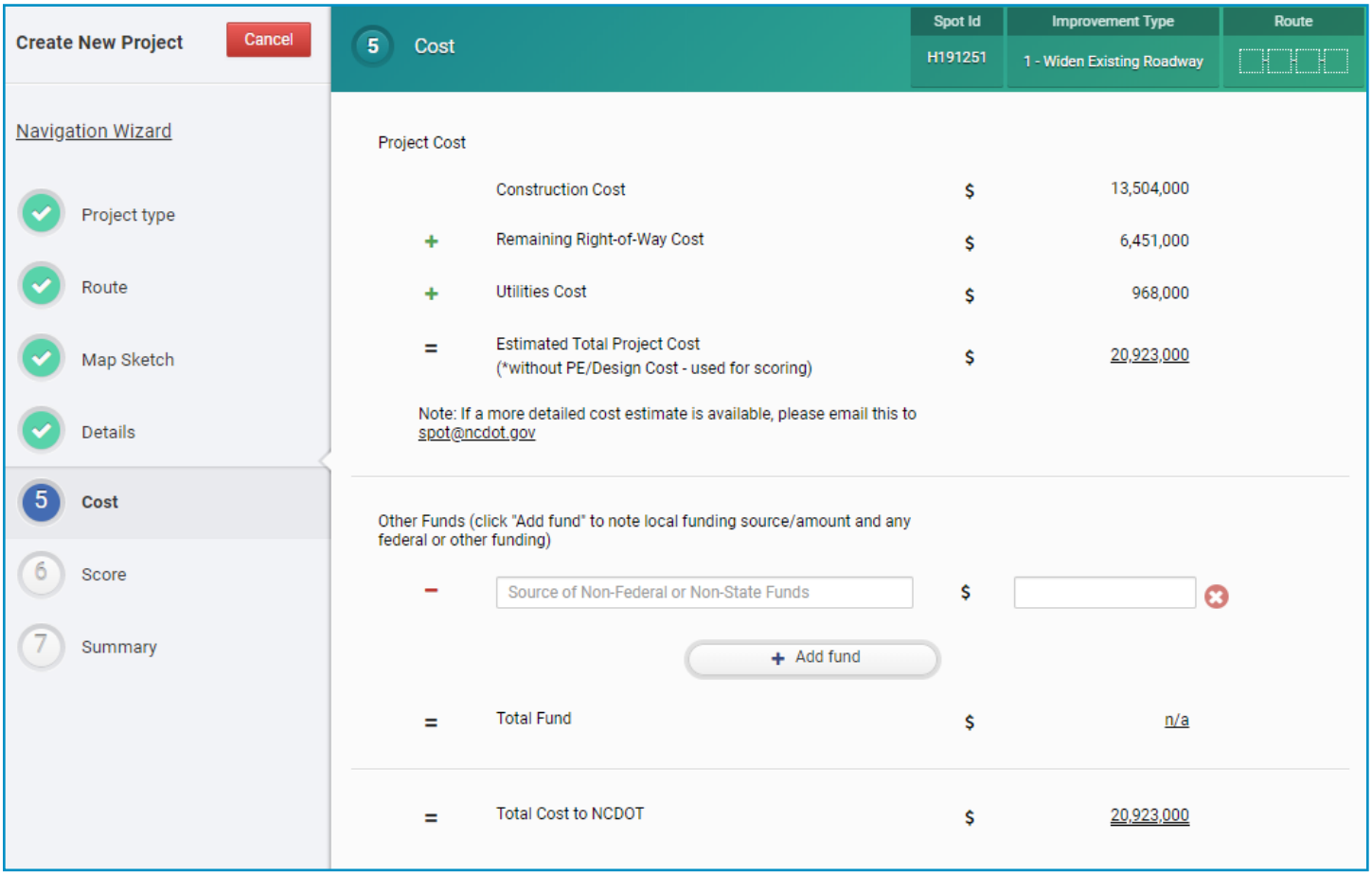
Remember for From / Cross Street and To:

- Please provide the Interstate, US, NC, or SR route number (unless a local road) and provide Route Name in parentheses (if desired).
    - Example: SR 1959 (Miami Boulevard).
- Spell out all words, street names, and street types (Drive, Road, Street, Avenue, Boulevard, etc.), except I, US, NC, SR
- For multiple routes, separate by commas
- For concurrent routes (that share the same physical pavement), use "/" (examples: I-85 Business/US 29/70, I-440/US 1, US 1/64, US 23/441, I-40/85)
- Make sure to provide logical termini that would be accepted in an environmental document. Use other routes if possible. Do not use planning (MPO/RPO) boundaries.
- For intersection projects, only fill in the "From / Cross Street" field. For citywide projects (such as signal systems), do NOT fill in the "From / Cross Street" or "To" fields.
- Please do not use all capital letters.

- **Project Description** – Description of the work to be performed as part of the project. All descriptions should begin with a verb (i.e., Widen, Construct, Install, etc.) with a maximum of 500 characters.
- **Primary Purpose** – a free text box for users to document the primary purpose or intent of the roadway improvement and issues the project should correct. This is similar to the Purpose and Need Statement of a project or Problem Statement, but with a maximum of 500 characters. Enter 2-3 sentences conveying what issues are being addressed by the project. This should be your 'elevator pitch' for the project.
- **Original Submitter (Organization)** – If this project already had a SPOT ID and existed from a previous round of Prioritization, provide the organization that originally submitted the project. This information is available in the lookup reference document created by the SPOT Office. If this is a new project for P8 without a prior SPOT ID, just enter your organization.
- **Additional Comments or Notes** – a free text box for users to add in additional information related to a project. This box is designed to let users include notes relevant to a project in the SPOT Online system. This is not a required field. This field allows for a maximum of 500 characters.

Note: The inputs for Screens 3 and 4 are listed on pages 20-44. SITs with similar screens are grouped together in blue boxes.

Screen 5 – Cost



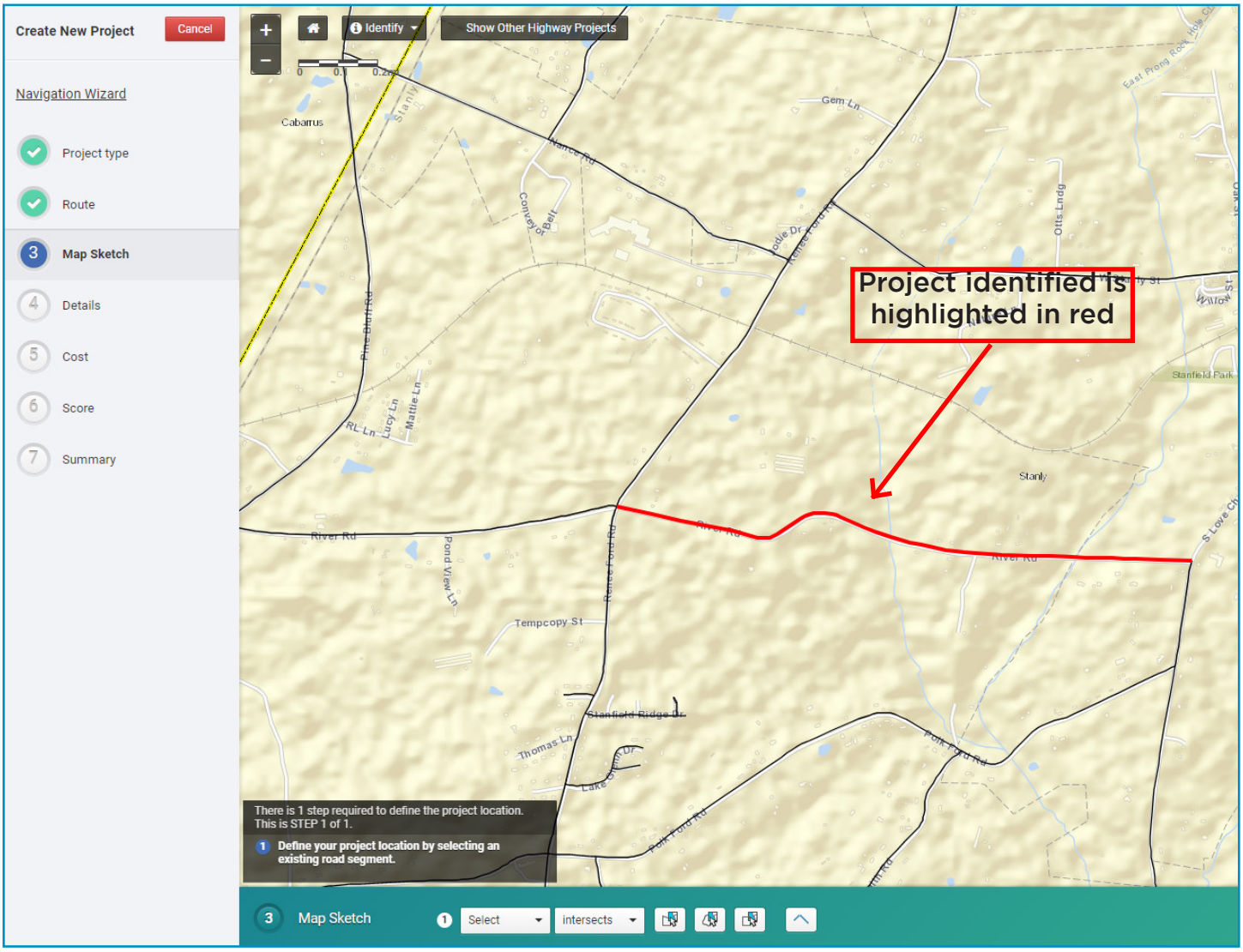
- **Other Funds Source** – the source of other funds committed to the cost of the project (i.e., municipal funds, tolls, etc.)
- **Other Funds** – the amount of other funding (non-federal or non-state funds) committed to the cost of the project.

You are now finished with the highway project entry.

Specific Improvement Types:	1. Widen Existing Roadway
	2. Upgrade Arterial to Freeway/Expressway
	3. Upgrade Expressway to Freeway
	4. Upgrade Arterial to RCI corridors
	11. Access Management

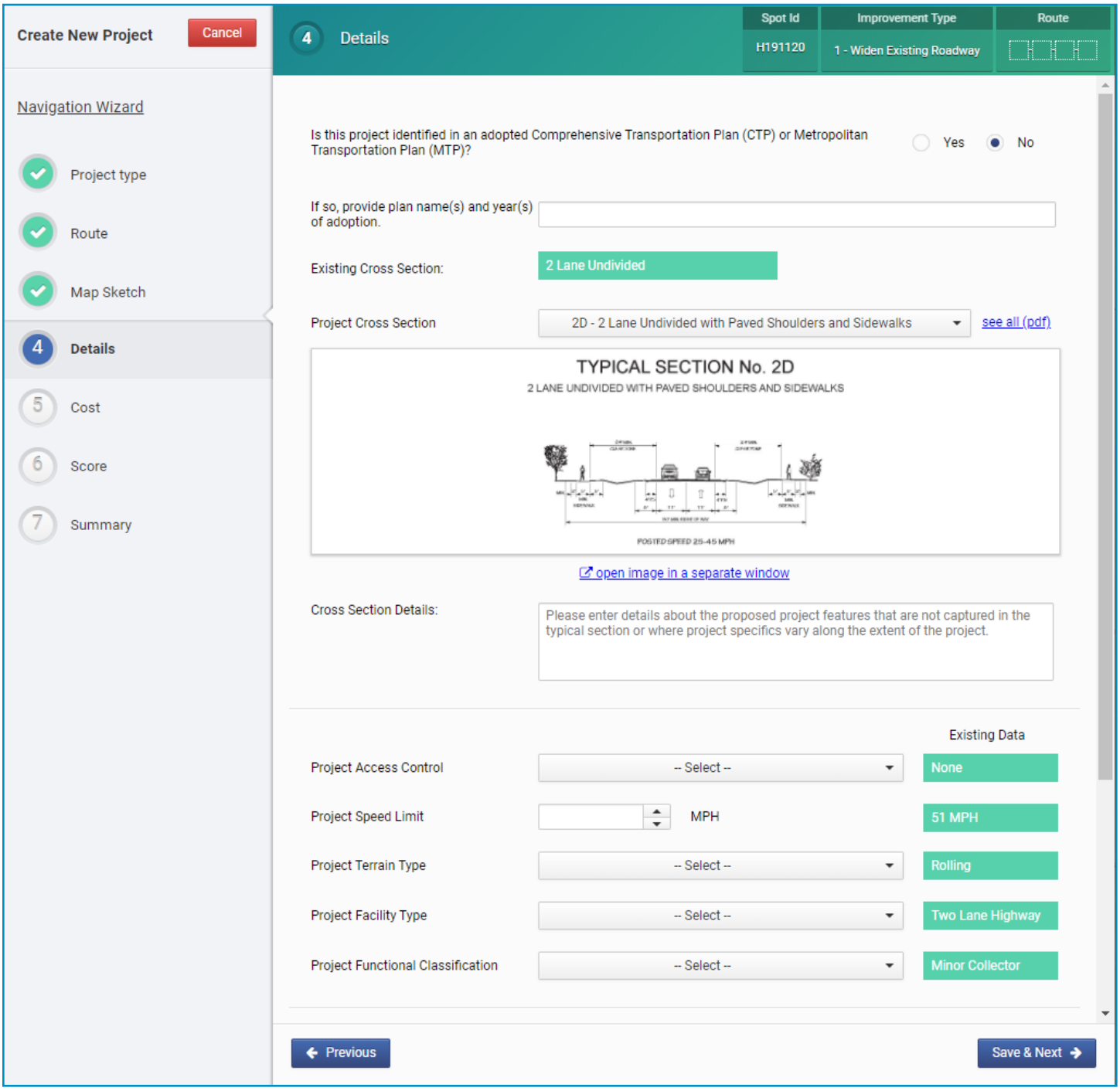
IMPORTANT NOTE: If greater than 50% of the intersections will be RCI, then use SIT 4. If it is 50% or less, then use SIT 25.

Screen 3 – Mapping



Users will be required to map the project by selecting the beginning and end points of the project and selecting the roadway segments in between.

Screen 4 – Project Details



- **Is this Project part of a Comprehensive Transportation Plan or Long Range Transportation Plan?**: (Yes/No)
  - If Yes, provide the **Name of Plan** and the **Year the Plan was adopted.**
- **Project Cross Section** – the proposed typical section for the project (57 options – see the Reference Appendices for "Highway Typical Sections for Use in SPOT Online").
- **Cross Section Details** – details about the proposed project features that are not captured in the typical section or where project specifics vary along the extend of the project. Please include details that will help staff develop the best cost possible.

- **Project Access Control** – the proposed control of access for the project (the existing access control will be provided for reference):
  - Full
  - Limited
  - Partial
  - None

Remember for Access Control:

- **Full Control of Access** – Connections to a facility provided only via ramps at interchanges. All cross-streets are grade-separated. No private driveway connections allowed. Control of access, which includes a control of access fence, is acquired along the entire length of the facility, and approximately 1000 feet beyond the ramp terminals on the Y lines (intersecting facilities) at interchanges, and approximately 300 feet on each side of the structure on Y lines at grade separations. Full control of access should be utilized on Freeways/Interstates.
- **Limited Control of Access** – Connections to a facility provided only via ramps at interchanges (major crossings) and at-grade intersections (minor crossings and service roads). No private driveway connections allowed. Control of access, which includes a control of access fence, is acquired along the entire length of the facility, except at intersections, approximately 1000 feet beyond the ramp terminals on the Y lines (intersecting facilities) at interchanges, and approximately 300 feet on each side of the structure on Y lines at grade separations. Limited control of access should be utilized on Expressways and Boulevards.
- **Partial Control of Access** – Connections to a facility provided via ramps at interchanges, at-grade intersections, and private driveways. Private driveway connections are normally defined as a maximum of one connection per parcel. The use of shared or consolidated connections is highly encouraged. Connections may be restricted or prohibited if alternate access is available through other adjacent public facilities. Control of access, which includes a control of access fence, is acquired along the entire length of the facility, except at intersections and driveways, approximately 1000 feet beyond the ramp terminals on the Y lines (intersecting facilities) at interchanges, and approximately 300 feet on each side of the structure on Y lines at grade separations. Partial of control of access should be utilized on Expressways and Boulevards.
- **No Control of Access (None)** – Connections to a facility provided via ramps at interchanges, at-grade intersections, and private driveways. No physical restrictions (such as a control of access fence) exist. Normally, private driveway connections are defined as one connection per parcel. Additional connections may be considered if they are justified and if such connections do not negatively impact traffic operations and public safety. No control of access should be utilized on Thoroughfares only.
- **Project Speed Limit (weighted average)** – the proposed speed limit for the project (the existing speed limit will be provided for reference).

IMPORTANT NOTE: If the speed limit will not change once the project is complete and open to traffic, make sure to enter the exact existing speed limit (to the nearest 1 mph) as shown. Failure to do so may affect the travel time savings calculation. If the speed limit will change once the project is complete and open to traffic, enter the new speed limit. If the speed limit will vary once the project is complete and open to traffic, entered the weighted average speed limit based on length.

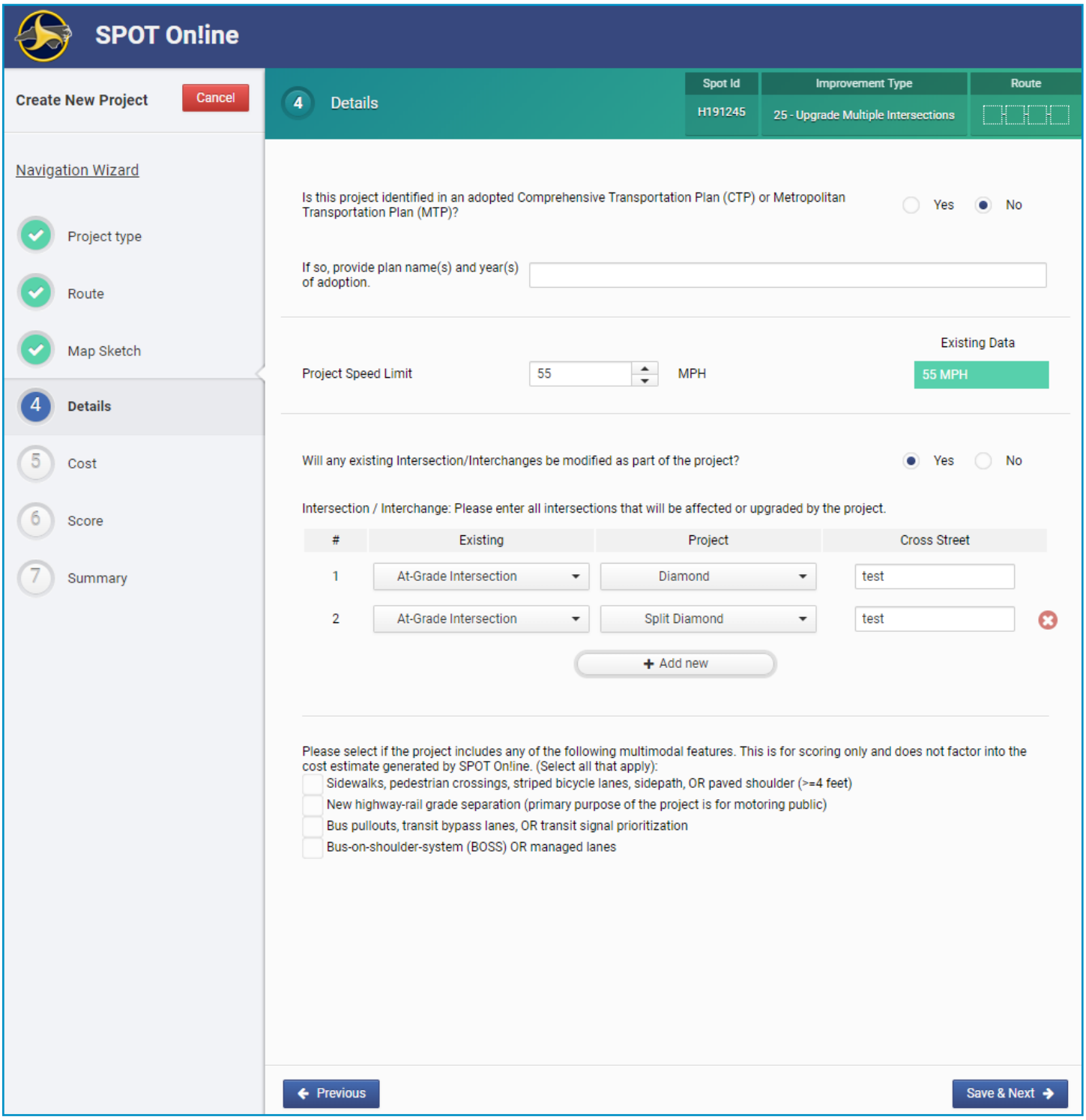
- **Project Terrain Type** – the proposed terrain type for the project (the existing terrain type will be provided for reference):
  - Level (Divisions 1-6 and 8)
  - Rolling (Divisions 7 and 9-14)
  - Mountainous (Truck speeds impacted)
- **Project Facility Type** – the proposed Facility Type for the project (the existing facility type will be provided for reference):
  - Freeway
  - Multi-Lane Highway
  - Two Lane Highway
  - Arterial
  - RCI corridors

Remember for Facility Type:

- **Freeway:** Roadway has Full Control of Access
- **Multi-Lane Highway:** Roadway with four or more lanes, a speed limit greater than 50 mph, AND any traffic signals which are GREATER THAN 2 miles apart. Expressways are considered multi-lane highways as they still include at-grade access to parcels or other streets.
- **Two-Lane Highway:** Roadway with two travel lanes and a speed limit greater than 50 mph. Roadways that meet these criteria and include a TWLTL are also classified as a Two-lane Highway.
- **Arterial:** Everything else; Includes:
  - Two-lane Highways with a speed limit less than 50 mph
  - Any roadway where traffic signals are LESS THAN 2 miles apart
- **RCI corridors:** a series of **SIGNALIZED** intersections in which minor cross-street traffic is prohibited from going straight through or left at a divided highway intersection. Minor cross street traffic must turn right but can then access a U-turn to proceed in the desired direction. All signalized intersections are two-phase signals and are synchronized in both directions to maximize efficiency and vehicle throughput.

If the facility type varies along the roadway, please use the facility type most prevalent along the corridor.

- **Project Functional Classification** – the proposed Functional Classification for the project (the existing functional classification will be provided for reference). For more information see Highway Functional Class Definitions at the end of this document:
    - Interstate
    - Other Principal Arterial-Other Freeway
    - Other Principal Arterial
    - Minor Arterial
    - Major Collector
    - Minor Collector
    - Local
- **Existing Median Type** – the existing type of median along the roadway. If more than one type exists, choose the predominant value (this value will be used for the cost estimation tool):
    - Depressed Grass Median – 46ft or Greater (Cable Guardrail)
    - Depressed Grass Median – 30ft (Rigid Guardrail)
    - Raised Grass Median
    - Raised Concrete Median
    - Jersey Barrier
    - Two Way Left Turn Lane
    - None (Undivided)
- **Will any Intersections/Interchanges be upgraded as part of this project?** – (Yes/No).
    - If Yes, then enter **Existing Intersection/Interchange Type** and P**roject Intersection/ Interchange** (see Intersection and Interchange Designs for SPOT Online). Note the user can enter more than one intersection/interchange improvement. See screenshot on next page:



- **Please select if the proposed project includes (select all that apply):**
  - Sidewalks, pedestrian crossings, striped bicycle lanes, wide outside lanes (>= 14 feet), OR paved shoulder (>=4 feet)
  - New highway-rail grade separation (primary purpose of the project is for motoring public)
  - Bus pullouts, transit bypass lanes, OR transit signal prioritization
  - Bus-on-shoulder-system (BOSS) OR managed lanes

Specific Improvement Types:	5. Construct Roadway on New Location
	6. Widen Existing Roadway and Construct Part on New Location

Screen 3 – Mapping

Users will be required to map the proposed project location either by drawing in the proposed location or by selecting the project from a user-uploaded shapefile. The user will also be required to map the parallel route for the project map by selecting the beginning and end points of the parallel route and selecting the roadway segments in between.

Screen 4 – Project Details

- **Is this Project part of a Comprehensive Transportation Plan or Long Range Transportation Plan?**: (Yes/No)
  - If Yes, provide the **Name of Plan** and the **Year the Plan was adopted.**
- **Project Cross Section** – the proposed typical section for the project (57 options – see Highway Typical Sections for use in SPOT Online document).
- **Cross Section Details** – details about the proposed project features that are not captured in the typical section or where project specifics vary along the extend of the project. Please include details that will help staff develop the best cost possible.
- **Project Access Control** – the proposed control of access for the project (the existing access control, based on the parallel route, will be provided for reference):
  - Full
  - Limited
  - Partial
  - None
- **Project Speed Limit (weighted average)** – the proposed speed limit for the project (the existing speed limit, based on the parallel route, will be provided for reference)
- **Project Terrain Type** – the proposed terrain type for the project (the existing terrain type, based on the parallel route, will be provided for reference):
  - Level (Divisions 1-6 and 8)
  - Rolling (Divisions 7 and 9-14)
  - Mountainous (Truck speeds impacted)
- **Project Facility Type** – the proposed Facility Type for the project (the existing facility type, based on the parallel route, will be provided for reference):
  - Freeway
  - Multi-Lane Highway
  - Two Lane Highway
  - Arterial
  - RCI corridors

- **Project Functional Classification** – the proposed Functional Classification for the project (the existing functional classification, based on the parallel route, will be provided for reference). For more information see Highway Functional Class Definitions at the end of this document:
    - Interstate
    - Other Principal Arterial-Other Freeway
    - Other Principal Arterial
    - Minor Arterial
    - Major Collector
    - Minor Collector
    - Local
- **Will the project include any interchanges or non-traditional intersections, such as roundabouts or directional crossovers with U-turns (RCI corridors)?** – (Yes/No).
    - If Yes, then enter Project Intersection/Interchange (see Intersection and Interchange Designs for SPOT Online). Note the user can enter more than one intersection/ interchange.
- **Please select if the proposed project includes (select all that apply):**
    - Sidewalks, pedestrian crossings, striped bicycle lanes, wide outside lanes (>= 14 feet), OR paved shoulder (>=4 feet)
    - New highway-rail grade separation (primary purpose of the project is for motoring public)
    - Bus pullouts, transit bypass lanes, OR transit signal prioritization
    - Bus-on-shoulder-system (BOSS) OR managed lanes

Specific Improvement Types:	7. Upgrade At-grade Intersection to Interchange or Grade Separation
	8. Improve Interchange
	9. Convert Grade Separation to Interchange
	10. Improve Intersection

Screen 3 – Mapping

Users will be required to map the project by dropping a pin at the intersection/interchange location.

Screen 4 – Project Details

- I**s this Project part of a Comprehensive Transportation Plan or Long Range Transportation Plan?**: (Yes/No)
  - If Yes, provide the Name of Plan and the Year the Plan was adopted
- **Project Access Control** – the proposed control of access for the project (the existing access control will be provided for reference):
  - Full
  - Limited
  - Partial
  - None
- **Project Speed Limit (weighted average)** – the proposed speed limit for the project (the existing speed limit will be provided for reference)
- **Project Facility Type** – the proposed Facility Type for the project (the existing facility type will be provided for reference):
  - Freeway
  - Multi-Lane Highway
  - Two Lane Highway
  - Arterial
  - RCI corridors
- Enter **Existing Intersection/Interchange Type** and **Project Intersection/Interchange** (see Intersection and Interchange Designs for SPOT Online)

Note:
If project location is in an urban footprint/area it is recommended to use a single point urban interchange or tight urban diamond interchange to capture the appropriate interchange cost.

- **Please select if the proposed project includes (select all that apply):**
  - Sidewalks, pedestrian crossings, striped bicycle lanes, wide outside lanes (>= 14 feet), OR paved shoulder (>=4 feet)
  - New highway-rail grade separation (primary purpose of the project is for motoring public)
  - Bus pullouts, transit bypass lanes, OR transit signal prioritization
  - Bus-on-shoulder-system (BOSS) OR managed lanes

Specific Improvement Types: 12. Ramp Metering

Screen 3 – Mapping

Users will be required to map the project by selecting the beginning and end points of the project and selecting the roadway segments in between.

Screen 4 – Project Details

- **Number of Ramp Meters** – the number of individual ramps where meters would be installed as part of the project. Note that an interchange may have multiple ramps with meters

Specific Improvement Types: 13. Citywide Signal System

Screen 3 – Mapping

Users will be required to select the county and city where the proposed citywide signal system is located

Screen 4 – Project Details

- **Type of Citywide Signal System Project** – whether project is an upgrade of an existing citywide signal system or whether a new citywide signal system would be installed as part of the project.
  - Upgrade of an Existing System
  - New Citywide Signal System
- **Number of Signalized Intersections** – the total number of signalized intersections included as part of the project.

Specific Improvement Types: 14. Closed Loop Signal System

Screen 3 – Mapping

Users will be required to map the project by selecting the beginning and end points of the project and selecting the roadway segments in between.

Screen 4 – Project Details

- **Number of Signalized Intersections** – the number of signalized intersections that will be connected as part of the closed loop signal system.
- **Miles of Fiber Optic Cable to be Installed** – the number of miles of fiber optic cable to be installed as part of the closed loop signal system.

Specific Improvement Types: 15. Install Cameras and DMS

Screen 3 – Mapping

Users will be required to map the project by selecting the beginning and end points of the project and selecting the roadway segments in between.

Screen 4 – Project Details

- **Number of CCTV Cameras to be installed**
- **Number of Dynamic Message Signs (DMS) to be installed**
- **Miles of Fiber Optic Cable to be Installed** – the number of miles of fiber optic cable to be installed with the project

Specific Improvement Types:	16. Modernize Roadway
	17. Upgrade Freeway to Interstate Standards
	25. Improve Multiple Intersections along Corridor
	26. Upgrade Roadway

Screen 3 – Mapping

Users will be required to map the project by selecting the beginning and end points of the project and selecting the roadway segments in between.

For SIT 25, users will be required to map the project by dropping a pin at each intersection/ interchange location to be upgraded.

Screen 4 – Project Details

Users will be required to answer questions and enter data used to score and cost the project.

- **Project Speed Limit (weighted average)** – the proposed speed limit for the project (the existing speed limit will be provided for reference).

IMPORTANT NOTE: If the speed limit will not change once the project is complete and open to traffic, make sure to enter the exact existing speed limit (to the nearest 1 mph) as shown. Failure to do so may affect the travel time savings calculation. If the speed limit will change once the project is complete and open to traffic, enter the new speed limit. If the speed limit will vary once the project is complete and open to traffic, entered the weighted average speed limit based on length.

- **Intersection / Interchange: Please enter all intersections that will be affected or upgraded by the project. Please select if the proposed project includes (select all that apply):**
  - For SIT 16, if there are no intersections along the corridor, select "At-Grade Intersection" under "Existing", select "Add 1 turn lane" under "Project" and type "None" under "Cross Street"
- **Please select if the proposed project includes (select all that apply):**
  - Sidewalks, pedestrian crossings, striped bicycle lanes, wide outside lanes (>= 14 feet), OR paved shoulder (>=4 feet)
  - New highway-rail grade separation (primary purpose of the project is for motoring public)
  - Bus pullouts, transit bypass lanes, OR transit signal prioritization
  - Bus-on-shoulder-system (BOSS) OR managed lanes

- For SIT 16 and 17, please utilize the "Description" field in SPOT Online to specify a cross-section if desired and provide further detailed information. This will assist the Feasibility Studies Unit in reviewing the cost estimates more effectively.

Specific Improvement Types: 18. Widen Existing Local (Non-State) Roadway

Screen 3 – Mapping

Users will be required to select state-maintained roadway segments nearest to the local roadway that the proposed project is on. Please include a description of the exact location of the project including the route number and name in the Project Description field on Screen 2 (Route). Also include a google maps URL so that the exact location is recorded.

Screen 4 – Project Details

Users will be required to answer questions and enter data used to score the project.

- **Existing # of Lanes Per Direction**
- **Existing Median Type**
- **Existing Speed Limit**
- **Existing Facility Type**
- **Existing Terrain Type**
- **Existing Length**
- **Existing Functional Classification**
- **Existing Lane Width**
- **Existing Paved Shoulder Width**
- **Does Existing Roadway have Curb & Gutter?"**
- **Existing Volume (AADT)**
- **Existing Capacity (LOS E)**
- **Existing Access Control**
- **Area Type** – Most likely this value will be urban
- **Percent Trucks**

The user will hit **apply details** and then answer the following questions:

- **Is this Project part of a Comprehensive Transportation Plan or Long Range Transportation Plan?**: (Yes/No)
    - If Yes, provide the Name of Plan and the Year the Plan was adopted

- **Project Cross Section** – the proposed typical section for the project (57 options – see Highway Typical Sections for use in SPOT Online)

- **Cross Section Details** – details about the proposed project features that are not captured in the typical section or where project specifics vary along the extent of the project. Please include details that will help staff develop the best cost possible.

- **Project Access Control** – the proposed control of access for the project (the existing speed limit, entered by users, will be provided for reference):
    - Full
    - Limited
    - Partial
    - None

- **Project Speed Limit (weighted average)** – the proposed speed limit for the project (the existing speed limit, entered by users, will be provided for reference):

IMPORTANT NOTE: If the speed limit will not change once the project is complete and open to traffic, make sure to enter the exact existing speed limit (to the nearest 1 mph) as shown. Failure to do so may affect the travel time savings calculation. If the speed limit will change once the project is complete and open to traffic, enter the new speed limit. If the speed limit will vary once the project is complete and open to traffic, enter the weighted average speed limit based on length.

- **Project Terrain Type** – the proposed terrain type for the project (the existing terrain type, entered by the user, will be provided for reference):
    - Level (Divisions 1-6 and 8)
    - Rolling (Divisions 7 and 9-14)
    - Mountainous (Truck speeds impacted)

- **Project Facility Type** – the proposed Facility Type for the project (the existing facility type, entered by the user, will be provided for reference):
    - Freeway
    - Multi-Lane Highway
    - Two Lane Highway
    - Arterial
    - RCI corridors

- **Project Functional Classification** – the proposed Functional Classification for the project (the existing functional classification, entered by the user, will be provided for reference). For more information see Highway Functional Class Definitions at the end of this document:
    - Interstate
    - Other Principal Arterial-Other Freeway
    - Other Principal Arterial
    - Minor Arterial
    - Major Collector
    - Minor Collector
    - Local

- Will the project include any interchanges or non-traditional intersections, such as roundabouts or directional crossovers with U-turns (RCI corridors)? – (Yes/No).
    - If Yes, then enter Project Intersection/Interchange (see Intersection and Interchange Designs for SPOT Online). Note the user can enter more than one intersection/ interchange
- Please select if the proposed project includes (select all that apply):
    - Sidewalks, pedestrian crossings, striped bicycle lanes, wide outside lanes (>= 14 feet), OR paved shoulder (>=4 feet)
    - New highway-rail grade separation (primary purpose of the project is for motoring public)
    - Bus pullouts, transit bypass lanes, OR transit signal prioritization
    - Bus-on-shoulder-system (BOSS) OR managed lanes

Specific Improvement Types:	19. Improve Intersection on Local (Non-State) Roadway

Screen 3 – Mapping

Users will define the project location, on a Non-State / Local Roadway by dropping a pin on the nearest state-maintained intersection closest to the area of the local intersection. Please include a description of the exact location of the project including the route numbers and names in the Project Description field on Screen 2 (Route). Also include a google maps URL so that the exact location is recorded.

Screen 4 – Project Details

Users will be required to answer questions and enter data used to score the project.

- **Existing # of Lanes Per Direction**
- **Existing Median Type**
- **Existing Speed Limit**
- **Existing Facility Type**
- **Existing Terrain Type**
- **Existing Length**
- **Existing Functional Classification Existing Lane Width**
- **Existing Paved Shoulder Width**
- **Does Existing Roadway Have Curb & Gutter?**
- **Existing Volume (AADT – Higher Level Facility)**

- **Existing Volume (AADT – Average of all Intersection Legs, then Doubled)**
- **Existing Capacity (LOS E – Average of all Intersection Legs, then Doubled)**
- **Existing Access Control**
- **Area Type** – Most likely this value will be urban
- **Percent Trucks**

The user will hit **apply details** and then answer the following questions:

- **Is this Project part of a Comprehensive Transportation Plan or Long Range Transportation Plan?**: (Yes/No)
    - If Yes, provide the Name of Plan and the Year the Plan was adopted

- **Project Access Control** – the proposed control of access for the project (the existing access control, entered by the user, will be provided for reference):
    - Full
    - Limited
    - Partial
    - None
- **Project Speed Limit (weighted average)** – the proposed speed limit for the project (the existing speed limit, entered by the user, will be provided for reference)
- **Project Facility Type** – the proposed Facility Type for the project (the existing facility type, entered by the user, will be provided for reference):
    - Freeway
    - Multi-Lane Highway
    - Two Lane Highway
    - Arterial
    - RCI corridors
- **Will any existing Intersection/Interchanges be modified as part of the project? (Yes/No)**. Select yes to indicate that an intersection will be modified and then enter **Existing Intersection Type** and **Project Intersection Type** (see Intersection and Interchange Designs for SPOT Online).
- **Please select if the proposed project includes (select all that apply):**
    - Sidewalks, pedestrian crossings, striped bicycle lanes, wide outside lanes (>= 14 feet), OR paved shoulder (>=4 feet)
    - New highway-rail grade separation (primary purpose of the project is for motoring public)
    - Bus pullouts, transit bypass lanes, OR transit signal prioritization
    - Bus-on-shoulder-system (BOSS) OR managed lanes

Specific Improvement Types:	20. Convert Grade Separation to Interchange to Relieve Existing Congested Interchange

Screen 3 – Mapping

Users will define the project location by dropping a pin on an existing grade separation. The user will then drop a pin on the existing congested interchange that the new interchange is intended to relieve.

Screen 4 – Project Details

- **Is this Project part of a Comprehensive Transportation Plan or Long Range Transportation Plan?**: (Yes/No)
- **Project Access Control** – the proposed control of access for the project (the existing access control will be provided for reference):
  - Full
  - Limited
  - Partial
  - None
- **Project Speed Limit (weighted average)** – the proposed speed limit for the project (the existing speed limit will be provided for reference)
- **Project Facility Type** – the proposed Facility Type for the project (the existing facility type will be provided for reference):
  - Freeway
  - Multi-Lane Highway
  - Two Lane Highway
  - Arterial
  - RCI corridors
- Enter **Existing Interchange Type** and **Project Interchange** (see Intersection and Interchange Designs for SPOT Online)
- **Please select if the proposed project includes (select all that apply):**
  - Sidewalks, pedestrian crossings, striped bicycle lanes, wide outside lanes (>= 14 feet), OR paved shoulder (>=4 feet)
  - New highway-rail grade separation (primary purpose of the project is for motoring public)
  - Bus pullouts, transit bypass lanes, OR transit signal prioritization
  - Bus-on-shoulder-system (BOSS) OR managed lanes

Specific Improvement Types: 21. Realign Multiple Intersections

Screen 3 – Mapping

Users will define the project by dropping a pin on the first intersection and then dropping a pin on the second intersection. The user will then draw in the new alignment between the two intersections.

Screen 4 – Project Details

- **Is this Project part of a Comprehensive Transportation Plan or Long Range Transportation Plan?**: (Yes/No)
  - If Yes, provide the **Name of Plan** and the **Year the Plan was adopted**
- **Existing Cross Section** – provided from system
- **Project Cross Section** – the proposed cross section for the project (57 options – see Highway Typical Sections for use in SPOT Online).
- **Cross Section Details** – details about the proposed project features that are not captured in the typical section or where project specifics vary along the extend of the project. Please include details that will help staff develop the best cost possible.
- **Project Access Control** – the proposed control of access for the project (the existing access control will be provided for reference):
  - Full
  - Limited
  - Partial
  - None
- **Project Speed Limit (weighted average)** – the proposed speed limit for the project (the existing speed limit will be provided for reference)
- **Project Terrain Type** – the proposed terrain type for the project (the existing terrain type will be provided for reference):
  - Level (Divisions 1-6 and 8)
  - Rolling (Divisions 7 and 9-14)
  - Mountainous (Truck speeds impacted)
- **Project Facility Type** – the proposed Facility Type for the project (the existing facility type will be provided for reference):
  - Freeway
  - Multi-Lane Highway
  - Two Lane Highway
  - Arterial
  - RCI corridors

- **Will the project include any interchanges or non-traditional intersections, such as roundabouts or directional crossovers with U-turns (RCI corridors)?** – (Yes/No).
    - If Yes, then enter **Project Intersection/Interchange** (see Intersection and Interchange Designs for SPOT Online). Note the user can enter more than one intersection/ interchange

- **Please select if the proposed project includes (select all that apply):**
    - Sidewalks, pedestrian crossings, striped bicycle lanes, wide outside lanes (>= 14 feet), OR paved shoulder (>=4 feet)
    - New highway-rail grade separation (primary purpose of the project is for motoring public)
    - Bus pullouts, transit bypass lanes, OR transit signal prioritization
    - Bus-on-shoulder-system (BOSS) OR managed lanes

Specific Improvement Types:	22.Construct Auxiliary Lanes or Other Operational Improvements

Screen 3 – Mapping

Users will define the project location by selecting an existing road segment.

Screen 4 – Project Details

- **Is this Project part of a Comprehensive Transportation Plan or Long Range Transportation Plan?**: (Yes/No)
    - If Yes, provide the Name of Plan and the Year the Plan was adopted
- **Project Cross Section** – the proposed cross section for the project (the existing cross section will be provided for reference). The proposed cross section includes the auxiliary lane(s). If the project is to construct an auxiliary lane in only one direction of travel, select the cross section that corresponds to adding an auxiliary lane in both directions of travel (the cost will ultimately be divided by two).
- **Cross Section Details** – details about the proposed project features that are not captured in the typical section or where project specifics vary along the extend of the project. Please include details that will help staff develop the best cost possible.
- **Project Access Control** – the proposed control of access for the project (the existing access control will be provided for reference):
    - Full
    - Limited
    - Partial
    - None

- **Project Speed Limit (weighted average)** – the proposed speed limit for the project (the existing speed limit will be provided for reference)
- **Project Terrain Type** – the proposed terrain type for the project (the existing terrain type will be provided for reference):
    - Level (Divisions 1-6 and 8)
    - Rolling (Divisions 7 and 9-14)
    - Mountainous (Truck speeds impacted)
- **Project Facility Type** – the proposed Facility Type for the project (the existing facility type will be provided for reference):
    - Freeway
    - Multi-Lane Highway
    - Two Lane Highway
    - Arterial
    - RCI corridors
- **Project Functional Classification** – the proposed Functional Classification for the project (the existing functional classification will be provided for reference). For more information see Highway Functional Class Definitions at the end of this document:
    - Interstate
    - Other Principal Arterial-Other Freeway
    - Other Principal Arterial
    - Minor Arterial
    - Major Collector
    - Minor Collector
    - Local
- **Will the project include any interchanges or non-traditional intersections, such as roundabouts or directional crossovers with U-turns (RCI corridors)?** – (Yes/No).
    - If Yes, then enter **Project Intersection/Interchange** (see Intersection and Interchange Designs for SPOT Online). Note the user can enter more than one intersection/interchange
- **Please select if the proposed project includes (select all that apply):**
    - Sidewalks, pedestrian crossings, striped bicycle lanes, wide outside lanes (>= 14 feet), OR paved shoulder (>=4 feet)
    - New highway-rail grade separation (primary purpose of the project is for motoring public)
    - Bus pullouts, transit bypass lanes, OR transit signal prioritization
    - Bus-on-shoulder-system (BOSS) OR managed lanes

Specific Improvement Types:	23. Construct Grade Separation at Highway/ Railroad Crossing

IMPORTANT NOTE: It is recommended that all highway-rail at-grade crossing projects should be submitted under the Rail mode, unless justification (in the Primary Purpose field) is provided to indicate it should be evaluated in Highway.

Screen 3 – Mapping

Users will define the project by dropping a pin on an intersection.

Screen 4 – Project Details

- **Is this Project part of a Comprehensive Transportation Plan or Long Range Transportation Plan?**: (Yes/No)
  - If Yes, provide the Name of Plan and the Year the Plan was adopted
- **Project Access Control** – the proposed control of access for the project (the existing access control will be provided for reference):
  - Full
  - Limited
  - Partial
  - None
- **Project Speed Limit (weighted average)** – the proposed speed limit for the project (the existing speed limit will be provided for reference)
- **Project Facility Type** – the proposed Facility Type for the project (the existing facility type will be provided for reference):
  - Freeway
  - Multi-Lane Highway
  - Two Lane Highway
  - Arterial
  - RCI corridors
- Enter **Existing Intersection/Interchange Type** and **Project Intersection/Interchange** (see Intersection and Interchange Designs for SPOT Online)
- **Please select if the proposed project includes (select all that apply):**
  - Sidewalks, pedestrian crossings, striped bicycle lanes, wide outside lanes (>= 14 feet), OR paved shoulder (>=4 feet)
  - New highway-rail grade separation (primary purpose of the project is for motoring public)
  - Bus pullouts, transit bypass lanes, OR transit signal prioritization
  - Bus-on-shoulder-system (BOSS) OR managed lanes

Specific Improvement Types:	24.Implement Road Diet to Improve Safety

IMPORTANT NOTE: For P8, SIT 24 projects can be scored as either a mobility project or a modernization project. By default, all SIT 24 projects will be scored as modernization projects. If you would like for your SIT 24 project to be scored as a mobility project, please note this in the Additional Comments field and send an email to SPOT@NCDOT.gov with the SPOT ID and a note requesting that it be scored as a mobility project.

The SPOT Office **will not** score SIT 24 projects as mobility projects unless an email is sent requesting to do so. The note in the Additional Comments field is so that SPOT can verify the intent. Leaving only a note in the Additional Comments field will likely result in a SIT 24 project being scored as a modernization project.

Screen 3 – Mapping

Users will be required to map the project by selecting the beginning and end points of the project and selecting the roadway segments in between.

Screen 4 – Project Details

- **Is this Project part of a Comprehensive Transportation Plan or Long Range Transportation Plan?**: (Yes/No)
  - If Yes, provide the **Name of Plan** and the **Year the Plan was adopted**
- **Project Access Control** – the proposed control of access for the project (the existing access control will be provided for reference):
  - Full
  - Limited
  - Partial
  - None
- **Project Speed Limit (weighted average)** – the proposed speed limit for the project (the existing speed limit will be provided for reference)
- **Project Facility Type** – the proposed Facility Type for the project (the existing facility type will be provided for reference):
  - Freeway
  - Multi-Lane Highway
  - Two Lane Highway
  - Arterial
  - RCI corridors

- **Will any Intersections/Interchanges be upgraded as part of this project?** – (Yes/No). Note, this does NOT include turn lanes at intersections (these are already accounted for in the cost)
    - If Yes, then enter Existing Intersection/Interchange Type and Project Intersection/Interchange (see Intersection and Interchange Designs for SPOT Online). Note the user can enter more than one intersection/interchange improvement.
- **Please select if the proposed project includes (select all that apply):**
    - Sidewalks, pedestrian crossings, striped bicycle lanes, wide outside lanes (>= 14 feet), OR paved shoulder (>=4 feet)
    - New highway-rail grade separation (primary purpose of the project is for motoring public)
    - Bus pullouts, transit bypass lanes, OR transit signal prioritization
    - Bus-on-shoulder-system (BOSS) OR managed lanes

End of Highway Guidance.

P8 Project Entry – Aviation

Resources

The key resource for correctly identifying a project to be entered into the SPOT Online system is the Airport Sponsor, who should have already entered the project into the NCDOT Division of Aviation's Partner Connect system. This may be the local Airport Manager or the City/County Manager.

Once projects are identified, contact the NCDOT Division of Aviation (DoA) for assistance in correctly categorizing and describing projects. The DoA Senior Program Engineer is the primary contact (currently Wasan Alkaissi), who can direct you to the DoA Airport Project Engineer/Manager for your area as well as the Airport Sponsor if needed. Contact information can be found on the NCDOT Directory.

Data Requirements

The following data in SPOT Online will need to be provided when entering an Aviation project:

- STI Project Category
- Specific Improvement Type (SIT)
- TIP # *
- Project Local ID *
- Airport Name
- Project Title
- Location (text and mapped)
- Project Description
- Primary Purpose
- Original Submitter
- Airport Sponsor
- Plan Information
- Additional Comments or Notes *
- Source of Cost Estimation
- Project Cost

This data is explained in more detail below, including the screens in SPOT Online where they are located. (Items marked with * are optional fields.)

Screen 1

STI Project Category –

The following 5 airports are categorized as Statewide Mobility:
- Asheville Regional Airport
- Charlotte Douglas International Airport
- Piedmont Triad International Airport
- Raleigh Durham International Airport
- Wilmington International Airport

The following 5 airports are categorized as Regional Impact:
- Albert J. Ellis Airport
- Coastal Carolina Airport
- Concord Regional Airport
- Fayetteville Regional Airport
- Pitt Greenville Airport

All General Aviation airports are categorized as Division Needs.

Specific Improvement Type (SIT) – Options are listed below. Select the one that best fits the project description. Note that for P8, options with an asterisk are new for P8 and will not be selectable for P8 – if your project fits one of these SITs, select another option and list the correct SIT in the Description field. If you need assistance identifying the correct SIT, contact the Division of Aviation Program Engineer or Airport Project Engineer/Manager for your area.
- 400 - Pavement Condition *
- 500 - Runway Length & WIDTH
- 600 - Pavement Strength
- 700 - Visual Navigational Aids *
- 800 - Runway Edge Lighting
- 900 - Weather Reporting Capability *
- 1000 - Standard Instrument Approach Procedures *
- 1100 - Taxiway Requirements
- 1200 - Aircraft Apron / Helipad Requirements
- 1300 - General Aviation Terminal Building
- 1400 - Taxiway and Apron Edge Lighting
- 1500 - Airfield Signage
- 1700 - Approach Lighting
- 1800 - Aircraft Rescue & Fire Fighting Equipment *
- 1900 - Hangars
- 2000 - Airfield Maintenance and Storage Building *

- 2100 - Perimeter Fencing
- 2200 - Fuel Facilities
- 3000 – Other

Note that the following SITs will show in SPOT Online but are no longer eligible for P8, so do not select these:

- 100 - Runway Approach
- 200 - Runway Safety Area
- 300 - Runway Protection Zones

TIP # / Project Local ID – Provide the State Transportation Improvement Program number and/or any Project Local ID number, if applicable.

Screen 2

Airport Name (Route/Facility Name) – Airport's three character ID and Name (via a drop down list).

Project Title – Provide a short title/description of the project, using only a concise version of the improvement(s) or item(s) being improved.

Location – Provide specific information regarding the location of the project on the airport. Also provide the area of influence (ex. Municipality/county/region) for the airport.

Project Description – Enter the description of the improvement or work to be performed as part of the project. It should also contain the following statement to ensure the project is tied back into Partner Connect (PC): "(includes PC Project Request Number: ####)" – this #### indicates the Partner Connect reference number for the project and is the key identifier for that project between the two systems.

- A project in SPOT Online could have multiple Partner Connect Project Request Numbers.
- Your Airport Sponsor or the Division of Aviation should be able to help you identify the Partner Connect Project Request Number(s).
- Note that complete projects including all applicable phases should be submitted as a single project in Prioritization – project phases of PE/Design, ROW, etc. should not be submitted as separate projects.

Primary Purpose – Enter 2-3 sentences conveying what issues are being addressed by the project. This should be your 'elevator pitch' for the project.

Original Submitter – If this project already had a SPOT ID and existed from a previous round of Prioritization, provide the organization that originally submitted the project. This information is available in the lookup reference document created by the SPOT Office. If this is a new project for P8 without a prior SPOT ID, just enter your organization.

Airport Sponsor – Provide the organization that owns/runs the airport and supports/advocates for the project. (This may be the county, airport authority, etc.)

Plan Information – Note if the project is identified in an Airport Layout Plan or any other plan, and if so, provide the plan name and year of adoption.

Additional Comments or Notes – Additional information to live with the project can be entered here. Description, location, or purpose information should not be repeated here, but miscellaneous information such as previous project IDs, historical notes, project scheduling/phasing needs, etc. can be stored here.

Screen 3

Mapped Location – Drop the point on the map as close to the realistic location of the project on the airport property.

Screen 4

No project details are requested for Aviation projects.

Screen 5

Source of Cost Estimation
Provide the organization providing the value of the estimated cost and/or the method used to estimate the cost.

Project Cost – Provide the project's component costs for Right of Way (if applicable), Utilities (if applicable), and Construction. SPOT Online will automatically calculate the Estimated Total Project Cost.

- Contact your Airport Sponsor or the Division of Aviation for assistance with project cost estimation.
    - Note that if multiple Partner Connect projects are being combined, all costs should be combined for the single SPOT Online project.
    - Statewide Mobility and Regional Impact projects may submit total costs representing as many years as a project's Right of Way, Utilities, and Construction are expected to be underway.

- Do not include PE/Design costs.
- Any additional/other funds being contributed to the project should be added in the "Other Funds" section by clicking "Add fund". "Other Funds Source" should note the source providing the funds, such as the municipality, county, etc.
    - As a reminder, Aviation scoring includes a Funding Leverage piece in the Benefit/Cost criteria. This allows the option of submitting Other Fund contributions at 3 different times: project submittal, Regional Impact local input point window, or Division Needs local input point window.
- SPOT Online will automatically calculate the Total Cost to NCDOT based on the Estimated Total Project Cost and any Other Funds that are entered.

End of Aviation Guidance.

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P8 Project Entry – Bicycle/Pedestrian

Carryover Projects

Attention: Each MPO and RPO is responsible for processing and submitting Bicycle/Pedestrian Carryover projects within your area (Grid/Map) in SPOT Online. Therefore, all data listed below will also need to be gathered for Carryover projects (be sure all data and costs are updated and current for P8) in addition to your P8 submittals. Remember that these Carryover projects will not count toward your P8 project submittal slots.

Resources

The key resource for correctly identifying a project to be entered into the SPOT Online system is the Project Sponsor (i.e., the organization that needs, supports, and advocates for the project), who can also help to obtain the required data that is necessary to submit Bike/Ped projects.

In addition, the following resources may be of assistance during submittal:

- "P8 Bicycle and Pedestrian Facility Terminology Tables" at the end of this Bicycle/Pedestrian Guidance, which provides definitions of each Facility Type and common terms used in bicycle and pedestrian projects; these tables will assist in categorizing which SIT and Facility Type to choose for your project.
- "Bundling Specifications for P8 Bicycle/Pedestrian and Public Transportation Projects" document in the Submittal Guidance Reference Appendices, which provides further important guidance for projects that include bundled bicycle and/or pedestrian elements.

Data Requirements

The following data in SPOT Online will need to be provided when entering a Bicycle/Pedestrian project (continued of next page):

- STI Project Category
- Specific Improvement Type (SIT)
- TIP # *
- Project Local ID *
- Route/Facility Name
- From/Cross Street & To
- Location (mapped)
- Project Description
- Primary Purpose
- Original Submitter
- Project Sponsor

- Additional Comments or Notes *
- Type of Facility
- Plan Information
- Distance to K-8 School
- Local Government(s) Where Located
- Amount of ROW Acquired & PE/Design Completed
- Environmental Document Type
- Connection Points
- Relation to Designated Routes
- Source of Cost Estimation
- Project Cost

This data is explained in more detail below, including the screens in SPOT Online where they are located. (Items marked with * are optional fields.)

Screen 1

STI Project Category – All Bicycle/Pedestrian Projects are only eligible in Division Needs.

Specific Improvement Type (SIT)– Options are listed next page. Select the one that best fits the project description.

- Refer to the "P8 Bicycle and Pedestrian Facility Terminology Tables" at the of this section for further Facility Type definitions if needed.
- For a bundled project that covers multiple SITs, choose the SIT that constitutes the majority of the overall bundled project by cost.

Specific Improvement Type	Included Facility Types
1 - Grade-Separated Bicycle Facility (Bicycle)	New Bicycle/Pedestrian Bridge, New Bicycle/ Pedestrian Tunnel
2 - Off-Road/Separated Linear Bicycle Facility (Bicycle)	Buffered Bicycle Lane, Contra-Flow Bicycle Lanes, Rail-Trail, Separated Bike Lane, Shared-Use Path / Multi-Use Path, Sidepath
3 - On-Road Designated Bicycle Facility (Bicycle)	Bicycle Lane
4 - On-Road Bicycle Facility (Bicycle)	Paved Shoulder, Shared Lane Marking ("Sharrow"), Signage
5 - Multi-Site Bicycle Facility (Bicycle)	Bicycle Corral, Bicycle Detection / Actuation, Bicycle Parking, Bicycle Share / Micro-Mobility Share, Bicycle Signal, Bicycle Wheel Channel, Curb Radii Revisions, Hybrid Beacon, Intersection Markings / Signage, Lighting, Mid-Block Crossing, Wayfinding
6 - Grade-Separated Pedestrian Facility (Pedestrian)	New Pedestrian Bridge, New Pedestrian Tunnel
7 - Protected Linear Pedestrian Facility (Pedestrian)	Rail-Trail, Shared-Use Path / Multi-Use Path, Sidepath, Sidewalk
8 - Multi-Site Pedestrian Facility (Pedestrian)	Accessible Pedestrian Signals, Crossing Island, Curb Extensions, Curb Ramp, Lighting, Marked Crosswalk, Mid-Block Crossing, Pedestrian Hybrid Beacon, Pedestrian Signal, Rectangular Rapid Flashing Beacon, Wayfinding
9 - Improved Pedestrian Facility (Pedestrian)	Sidewalk Widening, Streetscape / Corridor Improvements, Trail Improvement

Note that in addition to new/expansion facilities, major rehabilitation projects are also eligible. These include, but are not limited to, projects that modernize the facility by reconstruction (removing/replacing most or all of the facility). The purpose of this modernization/rehab may be in order to help bring the facility up to standards (ex. minimum width), meet ADA compliance, or address a facility/structure deficiency.

TIP # / Project Local ID – Provide the State Transportation Improvement Program number and/or any Project Local ID number, if applicable.

Screen 2

Route/Facility Name – Name of the roadway the project follows or name of the bicycle/pedestrian facility itself (if applicable).

From/Cross Street – Beginning location of the project. If a multi-site SIT (5 or 8) is chosen, enter all project locations.

To – End location of the project. If a multi-site SIT (5 or 8) is chosen, enter "N/A".

Project Description – Enter the Description of the work to be performed as part of the project, including the detailed types of bicycle and/or pedestrian infrastructure.

- Refer to the "P8 Bicycle and Pedestrian Facility Terminology Tables" document in the end of this section for further Facility Type definitions if needed.
- If the project is part of a designated bike route, include the name of the designated route.
- For a bundled project that covers multiple SITs, be sure to note which infrastructure type is being proposed in which locations.

Primary Purpose – Enter 2-3 sentences conveying what issues are being addressed by the project. This should be your 'elevator pitch' for the project.

Original Submitter – If this project already had a SPOT ID and existed from a previous round of Prioritization, provide the organization that originally submitted the project. This information is available in the lookup reference document created by the SPOT Office. If this is a new project for P8 without a prior SPOT ID, just enter your organization.

Project Sponsor – Provide the organization that needs and supports/advocates for the project. (This may be the municipality, county, etc.)

Additional Comments or Notes – Additional information to live with the project can be entered here. Description, location, or purpose information should not be repeated here, but miscellaneous information such as previous project IDs, historical notes, project scheduling/phasing needs, etc. can be stored here.

Screen 3

Mapped Location – For linear projects (SITs 1-4 for Bicycle, SITs 6/7/9 for Pedestrian), draw the project in the appropriate location on the map using either the straight-line tool or freehand tool. (The straight-line tool can snap to existing layers that are turned on in the Legend.) Shapefiles may also be uploaded in the Legend to utilize when drawing in the map.

For multi-site projects (SIT 5 for Bicycle, SIT 8 for Pedestrian), drop the point(s) at the appropriate location(s). Up to 25 points may be added in the map.

- Note that the first point dropped will be the visual representative point for the project in the main SPOT Online map.
- For projects with more than 25 points, contact the SPOT Office for guidance.

For a bundled project that covers multiple SITs, refer to the "Bundling Specifications" document in the Submittal Guidance Reference Appendices for mapping instructions.

When entering a project that contains an element(s) of another mode (ex. bus stop improvement, bus pullout, etc.), only map the bicycle/pedestrian elements in screen 3 – do not map the other modal elements. However, these additional elements should be accounted for in the overall project description and cost.

Screen 4

Type of Facility – Choose the actual facility type being proposed (via a drop-down list).

- Refer to the "P8 Bicycle and Pedestrian Facility Terminology Tables" document for further Facility Type definitions if needed.
- For a bundled project that covers multiple Facility Types, choose the Type that constitutes the majority of the project by cost.

Plan Information – Note if the project is identified in a plan, and if so, provide the plan name(s) and year(s) of adoption.

- As a reminder, a bicycle/pedestrian project must be included in a plan in order to be scored.

Distance to K-8 School – Provide [Yes/No] to note if this project is within 2 miles of a K-8 school. (This is informational and does not affect scoring.)

Local Government(s) Where Located – Jurisdiction of project location.

Amount of ROW Acquired & PE/Design Completed – Percentages of these items already acquired/completed for the project.

Environmental Document Type – Type of NEPA environmental document type anticipated for the project (via a drop-down list). Options are as follows:

- Categorical Exclusion
- Environmental Assessment
- Environmental Impact Statement

Connection Points – Measures the number of connections the project makes to other bicycle/pedestrian infrastructure. Linear projects may have connections anywhere along the project (not required to be at endpoints). Multi-site projects typically have one connection per point location, but see below for exceptions.

- For the first question, provide the number of connections to Existing and/or Committed bicycle/pedestrian facilities. (Be sure to document the names for record-keeping.)
    - There is no maximum number of Existing/Committed connections allowed.
- For the second question, provide [Yes/No] to note if the project makes any connections to bicycle/pedestrian facilities in a plan. (Be sure to document these as well.)
- The NCDOT Pedestrian and Bicycle Infrastructure Network (PBIN) layer can be used as a reference for existing and proposed facilities (note that this layer is continually updating). This should not be your sole source of Connection Point information.
- When counting the number of Connection Points along a project, a single connection that offers the user multiple directions of travel on the bicycle/pedestrian network may count as multiple connection points. For instance, when entering a crosswalk that connects to the corner of an intersection that has existing sidewalk along both streets (in both directions, in an L shape), the crosswalk's connection to that location may count as two connection points.

Relation to Designated Routes – Choose how the project is related to any National/State/Regional designated routes or designated state/federal trails (via a drop-down list). Options are as follows:

- Project is on/improving a designated route
- Project connects to a designated route
- Neither

If the project is on or connects to a designated route, also provide the name of the route.

Number of Manual Points of Interest – Enter a value of 0 in this field. Due to the automation of all previous manual POI categories, this field is no longer required. Values entered here for P8 will not be used for scoring.

Further notes regarding Points of Interest:

- Be sure to review the "Bike/Ped Locations of Interest" export file after processing the project in order to check for accuracy in the automatic POIs that SPOT Online located within the project's buffer. POI categories are listed in the screenshot below.
    - If your project's export is missing any POIs that you believe should be included,

utilize the file "P8 Bike/Ped POI Corrections (Template) " to send the additional POIs to the SPOT Office. These will be added to your project's POI count for scoring.
  - If your project's export includes any POIs that you know are no longer accurate, please contact the SPOT Office with this information.
  - Note that the newly automated POI category (shown with * below) will not show in an export, as they are being analyzed outside SPOT Online for P8. These will be able to be reviewed by submitters during the Data Review phase of scoring.
- A single POI is allowed to count twice, both as an Attractor POI and an Employment POI, if it can be verifiably defined and has a purpose under both categories.

POI categories (automated within SPOT Online):

Attractor POIs:

- Government buildings
- Fire/EMS
- Transit routes
- Schools (K-12, public/private), universities, colleges
- Medical (hospitals and public/private clinics)
- Places of worship
- Adult education centers
- Grocery stores, convenience stores, and pharmacies
- Tourist destinations (museums, theaters, auditoriums, historic landmarks) *
- Shelters *
- Parks (national, state, local)
- Tourist destinations (historic districts, downtowns/CBDs, major sports)

Employment POIs:

- Locations with employees of 5 or more *

* = automated for P8

Red text = P8 changes

Screen 5

Source of Cost Estimation – Provide the organization providing the value of the estimated cost and/or the method used to estimate the cost.

Project Cost – Provide the project's component costs for PE/Design (if applicable), Right-of-Way (if applicable), Utilities (if applicable), and Construction. SPOT Online will automatically calculate the Estimated Total Project Cost.

- Note that PE/Design costs are requested for programming purposes and will not be used in scoring. SPOT Online will automatically calculate the Estimated Total Project Cost without PE/Design to be used for scoring.
    - Ensure that the PE/Design cost is at least 10% of the Construction cost. If not, increase it to equal 10%.

- Any additional or other funds being contributed to the project (including the required 20% local match) should be added in the "Other Funds" section by clicking "Add fund". "Other Funds Source" should note the source providing the funds, such as the municipality, county, etc.
    - There is a 20% non-federal local match required to be contributed to each project. The local government is typically responsible for providing these funds.
    - Be sure to use the value for the *Estimated Total Project Cost with PE/Design* to calculate the required 20% local match.

- SPOT Online will automatically calculate the Total Cost to NCDOT based on the Estimated Total Project Cost and any Other Funds that are entered.

- Please provide documentation of costs entered to the SPOT Office.
    - The P8 Bicycle/Pedestrian Cost Estimation Tool should be used as a default cost estimator when a more detailed study is not available. <u>For P8, the recommendation is to double the cost estimates from this tool.</u>

- For a bundled project cost, combine the project component costs for all individual pieces, and refer to more instructions in the document "Bundling Specifications for P8 Bicycle/Pedestrian and Public Transportation Projects".

- Projects must meet a minimum cost requirement of $100,000 in order to be scored in P8.

P8 Bicycle and Pedestrian Facility Terminology Tables

These tables provide definitions of each Facility Type and common terms used in bicycle and pedestrian projects. The tables are organized by Specific Improvement Type (SIT) to coincide with the SIT categories used in P8. These tables will assist in categorizing which SIT and Facility Type to choose for your project, in addition to providing a reference of standard terminology to utilize when creating specific, accurate project descriptions.

1 - Grade-Separated Bicycle Facility (Bicycle)	
Facility Type (or Treatment)	**Definition**
New Bicycle/ Pedestrian Bridge	An overpass provides continuity of access for bicyclists and pedestrians. They prevent significant detour for bicyclists and pedestrians due to unsurpassable natural or built barriers.
New Bicycle/ Pedestrian Tunnel	An underpass provides continuity of access for bicyclists and pedestrians across barriers. They connect shared use paths across a built or natural barrier.

2 - Off-Road/Separated Linear Bicycle Facility (Bicycle)	
Facility Type (or Treatment)	**Definition**
Buffered Bicycle Lane	Buffered bicycle lanes are conventional bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane.
Contra-Flow Bicycle Lanes	Lanes designated to allow bicycles to ride in the opposite direction of motor vehicle traffic.
Rail-Trail	A shared use path either paved or unpaved, built within the within the right-of-way of a former railroad.
Separated Bike Lane	An exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A separated bike lane is physically separated from motor traffic and distinct from the sidewalk, and may be one-way or two-way. Also called Cycle Tracks and Protected Bike Lanes.

Shared-Use Path/ Multi-Use Path	A shared use path is physically separated from motor vehicle traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way. Shared-use paths may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. Most shared-use paths are designated for two-way travel.
Sidepath	A shared use path located immediately adjacent and parallel to a roadway.

3 - On-Road Designated Bicycle Facility (Bicycle)	
Facility Type (or Treatment)	**Definition**
Bicycle Lane	A portion of the roadway that has been designated for preferential or exclusive use for bicyclists by pavement markings and, if used, signs. It is intended for one-way travel, usually in the same direction as the adjacent traffic lane, unless designated as a contra-flow lane.

4 - On-Road Bicycle Facility (Bicycle)	
Facility Type (or Treatment)	**Definition**
Paved Shoulder	The portion of the roadway contiguous with the traveled way that, where paved, are often used by bicyclists. In many rural areas, 4 foot wide paved shoulders are the typical treatment for accommodating bicyclists. Where speeds are 55 mph and above, 5 foot wide paved shoulders should be considered.
Shared Lane Marking ("Sharrow")	(1) A pavement marking symbol that indicates an appropriate bicycle positioning in a shared lane. (2) To maintain a high quality of service in shared-lane markings, "Share the Road" signs or "Bicycle May Use Full Lane" signs should be present.
Signage	A roadway or bikeway designated by the jurisdiction having authority, either with a unique route designation or with bike route signs, along which bicycle guide signs may provide directional and distance information. (ex. Bicycle Route, Share the Road Sign)

5 - Multi-Site Bicycle Facility (Bicycle)	
Facility Type (or Treatment)	**Definition**
Bicycle Corral	On-street bicycle parking corrals are bicycle racks placed in the parking lane on the roadway where short-term demand for bike parking is high. Corrals typically have 6 to 12 bicycle racks in a row and can park 10 to 20 bicycles. This uses space otherwise occupied by one car.
Bicycle Detection/ Actuation	Bicycle detection is used at actuated signals to alert the signal controller of bicycle crossing demand on a particular approach. Bicycle detection occurs either through the use of push-buttons or by automated means. Sign R10-22 may be used.
Bicycle Parking	Bicycle parking should be considered wherever motor vehicle parking is provided, and should be convenient and easy to use. Bicycle parking facilities run the gamut from simple hitching posts installed outside buildings or downtown sidewalks to covered parking facilities, bike lockers and full service bike stations.
Bicycle Share/ Micro-Mobility Share	Service in which bicycles or scooters are made available for shared use to individuals on a short term basis for a price or free. Some systems are dockless, and some utilize docks that lock and release the unit by computer control.
Bicycle Signal	A bicycle signal is an electrically powered traffic control device used to improve identified safety or operational problems involving bicycle facilities or to provide guidance for bicyclists at intersections.
Bicycle Wheel Channel	A channel installed along the side of a stairway to facilitate walking a bicycle up or down the stairs.
Curb Radii Revisions	A typical bicycle-motor vehicle crash type occurs when a motor vehicle passes a bicycle going straight ahead and then turn right shortly after making the passing maneuver. Reducing the radii of curbs at these high speed right turns provides a remedy.
Hybrid Beacon	A signal head with two red lenses over a single yellow lens on the major street and pedestrian for the minor street, to improve bicycle crossing of major streets in locations where side-street volumes do not support installation of a conventional traffic signal. Also referred to as a HAWK beacon (High-Intensity Activated crosswalk beacon).

Intersection Markings/ Signage	Intersection markings are one method helping bicyclists negotiate problem areas such as intersections, junctions or driveways. (ex. Merge and Weave Area Redesign, Turning Restriction, Bike Boxes)
Lighting	Lighting illuminates the roadway surfaces as well as other roadway users. Good lighting on roadways optimized visibility of bicyclists (and pedestrians) during low-light conditions, particularly in locations where high numbers of bicyclists may be expected such as intersections.
Mid-Block Crossing	Marked crosswalks can also be used to create mid-block crossings at places other than an intersection. Mid-block crossings may provide pedestrians with a more direct route to their destination.
Wayfinding	Wayfinding systems help all road users (motorists, pedestrians, bicyclists) find their way in a city. They pertain to directional signs, distance marqueurs, posted maps, information kiosks and other aides for getting people places.

6 - Grade-Separated Facility (Pedestrian)	
Facility Type (or Treatment)	**Definition**
New Pedestrian Bridge	An overpass provides continuity of access for bicyclists and pedestrians. They prevent significant detour for bicyclists and pedestrians due to unsurpassable natural or built barriers.
New Pedestrian Tunnel	An underpass provides continuity of access for bicyclists and pedestrians across barriers. They connect shared-use paths across a built or natural barrier.

7 - Protected Linear Pedestrian Facility (Pedestrian)	
Facility Type (or Treatment)	**Definition**
Rail-Trail	A shared use path either paved or unpaved, built within the within the right-of-way of a former railroad.
Shared-Use Path/Multi-Use Path	A shared use path is physically separated from motor vehicle traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way. Shared-use paths may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. Most shared-use paths are designated for two-way travel.

Sidepath	A shared use path located immediately adjacent and parallel to a roadway.
Sidewalk	The portion of a street or highway right-of-way, beyond the curb or edge of roadway pavement, which is intended for use by pedestrians.

8 - Multi-Site Pedestrian Facility (Pedestrian)	
Facility Type (or Treatment)	**Definition**
Accessible Pedestrian Signals	A device that communicates information about pedestrian signal timing in a non-visual format including audible tones, verbal messages, and/or vibrotactile information.
Crossing Island	Protected spaces placed in the center of the street to facilitate bicycle and pedestrian crossings. Crossings are facilitated by splitting movements into two stages separated by the direction of approaching vehicle traffic.
Curb Extensions	Constrict the street width to the traveled way minus the width of the nominal on-street parking lane. They are intended to reduce the pedestrian crossing distance, slow right-turning vehicles, improve visibility between motorists and pedestrians, and provide more space for landscaping and other features. They should be visible and should not extend beyond the width of the parking lane into the travel path of a bicyclist.
Curb Ramp	Curb ramps provide access between the sidewalk and the roadway for people using wheelchairs, strollers, walkers, crutches, handcarts, bicycles and also pedestrians with mobility impairments who have trouble stepping up and down high curbs.
Lighting	Lighting illuminates the roadway surfaces as well as other roadway users. Good lighting on roadways optimized visibility of bicyclists (and pedestrians) during low-light conditions, particularly in locations where high numbers of bicyclists may be expected such as intersections.
Marked Crosswalk	Marked crosswalks serve two purposes: (1) to inform motorists of the location of a pedestrian crossing so that they have time to lawfully yield to a crossing pedestrian; and (2) to assure the pedestrian that a legal crosswalk exists at a particular location.
Mid-Block Crossing	Marked crosswalks can also be used to create mid-block crossings at places other than an intersection. Mid-block crossings may provide pedestrians with a more direct route to their destination.

Pedestrian Hybrid Beacon	A signal head with two red lenses over a single yellow lens on the major street and pedestrian for the minor street, to improve pedestrians crossing of major streets in locations where side-street volumes do not support installation of a conventional traffic signal. Also referred to as a HAWK beacon (High-Intensity Activated crosswalk beacon).
Pedestrian Signal	Traffic signals assign the right of way to vehicular and pedestrian traffic. When installed appropriately, traffic signals benefit pedestrians by interrupting heavy volumes of motor vehicles where there are insufficient gaps to cross safely at intersections and mid-block locations. Pedestrian signal heads provide specific types of traffic signal indications (i.e. WALK and DON'T WALK) exclusively intended for controlling pedestrian traffic.
Rectangular Rapid Flashing Beacon	A type of active warning beacon which uses an irregular flash pattern similar to emergency flashers on police vehicles and can be installed on either two-lane or multi-lane roadways.
Wayfinding	Wayfinding systems help all road users (motorists, pedestrians, bicyclists) find their way in a city. They pertain to directional signs, distance marqueurs, posted maps, information kiosks and other aides for getting people places.

9 - Improved Pedestrian Facility (Pedestrian)	
Facility Type (or Treatment)	**Definition**
Sidewalk Widening	Sidewalks can be widened when space allows to improve pedestrian facilities. Recommended sidewalk widths range from 6 to 12 feet. Narrower sidewalks (5 feet) may be sufficient for local/subdivision streets in areas with low to medium land use densities.
Streetscape/ Corridor Improvements	See definitions for: Crossing Island, Curb Extensions, Intersection Markings, Lighting, Marked Crosswalk, Mid-Block Crossing Sight Distance Improvements.
Trail Improvement	Improvement to the surface, signage, or crossing facilities along a rail-trail, shared use path, or multi/use path.

End of Bicycle/Pedestrian Guidance.

P8 Project Entry – Ferry

Resources

The key resource for correctly identifying, categorizing, and describing a project to be entered into the SPOT Online system is the NCDOT Ferry Division's Planning and Development Manager (currently Cat Peele). Contact information can be found on the NCDOT Directory.

Data Requirements

The following data in SPOT Online will need to be provided when entering a Ferry project:

- STI Project Category
- Specific Improvement Type (SIT)
- TIP # *
- Project Local ID *
- Route/Facility Name
- Location (text and mapped)
- Project Description
- Primary Purpose
- Original Submitter
- Plan Information
- Additional Comments or Notes *
- Source of Cost Estimation
- Project Cost

This data is explained in more detail below, including the screens in SPOT Online where they are located. (Items marked with * are optional fields.)

Screen 1

STI Project Category –
- Statewide Mobility = not eligible
- Regional Impact = expansion vessels and infrastructure
- Division Needs = replacement vessels

Specific Improvement Type (SIT) – Note that Ferry SITs have been updated for P8, but SPOT Online will not show the new options. During P8 submittal, choose an applicable SIT from the P7 list below. The Ferry Division will convert all projects to P8 SITs during scoring.

1 - Replacement Vessel (Support Fleet) - Tug
2 - Replacement Vessel (Support Fleet) - Barge
3 - Replacement Vessel - Dredge
4 - Replacement Vessel - River Class Ferry (like for like)
5 - Replacement Vessel - Sound Class Vessel (like for like)
6 - Replacement Vessel - Passenger (like for like)
7 - Replacement Vessel - Hatteras Class (to increase capacity)
8 - New River Class Vessel (to increase capacity)
9 - New Sound Class Vessel (to increase capacity)
10 - New Passenger Vessel (to increase capacity)
11 - New Ramp & Gantry (to increase capacity)
12 - Port Expansion (to increase capacity)
13 - Other Terminal or Shipyard Infrastructure
14 - Terminal Replacement
15 - New Terminal & Vessel
16 - New Terminal

TIP # / Project Local ID – Provide the State Transportation Improvement Program number and/or any Project Local ID number, if applicable.

Screen 2

Route/Facility Name – Choose the existing Ferry route or new route (via a drop-down list).

Location – Provide specific information regarding the location of the project. For vessels, this should match the route. For infrastructure, provide the terminal for the project.

Project Description – Enter the description of the improvement or work to be performed as part of the project.

Primary Purpose – Enter 2-3 sentences conveying what issues are being addressed by the project. This should be your 'elevator pitch' for the project.

Original Submitter – If this project already had a SPOT ID and existed from a previous round of Prioritization, provide the organization that originally submitted the project. This information is available in the lookup reference document created by the SPOT Office. If this is a new project for P8 without a prior SPOT ID, just enter your organization.

Plan Information – Note if the project is identified in a plan, and if so, provide the plan name and year of adoption.

Additional Comments or Notes – Additional information to live with the project can be entered here. Description, location, or purpose information should not be repeated here, but miscellaneous information such as previous project IDs, historical notes, project scheduling/ phasing needs, etc. can be stored here.

Screen 3

Mapped Location – For infrastructure projects, drop the point on the map as close to the realistic location of the project on the terminal. For vessel projects, drop the point at one of the terminals.

Screen 4

No project details are requested for Ferry projects.

Screen 5

Source of Cost Estimation – Provide the organization providing the value of the estimated cost and/or the method used to estimate the cost.

Project Cost – Provide the project's component costs for Right-of-Way (if applicable), Utilities (if applicable), and Construction. SPOT Online will automatically calculate the Estimated Total Project Cost.

- Contact the NCDOT Ferry Division for assistance with project cost estimation.
- Do not include PE/Design costs.
- Any additional or other funds being contributed to the project should be added in the "Other Funds" section by clicking "Add fund". "Other Funds Source" should note the source providing the funds, such as the municipality, county, etc.
- SPOT Online will automatically calculate the Total Cost to NCDOT based on the Estimated Total Project Cost and any Other Funds that are entered.

End of Ferry Guidance.

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P8 Project Entry – Public Transportation

Carryover Projects

Attention: Each MPO and RPO is responsible for processing and submitting Public Transportation Carryover projects within your area (Grid/Map) in SPOT Online. Therefore, all data listed below will also need to be gathered for Carryover projects (be sure all data and costs are updated and current for P8) in addition to your P8 submittals. Remember that these Carryover projects will not count toward your P8 project submittal slots.

Resources

The key resource for correctly identifying a project to be entered into the SPOT Online system is the transit system, who can also help to obtain the required data that is necessary to submit Public Transportation projects.

Project submitters are not required to enter transit data in screen 4 of SPOT Online; instead, ITRE (the Institute for Transportation Research and Education, NC State University) staff will be assisting with data collection efforts for project scoring information in P8. ITRE will be in contact with each submitter to coordinate collection of the proper data outside SPOT Online, and they will also assist submitters with obtaining the data where needed.

In addition, the following resource may be of assistance during submittal:

- "Bundling Specifications for P8 Bicycle/Pedestrian and Public Transportation Projects" document in the Submittal Guidance Reference Appendices, which provides further important guidance for projects that include bundled public transportation elements.

Project Categories

Public Transportation projects are scored in 1 of 3 separate categories (scaled separately) as shown below with eligible project definitions:

Mobility (Route-Specific):

- Route-specific vehicles (new or expansion only)
  - Fixed guideway vehicles
  - Fixed route vehicles
  - Deviated fixed route vehicles
- Corridors
  - Fixed guideway (commuter rail, intercity rail, light rail)
  - Bundle of vehicle + other (ex. stops / shelters, park and rides, bus pullouts)
  - Bus Rapid Transit (BRT)
  - Bus on Shoulder System (BOSS) / Busway

Demand-Response:

- Demand Response vehicles (expansion only)
  - Includes microtransit vehicles
  - No facilities are eligible here – either submit Demand Response facilities under Facility category or under Mobility category if bundled with a vehicle

Facility:

- Passenger stations
  - Includes Mobility Hubs
- Individual or bundled stops/shelters
  - Shelters must be bundled along a specified transit route, not a general roadway
  - Shelters are eligible to be submitted if upgrading an existing shelter (larger size, additional amenities, etc.) or where a shelter currently does not exist. Replacing existing shelters with identical size or amenities is not eligible.
- Individual or bundled park and ride lots
- Administrative / Maintenance buildings

Based on these categories, 9 different Specific Improvement Types (SITs) are available in P8. These are listed in the data requirements below.

Note that technology projects are not eligible to be submitted as an STI project – this includes projects such as transit signal prioritization and cameras. Replacement vehicles are funded through other methods and are not scored in STI.

Data Requirements

The following data in SPOT Online will need to be provided when entering a Public Transportation project:

- STI Project Category
- Specific Improvement Type
- TIP # *
- Project Local ID *
- Route/Facility/Project Name
- Location (text and mapped)
- Project Description
- Primary Purpose
- Original Submitter
- Project Sponsor
- Plan Information
- Transit System Legal Name
- Contact Person / Phone Number / Email Address
- MPO/RPO(s)
- Division(s)
- County(ies)
- Additional Comments or Notes *
- Project Cost
- Source of Cost

This data is explained in more detail below, including the screens in SPOT Online where they are located.

Screen 1

STI Project Category –

- Regional Impact:
  - Service spanning two or more counties and serving more than one municipality
  - Based on route (not provider)
- Division Needs:
  - Service not included in Regional Impact
  - Multimodal terminals and stations serving passenger transit systems (includes all facilities)

Specific Improvement Type (SIT) – Options are listed next page. Select the one that best fits the project description.

- 1 - Mobility (route-specific) - New Service
  - New route, mode, or corridor-related infrastructure
- 2 - Mobility (route-specific) - Headway Reduction
  - Adding vehicle to increase service frequency
- 3 - Mobility (route-specific) - Extension
  - Extending route miles on an existing route
- 4 - Demand Response
  - Vehicle for expansion of service (no facilities)
- 5 - Facility - Passenger Station
- 6 - Facility - Stop/Shelter
- 7 - Facility - Park and Ride
- 8 - Facility - Administrative
- 9 - Facility - Maintenance

Note: Bundled projects must remain within the same SIT, due to varied data requirements amongst different SITs.

TIP # / Project Local ID – Provide the State Transportation Improvement Program number and/or any Project Local ID number, if available.

Screen 2

Route/Facility/Project Name – Name of the type of request, transit system, project route, facility, or any other pertinent information to the project's title.

Location – Provide specific information regarding the location of the project. For Mobility (route-specific) projects, provide the from/to, area(s) served by the route, and major connections to other routes or stations. For Demand Response projects, provide municipality/county area(s) served. For Facility projects, provide the location(s) of the facility(ies), area(s) served, and any associated routes.

- For a bundled project, be sure to describe the various locations for all elements of the bundle.

Project Description – Provide the description of the project request, improvement, or work to be performed as part of the project. Include details such as type and number of vehicles, infrastructure improvements, connections to be made, etc.

- For a bundled project, be sure to describe these aspects clearly for all elements of the bundle.

Primary Purpose – Enter 2-3 sentences conveying what issues are being addressed by the project. This should be your 'elevator pitch' for the project.

Original Submitter – If this project already had a SPOT ID and existed from a previous round of Prioritization, provide the organization that originally submitted the project. This information is available in the lookup reference document created by the SPOT Office. If this is a new project for P8.0 without a prior SPOT ID, just enter your organization.

Project Sponsor – Provide the organization that needs and supports/advocates for the project. (This may be the municipality, county, transit agency or authority, etc.)

Plan Information – Note if the project is identified in a plan, and if so, provide the plan name and year of adoption.

Additional Comments or Notes – Additional information to live with the project can be entered here. Description, location, or purpose information should not be repeated here, but miscellaneous information such as previous project IDs, historical notes, project scheduling/ phasing needs, etc. can be stored here.

State / Local / Federal / Other Share – THIS SECTION WILL NOT BE USED FOR P8. However, as it was not removed from SPOT Online, enter 10% for the State Share and 10% for the Local Share to satisfy the SPOT Online requirement, and leave the remaining Federal Share and Other Share at 0%. All percentages entered in this section will be ignored for P8, as the costs entered on screen 5 will be the only information regarding Other Funds and Cost to NCDOT that are used for scoring.

Transit System Legal Name – Drop-down list of all systems in NC.

Contact Person / Phone Number / Email Address – Contact information for representative person at the transit system, ideally the one providing project data.

MPO/RPO – Provide the MPO or RPO that the project is located in (via a drop-down list) and the accurate percentage of location. If the project is located in more than one MPO/RPO, select "Add Another MPO/RPO" (up to 3 total) to provide the location and percentages, totaling 100%.

Division – Provide the Division that the project is located in (via a drop-down list) and the accurate percentage of location. If the project is located in more than one Division, select "Add Another Division" (up to 3 total) to provide the location and percentages, totaling 100%.

County – Provide the County that the project is located in (via a drop-down list) and the accurate percentage of location. If the project is located in more than one County, select "Add Another County" (up to 3 total) to provide the location and percentages, totaling 100%.

Screen 3

Mapped Location – Public Transportation now supports multi-point mapping. Drop at least 1 point as close to the realistic location of the project as possible. Up to 25 points may be added in the map.

- Note that the first point dropped will be the visual representative point for the project in the main SPOT Online map.
- For projects with routes, drop points along the route to provide an accurate representation (if including stops/shelters along a route, map those locations).
- For demand response vehicle requests, drop the point at the system's location.
- For projects with only facilities, drop a point at each facility's location.
- For bundled projects, drop enough points to represent the various elements of the bundled project.
- For projects with more than 25 points, contact the SPOT Office for guidance.

Screen 4

No project details are requested for Public Transportation projects. (ITRE will be in contact with each submitter to coordinate data collection outside SPOT Online.)

Screen 5

Source of Cost Estimation – Provide the organization providing the value of the estimated cost and/or the method used to estimate the cost.

Project Cost – Provide the project's component costs for PE/Design (if applicable), Right-of-Way (if applicable), Utilities (if applicable), and Construction. SPOT Online will automatically calculate the Estimated Total Project Cost.

- Note that PE/Design costs are requested for programming purposes and will not be used in scoring. SPOT Online will automatically calculate the Estimated Total Project Cost without PE/Design to be used for scoring.
- Any additional or other funds being contributed to the project should be added in the "Other Funds" section by clicking "Add fund". "Other Funds Source" should note the source providing the funds, such as the municipality, county, etc.
- SPOT Online will automatically calculate the Total Cost to NCDOT based on the Estimated Total Project Cost and any Other Funds that are entered.

- For a bundled project cost, combine the project component costs for all individual pieces, and refer to more instructions in the document "Bundling Specifications for P8 Bicycle/ Pedestrian and Public Transportation Projects".
- Projects must meet a minimum cost requirement of $40,000 in order to be scored in P8 .

In addition, please note these important cost changes for P8:

- There is **no local match required** for Public Transportation projects in P8. Local funds are still optional to enter as "Other Funds" with a submittal to help reduce the Cost to NCDOT that is used in scoring, but there is no match requirement. Therefore, projects may request up to 100% of the total cost in Prioritization (i.e. Cost to NCDOT may equal the total cost, to be wholly funded in STI).
- In addition, Public Transportation projects in STI should **not enter federal funds** as "Other Funds" unless those funds are within the control of the submitter or transit agency (ex. 5307). Do not enter federal funds in anticipation of potentially receiving 5311 from IMD at a later date.
- To summarize, P8 Public Transportation projects can be submitted with **any desired percentage split of state (up to 100%) and other funds**. Other funds can be comprised of local funds or any federal funds within local control – enter local and/or federal funds that have different sources as separate entries in the "Other Funds" section on screen 5 in SPOT Online.

End of Public Transportation Guidance.

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P8 New Project Entry – Rail

Resources

The key resource for correctly identifying, categorizing, and describing a project to be entered into the SPOT Online system is the NCDOT Rail Division STI Team at RailDivisionSTITeam@ncdot.gov.

The NCDOT Rail Division also provides extensive additional guidance tools on project submittal decisions such as mode eligibility, STI eligibility, Specific Improvement Types, and project descriptions. These files are available in the P8 Submittal Guidance Reference Appendices .

Data Requirements

The following data in SPOT Online will need to be provided when entering a Rail project:

- STI Project Category
- Specific Improvement Type (SIT)
- TIP # *
- Project Local ID *
- Route/Facility Name
- Location (text and mapped)
- Project Description
- Primary Purpose
- Original Submitter
- Plan Information
- Right-of-Way Owner / Rail Operator
- Additional Comments or Notes *
- Source of Cost Estimation
- Project Cost

This data is explained in more detail below, including the screens in SPOT Online where they are located. (Items marked with * are optional fields.)

Screen 1

STI Project Category

- Statewide Mobility = any freight or safety project on Class I railroads
- Regional Impact = any passenger service project that is not a station improvement
- Division Needs = any passenger station project

Specific Improvement Type (SIT) – Options are listed next page. Select the one that best fits the project description. If you need assistance identifying the correct SIT, contact the Rail Division.

- 1 - Freight rail infrastructure improvement or construction (line)
- 2 - Freight rail infrastructure improvement or construction (point)
- 3 - Highway-rail crossing improvement (point)
- 4 - Passenger rail station improvement or construction (point)
- 5 - Passenger rail service (line)
- 6 - Other passenger rail improvements (point)
- 7 - Corridor modernization (line)

TIP # / Project Local ID – Provide the State Transportation Improvement Program number and/or any Project Local ID number, if available.

Screen 2

Route/Facility Name – Provide the operator and branch name for the project location. This can be found in the Rail System layer in the Map Legend (see Supplementary Notes at the end of this Rail Guidance).

Location – Provide specific information regarding the location of the project, such as the . rail line(s) served as well as the following:

- For corridors, provide the from/to and major connections with other lines.
- For crossings/grade separations, provide the crossing ID number and location for the impacted crossing(s). This can be found in the Rail System layer in the Map Legend (see Supplementary Notes at the end of this Rail Guidance).
- For stations, provide the proposed location.

Project Description – Enter the description of the improvement or work to be performed as part of the project.

- Note that complete projects including all applicable phases should be submitted as a single project in Prioritization – project phases of PE/Design, ROW, etc. should not be submitted as separate projects.

Primary Purpose – Enter 2-3 sentences conveying what issues are being addressed by the project. This should be your 'elevator pitch' for the project.

Original Submitter – If this project already had a SPOT ID and existed from a previous round of Prioritization, provide the organization that originally submitted the project. This information is available in the lookup reference document created by the SPOT Office. If this is a new project for P8 without a prior SPOT ID, just enter your organization.

Plan Information – Note if the project is identified in a plan, and if so, provide the plan name and year of adoption.

Right-of-Way Owner – Enter the appropriate right-of-way owner of the project infrastructure. This can be found in the Rail System layer in the Map Legend (see Supplementary Notes at the end of this Rail Guidance).

Rail Operator – Enter the appropriate operator of the project infrastructure. This can be found in the Rail System layer in the Map Legend (see Supplementary Notes at the end of this Rail Guidance).

Additional Comments or Notes – Additional information to live with the project can be entered here. Description, location, or purpose information should not be repeated here, but miscellaneous information such as previous project IDs, historical notes, project scheduling/phasing needs, etc. can be stored here.

Screen 3

Mapped Location – For corridor projects, draw the project in the appropriate location on the map using either the straight-line tool or freehand tool. (The straight-line tool can snap to existing layers that are turned on in the Legend, such as the Rail System.) Shapefiles may also be uploaded in the Legend to utilize when drawing in the map.

For point projects, drop the point on the map at the appropriate location. For projects with multiple locations (ex. new grade separation with multiple at-grade crossing closures), choose the primary location for the point.

Screen 4

No project details are requested for Rail projects.

Screen 5

Source of Cost Estimation – Provide the organization providing the value of the estimated cost and/or the method used to estimate the cost.

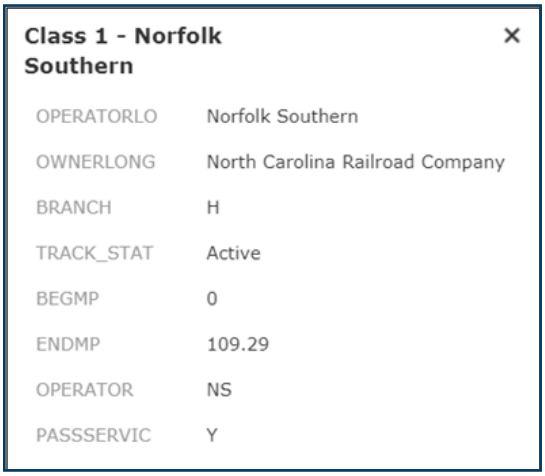
Project Cost – Provide the project's component costs for Right-of-Way (if applicable), Utilities (if applicable), and Construction. SPOT Online will automatically calculate the Estimated Total Project Cost.

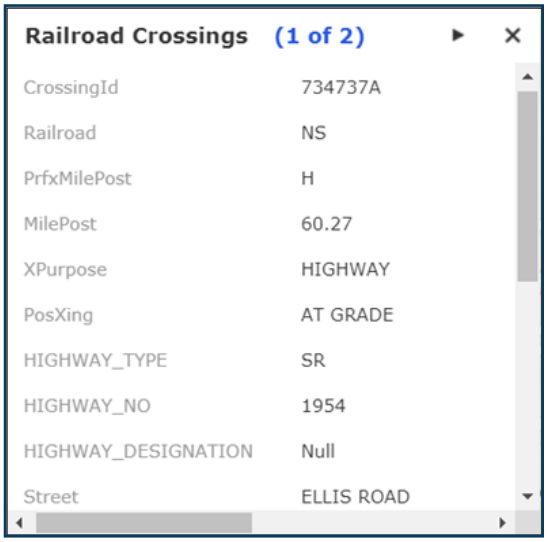
- Contact the Rail Division for assistance with project cost estimation.
- Do not include PE/Design costs.

- Any additional or other funds being contributed to the project should be added in the "Other Funds" section by clicking "Add fund". "Other Funds Source" should note the source providing the funds, such as the municipality, county, railroad, etc (see notes next page).
  - NOTE: For grade separation projects, approximately 5% of the structure cost is required to be contributed by the railroad - please specify this in the "Other Funds" section, noting which railroad as the "Other Funds Source".
  - Reminder: Rail scoring includes a Funding Leverage piece in the Benefit/Cost criteria. This allows the option of submitting Other Fund contributions at 3 different times: project submittal, Regional Impact local input point window, or Division Needs local input point window.
- SPOT Online will automatically calculate the Total Cost to NCDOT based on the Estimated Total Project Cost and any Other Funds that are entered.

Supplementary Notes

- The Rail System layer can be turned on in the Map Legend of the main map or on screen 3 during project processing. This layer contains corridors as well as crossings (when zoomed in). Use the Identify map tool to view attributes from this layer.
  - Clicking on a corridor will open a pop-up with information about the operator, branch name, and other helpful data (see screen shot below on left).
  - Clicking on a crossing will open a pop-up with information about the crossing ID number, operator, type of crossing, name of intersecting facility, and other helpful data (see screen shot below on right).





End of Rail Guidance.

Now that you've bravely made it to the end, your quest options are:

A) *Apply this knowledge like the Prioritization wizard you were born to be*

B) *Email us your burning questions (emoji use triggers the hidden prioritization algorithm known only to three squirrels and one spreadsheet) at spot@ncdot.gov*

C) *Swing by a workshop or office hours—yes, we'll be there, and no, we won't quiz you (probably)*

D) *Pretend this never happened and quietly close the tab*

Choose wisely. The fate of at least one spreadsheet (and possibly the universe) hangs in the balance.

End of Prioritization 8 Submittal Guidance.