


ENG-29 Online Interactive Form Instructions



Submission steps

The following is a step-by-step illustration for how to submit a roadway update to DOT using Eng-29 web form. The form is composed of three sections, users are required to submit the form with information provided for at least the first and last section (Basic information and authorization respectively). Submission steps are listed for section 1, section 2, and section 3 in the following paragraphs in sequence.

- 1 | Open your web browser and navigate to Eng-29 form URL provided by DOT, wait for the form to load.
- 2 | Enter the passcode received from CTDOT in the passcode field, Section 1 will show immediately once a correct passcode is entered, see Figure 1.

 Note: Passcode is composed of four letters followed by six digits, separated with an underscore as in Abcd_123456.

Roadway Update Form (ENG_29)

DEPARTMENT OF TRANSPORTATION
BUREAU OF POLICY AND PLANNING
DIVISION OF SYSTEMS INFORMATION

Passcode*

Abcd_123456

Correct Code

Section 1 shows, proceed

Please, proceed to fill the road edits for Bethany (If Any).

Section 1 - Basic Information

Calendar year of edits*

Pick or type year of edit

📅 yyyy

Submit

Basic information

Once the passcode is entered, section 1 and corresponding questions will appear.

- 1 Find the field labeled "Calendar year of edits", use the corresponding date picker to select the year of road edit.
- 2 Select on the date picker and use the left and right arrows to navigate to the selected year and the next question will appear. Alternatively, the user can type in the year and hit enter.

- Section 1 - Basic Information

Calendar year of edits*
Pick or type year of edit

Step 1.1

« 2020-2029 »

2019 2020 2021 2022

2023 2024 2025 2026

2027 2028 2029 2030

Step 1.2

- Section 1 - Basic Information

Calendar year of edits*
Pick or type year of edit

Does Bethany have road changes for calendar year 2010 ? *

Yes No

Step 1.3

- 3 | If the town or Borough of the user's choice does not have any road changes for the corresponding calendar year, Select "No". This will show section 3 – Authorization
- 4 | If there are any roadway updates for selected calendar year, select "yes" then, proceed to fill Section 2 -Roadway updates.

Roadway Updates

- 1 | Use the drop-down list labeled "Type of change" to select the change type that reflect changes happened in the targeted year of submission. There are seven roadway change types, refer to


Level of change
Road was partially or totally abandoned / discontinued?

Partial Whole

Figure 2 Example for partial / whole road change question

Table 1 for details on roadway change types and Table 2 for details on the questions relevant to each change type.

- 2 Select the level of change (Partial change or whole change) based on the extent of the change on the road. For example, a road can change wearing surface partially and not for the whole road as shown in Figure 1.

 Note: The Partial or Whole question will only appear with relevant questions as shown in Table 2

- 3 Based on the selected change type, different set of questions will show. Proceed filling the rest of Section 2 accordingly.

Level of change
Road was partially or totally abandoned / discontinued?

Partial Whole

Figure 2 Example for partial / whole road change question

Table 1. Types of roadway changes, descriptions and assigned short codes.

Index	Code	Change Level	Change Type	Description
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1	A	Not Applicable	New Road	For adding new road information.
2	B	Not Applicable	New Extension of Existing Town Public Road	Information on an extension added to an existing town public road.
3	C	Whole	Abandoned / Discontinued	Information on a road that has been abandoned or discontinued as a whole or only part of it.
4	D	Part		
5	E	Whole	Road Name / Spelling	A change in road name or spelling for the whole road or a part of it.
	F	Part		
6	G	Whole	Change in Wearing Surface Type/Material (Improved/Unimproved)	Change in road wearing surface type / material such as paved, dirt or gravel. The change can be on the whole road or part of it.
	H	Part		
7	I	Whole	One-way/Two-Way Roadway Operation	A change of travel way operation of a road in a whole or only part of the road.
	J	Part		
8	K	Not Applicable	Road length	A change in road length due to realignment, reconstruction or other.
9	L	Not Applicable	Number of lanes	A change in number of lanes of a road.

Table 2. Change types and their relevant questions.

Index	Question	Question Type	Description	Relevant change codes (Table 1)
1	Road Digitization	Web map	Use to draw a line representing the geometry of the corresponding roadway change.	A, B, D, F, H, K, I
2	Road length from, Road length to	Field, Decimal number.	Decimal values representing road length old and new values.	K

3	Begin point and End point	Text field	Input is text description of the starting point and the ending point of the corresponding roadway change. It can be an intersecting road name or other distinguishing features on the road.	All types.
4	Road name	Select one from list	The name of the road that has changed some property such as number of lanes, length... etc. Or being extended.	All except A.
5	New road name	Text input field	Available when adding new road	A, E, F.
6	Old road name	Select from list	Name of road which name has changed.	E, F.
7	Wearing surface condition (old / new)	Radio buttons	A selection is required for the old and new wearing surface condition	G, H.
8	Travel way operation (Old / New)	Radio buttons	A selection is required to identify the old and new travel ways operation (One way or two way)	I, J.
9	Number of lanes (Old / New)	Radio buttons	A selection is required to specify the old and new number of lanes.	L
10	Date of update	Date picker	User is required to select the date when the road update or abandonment / discontinuity was accepted.	All types.
11	Title	Text field	Title of form signee	All types.
12	Printed name	Text field	Name of form signee	All types.
13	Date of signature	Date picker	Date of signature	All types.
14	Supplementary document.	Attachment Button	Users are required to use this feature to upload supplementary document (PDF / Word document) that reflect roadway change.	All types.

Map interface

The map interface contains eight elements to facilitate digitization process, refer to Figure 1 and Table 3 for information on each element.

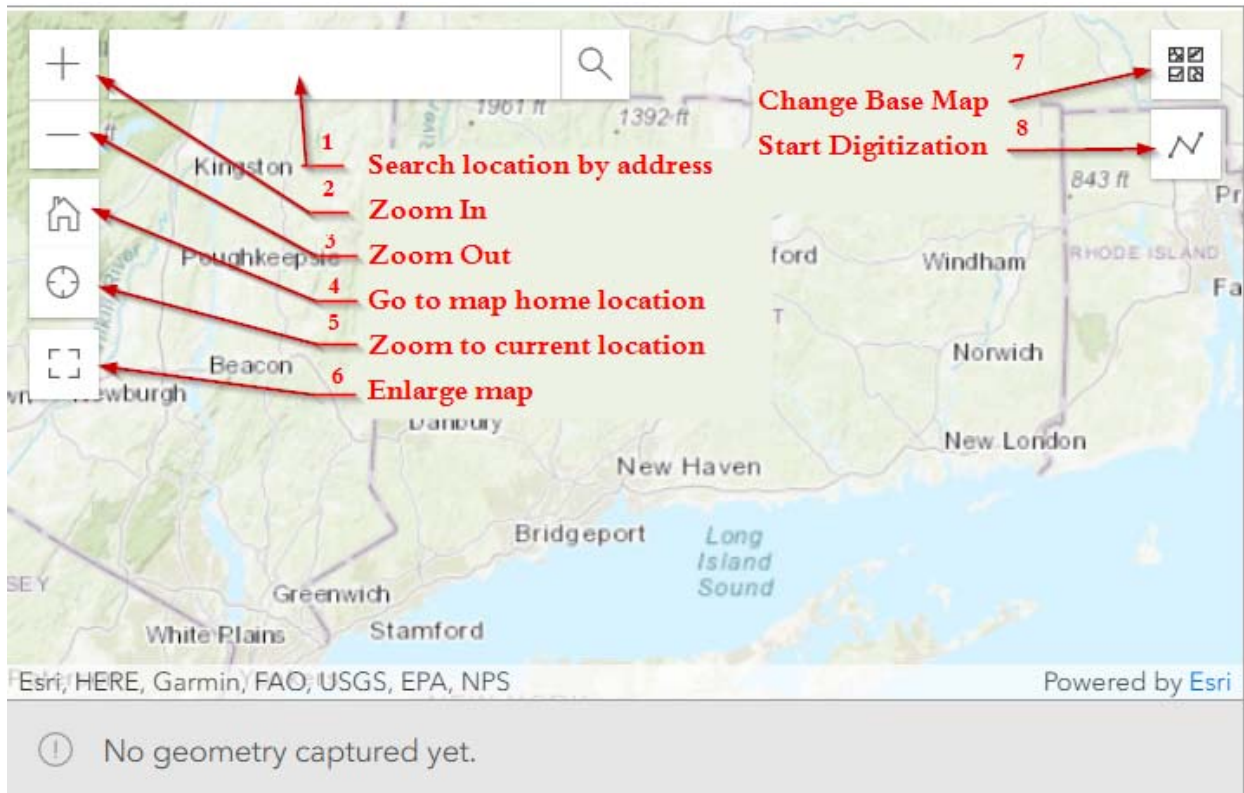


Figure 3. Map interface, the default map layout that shows on Eng-29 form.



Figure 4. Digitization controls appear when the digitization button is toggled on.

Table 3. Digitizer map elements.


Element	Description
1	Text field, takes in address to search for the targeted road.
2	Zoom in the map.
3	Zoom out the map.
4	Go to initial map location.
5	Go to current location (needs GPS-enabled device).
6	Enlarge the map size to full screen for better map visibility.
7	Change the base map, can be changed according to user preference. There are many base maps that show different features of earth and are in different colors.
8	Starts the editing process.
9	Number of lanes (Old / New)

- 10 Date of update
- 11 Title
- 12 Printed name
- 13 Date of signature
- 14 Supplementary document.


Digitizing a road

Road digitization question requires the user to draw a line representing the road or part of road that has been updated. It can also represent a new road or a road extension depending on the selected road change type. The steps below guide users on how to use the digitizer map and corresponding information required to be entered.

- 1 The user can either keep the default map or use base map selection button (element 7) to select a map of your preference and can enlarge the map for better visibility using expand button (element 6).
- 2 Use map navigation to find the targeted road location using all or part of the following features.
 - 2.1 Type the road address in search element (1) to navigate to the targeted road or city / town. E.g. "25 Talcottville Rd, Vernon Rockville, CT, 06066, USA".
 - 2.2 Use the mouse cursor to move around the current map area by clicking and dragging over the map.
 - 2.3 Use zoom controls to change the map scale (elements 1 and 2).

 Note: Press and hold CTRL button and use mouse scroll button to zoom in or out.

- 3 Start digitization using the digitization button (element 8), this will show more digitization controls (Figure 4).
 - 2.1 With digitization button toggled on (Green), start by clicking on the first point location on the new line.
 - 2.2 Move the mouse, a line will start to extend from first point to the mouse cursor.
 - 2.3 Add more points by clicking on the road centerline at small distances. Each new point will fix new line segment to the map.

 Note: The more points that are added on the line, the smoother the line will be. The user can move the map by clicking mouse left button and dragging, this will move the map without adding a point.
 - 2.4 Once the whole line is digitized, finish drawing by double clicking mouse left button or by clicking the finish button (element 12).

Road length

Length in miles of the new road

Figure 5 Road / road portion length estimation

Use road length field to enter the current length of the road or part of road that has been update or the length of the newly added road. This can be received with the road update information or calculated using the length field that appears below the map.

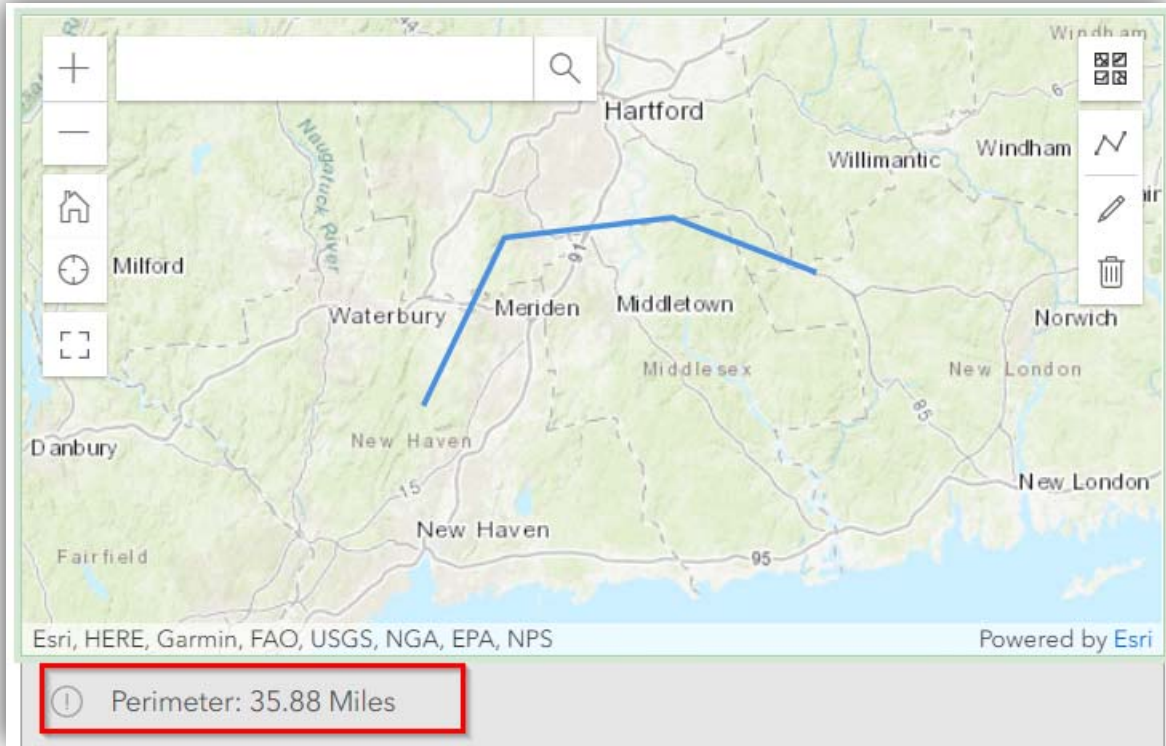
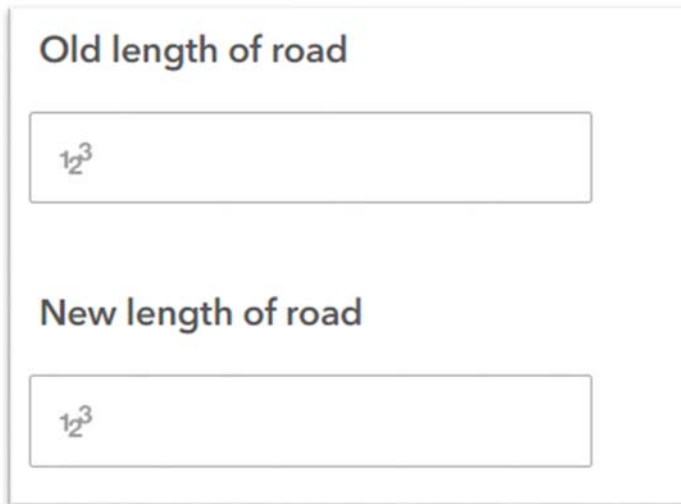


Figure 6. Line length field.

⚠ Warning: Do not use the enter keyboard button to move from road length question to the next question, this will cause input control to move back to the digitization question and erase drawing. Use the mouse cursor or Tab keyboard button to navigate to next question. If this happened and control moved back to the map, and digitization was cleared out, pressing Esc button on the map will bring back previously digitized line.

Road length questions - Question 2 Table 2

Road length questions show only with the road length change type. Users are required to provide old road length and new road length when length of road has been changed due to some road modification such as road realignment or reconstruction.



The image shows a form with two input fields. The first field is labeled "Old length of road" and contains the text "12³". The second field is labeled "New length of road" and also contains the text "12³".

Figure 7 shows example road length change fields.

Figure 7. Example road length change fields.

Start and End points - Question 3 Table 2

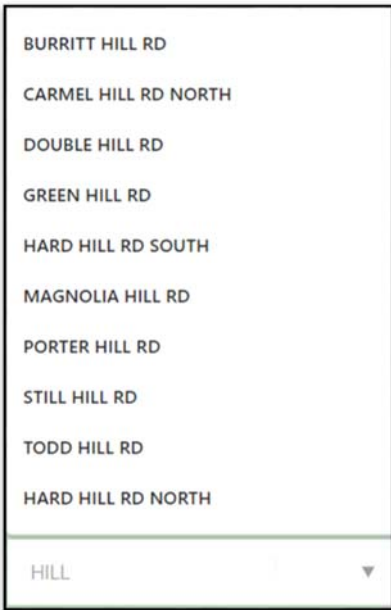
<p>Start point of the new road</p> <p>road intersection, feature on the road, location identifier or other distinguishing feature</p> <input type="text"/>
<p>End point of the new road</p> <p>road intersection, feature on the road, location identifier or other distinguishing feature</p> <input type="text"/>

Use start and end point questions to specify the starting point and ending point of the road update, extension, or the new road. This can be written as an intersection of two roads, e.g. "The intersection of Winding brook trl rd and Center rd, Vernon, CT". It also can be a distinguishing feature or building on the road.

Road name - Questions 4,5 and 6 Table 2

There are three fields related with road names, they differ based on the type of question and are either a select one field, or a text field.

- In case of New road, the input is a single text field that requires input of the new road name.
- In case of any type of change except new road and road name change, the input is a drop-down list where user can select road name from the list, or search road names in the list input using whole or part of the required road name.
- In case of road name change, two fields for road name input are displayed, old road name and new road name. Old road name is a drop-down list of roads while new road name is a text input field.



A vertical list of road names in a drop-down menu. The list contains the following items: BURRITT HILL RD, CARMEL HILL RD NORTH, DOUBLE HILL RD, GREEN HILL RD, HARD HILL RD SOUTH, MAGNOLIA HILL RD, PORTER HILL RD, STILL HILL RD, TODD HILL RD, and HARD HILL RD NORTH. At the bottom of the list, the word "HILL" is displayed with a small downward-pointing triangle to its right, indicating the current selection.

Figure 8. Example road name drop down search list.



A text input field with the label "Name of new road" positioned above it. The input field is empty and has a thin border.

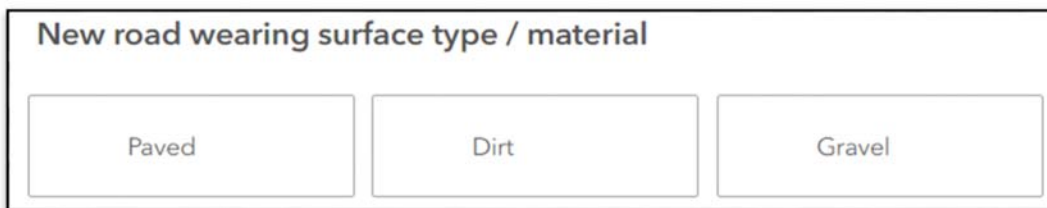
Figure 9. Example road name input text field.

Wearing surface - Question 7 Table 2

Wearing surface question requires specifying the status of wearing surface for either a new road or a road that has changed the wearing surface type. Two cases are shown below in

Figure 10. New road – wearing surface selection.

and Figure 11.



A selection interface titled "New road wearing surface type / material". It features three buttons arranged horizontally: "Paved", "Dirt", and "Gravel". Each button is a simple rectangle with its respective label centered inside.

Figure 10. New road – wearing surface selection.

The form is titled "Old wearing surface type / material" and "New wearing surface type / material". The "Old" section contains three radio button options: "Paved", "Dirt", and "Gravel". The "New" section contains three button options: "Paved", "Dirt", and "Gravel".

Figure 11. Change in wearing surface- old and new selection.

Travel way operation - Question 8 Table 2

This question specifies the travel way operation either one-way or two-way for a new road, or the change in travel-way operation in an existing road. The questions appear to corresponding change types as shown below.

The form is titled "One-Way / Two-Way roadway operation" and contains two button options: "One Way" and "Two Way".

Figure 12. Roadway operation of a new road.

The form is titled "One-way / Two-way road operation (old)" and "One-way / Two-way road operation (new)". The "old" section contains two radio button options: "One Way" and "Two Way". The "new" section contains two button options: "One Way" and "Two Way".

Figure 13. Roadway operation change for an existing road.

Number of lanes - Question 9 Table 2

This question requires user to input the number of lanes of a new road, or the change in number of lanes in an existing road as shown below.

Number of lanes of the new road		
1.0	2.0	3.0
4.0	5.0	6.0

Figure 14. Selecting number of lanes for a new road.

Old number of lanes		
<input type="radio"/> 1.0	<input type="radio"/> 2.0	<input type="radio"/> 3.0
<input type="radio"/> 4.0	<input type="radio"/> 5.0	<input type="radio"/> 6.0
New number of lanes		
1.0	2.0	3.0
4.0	5.0	6.0

Figure 15. Number of lane change in an existing road.

Adding more road edits or Removing existing ones

If there are more than one road edit, user can add more roads to the form with same or different change types using the add button at the lower center of the form as shown in Figure 16 . User can also remove a road edit that he has previously filled using the minus sign at the bottom right of the form as shown in Figure 16.

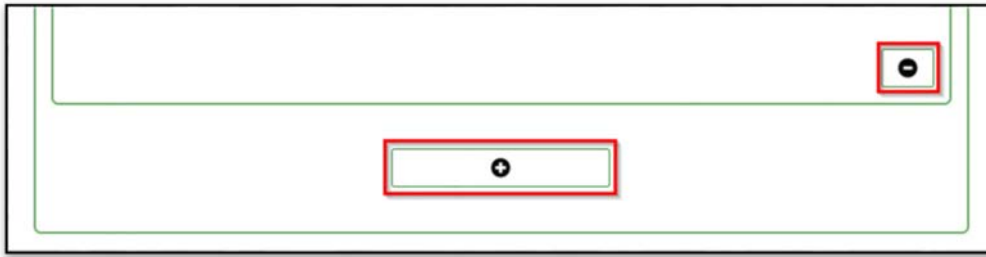


Figure 16. Adding new road edits to same submission or removing existing one.

Authentication

This section should be filled by the form authorized signee using the following questions. User needs to read the authorization statement carefully as shown in Figure 17, then proceed filling authorization questions.

I hereby certify that the above-listed roads have had legal liability and maintenance responsibility accepted by the town of Bethlehem, are open to public motor vehicles travel during the majority of the year, are accessible via the public highway network, and are passable in a standard passenger vehicle. I further certify that I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense under 53a-157b of Connecticut General Statutes.

Figure 17 Example authorization statement.

Title - Question 10 Table 2

The title of form signee. For example, project director.

Printed - Question 11 Table 2

The printed name of form signee.