



# Data Updates & Sharing Application

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## Instruction Manual

TPP, Data Management Section

## Table of Contents

Purpose.....	2
Browser Information .....	2
Logging In .....	2
The Application .....	4
Resources Menu Section .....	8
How to Complete the Markup.....	9
Completion & Contact Info .....	10

## Purpose

Welcome to the Data Updates & Sharing Application!

This document serves as a how-to guide and reference for reviewing and submitting changes to the Texas Department of Transportation's geospatial road inventory. The Data Updates & Sharing Application (DUSA) serves as a communication tool for local, subject matter experts to review and acquire the GIS road network TxDOT currently has on file under their jurisdiction. The application provides multiple tools for the user to interact with the GIS inventory such as downloading a copy, uploading bulk changes to be implemented by TxDOT, or by directly marking up changes within the application to be implemented by TxDOT.

## Browser Information

DUSA is accessed through an internet browser. It is highly suggested to use Google Chrome to receive the highest performance while working within this application. Mozilla Firefox will also provide acceptable performance. TxDOT advises against using Internet Explorer.

## Logging In

To access the Data Updates & Sharing Application, you must first establish a username and password. Follow the steps outlined below to obtain this information. You will only have to do this one time. If you already have a username and password, skip to step #3.

- 1) Fill out the Registration form at the following website address:


[https://www.dot.state.tx.us/apps-cg/contact\\_us/form/dusa-form.htm](https://www.dot.state.tx.us/apps-cg/contact_us/form/dusa-form.htm)

- 2) Within 24 hours after submitting the Registration form, you will receive an email from **ArcGIS Notifications** providing your unique username and inviting you to join the **ArcGIS Online Organization, Texas Department of Transportation**. Follow the link within this email to finish setting up your account and establish your own password.
- 3) Once you receive a unique username and password, you will then sign-in to DUSA at the following website address:

[https://www.txdot.gov/apps/statewide\\_mapping/dusa/index.html](https://www.txdot.gov/apps/statewide_mapping/dusa/index.html)

- 4) Select the '**ArcGIS login**' option to sign into the Data Updates & Sharing Application with your new ArcGIS Online username and password. **DO NOT** attempt to sign-in using the '**Enterprise login**' option, as it will be unsuccessful.

Data Updates & Sharing Application wants to access your ArcGIS Online account information ?

Sign in to Texas Department of Transportation with 

Enterprise login

ArcGIS login

Firstname.Lastname\_COUNTYNAME

.....

☐ Keep me signed in

Sign In

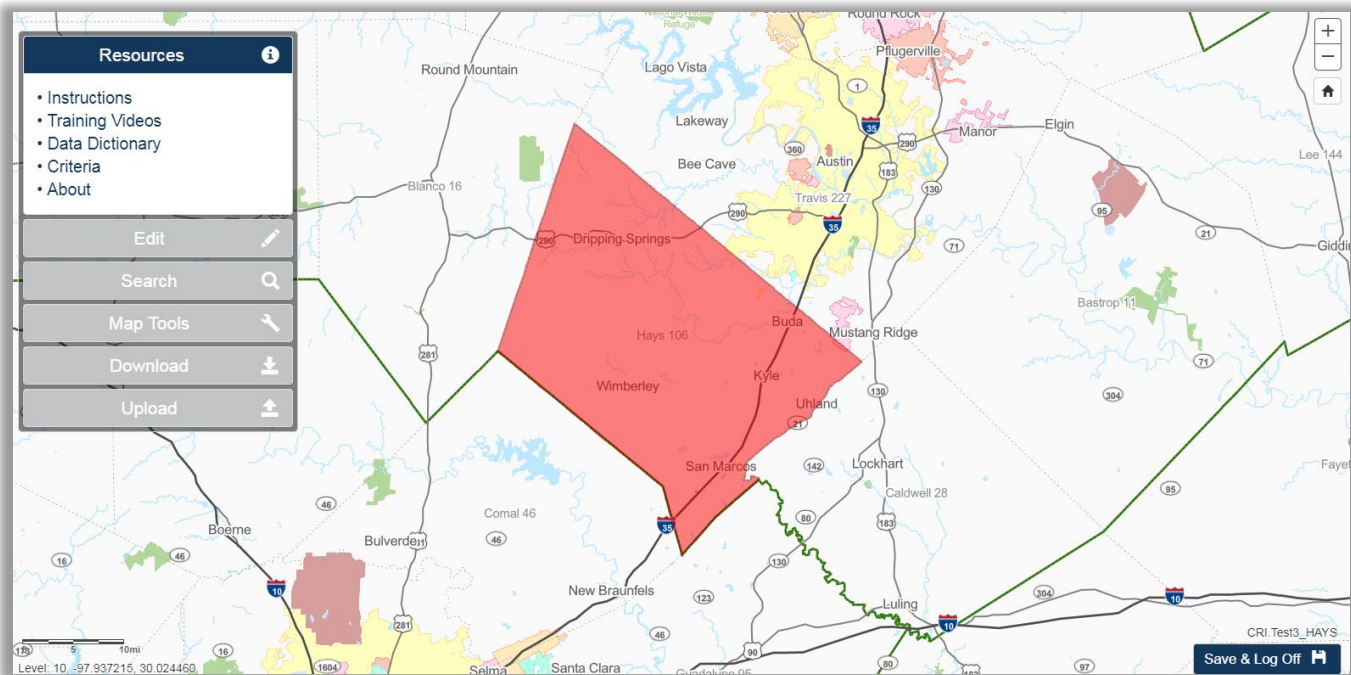
[Forgot username?](#) or [Forgot password?](#)

- 5) Once you have successfully signed in, select your county from the dropdown list and click 'Go'. DUSA will open and automatically zoom to your county.

## The Application

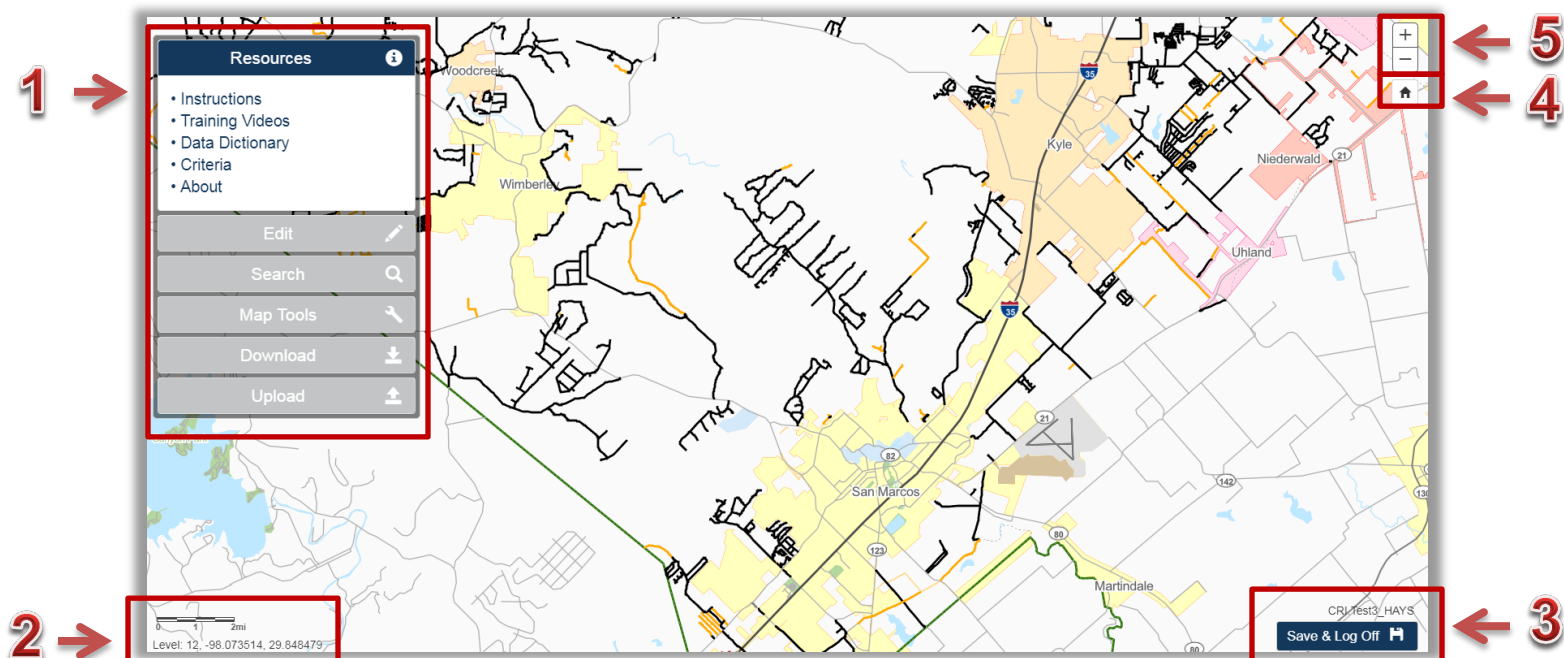
The Application is a large interactive map which you can navigate and has tools for completing various tasks. The application is specifically oriented for reviewing and updating the TxDOT inventory. Therefore, you will only be able to view the inventory for your organization.

To ensure a quality review and mark up, you must be zoomed in for the inventory to appear (Level 11 for County Roads). If you are zoomed out too far, the inventory will disappear and your organization's jurisdiction will appear in red.



Click and drag anywhere on the map to pan around the map.

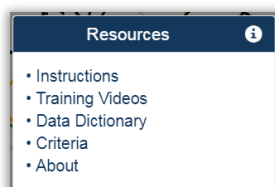
The Application contains many components, each with a specific functionality.



1. **Menu.** The Menu contains 6 sections: Resources, Edit, Search, Map Tools, Download, and Upload. Each section name can be clicked to open the options/tools for that section while simultaneously hiding the other sections. Detailed instructions for each section can be found through links within this document.
2. **Map Information.** This displays a scale bar, the current zoom level of the map, and the current latitude and longitude coordinates of the mouse cursor.
3. **Save & Log Off Button.** This section displays the name of the organization you logged in with. Click the Save & Log Off button to save your changes and log off the current session and return to the Sign-In screen.
4. **Home Button.** Click the Home button to return the map to the original zoom level and location as when you initially logged in. This will be the default extent for your organization.
5. **Zoom Buttons.** Click the + (plus) button to zoom in and the – (minus) button to zoom out of the map. Alternatively, you can double click a location on the map to zoom in or use the scroll wheel on the mouse to zoom in and out.

The Menu is broken down into 6 sections. Each has a purpose which provides an alternative method for reviewing the inventory and submitting changes.

## **Resources**



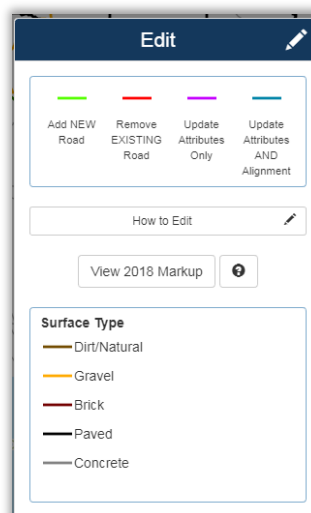
The Resources section offers reference material for use during your update. (see page 8 for more information)

## **Edit**

The Edit section provides 4 drawing template options for you to mark up the map

The 'How to Edit' button can be clicked to open [instructions](#) specific to editing within the Application.

The 'View 2018 Markup' button toggles between viewing and hiding the 2018 Markups that did not meet the criteria for a county road or were not updated for another reason. The '?' symbol lists the possible reasons.



Also provided is a Legend for the current inventory as it is displayed in the map.

## **Search**



The Search Tool enables you to search by the Route ID or Full Street Name for a county road in your county. The Route ID\* is a unique identifier for each route within the TxDOT Inventory and is comprised as follows:

- 3 digit county number + Prefix "A" or "AA" + 4 or 5 digit unique ID for the specific county

Example (Harris County; Number 102) = 102AA1234

\*Note: The route ID can be found in the Application by clicking on any 'Current Inventory' route.

- The Full Street Name is the common name used on signs and for navigation. This includes any prefixes and suffixes.

Examples: E McDonald Ln or County Road 2206

- When using the Search Tool, it will only search for an exact match.

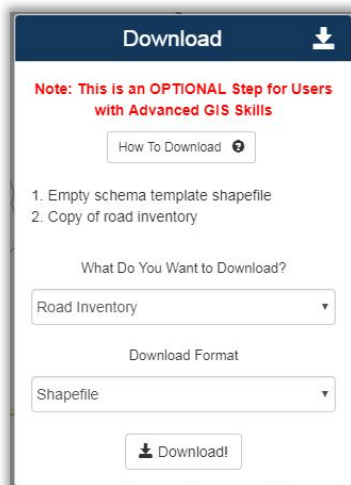
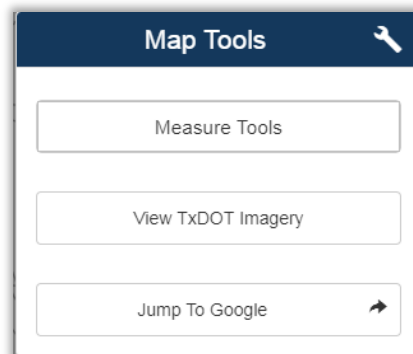
Example: 'Smith Rd' is correct but 'Smith' is incorrect

Example: 'County Road 2468' is correct but 'CR 2468' is incorrect

## **Map Tools**

The Map Tools section provides 3 tools to aid with making markups.

1. The Measure Tools measures the distance along roads, as well as area and lat/long positions.
2. The 'View TxDOT Imagery' button allows users to easily switch between Imagery and TxDOT basemaps.
3. The 'Jump To Google' button opens a new browser tab in Google Maps centered at the current location in DUSA. It's useful for examining roads with Street View.



## **Download**

The Download section offers 2 options designed for users with advanced GIS skills

1. Download an empty template shapefile to be used when marking up changes to the current TxDOT inventory within ArcMap on your local computer. This template shapefile is required to submit bulk updates in the Upload section.
2. Download a GIS copy of the current TxDOT inventory. Choose between the option in the dropdowns and click "Download!".

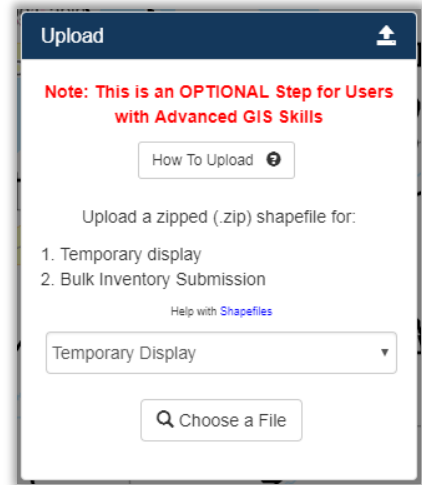
Finally, the "How to Download" button can be clicked to open [instructions](#) specific to downloading within the Application.



## Upload

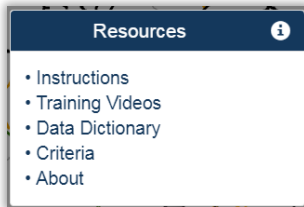
The Upload section offers 2 options designed for users with advanced GIS skills.

1. Upload a shapefile for temporarily displaying within the map. Your shapefile will draw and can be used for reference during your update. The shapefile will be cleared automatically when you log off.
2. If you have marked up changes within the downloaded schema template shapefile, you can submit those changes in bulk.



The “How To Upload” button can be clicked to open [instructions](#) specific to uploading within the application.

## Resources Menu Section



The ‘Resources’ Menu Section contains a variety of reference materials which may serve as helpful information when reviewing the current inventory and marking up changes. Available resources include:

1. **Instructions.** This is a link to this document with descriptions on the application and its functions and links to specific instructions for Editing, Downloading, and Uploading (pages 8 & 9).
2. **Training Videos.** Instructional videos of DUSA for an overview and editing.
3. **[Data Dictionary](#).** A document which interprets the data schema fields within all the datasets used in the DUSA application. Each field is described with listed acceptable values for said field.
4. **Criteria.** A document which outlines the mandated definition of the road classification being updated. This document will list specific requirements for roads to be added to the TxDOT road inventory and reported to dependent agencies.
5. **About.** Highlights enhancements made to DUSA.

## How to Complete the Markup

The markup is a multistep process involving a review of the current TxDOT inventory and identifying changes which need to be made. Complete the markup using one of the following two options:

**Option 1:** Draw changes directly within the Application using the Edit tools in the Edit section of the menu. The general steps for this method are as follows:

- a. Log into the Application. Review the documentation available within the 'Resources' section of the menu for comprehension of the application and markup process.
- b. Open the 'Edit' section of the menu. Click the "How to Edit" button to access the [Edit section instructions](#) for detailed directions about editing within the Application.
- c. Review the current TxDOT inventory by panning and zooming within the web map. Observe the current existence and alignment of the roads in the inventory. Click roads to review their attributes (descriptive details).
- d. Markup changes to identify inaccuracies in the current road inventory by drawing in the application using the Edit tools. Specific details and examples demonstrating how to draw changes within the application are shown in the [Edit section instructions](#).

**Option 2:** Draw changes in ArcMap using the 'Schema Template' shapefile and upload them to the application. This is an optional step for users with advanced GIS skills. The general steps for this method are as follows:

- a. Log into DUSA. Review the documentation available within the 'Resources' section of the menu for comprehension of the Application and markup process.
- b. Open the 'Download' section of the menu. Click the "How to Download" button to access the [Download section instructions](#) for detailed directions about the download process. Download the 'Schema Template' shapefile for markup changes. Optionally, download the current TxDOT road inventory for the county for reviewing and identifying changes to be marked up.
- c. Review the [Edit instructions](#) for detailed directions and examples how to markup changes in the 'Schema Template' shapefile (use the same methods as the instructions outline for working within the application). Review the current TxDOT inventory and edit the 'Schema Template' shapefile by drawing changes in ArcMap.
- d. Open the 'Upload' section of the menu. Click the "How to Upload" button to access the [Upload section instructions](#) for detailed directions

about the upload process. Upload the edited 'Schema Template' shapefile into DUSA in bulk via the 'Upload' section of the menu.

## Completion & Contact Info

The deadline for completing the present year's review and markup is August 31. Any markups submitted after August 31 will be applied towards next year's submission. At the time of completion, the updates will be reviewed and the changes which meet the inventory criteria will be implemented to update the TxDOT Road Inventory.

Thank you for using the Data Updates & Sharing Application to submit changes to the TxDOT Road Inventory. If you would like to report any bugs or issues, or have any questions which need clarification of the procedures, please contact the Transportation, Planning, and Programming Division's Data Management staff at:

[TPP-GIS@txdot.gov](mailto:TPP-GIS@txdot.gov)

(512) 486-5052