TOAMS:
Signing Training and User’s Manual

 Anything Highlighted in Blue would be BTO or Region Data Editor task.
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Log into TOAMS Test system with your WAMS Test ID and password. Should you have difficulty logging in, please contact Mary Elizabeth Kunkel.

Navigate the system. The **Menu** accesses projects, work orders and contains signing assets. The **Map** accesses the spatial assets and displays signs and work orders spatially. The **Data Viewer** searches spatial assets as well as displays asset information.
Getting Help
Contact Mary Elizabeth with log in issues.
Contact BTO (Jeannie Silver, Matt Rauch, or Jay Hille) with any other issues.

Setting Preferences

Everyone can set individual preferences for the VUEWorks system. These preferences include default settings for work orders, search pages and many other considerations.

1. Navigate using the menu. Click on the **Welcome** option in the menu to expand. Then select the **Set Preferences** option.
2. The Set Preference window will open and the default VUEWorks Feature is **General**. On the General feature window, you will see many options.

<table>
<thead>
<tr>
<th>VUEWorks Feature</th>
<th>General</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Service Requests</td>
</tr>
<tr>
<td></td>
<td>Work Orders</td>
</tr>
</tbody>
</table>

3. **Do not use the Password reset option** since you are using another system to manage the password.
4. The Embedded Window Mode is used to allow the sub-windows in VUEWorks to move outside of the application. This is best used when working with two monitors since you can place sub windows on a different monitor.
   
   *Note: Currently Embedded Windows On works better.*
5. In the Search Page area, pull down on the list and select **Signs**.
6. Default View should be set to **Map**. Note: If you select Dashboard for Default View, the Dashboard will display when you log in. To go to the main program with the Map, click on the **VUEWorks** toggle button in the upper left area. **Do not click on the browser back button.** It will log you out of VUEWorks.
7. Click on the **Save** button.
Searching, Filtering, and Viewing Assets

VUEWorks offers many ways to select assets. The most common ways are using:

- The Map Feature
- Data Viewer Search Pages
- Data Viewer Search Filters

We will walk you through these methods. Once assets have been selected, many other actions can be performed. Those options will be described later in this document.

Map Feature

Get to know the Toolbar

The toolbar along the top of the map lets you perform a variety of tasks associated with selection of assets and navigation of the map. Below is a quick description of each of these tools and their function.

Show Dashboard: 
Dash board view

Map tip: 
Display asset information by clicking the asset on the map.

Select assets: 
Select one or more assets by clicking the location on the map or drawing a box on the map. The assets are then added, replaced, or removed in the Data Viewer selection set.

Select assets using buffer: 
Select all assets within a specific distance of an asset you select on the map.

Measure: 
Find linear and area measurements.

Zoom in/out: 
Zoom in or out of the map area by clicking on the map.

Edit map: 
Add or edit features on the map, along with their attributes.

Street view: 
Select a point on the map to display it in google street view.

Pan map: 
Move up, down, left, or right on the map.

Zoom previous/Next: 
Move to the previous zoom level. This is useful when you have been zooming in and out a lot or have accidently zoomed to a place you did not mean to go.

Zoom to map extents: 
Zoom out of the map to its fullest extent.

Highlight selected assets: 
Display yellow highlights on all selected assets in the Data Viewer selection set.

Zoom to selected asset: 
Zoom to the location of the currently selected asset in the Data Viewer.

Print map: 
Print the currently displayed map – just the area that is visible on the screen.

Map scale: 
Displays the map.

Note: Assets/Layers and work orders will only display on the map at a set scale.
**Toggle Layer/Legend:** Display or hide the list of map layers and the legend. Note the more operational basemaps you select, the slower the load time will be to select assets.

**Toggle Basemap selection:** Display or hide the list of base maps to choose from. Select whatever background you would like.
Selecting Assets from the Map

One way to select assets is by using the map area and the tools above for selecting the assets. Use the navigation tools or scroller on your mouse to zoom close to the assets you wish to select and click on the Select Assets tool button.

Note: If the map is not where you would like it, use the pan button to move the map.

The Selection box will display. The default is All Layers. Change the Select From option using the drop-down arrow. Select Sign. The default option is Add to selection and will continue to add assets, as selected to the list. The other options are available by clicking on the radio button next to them. Replace Selection will clear a current selection with the assets selected. Remove Selection will remove only those assets selected from the current selection.

Note: If you do not change the Select From to Signs it will be very slow. If you accidentally did this click the green button in corner of the popup dialog box.

The Selection will be highlighted in yellow and the assets will be displayed in the Data Viewer.

Warning: There will be times in which your search will produce such a large selection, the system will prompt you to list only.

Note: To remove the asset selection from the Data Viewer to do another search, click on the Red X in the upper right corner of the Data Viewer.
Data Viewer- Search Pages

The data viewer will display a default search page. In the set preferences, you can set which search page to default to. Below are the steps to using a search page in the Data Viewer.

1. There are several fields that are searchable for this search page. Enter in a value for the fields. You can enter a value for only one or enter values for several. The asset must have all selected values to show up in the search.

   ![Search for Signs by Location](image1)

   ![Search for Signs by Details](image2)

2. Once the field or fields have been entered, use the Locate button to highlight the assets on the map. Click on the Select button to highlight them on the map and add them in the Data Viewer as a list of assets.

   ![779 Assets Selected](image3)
Data Viewer- Search Filters

1. In addition to the search pages, the Data Viewer has the option to manually do a filtered search. To access the search filter, click on the Binoculars icon. The search feature will display in the Data viewer. Below is an example for searching for signs in a County and the year the sign was manufactured.

2. Set the Filter Options to Add to current selection set.

3. In the search criteria area, in the Table drop-down list select Sign.

4. In the Field drop-down list, select County.
   Note: It may take a few seconds for the Drop Downs to generate.

5. In the Operator drop-down list, select Exactly Matches.

6. In the Value field drop-down list, select Door.

7. The plus sign adds additional search criteria.

8. In the Table drop-down list select Sign.

9. In the Field drop-down list, select Year Manufactured.

10. In the Operator drop-down list, select Less Than.

11. In the Value field drop-down list, select 2005.

12. When ready, click on the Search button. All assets meeting the criteria will be displayed in the data viewer. The assets will also be highlighted in the map area.
Filtering Further

VUEWorks allows sub searches. This can be done by clicking on the Binoculars icon from the selection list. In the Filter Options select either Filter current selection set to narrow down the selection set or Add to current selection set to add more assets to your selection list. Below will show you how to filter the selection for only Old signs in Door County on STH 42.

1. Set the Filter Options Filter current selection set.
2. In the search criteria area, in the Table drop-down list select **Sign**.
3. In the Field drop-down list, select **Route**.
4. In the Operator drop-down list, select **Exactly Matches**.
5. In the Value field drop-down list, select **STH 42**.
6. Click on the Search button.
Saving and Running a Search Filter

VUEWorks allows the saving of commonly used filter conditions.

1. To run an existing search filter, click on the Binoculars.
2. Click on the Filter drop-down and select the search that you would like to run. The Search criteria fields will auto populate with the saved filter criteria.
3. Click on the Search button to run the filter. 
   Note: Any drop down in the existing filters can be changed to meet your needs.
4. To save a search filter, click the red x.
5. Click the binoculars again.

6. Select the filter you wish to edit or enter in a new one.
7. Enter in your search criteria.
8. Then click on the New button under the Filter list.

9. The Save New Search Filter widow will open.

10. Enter a Search Filter Name.
11. The Filter Description and Filter Key Words can also be filled in before saving. Then click on the Save button.

   Note: Saved Filters are not available to you until you close out of the data view and go back in.
Reporting-General

Once assets have been selected, several actions can be done with them. Reporting on these assets is an important part of managing assets. Below is an example of running the Field Inventory Report.

1. Make sure that you have a selection of assets in the Data Viewer before running reports.

2. From the Data Viewer, there is a series of icons across the top. The Report icon will open the Report Manager window and allow you to select a report and print using the selected assets.

3. There are both Dynamic and Traditional reports to choose from. Traditional reports are canned reports created by DTS and Dynamic reports are reports someone in the Region/BTO created. For the Field Inventory Report, click on the Traditional tab, Signs and the list of reports are displayed.

4. Click on the County Field Inventory Report.

5. Then click on the button. The report will open in a separate browser window. Note: It only displays the first page of the report.

6. There are printing and saving options for all reports. The Report Type at the bottom of the screen lets you pick between PDF and Excel with Formatting.

*Selecting Excel with formatting then select Print. A second dialog box will pop up. Select Save as. Select a location to save the file.

*Selecting PDF then select Print will prompt you to a print screen. Select your desired printer.
Viewing Attribute Data for an Asset

Viewing Current Attribute Data

VUEWorks provides an area for managing all aspects of an asset. The Data Viewer will allow you to view the selected assets, but it will also provide a location to view attributes (data fields) about each of the assets, work orders, documents, and much more.

1. Use either the Data Viewer or Map to select assets. The Data Viewer will display the selected assets and they will appear highlighted on the map.
   Note: the following steps only work if it is less than 1000 assets.

2. A brief overview of the signs is shown in the Data Viewer.

<table>
<thead>
<tr>
<th>Asset ID</th>
<th>Layer</th>
<th>Location</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sign</td>
<td>USH 53, Southbound - 074.640 mi</td>
<td>W13-1 16W x 18H 30</td>
</tr>
<tr>
<td>2</td>
<td>Sign</td>
<td>USH 53, Northbound - 105.260 mi</td>
<td>R2-1 24W x 30H 55</td>
</tr>
<tr>
<td>3</td>
<td>Sign</td>
<td>USH 53, Northbound - 105.250 mi</td>
<td>R5-1 30W x 30H</td>
</tr>
<tr>
<td>4</td>
<td>Sign</td>
<td>USH 53, Northbound - 105.260 mi</td>
<td>R11-54-F 48W x 30H</td>
</tr>
<tr>
<td>5</td>
<td>Sign</td>
<td>USH 53, Northbound - 128.960 mi</td>
<td>R6-1-R 36W x 12H</td>
</tr>
</tbody>
</table>

3. In the Data Viewer, there is a column with Asset ID and one for Layer. If you click on the Layer for an asset in the list, the asset will be highlighted in blue. Clicking on another one will highlight that one in blue.

4. Clicking on the Asset ID link (in blue and underlined) will select and display the Attributes for that asset.

5. Clicking on the Show All button in the lower right corner of the Data Viewer will take you back to the list. The Green Arrows will let you move between the assets.

   Note: The arrows will not go from sign to sign down the road.

6. Assets can be sorted by clicking in the header, a white arrow will light up displaying how they were sorted.
Viewing Work Orders from Cartegraph

Viewing Historical work order information from the legacy system, CarteGraph is available and associated with each of the sign assets.

1. Select a sign you wish to view Work Orders on.
2. Select **Historic Work Orders** from the drop-down list.
3. Work orders in the CarteGraph system are displayed in chronological order. Key information is available. Use the scroll bar to see additional work order records.
Attaching a Document

1. Navigate to the Sign you would like to add a document to.
2. Select Documents from the Dropdown lists.
3. Click on the **Add Document** button.
4. Click on the **Upload Link** tab at the top of the Create Document Link window.
5. Click on the **Browse** link.
6. Navigate to the file location and select the **Signs Order PDF** file.
7. In the **Document Type** drop-down list, select Document.
8. In the **Upload To Library** drop-down list, select the correct BTO SIGNS.
9. Click on the **Create Link** button and then click on the **Close** button.
10. The document is listed in the Document area for the work order.
11. Click on the **Create Link** button to save the work order and generate a work order number.
Updating Signs

**Updating Sign Attributes**
Once the route has been field verified, the Data Editors will update any records that are incorrect. Find the signs you wish to update. Use one of the filtering capabilities shown earlier to find the sign(s) that need(s) to be updated.

1. Enter in all the data that needs to be changed for that asset. Be sure all mandatory fields are filled in. **Do not make changes in the Gear Tool.** It does not always save.

2. Select Save.
3. A Change Log Comment box will appear, enter in updated information, projects, or batch order. Then click ok.
Physically Moving Signs in VUEWorks

If a new sign needs to be added or a sign needs to be moved to the correct location, VUEWorks offers a way to move assets on the desktop application from the map. Below are the instructions to move an asset.

1. Click on the **Edit Map** icon at the top of the Map Toolbar.
2. The Editor Tool will display at the top of the map area. On the Choose layer to edit drop-down, select **Sign**.
3. Then click on the **Select Feature** button and double click the sign with the mouse pointer. Once the asset is selected it will have a circle around it. You can then take that asset with the pointer and drag it to the new location. This is commonly done when assets are placed on top of one another or are in the incorrect location.
4. **Sign Attributes should not be** entered here.
5. When the asset has been moved, click on the **Done** button. If further edits are needed use the Data Viewer to make changes.
   
   *Note: Clicking on the attribute field for Status will allow you to select **Retired**.*

   **Caution!!! Once the Status has been changed to Retired, it is very difficult to change back to Active.**

6. This same process could be used to add a new feature or asset. Instead, click on the **Add Feature** button and select where you want to drop the new sign. Add all the only the status and region. Then fill in the rest of the data in the Data Viewer.

   *Note: **DO NOT** touch the latitude/longitude fields.*
Adding Signs in VUEWorks
Below are the instructions to add an asset.

7. Click on the Edit Map icon at the top of the Map Toolbar.
8. The Editor Tool will display at the top of the map area. On the Choose layer to edit drop-down, select Sign.

9. Then click on the Add Feature button and double click where you would like to add a sign.
10. The Feature Attributes dialog box will open. Only enter in the Status and Region.

11. Select the Done button.
12. Enter in the rest of the information in the Data Viewer.
   Note: Clicking on the attribute field for Status will allow you to select Retired.

   Caution!!! Once the Status has been changed to Retired, it is very difficult to change back to Active.

13. Then select the Save button.

   Note: DO NOT touch the latitude/longitude fields.
Creating Reports

Generate a Standard Report (Traditional)

Standard reports consist of basic information in a very basic layout. You can then use the standard report templates to generate reports of your own, as well as make simple changes to their content.

1. From the Menu pane, select the Find/Manage/Report from either the Work Orders or GIS Assets drop down depending on what you would like to run a report on. If you have assets selected and you wish to run a report on, you can select the after a search is completed.

2. When the screen appears, go to the Report tab and select Traditional or Select Traditional if you selected the Report Icon.

3. From the drop-down select Signs.

4. Traditional reports are generally tabular in structure and are great for lists, barcode printing, and data summaries. Click on the New button to create a traditional report.

5. Enter in a Report Name. For Training purposes, put your FirstName-ReportName for the report name. The report title appears at the top of the report as a header. The report header allows the creation and use of standard letterhead with special fonts and pictures or agency logos.

6. **Report Header**: This is a “running header” that appears above the title, such as your company name and location. It can be repeated on every page. To define a header, click the Manage Headers icon . The Report Header Editor dialog appears.
   - Provide a name for the heading.
   - Specify the height of the header area (you also specify the units of measurement for the height). **Note**: The height needs to be great enough to accommodate the header text and images, if any.
   - Specify the font type, size, and style.
   - Images can also be used use in the header.
   - Click Save when you are done to close the dialog.
7. **Style** (required): Indicates the type of report you want to generate:

- **Form**: Report looks like a form.
- **Tabular**: Report is a table of data with one field per column and one record per row.
- **Advanced Tabular**: Report is a table of data with multiple fields per column and multiple records per row.
- **Form Merge**: Report is generated by merging in data from VUEWorks selection sets.

8. Leave **Units** as English.

9. Select **Paper Size** as either 8.5x11 or 11x17.

10. Leave Margins as 0.75.

11. Change the **Orientation** from Portrait to Landscape to provide more space for columns.

12. **Report Title Style**: This is the font used for the title.

13. **Column Header Style**: This is the font used in the Header.

14. **Column Detail Style**: This is the font used in rows and columns of the report.

15. Press **Next** to view the next page where you specify what should be included in the report:

16. The Traditional Report Designer displays. To add a column, click on the **Add Column** button at the top.

17. In the mid-section, the selection list displays. Select the **Category** and **Field** for the column. Formatting options are available.

18. Continue to add columns and fields to the report (some field types allow for summary options).

19. Click **Field Summary**.
20. Fill in the boxes as appropriate.

21. When you have selected all the fields, click on the **Save** button. Save anytime you would like to preview the report.

22. The displayed columns can be formatted in terms of size/length, column title, and alignment. Select the column and then make the changes. Preview the results at any time. Saving is required before previewing.

23. Click on the **Next** button to continue with report Sorting, Grouping, and Footer creation.

24. Enter in any sorting criteria, indicate ascending or descending, and add any other formatting desired. Click on the **Next** button to display the Access screen.

25. The Set Report Access works the same as the Filter Save feature. Select the Users or Roles and click on the right arrow to give access. Select on the right side any User or Roles and click on the left arrow to remove access.

26. Save the report and preview and/or print the report. All reports display in a window prior to being printed and most pop up a separate window. If it does not work, check for pop up blockers, allow pop ups, and then run the report again.
27. If you want to make some changes to the report before you print it, select the Edit Tab. The Traditional Report Designer screen appears.

28. Enter any changes you have and hit save.

29. To copy an existing traditional report template to serve as the basis for a new one, select the report and click Copy.

a. When the Traditional Report Designer screen appears, change the Report name and Report title and then follow the same process and make any other desired changes.

b. Once you’re finished, click Save and the name of the new report will appear under the Existing Report Templates pane.
Generate a Standard Report (Dynamic)

1. From the Menu pane, select the Find/Manage/Report from either the Work Orders or GIS Assets drop-down depending on what you would like to run a report on. If you have assets you wish to run a report on are in the Data Viewer you can select the.

2. When the screen appears, go to the Report tab and select Dynamic or Select Dynamic if you selected the Report Icon.

3. Click on the New button to create a Dynamic report.

4. A new Dynamic Report screen pops up. A Report Name must be entered in order to proceed with the creation of your report. Keep the User Selection Set as Associated. In the GIS Asset Data Source section, click on all of the Signs. Click the OK button.

5. If the screen below pops up follow steps 6-9. If not skip to step 10.

6. Click on the 3 dots in the upper right-hand corner of the browser.

7. Then click settings.

8. View Advanced Settings

    Advanced settings

    View advanced settings

9. Change it to use Adobe Flash Player.

    Use Adobe Flash Player

    On
10. The Wizard will display after loading. **Select Using Report Wizard** and **Standard Report** are selected. Click the **Ok** button.

![Image of Wizard with Using Report Wizard selected]

11. The Data Source option will display. Select **GISAttributes** and click the **Next** button.

![Image of Data Source with GISAttributes selected]

12. The Select Columns options will display. Check each field you would like included in your report. Then click on the **Next** button.

![Image of Select Columns with various fields selected]
13. The **Column Order** section will display along with all the fields you selected previously. Use the **Up** and **Down** arrows on the right side of the window to arrange the fields in the order that you would like. This step here will save you a lot of time. They can be arranged once the report is rendered but it takes more time and effort. Click on the button.

![Columns Order](image)

14. The next part of the wizard, is the **Sort** section. If you would like the data sorted in a particular order, set the sort here. Click on the **Add Sort** button. In the Field Box [No Sorting] dropdown, click the arrow to the right. Then double click on the field. Note: You may need to open a table to see the fields. You can select Ascending or Descending. Then click the **Next** button.

![Sort](image)
15. The **Filter** Button is the section that would allow you to bypass doing a filter query before running the report. This is optional. To add a filter, click on the **Add Filter** button. The **Dynamic Report** is a little different in the setup. There is an option to do Value or Expression. If you wanted this report to only use one set filter, use the Value option for **Field Is**. Data Type indicates what type of field it is. The Column field is where you select the table and field to condition against. You can then set the condition and the literal value. Click on **Next** to move to the next section.

![Filter Button Image]

16. If you would like to create a grouped report, the **Groups** section will allow you to identify which field or fields to create a group band. In our example, we will click on the **GISAttributes.SIGN_TRVL_DRCTN**. Notice that it moved it to the top and selected it. You can have more than one grouping. The hierarchy does matter in the way the report will be formatted. The top one will be the outer or higher-level grouping.

**Groups**

Select columns on which necessary to group.

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Select Columns</th>
<th>Columns Order</th>
<th>Sort</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] GISAttributes.SIGN_TRVL_DRCTN</td>
<td>[ ] GISAttributes.SIGN_SHTG_TYP</td>
<td>[ ] GISAttributes.SIGN_RTE</td>
<td>[ ] GISAttributes.SIGN_PL_MRKR</td>
</tr>
</tbody>
</table>
17. The **Totals** section is the next part of the wizard. In this section, identify any field you would like summarized. You can select several summary options. The pull-down list will display the options relative to the field type. You can have multiple summary fields. Once completed, click on the **Next** button.

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Column</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Columns</td>
<td>SIGN_TRVL_DRCTN</td>
<td>[None]</td>
</tr>
<tr>
<td></td>
<td>SIGN_SHTQ_TYP</td>
<td>[None]</td>
</tr>
<tr>
<td></td>
<td>SIGN_RTE</td>
<td>[None]</td>
</tr>
<tr>
<td></td>
<td>SIGN_PL_WRKR</td>
<td>[None]</td>
</tr>
<tr>
<td></td>
<td>SIGN_INTRL_ID</td>
<td>[None]</td>
</tr>
<tr>
<td></td>
<td>SIGN_ID_PK</td>
<td>[None]</td>
</tr>
<tr>
<td>Totals</td>
<td>SIGN_RGN</td>
<td>[None]</td>
</tr>
<tr>
<td>Themes</td>
<td>SIGN_CNTY</td>
<td>[None]</td>
</tr>
<tr>
<td></td>
<td>SIGN_STE_ID</td>
<td>[None]</td>
</tr>
<tr>
<td></td>
<td>SIGN_PSTN</td>
<td>[None]</td>
</tr>
<tr>
<td></td>
<td>SIGN_WIDTH</td>
<td>[None]</td>
</tr>
<tr>
<td></td>
<td>SIGN_HEIGHT</td>
<td>[None]</td>
</tr>
</tbody>
</table>

18. The **Theme** section gives you an option to select a pre-defined template for background color and look as well as data row distinction. Select one of the themes or none and click on the **Next** button.
19. The final section is the **Layout**. In this area, you can change the orientation of the report and whether you use the regular data layout or a table structure look and feel. The other items should be unchanged. Use the defaults. Click on the Finish button and the system will generate the report and display in **Design** mode.

20. The Report will view in Design Mode. Titles and widths can be changed here.

21. Click on what value you would like to change.
22. Go to the box on the right. Click in the field you which to change. Widths can also be changed on the report. You can also highlight more than one field and change the width. You can also more column around.

23. Click on the Save Report button and then you can preview by clicking on the Preview tab or close and run the report.

24. Additional Note: The Access button at the bottom will allow you to set permissions to an individual or role. It works like the Traditional report access option. Click on the Users or Roles on the left and click on the Right Arrow button to move them to the right and give them access.