inspecttech

SIMS Manager 5.4

https://mn.bridgemanage.com

Table of Contents

Introduction to SIMS Manager 5.4:

SIMS Manager is an easy to use software package designed to assist managers with a wide variety of administrative and asset management tasks. Additionally, the Management component provides a one stop location for all bridge information. The layout and user interface of the Manager site has been designed to function and resemble the Collector site. Ultimately, SIMS Manager is a portal for querying data, running summary reports, updating asset information, viewing completed inspection reports, analyzing data in graphs and charts, and many other administrative actions which can significantly aid in the management of assets. SIMS Manager provides the necessary tools to enhance the quality of your infrastructure and is aimed at facilitating better results.

Requirements for SIMS Manager 5.4:

- Screen resolution of at least 1024 x 768 (1280 x 960 is preferred).
- A computer system with at least a 1 GHz processor with 1 GB of RAM for optimal performance.
- Internet Explorer 7.0 or higher
- Adobe Acrobat Reader 6.0 or higher.
- For the Laptop version you will need 10 Gigabytes of free disk space. This is required for the application and basic data associated with the bridges. Since the system will be storing all of the pictures and attachments related to the bridges, additional space may be required depending on the number of inspections and amount of pictures.

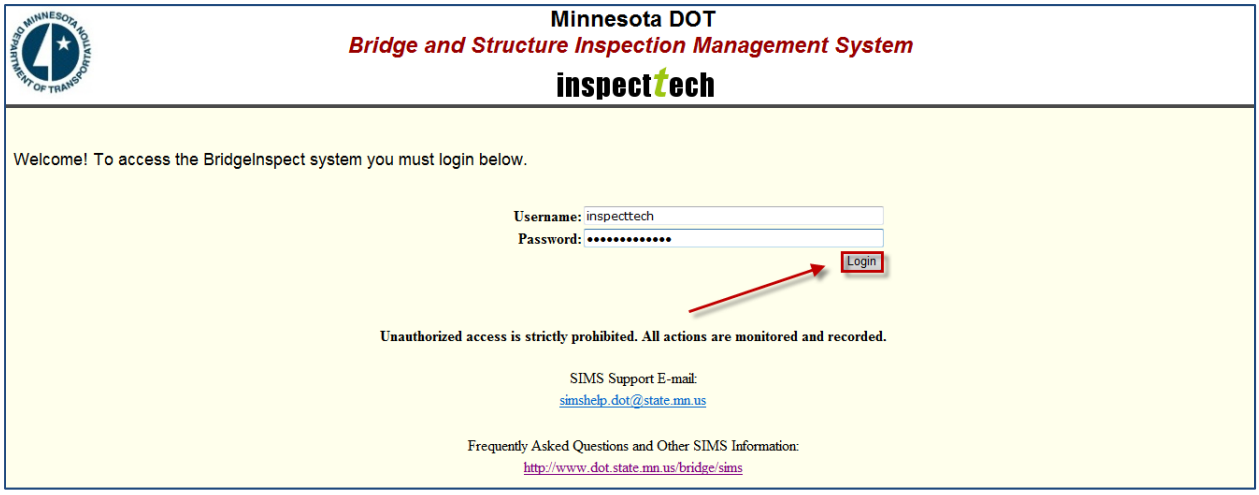
SIMS Frequently Asked Questions & Video Tutorials:

The Minnesota Department of Transportation has created a SIMS help site to assist users with questions pertaining to the SIMS software. This site provides valuable information on everything from computer requirements, to the approval processes, to training questions, and to video tutorials. Users can find this site using the link below. Additionally, any questions pertaining to SIMS can be directed to David Hedeen at 651-366-4528 or Jennifer Zink at 651-366-4573.

SIMS Help Site: http://www.dot.state.mn.us/bridge/sims

How to Login to the Manager Website:

1. To login to the SIMS Manager website, open an internet browser and type https://mn.bridgmanage.com/ . This will open the Management component and launch the login screen.



2. Once the login page has uploaded the user may create an icon on their desktop (a shortcut to the Manager website) which will take the user directly to the login page with one click. To create a shortcut icon follow these steps.

   - Right click anywhere on the login page.
   - From the options listed, select “Create Shortcut” and then click “OK”.

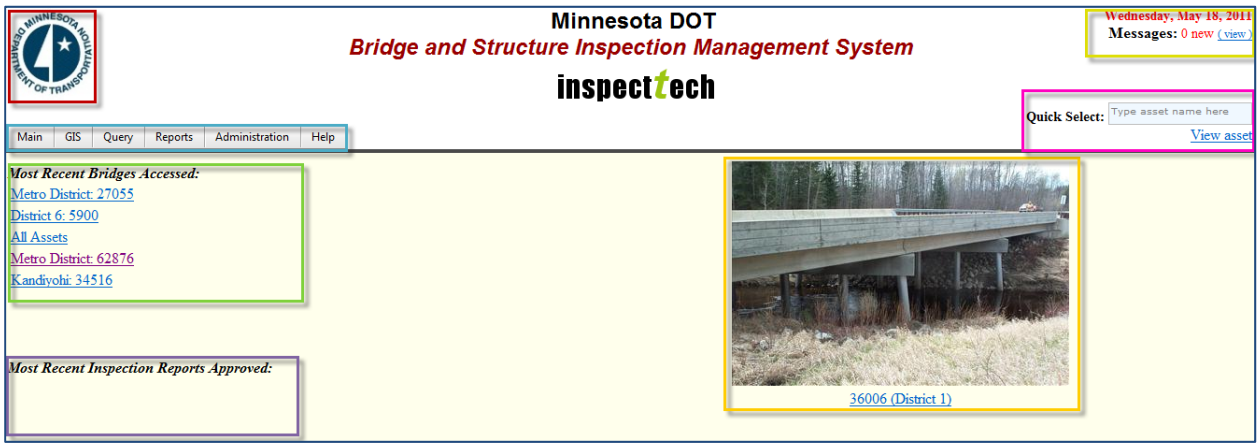
3. To enter into the SIMS Manager site, enter your username and password into the appropriate box and click “Login”. If successful this will take the user to the Manager main page.

   - If for some reason there is an error with the entered username or password, a message will appear in red at the top-left hand corner saying “Username/password failed!” If this happens, try it again to see if it was a typing error. If not, contact Lisa Hartfiel at the MnDOT Bridge Office to see if the appropriate login credentials are being used.

   - Please note that if a user forgets their login information they must contact Lisa Hartfiel at the MnDOT Bridge Office to get the password reset.

Manager Main Page:

Once you successfully login to the SIMS Manager site, the user will be greeted by the 'Main' page. The Main page is exceptionally important for navigation purposes and is the central point for the Manager site. The Main page has several interactive features which provide the user with abilities to quickly find any asset, report, or specific page throughout the site. Highlighted below are several important features available on the Main page.



The above screenshot has several highlighted areas which identify features of the Main page. The upper left hand corner contains the Minnesota Department of Transportation logo. This icon acts as a navigation tool that will transfer the user back to the Main Page from any point in the software. Directly below the logo is the navigation menu, which contains 6 tabs; "Main", "GIS", "Query", "Reports", "Administration" and "Help". Each tab consists of multiple sub-tabs which will direct the user to a specific page within the software. Throughout the course of this manual these tabs will be mentioned and discussed thoroughly.

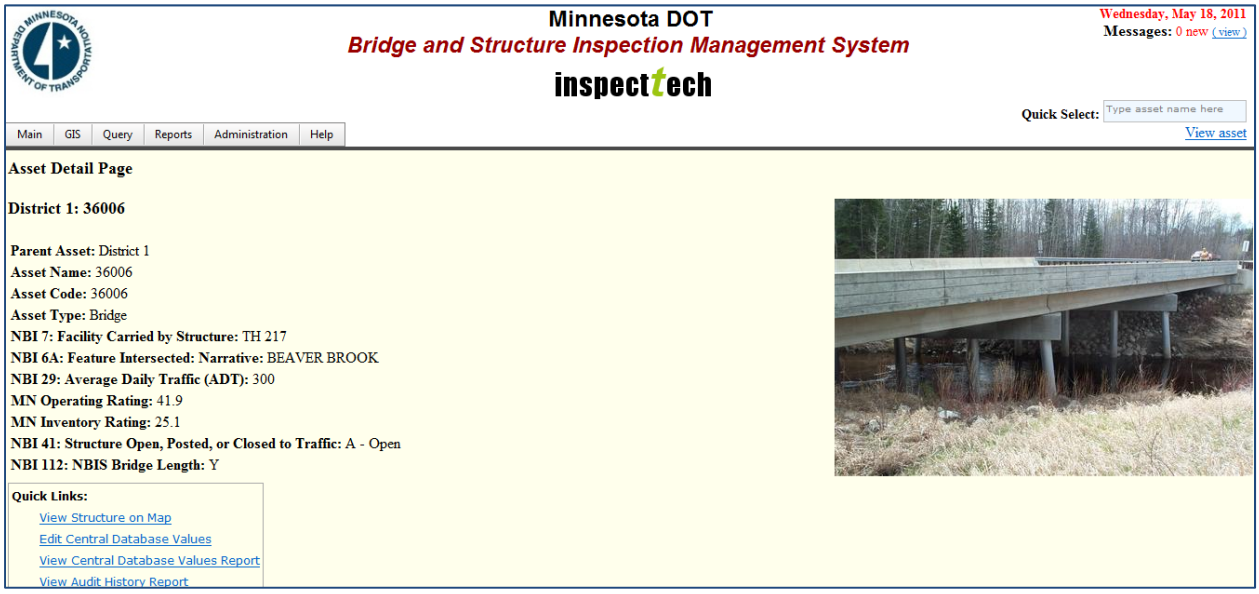
The next two sections are located below the navigation menu, and they are labeled "Most Recent Bridges Accessed" and "Most Recent Inspection Reports Approved". Both of these sections are available to save time and effort searching for bridges and reports that the user may need to access. Selecting the hyperlinked text in either of these sections will direct the user to the Asset Detail Page, where all information pertaining to the bridge can be found including pictures and central database values. The large picture shown is an inspection photo randomly generated by the software for visual and navigating purposes. Users may access this bridge's information by selecting the photo or the hyperlinked text below it.

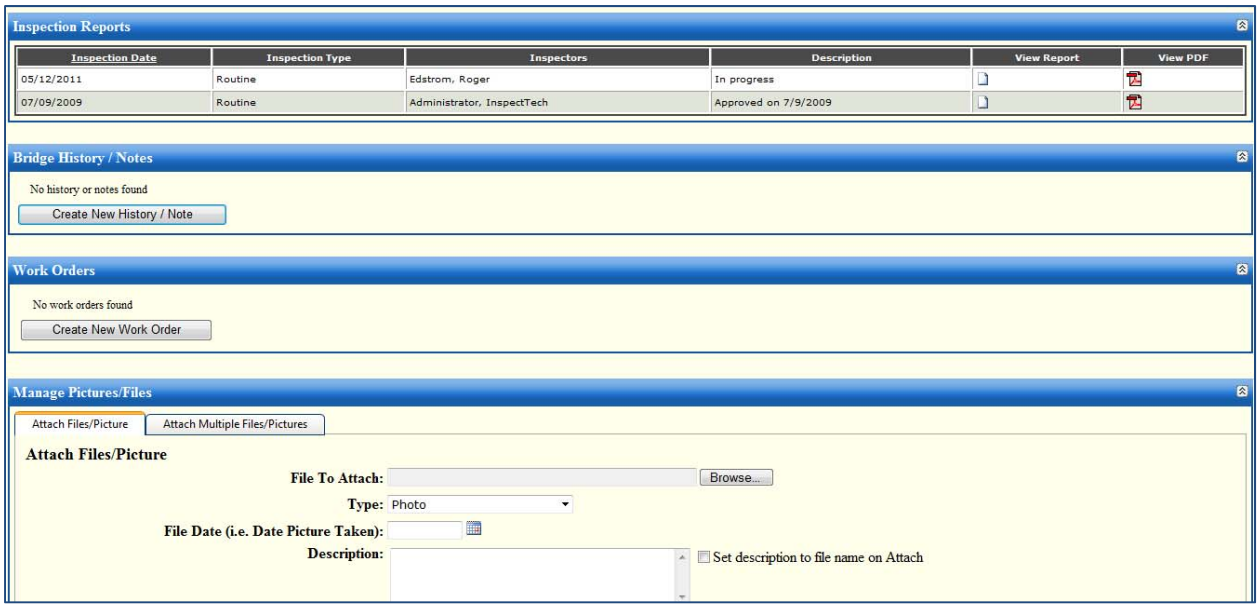
The section highlighted in pink in the above screenshot is the Quick Select. This feature allows users to search and retrieve any bridge that exists in the software quickly and with little effort. The user doesn't need to know the bridge's full name; rather any part of the name will suffice. Begin typing the name into the box and a list of 20 assets will appear using alphanumeric matching. The last section of the Main page is the Date and Message Alert at the top right hand side of the Main Page. This shows if you have any unviewed messages. Click "view" to be transferred to the message board.

Asset Detail Page:

The Asset Detail Page is a one stop location for all information pertaining to a particular bridge. This page can be generated multiple ways including the hyperlinked text on the Main page, which lists the 5 most recent bridges accessed and reports approved, by clicking on the picture on the Main Page or by selecting a specific bridge through one of the various search functions. The information on this page includes asset name, parent asset, asset code, asset type, facility carried, features intersected, ADT, operating rating, inventory rating, and any other specific fields designated to a particular type of asset. The Asset Detail Page also provides access to central database values, past and current inspection reports, certain files associated with the asset (i.e. bridge history notes) and all pictures associated with the asset.

- This is a screenshot of the Asset Detail Page for a bridge. Not all sections of the Detail Page are visible in this screenshot.



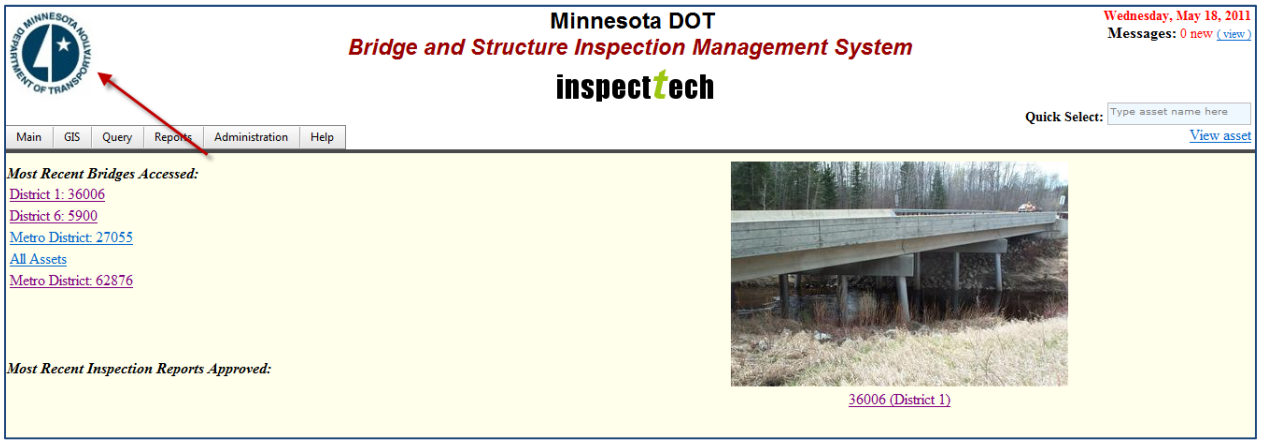


How to Logout Securely:

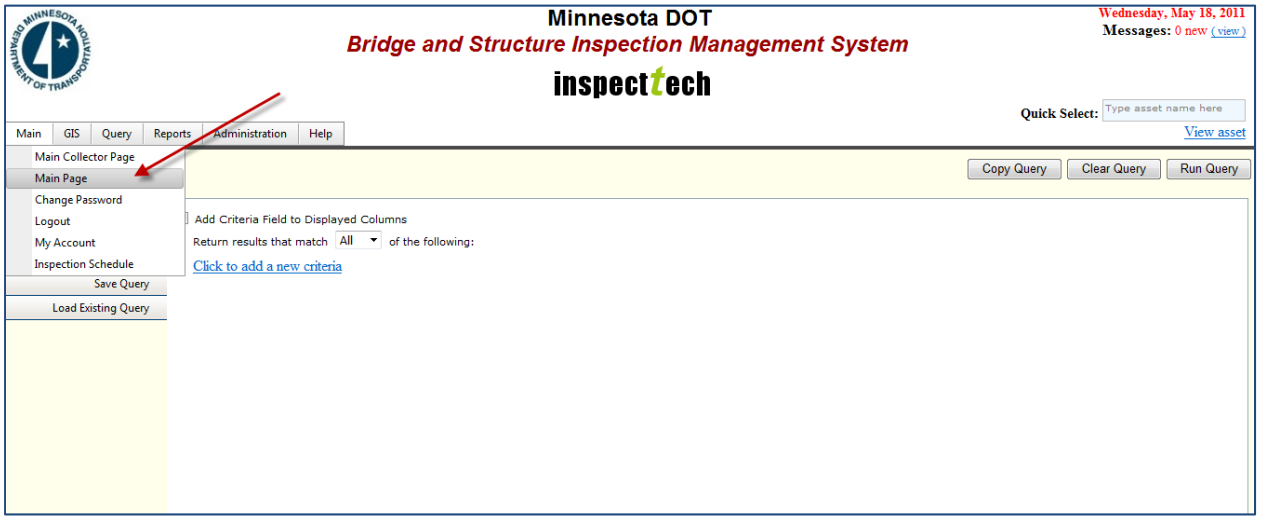
The software has an auto logout feature after 2 hours of inactivity. However, users may manually logout of the system any time they exit the site. This is a security precaution and should be performed when not actively using the software. The logout is found under the "Main" tab and is shown in the screenshot below.

How to Navigate Back to the Main Page:

1. There are two ways to return to the Main Page at any given point within the Manager component. The simplest way, which was discussed in the Main Page section, is by clicking on the Minnesota DOT logo at the top of the page. This will immediately transfer the user back to the Manager main page.



2. The second way to return to the Main page is by using the Main tab located on the navigation menu bar. Go to the "Main" tab and click on the sub-tab "Main Page".

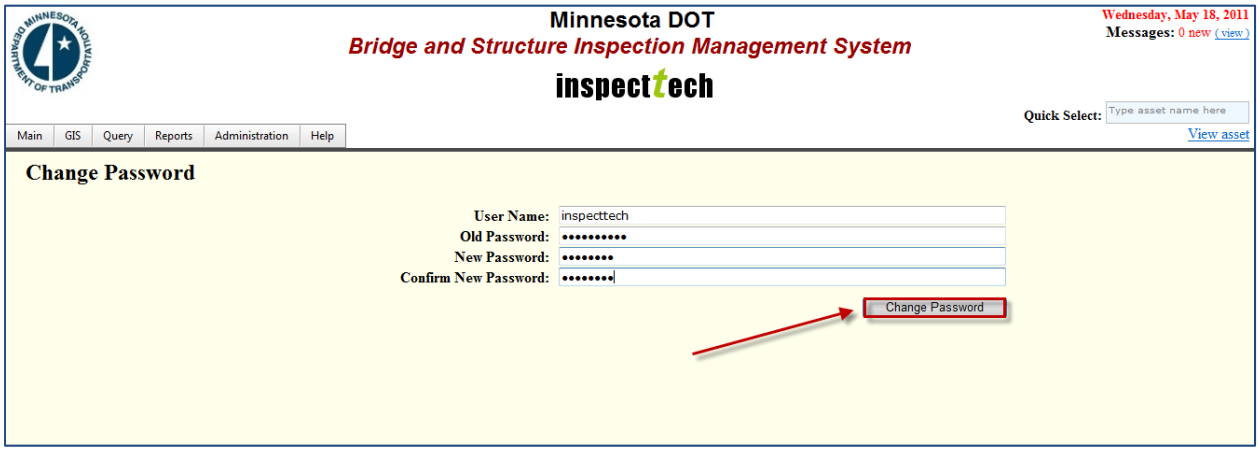


How to Change Your Password:

Each user will be assigned a username and password to login to the software. Note: the username and password provided for the Collector software is the same for the Manager. Upon initial login, users may change their password by following the instructions below. Additionally, users may change their password as they please following the same instructions.

1. Login to the software and select the "Main" tab at the top-left corner of the main page. Chose the option "Change Password" from the drop-down list.

   - Here is a screenshot displaying the change password page:



2. The page will upload displaying the appropriate username. Type the old password into the appropriate box and then type the new password to confirm it. Then select "Change Password". The next time the user logs into the site they will use the new password to enter the Collector and/or Manager website.

- *Note: Once the user has changed their password in the Manager component, their password will automatically change for the Collector site as well. Additionally, the password will be updated on the laptop version as soon as it's synchronized.*

Managing "My Account":

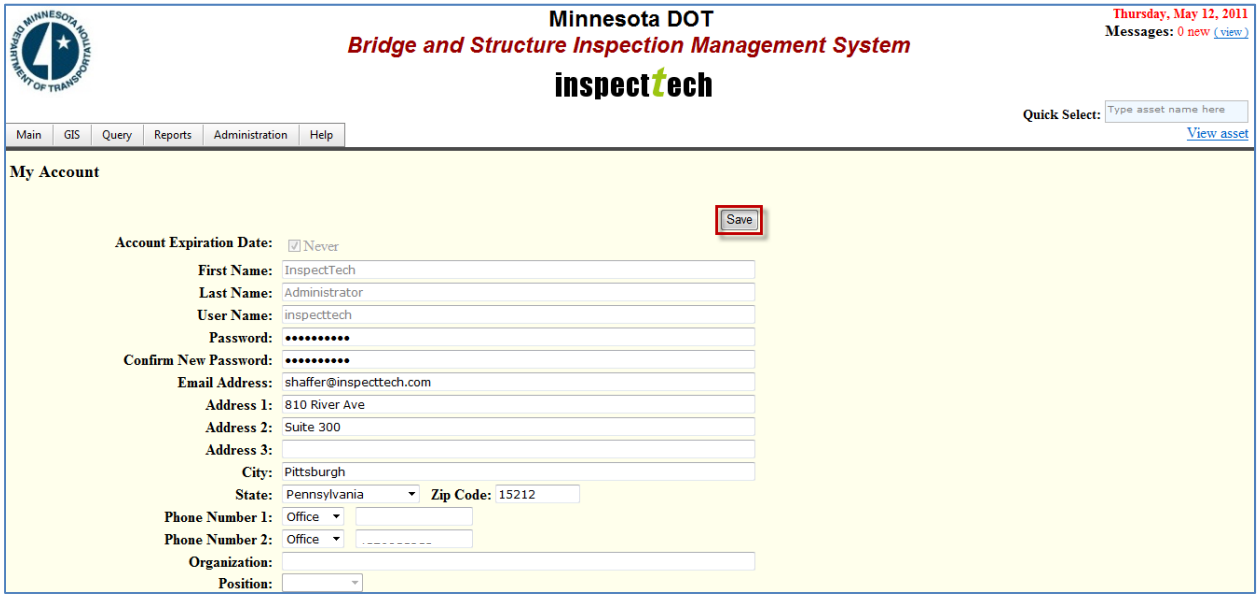
SIMS has a feature which tracks users of the system more thoroughly and allows them to make changes to their account information when needed. The 'My Account' option, located under the Main tab, displays a variety of information pertaining to a user including: name, address, email address, phone numbers, organization, position, years of experience, and account expiration date. This provides detailed profiles for every user of the software and helps communicate contact information throughout the system.

1. To make changes to your account go to the Main tab on the navigation bar.

2. Select 'My Account' from the list of options and edit where needed.

3. Remember to click 'Save'.

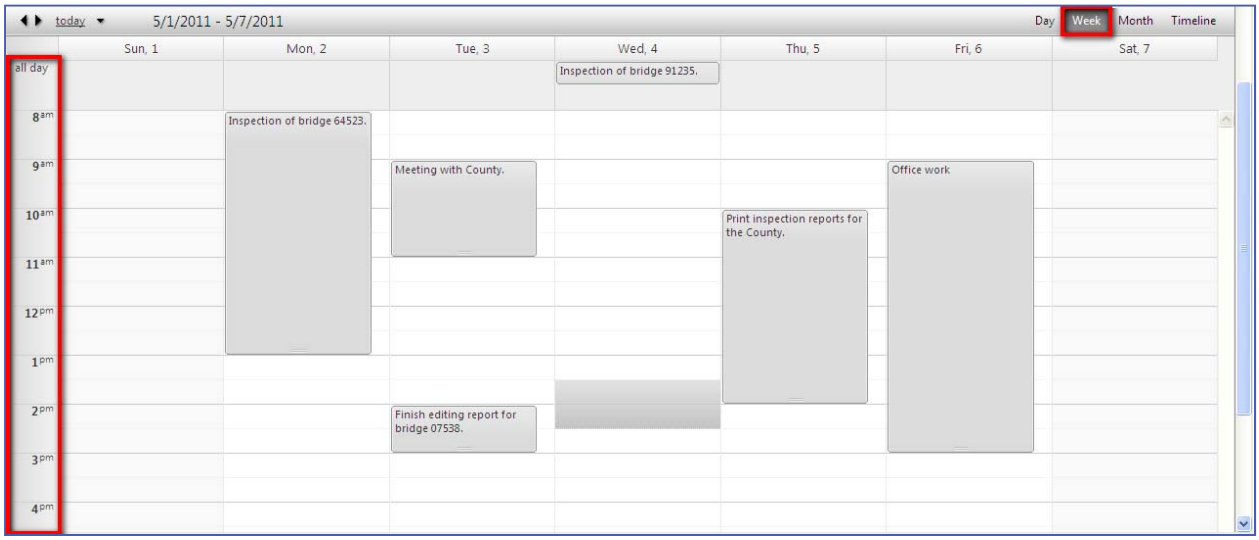
➢ Below is a screenshot of the account page where users can enter their information.



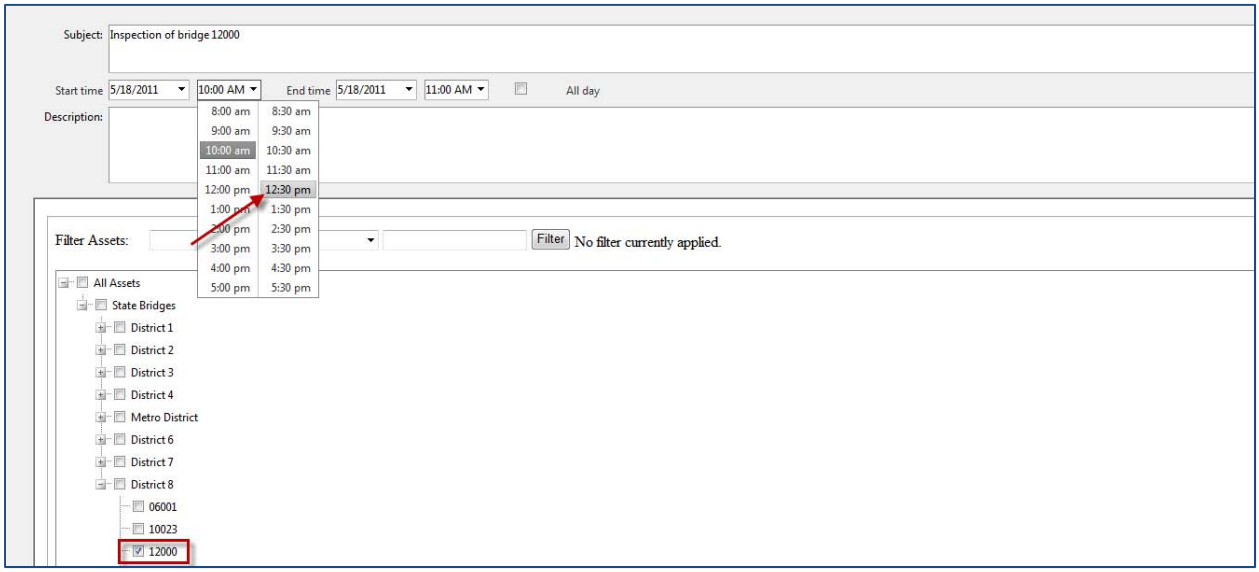
Inspection Schedule:

InspectTech has integrated a fully functional calendar into the software with the purpose of promoting organization and efficiency among users. This feature allows users to develop a calendar around the inspection cycle and even break down specific inspections, deadlines, and other tasks down to the hour. The calendar may be viewed by day, week, month or timeline to give the user maximum control and visibility of their schedule. To toggle between day, week, month, or timeline, use the buttons at the top right of the calendar.

- Here is an example of a basic inspection schedule:



1. To add an event to the inspection schedule, double click inside the calendar on the correct date. A new page will appear and you will be able to add a subject, description, and even choose a bridge from the filter at the bottom. In order for the appointment to be added to the calendar, you must select 'Save'. Below is a screenshot of the input page for the calendar where users will edit/add all information about the appointment.

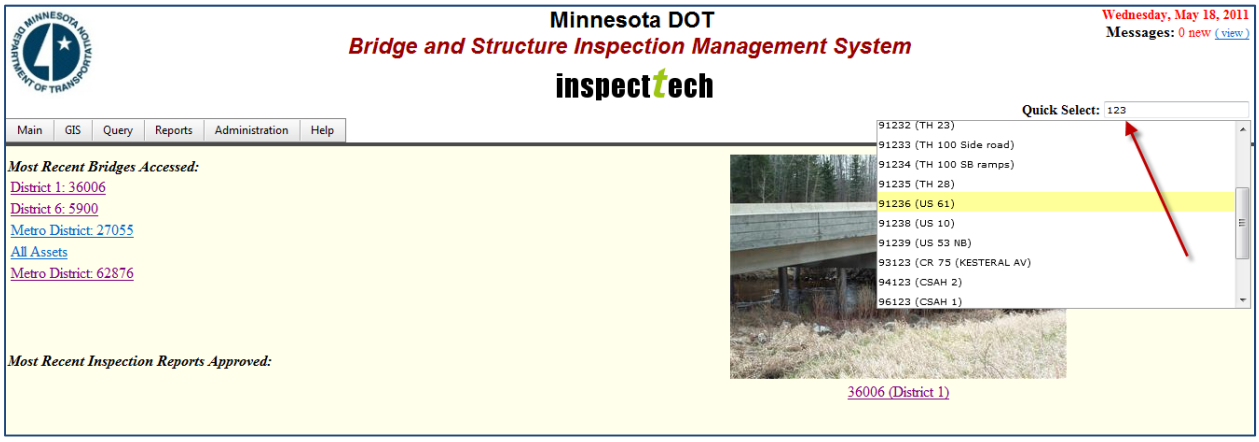


How to Use the Quick Select:

The Quick Select textbox is located at the top right hand corner of the main page. Quick Select is designed to assist users with finding any bridge in the system without having to filter or drill down. This can save significant time when trying to find a bridge. Quick Select uses alphanumeric text to bring back up to twenty bridges that match what has been entered into the Quick Select box. The user doesn't have to know the entire bridge name; only part of the name will suffice. Type in the information known about the asset and allow the Quick Select to return the bridges that match the criteria.

2. Begin typing the portion of the bridge name known. For example, the bridge we are searching for contains "123" in its name. Type "123" into the textbox and the first 20 assets which match that will appear. Use the returned results to find the correct bridge.

   - This is what the "Quick Select" should look like when searching for a particular bridge:



3. The user can navigate the drop down box by placing their mouse in the textbox and scrolling or using the arrows on the keyboard. Users can also add more information into the "Quick Select" and it will narrow the results down even further (i.e. add the number 4 to 123).

4. When the user finds the bridge in the list, they can click on it or hit the enter key to open the asset detail page. From here users can generate a new report or find a variety of information pertaining to the bridge. Notice the selected bridge is highlighted yellow in the screenshot.

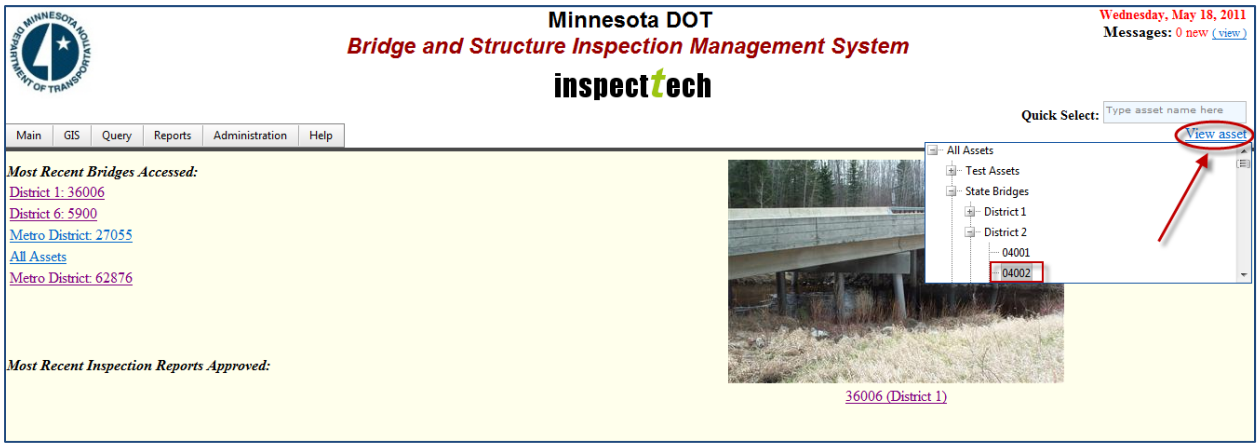
How to Find an Asset Using the "View Asset" Link:

Located under the "Quick Select" is the "View Assets" link. Clicking on this link allows the user to expand into a drill down search to find any asset within the system quickly and easily. The drill down is dynamically structured starting with all assets and then breaks down to asset types (i.e. State bridges). The next level of the tree displays each specific parent asset (i.e. District 2). Under each parent is a listing of all bridges which the user can scroll through until they find the correct bridge.

1. To begin navigating through the drill down search click on the "View Assets" button and then click on the plus symbol next to the correct parents. This will expand to show all assets located within that area.

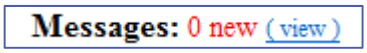
2. From this point you can scroll through the list of assets to find the desired bridge.

   - Here is a screenshot demonstrating this process.



How to Check Your Messages:

Located on the top right hand side of the main page you will find a 'Message' section. This will tell you how many messages are new and will have the word (view) in parenthesis which enables the user to view their messages. In order to view your messages click on the "view" link. This will direct you to a page that has your "read" and "unread" messages. Here is what the message section on the main page looks like.

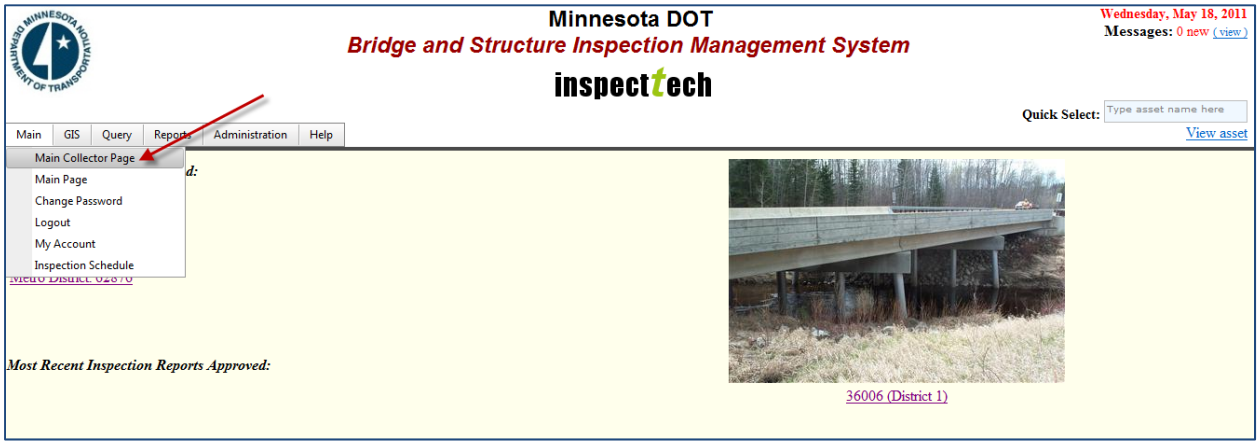


How to Navigate to the Collector:

1. There is a link that connects the MnDOT Manager site to the Collector site. Go to the navigation menu on the Main page and select the Main tab.

2. From the drop down options choose "Main Collector Page". This will take you directly to the Collector Login page.

   - *Note: Users may need to re-enter their password to enter the Collector site.*

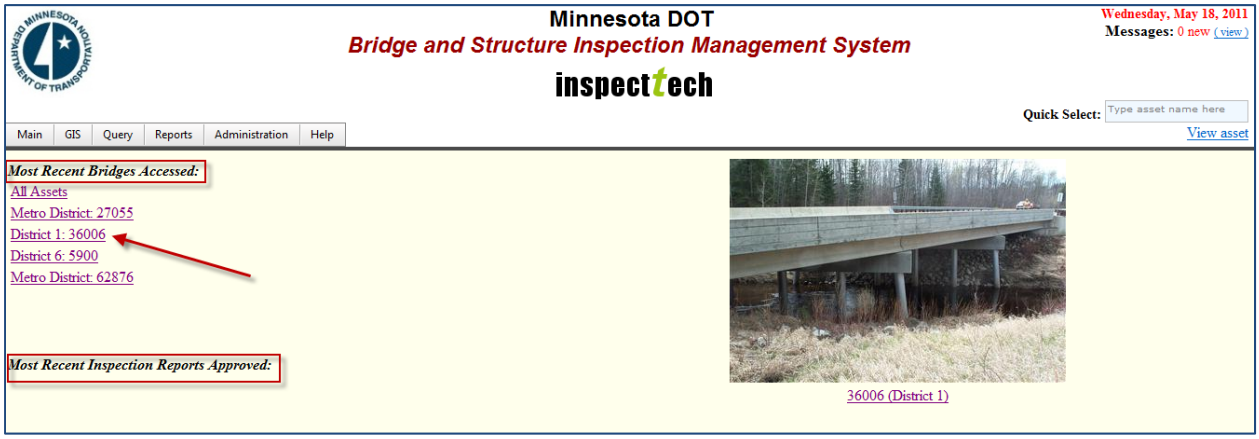


How to View the "Most Recent Bridges Accessed" and the "Most Recent Reports Approved":

The Manager component has a time saving feature which allows a user to navigate directly to bridges they have most recently accessed or reports most recently approved, eliminating the need to use searching functions to find a particular asset/report over and over again. Each section contains the five most recent assets or reports along with a link to transfer the user to the report or asset detail page. These two sections were highlighted in the Main Page screenshot located on page 7 and are shown below as well.

1. The middle section of the Manager Main page is where these sections can be found. They are divided appropriately and link the user to either the Asset Detail Page, which is for the "Most Recent Bridges Accessed", or the finalized inspection report for the "Most Recent Reports Approved". The user is able to view a PDF of the inspection report by clicking on the "view PDF" which will be highlighted in blue next to the bridge's name.

    - The screenshot displays the location of these links.



How to Utilize the GIS Map:

SIMS has an interactive GIS mapping feature which allows users to locate any bridge in the entire system or look up groups of bridges with just a click of a button.

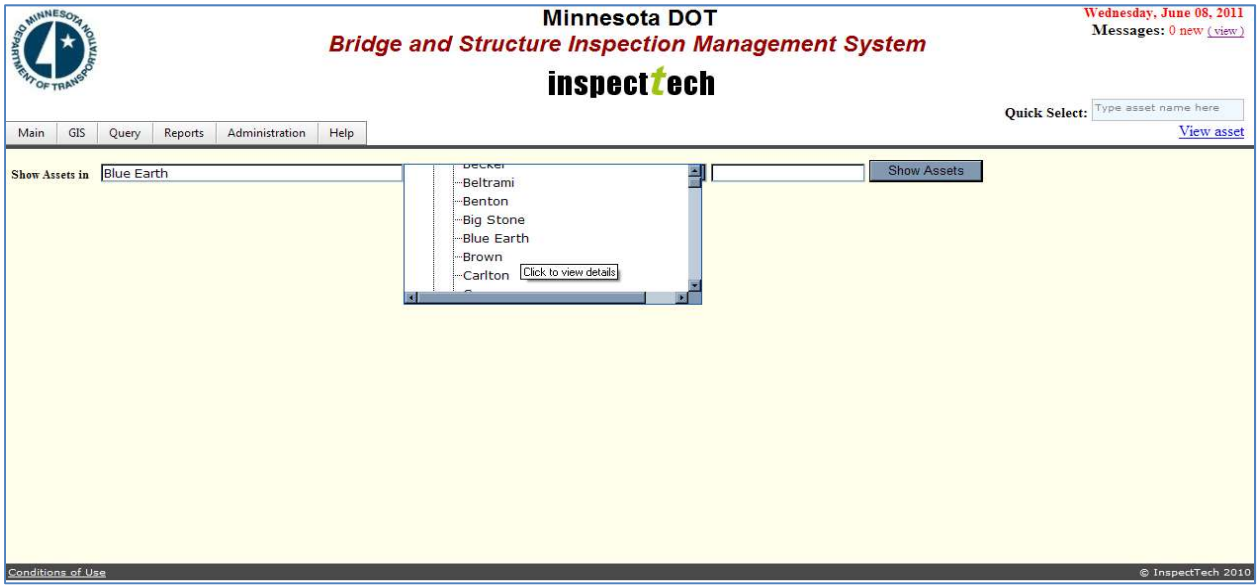
1. Begin by clicking on the "GIS" tab on the Main page navigation bar. Then, click on the "Main Map" option. This will open a new page where the user can use the filter to view assets in a particular district, county, city, or township on the interactive map.

2. To view the bridges in a particular District, click inside the "Show Assets In" box and use the tree search to drill down to the correct District. Click the "Show Assets" button to generate the interactive map. This will return all bridges in that District; however, the user is able to narrow their search down further using the filter function and the checkboxes located underneath the search bar.

3. To narrow the results start by selecting the textbox labeled "by". This will provide a list of criteria which you can use to limit the bridges returned. Inside the last textbox type in the criteria to limit the search. This will only return bridges on the map which meets the criteria entered. Click "Show Assets" to generate the map when you are finished.

   - *Note: Entering criteria into the GIS is not a necessary step; however, there is a limit to the number of assets the GIS Map will return so in some instances you will have to narrow your search.*

   - Here is a screenshot of the GIS search screen. Suppose a user wanted to view only bridges located in Blue Earth County. Use the drop down box to choose the parent asset (shown in screenshot) and click "Show Assets". The second screenshot is of the interactive map that was generated by the searching criteria entered.



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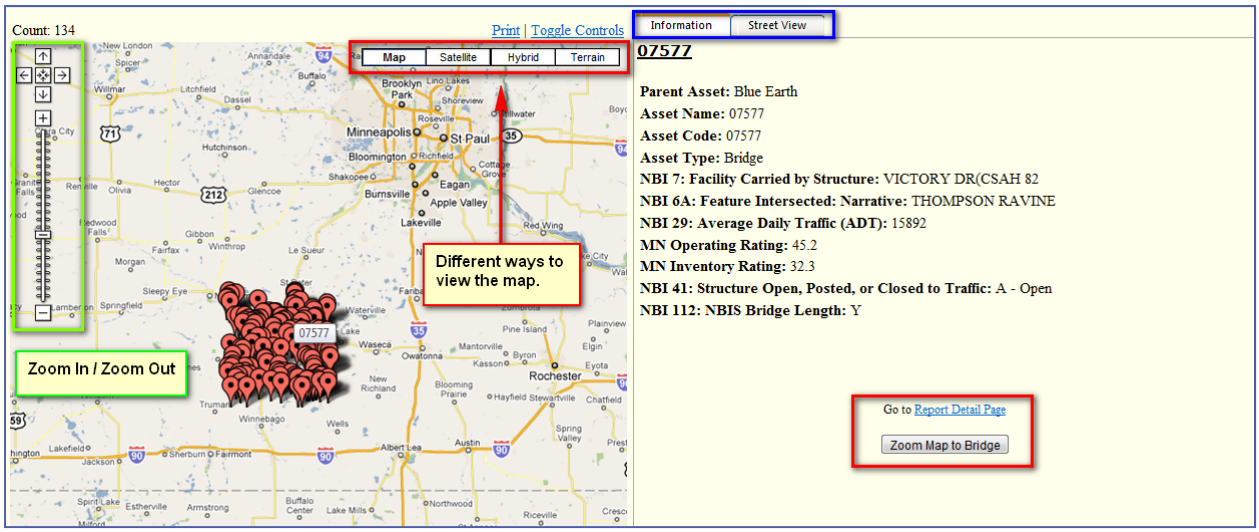
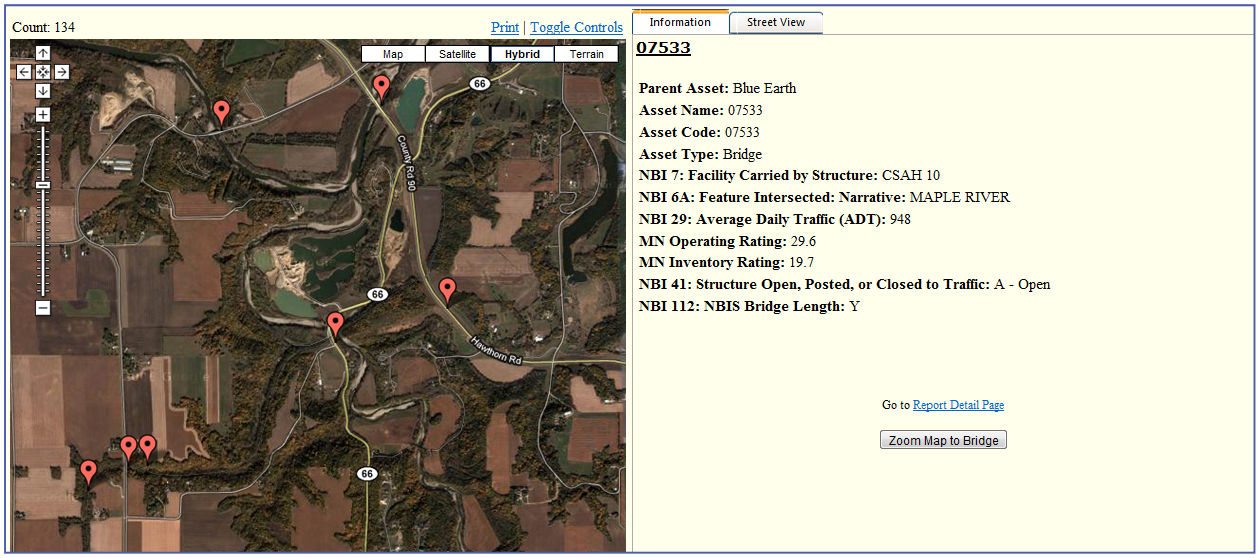


4. Notice that every bridge in the County is marked with a red pin and the total number of bridges returned is given in the top left hand corner. Users are able to zoom into and out of the map to get the best view using the scale on the left hand side of the page or by double clicking inside the map. Users also have the ability to view the map in four distinct ways: map view, satellite view, hybrid view or terrain view. When a user places their mouse over a single pin (bridge) and clicks, the bridge's information will generate on the right hand side of the page. This information section is broken down into two tabs. The first tab automatically opens when a bridge is selected and it contains general information about the bridge as well as a link to the bridge's detail page and also a button which will focus the map solely on that bridge. The second tab is labeled "Street View" and allows the user to view the bridge as if they were driving across/under the bridge in a vehicle. This "Street View" feature allows viewing from other streets as well, such as the ones that intersect and pass underneath the bridge. Not all bridges will have street view enabled.



- Here is a screenshot of the same map above. It is zoomed in and in hybrid view to provide a different look.

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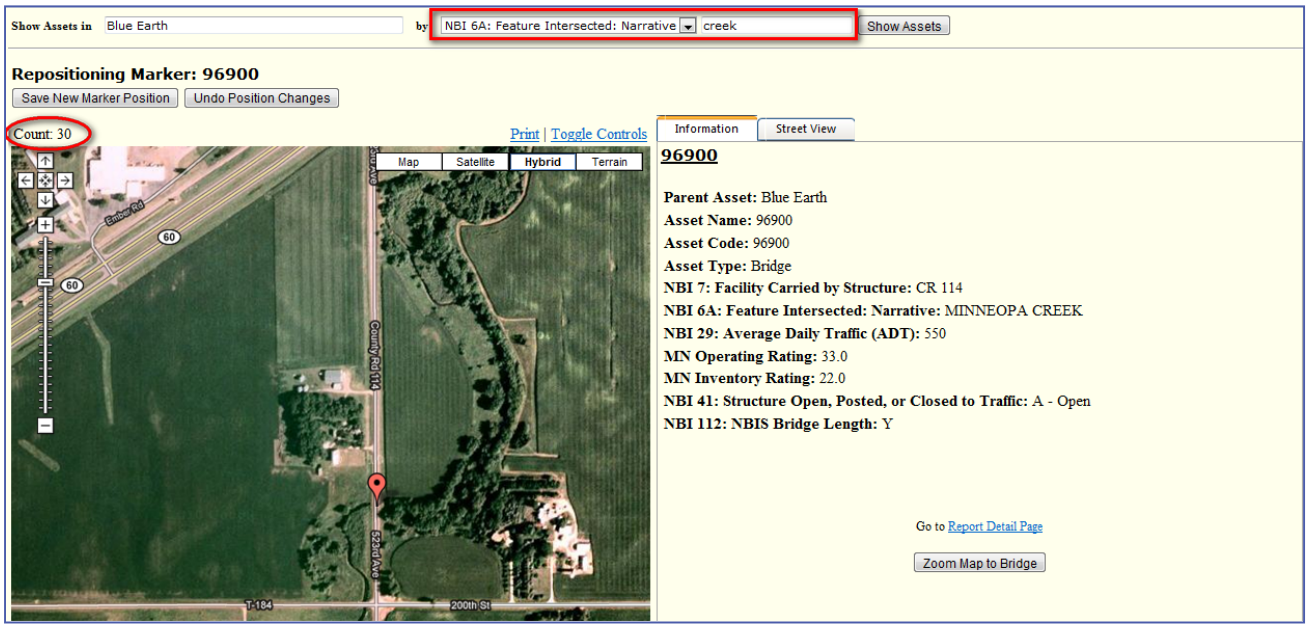
5. A user is able to print the map. To do so click on the "Print" link at the top of the page right above the different views. This will generate a new page and will expand the picture. Choose the correct printer then click print.

6. When necessary the user is able to narrow the results even more by using the search bars at the top of the page. Suppose a user needed a map of the County, but it will only display the bridges which intersect a "creek". To do so, click the drop down box for "by" and choose "Feature Intersected". Then, in the box next to it type the word "creek" and click on "Show Assets". Now the map will only show those assets in the County which intersect a creek.

    - Here is a screenshot only showing bridges in Blue Earth County which have "creek" in their name. Notice the count now displays 30, instead of the original 134. Also, the map has been increased enough to see specific roads and creeks. This will allow inspectors to pinpoint the exact location of any asset. Again, the user can zoom the map closer to view every road and surrounding features more in-depth.



7. Overall the GIS map is a very effective and useful tool to locate any bridge. The ability to view and print customized maps using searching criteria is a powerful feature which can serve many purposes. Here is a screenshot of what happens when you click the "Zoom to Bridge" button on the bottom right hand corner. It focuses the map directly over the bridge to give the user a clear look at the surroundings and exact location of the bridge. Notice the "Street View" tab is opened on the right and shows unparalleled views from all angles of the bridge.

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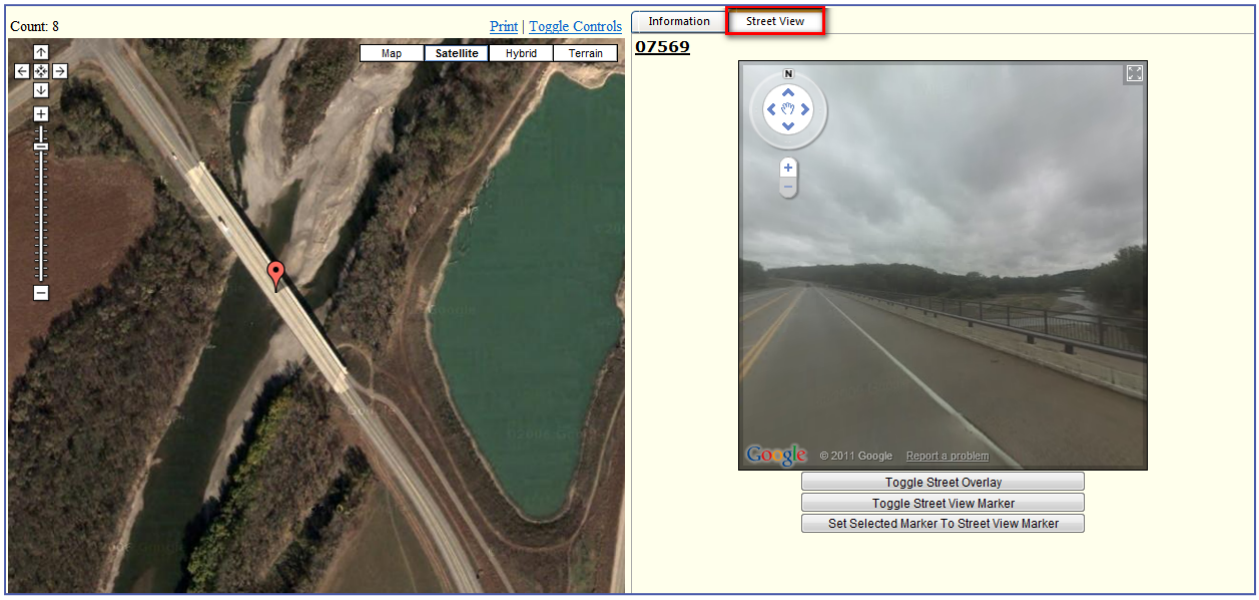

How to Construct a Basic Query Report:

One of the most popular and useful features in the Manager software is the querying capabilities. Users are able to design complex queries capable of scanning the entire system in just seconds. The user can design specific queries for their needs or create a query that can be run for users across the entire system. The purpose of the report query is to allow a user the ability to quickly search for information using any inspection or inventory field. For example, a user needs to know all the bridges in their District which have a deck rating less than 4. He or she would be able to build a query and find all of those bridges in just a few seconds. Another major function of the report query is also the ability to do summary reporting, where an entire inventory of bridges can be compared side by side. For example, suppose a user wants a list of all deck ratings for each bridge throughout their District. The query would return every bridge deck rating in the District.

1. Start by selecting the "Query" tab which is located on the Main Page navigation menu. Scroll down and select "Construct Query Report" from the available choices. The page will generate and several options from this point will be available to the user. The first is a checkbox at the very top which asks "Add Criteria Field to Displayed Columns". The second option wants to know how to return the results, if it matches "ANY or ALL" the following. The last option is "Click to add new criteria". Notice the sub tabs along the left side of the screen. These are functions of the query and will be discussed more thoroughly in their own section. Here is a screenshot of the starting point when building a query.

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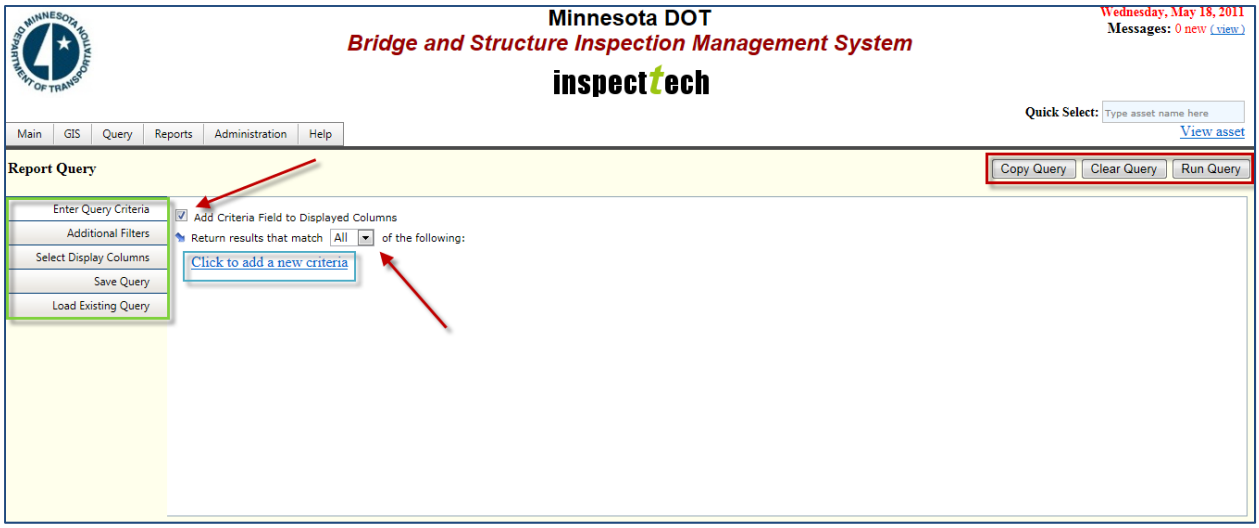
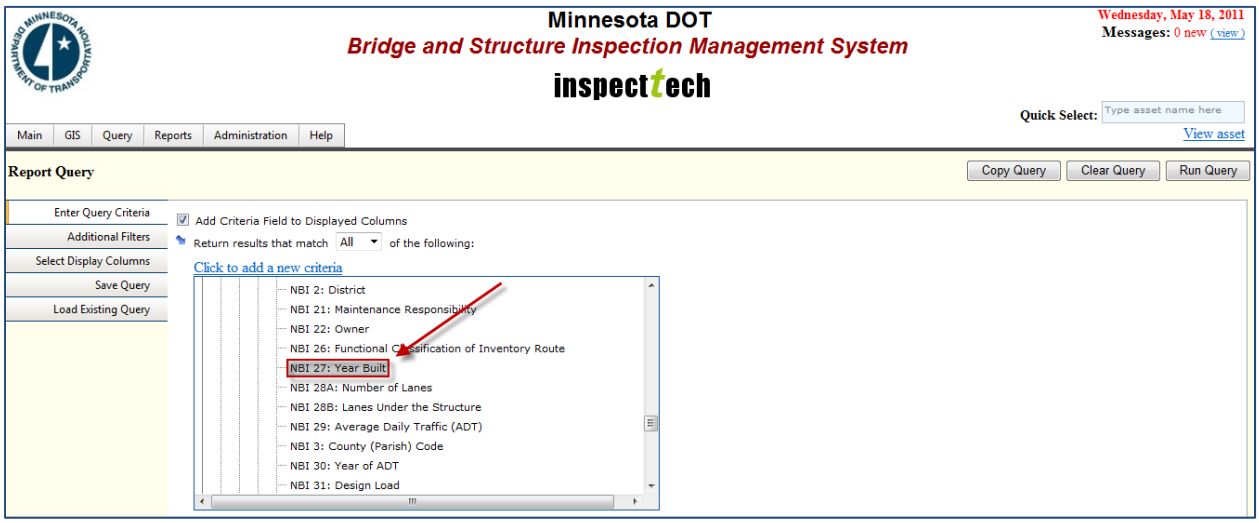


Enter Query Criteria:

1. The "Click to add new criteria" link will allow the user to start building the query. When selected this will open a section which provides a tree search with two ways to find the field to be utilized as criteria in the query…Forms and Asset Fields.

2. For an example, suppose a user wanted to run a query concerning the year bridges were built across the state. The screenshot below shows how to locate the field using the drill down method under "Forms". There is also a searching option which allows the individual to use a filter to find the desired field.



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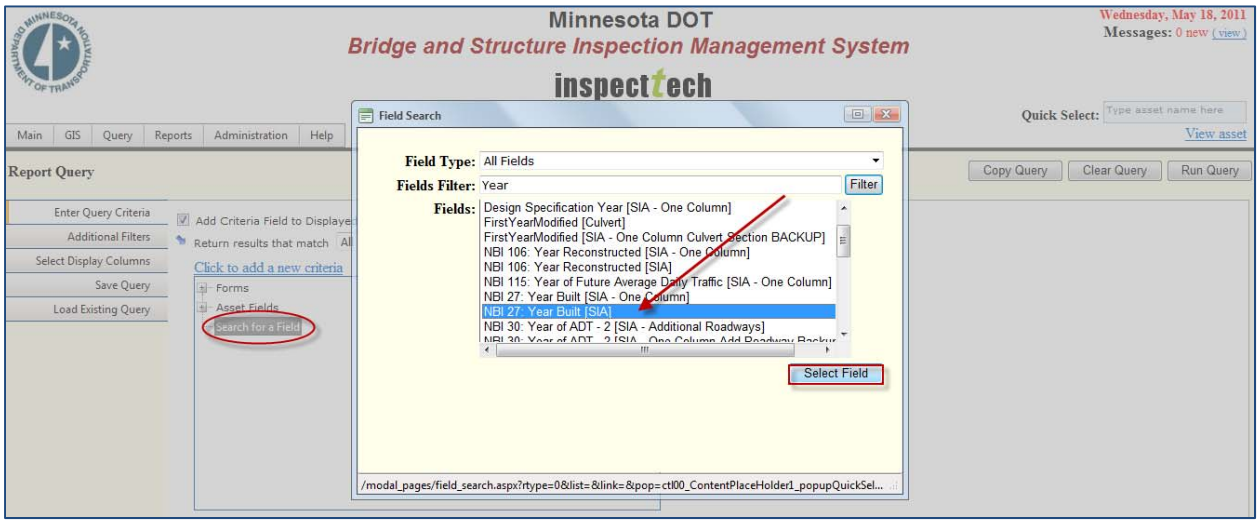
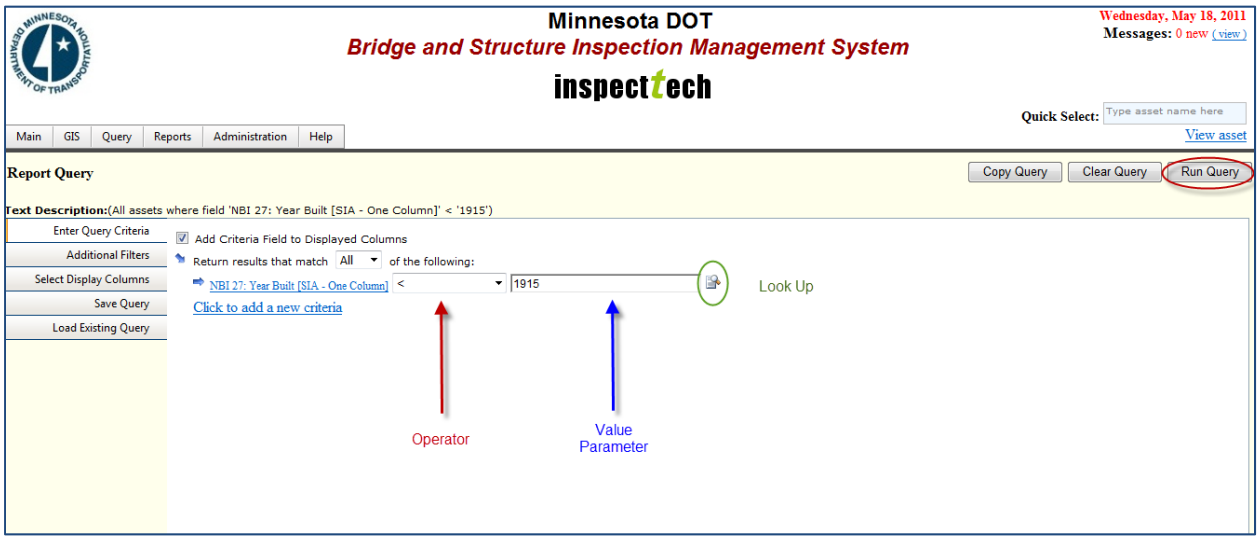


3. Once the field is selected the next step is to enter in the parameters for the filter. First choose <, <=, >, >=, =, contains, or does not contain in the first text box. The <, >, = are useful for data in numeric format. While 'contain' and 'does not contain' are primarily used on text fields. Then enter the value parameter. If the user is unsure as to the value to enter for a particular field, there is an icon to the right, which will generate a pop up describing what values may be entered based on the field selected. For this example, suppose a user wants to query all bridges in Minnesota which were built before 1915.

4. Once the parameters are set, click the "Run Query" button at the top or bottom right hand corner of the page. This button will execute the query, and the user should see a loading symbol as the query retrieves the results.

   - *Note: Users may add an unlimited number of parameters to a query by following the same exact process. This will be covered more in depth in its own section.*



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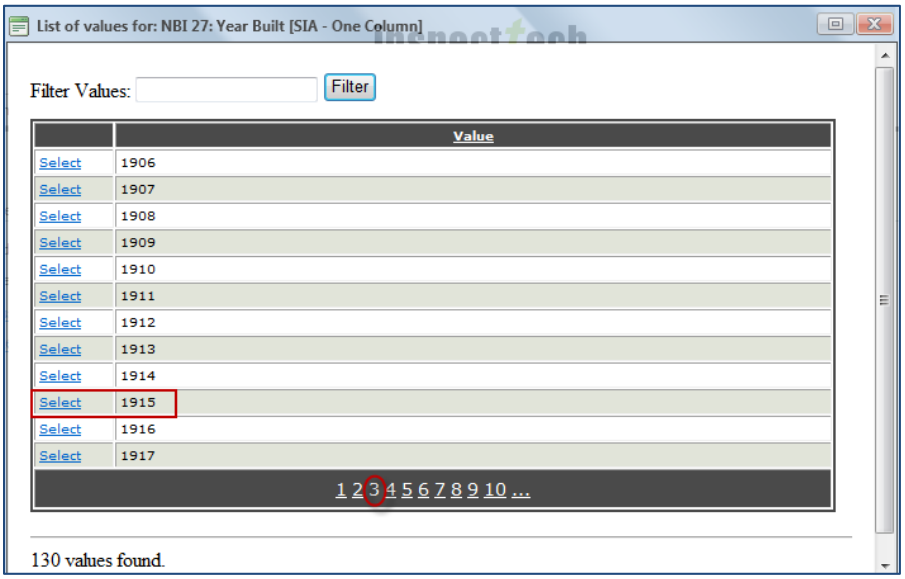
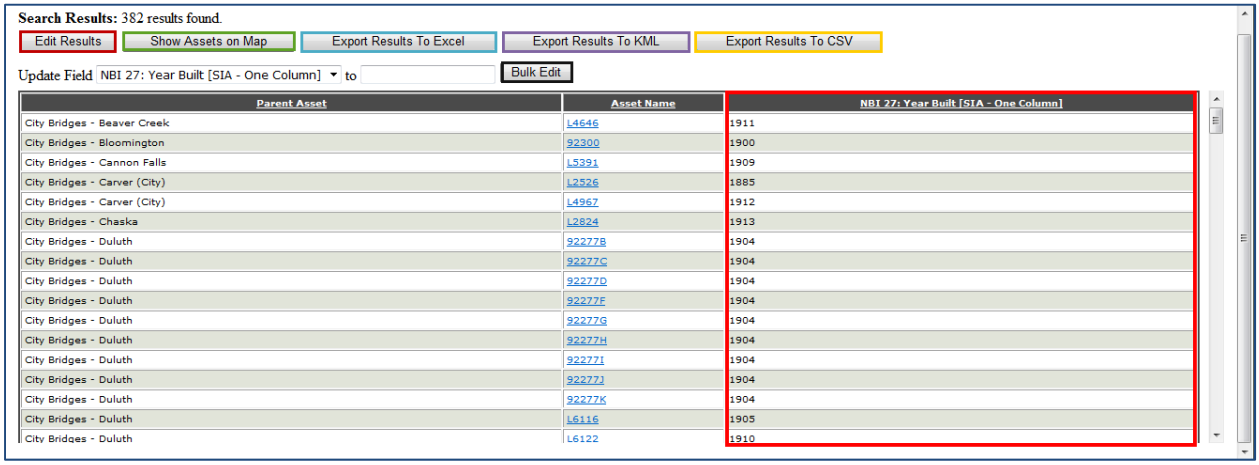
Continued

Below is a screenshot of the pop up that the look up option will generate. This will display all values applicable with the field selected in the query. Users may click the 'Select' button to add that value into the parameter of the query. Users may use the page numbers at the bottom of the page to view all choices.



5. The query will generate the results and place them at the bottom of the page where the information returned can be analyzed. From here there are several options which users can do with the results. One option available to the user is the ability to view the returned bridges on a map, just like the GIS Map demonstrated earlier. Also, users may export the results directly to Excel, KML or to CSV. All of the options will be touched upon in upcoming sections of this manual. The screenshot below highlights the users' different options.



- The query results are delivered in a table which allows the users to scroll through the results, open any bridge detail page by selecting the link, or sort the data by selecting one of the column headers. Notice the search results are displayed in the top corner showing how many bridges were returned. The user can bulk edit if they have the proper permissions.

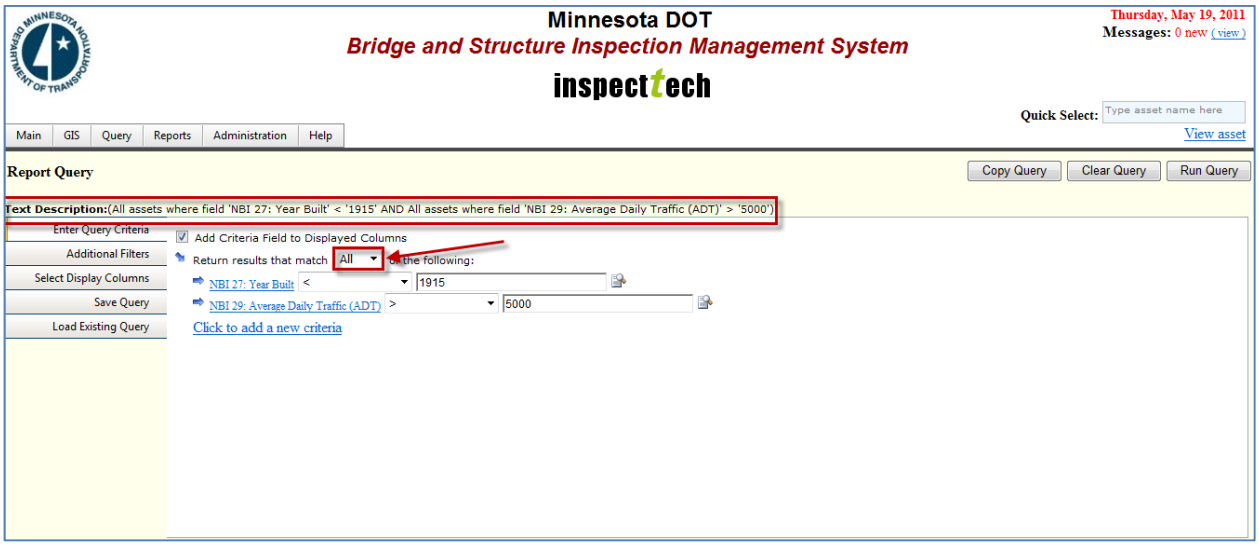
6. The user may save the query for future access. Saving queries is covered in its own section in this user manual.

How to Construct a Multiple Criteria Report Query:

1. To construct a multiple criteria query report, begin the same way as a basic report query and enter the first parameter. Then click on the "Add new criteria" button to add more criteria to the query.

2. Use the same method as described in the previous section to enter the parameters. Do this process however many times necessary to add all the criteria to the query. It is important to make a distinction between if the query must meet "ALL" or just "ANY" of the criteria. This is done through the drop down box located above the "Add new criteria button".

   - Notice: Above the criteria there is a "Text Description" section which writes out what the query is looking for. The user can use this if they encounter any unexpected problems to decipher the criteria better. "All" criteria must be selected to meet both criteria.

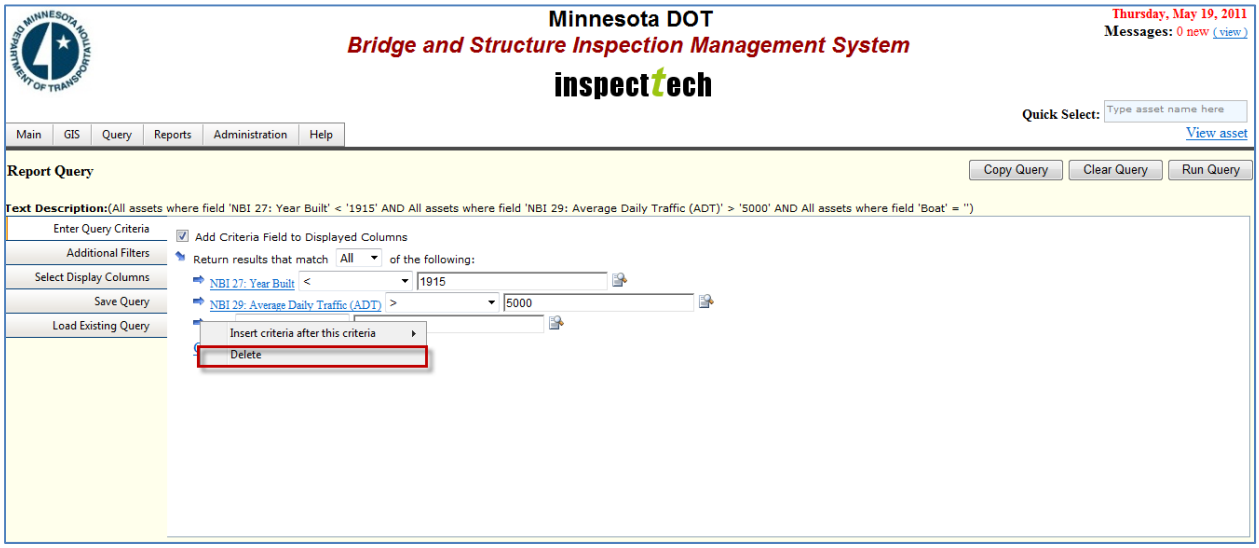


3. The results will be generated at the bottom of the page. Users have the same options as with a single criteria query report.

How to Delete Criteria from a Query:

The query feature allows users to delete added criteria without having to start the query over again. This process is very simple and can be completed in just seconds.

1. Click on the blue arrow next to the criteria and choose the “Delete” option.



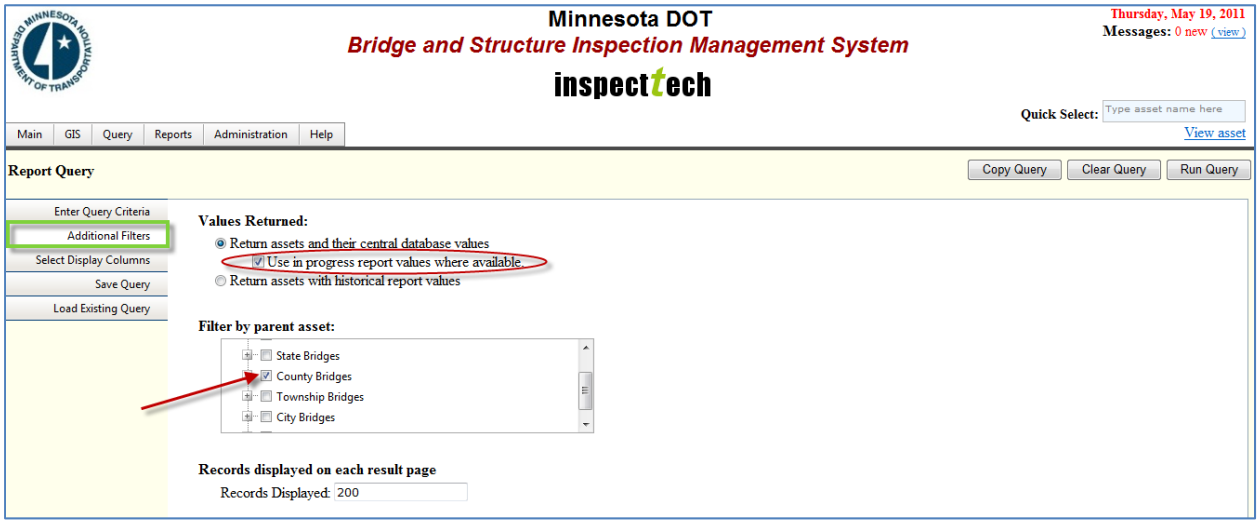
Adding Additional Filters to the Report Query:

The query feature not only allows users to enter specific criteria, but it also allows them to add filters which narrow the results (i.e. users may limit the results to specific parent assets such as a county or district, instead of pulling all the information from the entire state's bridge inventory).

1. To add a filter to the report query scroll down the left hand side of the page and click on the "Additional Filters" tab. This will open up another screen and display a list of filters which a user may add to the query and its results.

2. There are three filters which can be applied to a query. The first filter is whether to return the assets with their central database values (the most recent values) or their historical report values. Additionally, there is a checkbox available which will pull values from in progress reports where applicable, so that the most current values are used. The default setting for this one is central database values with the additional checkbox selected. The second filter allows a user to choose a parent asset using a basic tree structure. The user may choose the type of parent (i.e. County Bridges) or they may choose a specific parent (i.e. Becker County). The third filter is how many records are displayed on each result page. The default setting is 200 records per page, but users may change this number accordingly.

   - Here is a screenshot showing the different filters which can be added to a query.



Select Display Columns for the Query Report:

The Query also allows users to choose which fields are displayed as columns in the generated report. The user may add as many columns as necessary to enhance the report.

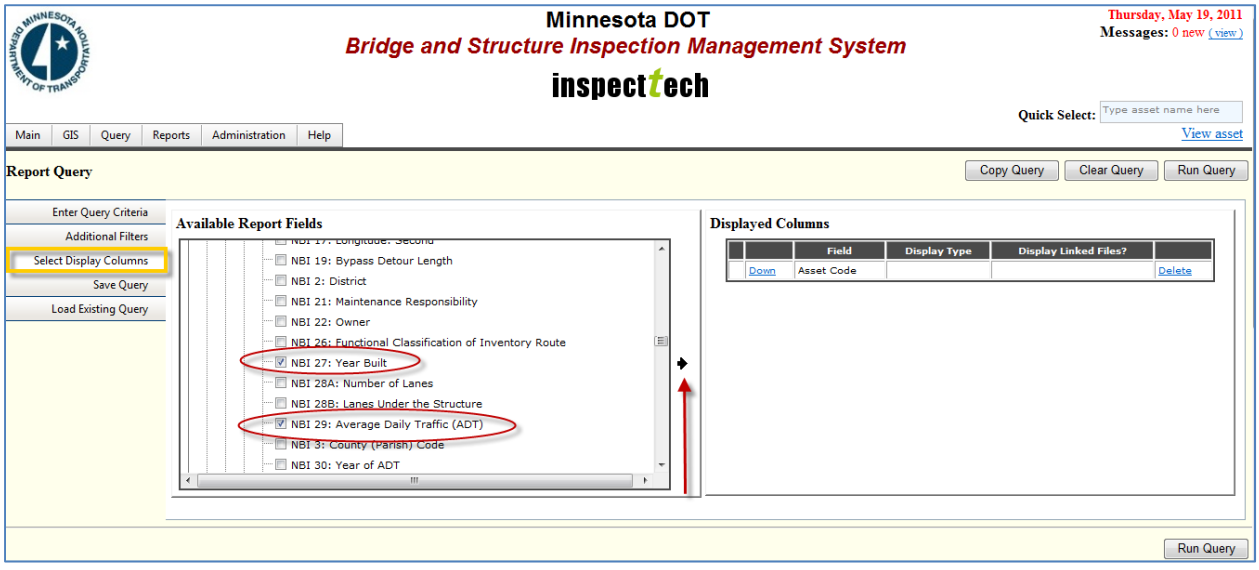
- *Note: Those fields used as part of the query are automatically added as displayed columns.*

1. To edit or include additional fields in a query report, begin by clicking on the "Select Display Columns" tab on the left side of the main query page. This will generate a new page with all the fields that can be added to the report in a drill down under the section called "Available Report Fields". The user can also search a particular field by choosing "Search for a Field'.

2. Locate and include the desired fields by clicking on the check box to the left of the field. This will place a checkmark in the box and will allow the user to continue navigating to other fields. This will also allow them to add all the new fields at the same time.

3. Once the user has selected all the fields they need, they will click on the small black arrow in between the two sections. This will transfer over the fields selected and will add those fields to the displayed column in the report generated.

4. To the right of the small black arrow, there is a section called "Displayed Columns". These are the fields which are predefined or have been added as columns of the generated query report. Notice how users can rearrange these fields by clicking the 'Up/Down' buttons. For some fields the user can change the display of the field to either "Show Value" or "Show Comment". If there are files such as pictures linked to any of the fields, those can be displayed as well by choosing 'Yes' or 'No' from the drop down box in that column. If necessary, the user can click the "Delete" button to remove that field from the report.



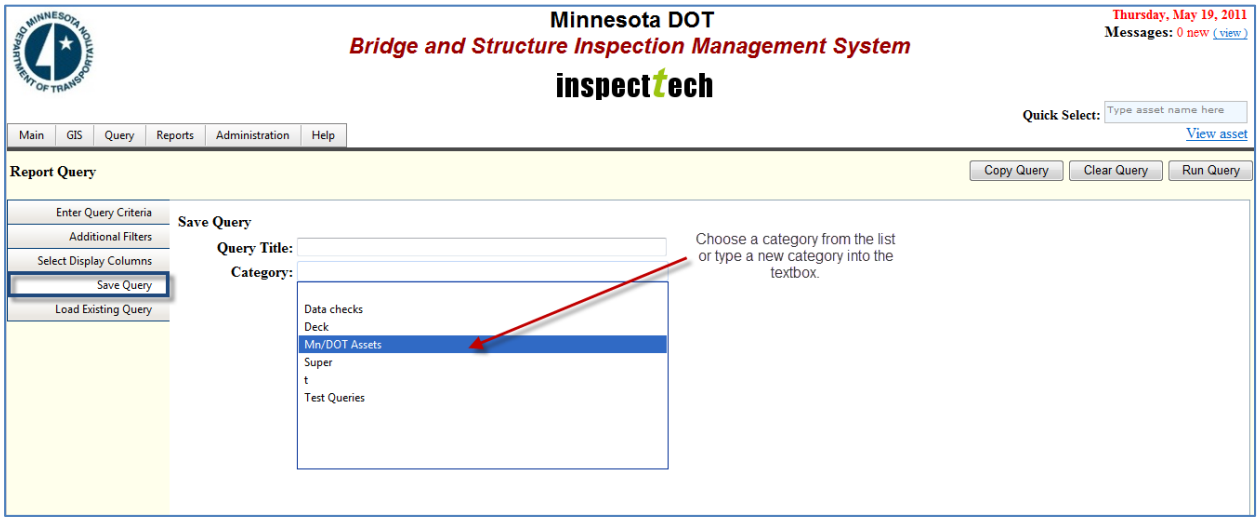
- This is a screenshot of the "Select Display Columns" tab. This example shows a user adding longitude and latitude coordinates to the query output.

How to Save a Query:

Many times a query generated will need to be used again in the future. For that purpose the user is able to save a query to eliminate the hassle of setting it up time and time again (i.e. a report which shows all bridges inspection dates for the upcoming year). The saved query can also be made available to every qualified user throughout the system as well.

1. All parameters must be defined, filters added, and display columns selected exactly how the user wants them to appear. Then click on the "Save Query" tab along the left side of the page. This will open up a new page where the user will be able to save the query.

    - Here is a screenshot of what the page should look like.



2. The query must be given a title in order to be saved. Furthermore, the user has the option of adding a category from the drop down under which the query would fall. Additionally, users have the option of entering a unique category name of their own. Choosing a query category is not a mandatory step for saving purposes, but can be useful when trying to load an existing query.

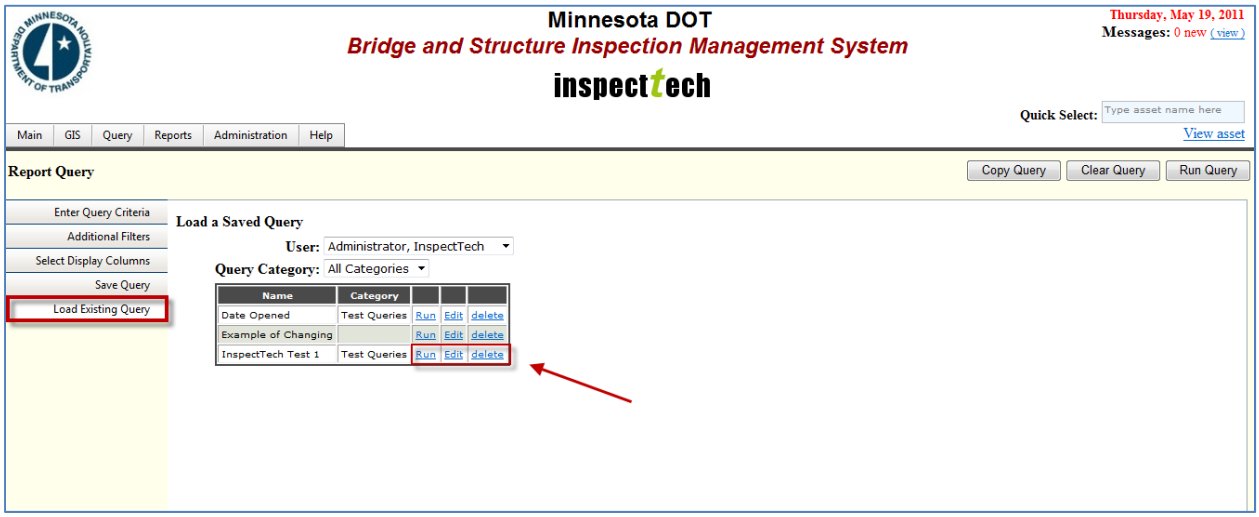
3. Users may also save a query which has been uploaded and edited. At this point when they click the "Save Query" tab they will be given a choice to save it as a new query or to save the changes made to the existing query (if they are the owner of that query in this instance). If the user wants to save an uploaded query as a new query they will click the "Save as New Query" button and type in the appropriate information.

How to Load an Existing/Saved Query:

As mentioned in the previous section, the Save query function is a useful tool when users have queries that may need to be used more than once. This section of the query function will demonstrate how to load the existing query in order to run, edit, or delete it.

1. Begin by clicking on the "Load Existing Query" tab on the left hand side of the page. The user will be able to view every query that was saved and has been made public, because the default tabs will be "All Users" and "All Categories". However, they will be able to filter the queries by selecting either a user or a specific category. For example, if a person wanted to find a query they saved, they would change the user to themselves and then it will display only the queries which they created and saved.

   - Here is an example of what the page should look like when "All Users" are selected. Not all saved queries are available for use because some queries are saved for individual use instead of it being available to all. Users can either "run", "edit" or "delete" any one of the queries available to them.



2. If changes are made to the query or new information is added the user must save it again. When users go to the Save Query tab there will be a section displaying the query title and will have an option to "Save Query Changes". If the query that is edited belongs to another user, you will need to save the query under a new title.

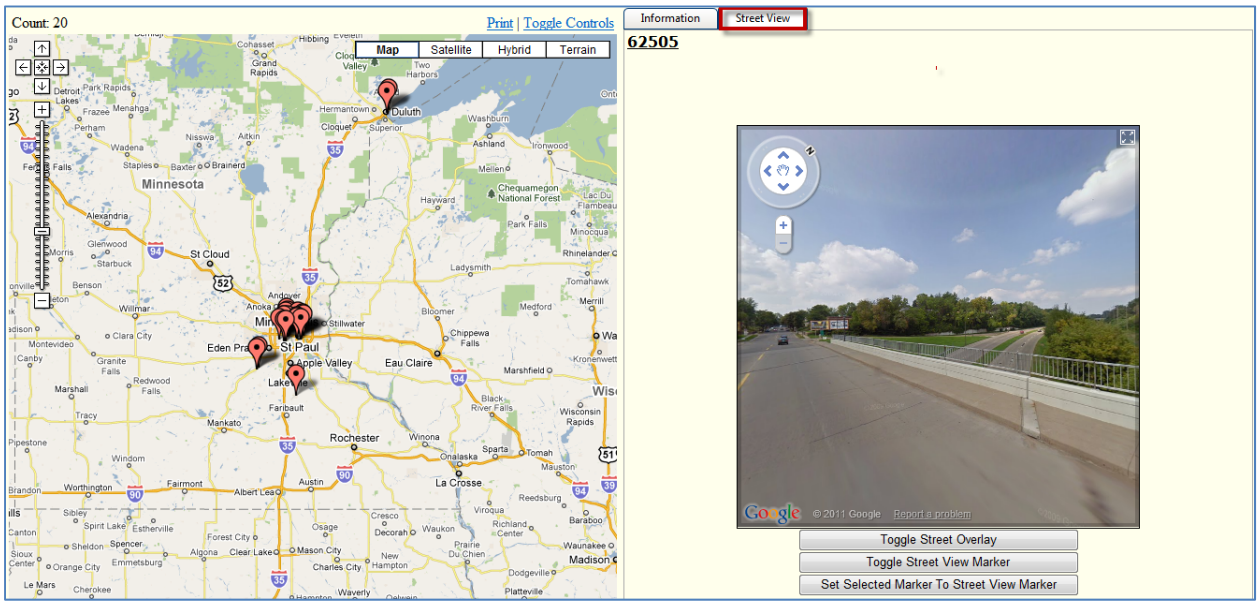
How to Show Queried Assets on a Map:

After the query has run and results are returned, the user has several options for viewing the output. One of the options is viewing the returned assets on an interactive GIS map.

1. To show the queried assets on a map start by scrolling to the bottom of the page where the query results are located. Find the option called "Show Assets on a Map" and click on it. This will open a new internet tab and will take the user to InspectTech's GIS Map interface.

2. From here they can zoom in and out of the map to view where all the returned assets are located. This will enable the users to view certain assets in street view as well.

   - Here is an example of the queried assets shown on a map. This is the same exact feature as the GIS map explained earlier, however, only the assets which were returned by the query are visible. Note: Only those bridges which have valid coordinates entered into the system will be displayed on the map.



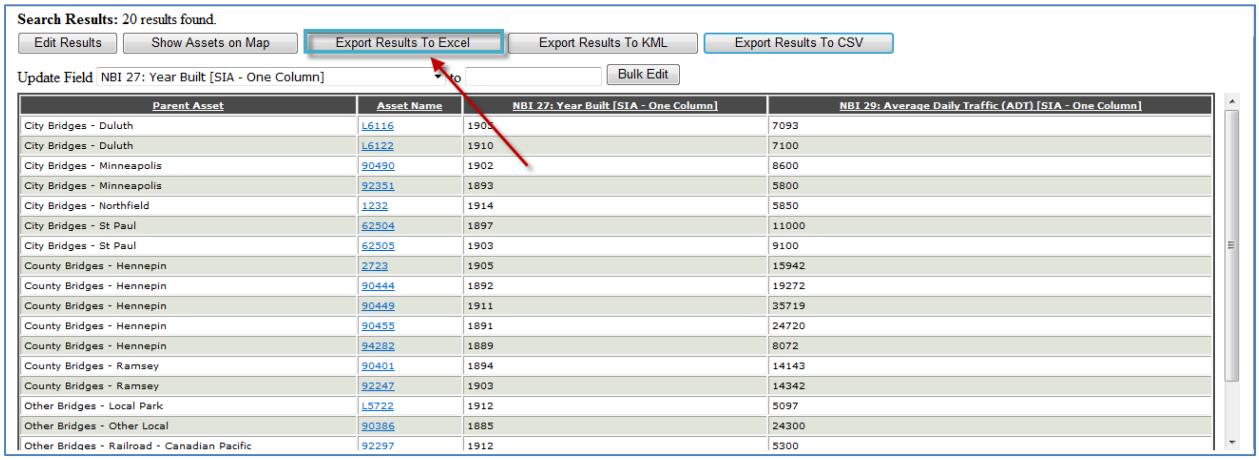
How to Export Query Results to Excel:

Another option for the query results is exporting the report into an excel file. This can be very useful for managers because they will be able to manipulate the data any way they like, make the report look according to personal preference, save the file on their computer, as well as have the ability to email the report to others.

1. Begin by scrolling down to the bottom of the page where the query results can be found. Find the option called "Export Results to Excel" and click on it. This will automatically generate an excel file with all the assets pulled from the query.

2. From here the person can save the excel file and arrange/format the data in a variety of ways.

   - Here is a screenshot of where the "Export Results to Excel" button is located:

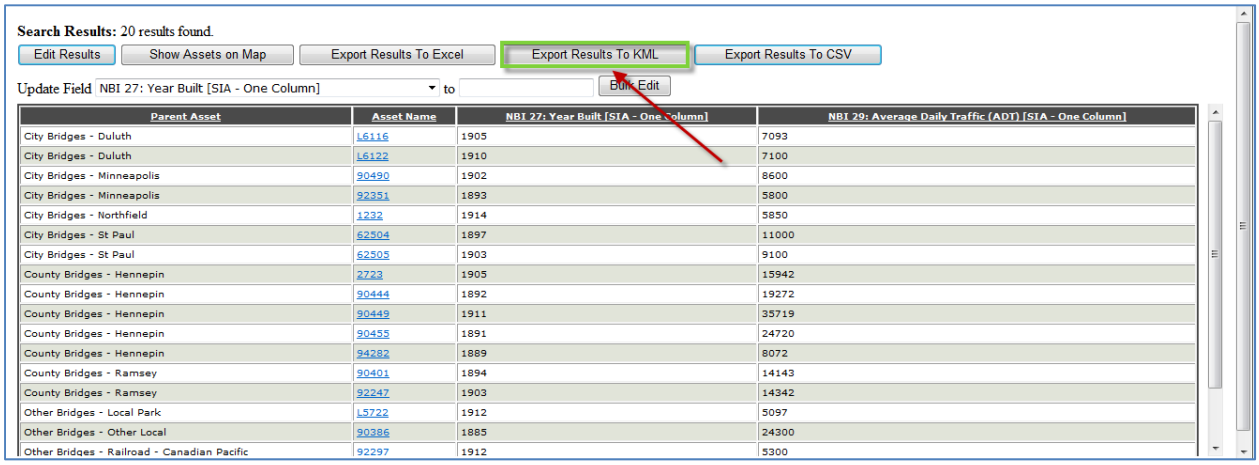


Parent Asset	Asset Name	NBI 27: Year Built [SIA - One Column]	NBI 29: Average Daily Traffic (ADT) [SIA - One Column]
City Bridges - Duluth	L6116	1905	7093
City Bridges - Duluth	L6122	1910	7100
City Bridges - Minneapolis	90490	1902	8600
City Bridges - Minneapolis	92351	1893	5800
City Bridges - Northfield	1232	1914	5850
City Bridges - St Paul	62504	1897	11000
City Bridges - St Paul	62505	1903	9100
County Bridges - Hennepin	2723	1905	15942
County Bridges - Hennepin	90444	1892	19272
County Bridges - Hennepin	90449	1911	35719
County Bridges - Hennepin	90455	1891	24720
County Bridges - Hennepin	94282	1889	8072
County Bridges - Ramsey	90401	1894	14143
County Bridges - Ramsey	92247	1903	14342
Other Bridges - Local Park	L5722	1912	5097
Other Bridges - Other Local	90386	1885	24300
Other Bridges - Railroad - Canadian Pacific	92297	1912	5300

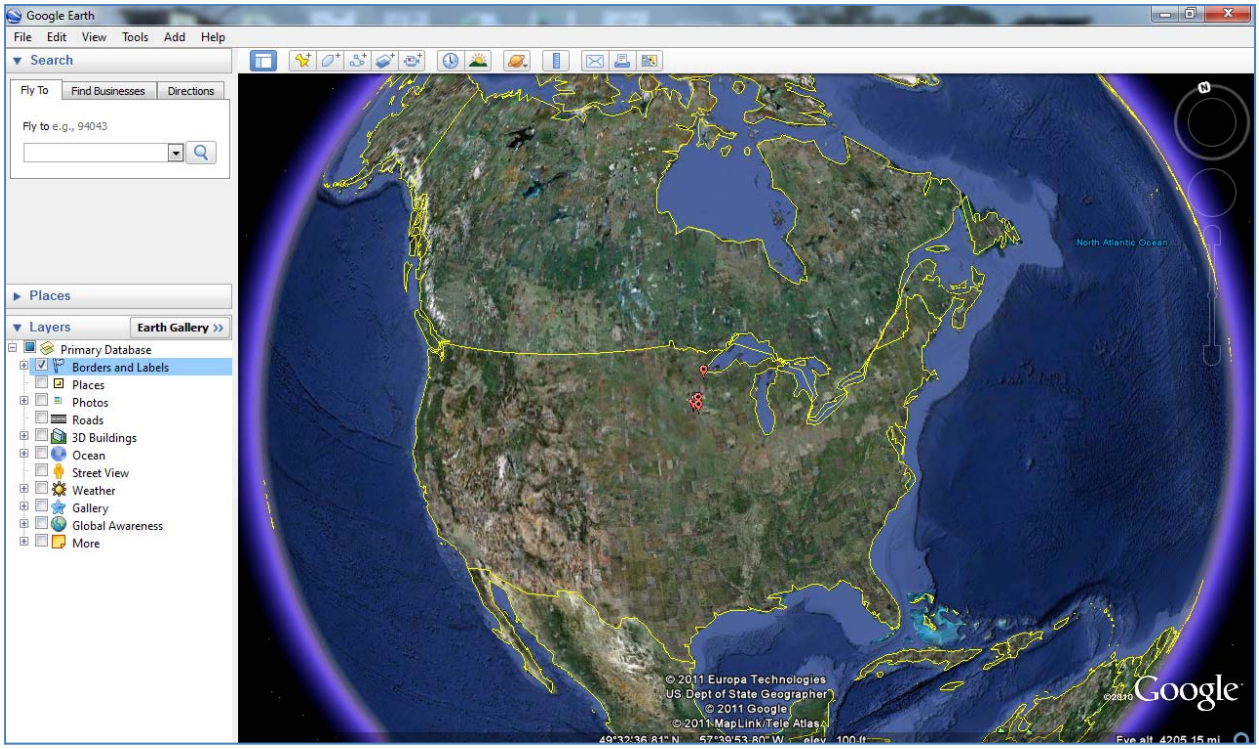
How to Export Results to KML:

Exporting results to KML will enable a user to view the results in "Google Earth" and other mapping systems which use 2D and 3D capabilities. When a user clicks on this button it will automatically open Google Earth and place the assets returned in the query onto the map. In order for this to work, the user must have Google Earth or another mapping system installed on their computer.

1. To show the queried results in Google Earth scroll down to the bottom of the page and choose "Export Results to KML" button. This will automatically launch Google Earth, allowing the user to zoom in and out to see a 3D projection of each bridge. Below are several screenshots depicting the KML exporting feature.



Parent Asset	Asset Name	NBI 27: Year Built [SIA - One Column]	NBI 29: Average Daily Traffic (ADT) [SIA - One Column]
City Bridges - Duluth	L6116	1905	7093
City Bridges - Duluth	L6122	1910	7100
City Bridges - Minneapolis	90490	1902	8600
City Bridges - Minneapolis	92351	1893	5800
City Bridges - Northfield	1232	1914	5850
City Bridges - St Paul	62504	1897	11000
City Bridges - St Paul	62505	1903	9100
County Bridges - Hennepin	2723	1905	15942
County Bridges - Hennepin	90444	1892	19272
County Bridges - Hennepin	90449	1911	35719
County Bridges - Hennepin	90455	1891	24720
County Bridges - Hennepin	94282	1889	8072
County Bridges - Ramsey	90401	1894	14143
County Bridges - Ramsey	92247	1903	14342
Other Bridges - Local Park	L5722	1912	5097
Other Bridges - Other Local	90386	1885	24300
Other Bridges - Railroad - Canadian Pacific	92297	1912	5300



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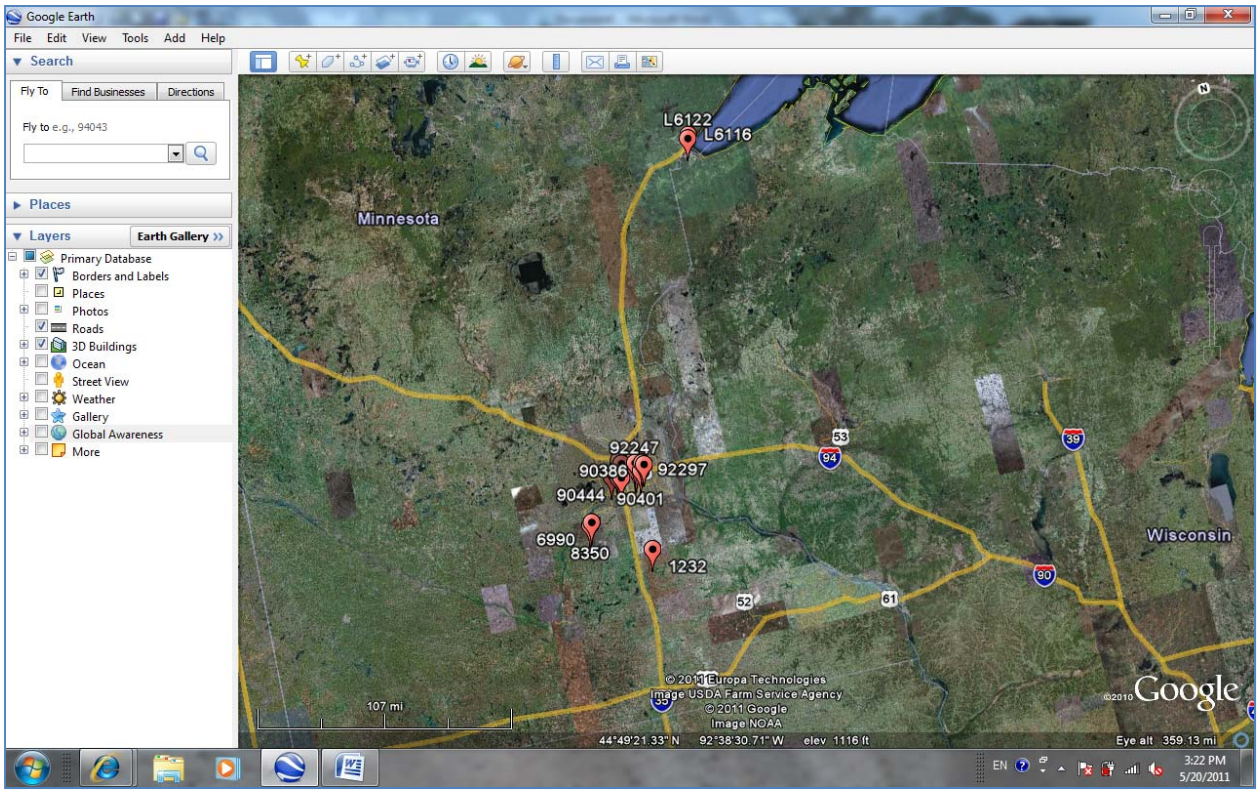
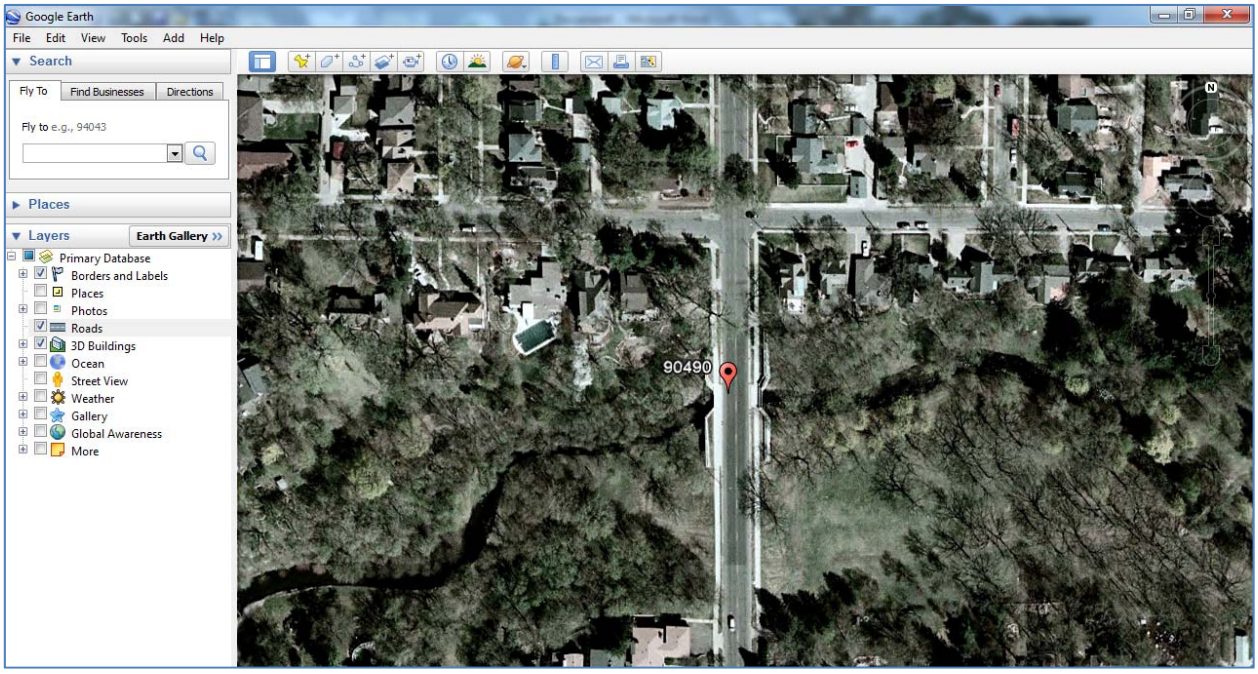
Continued



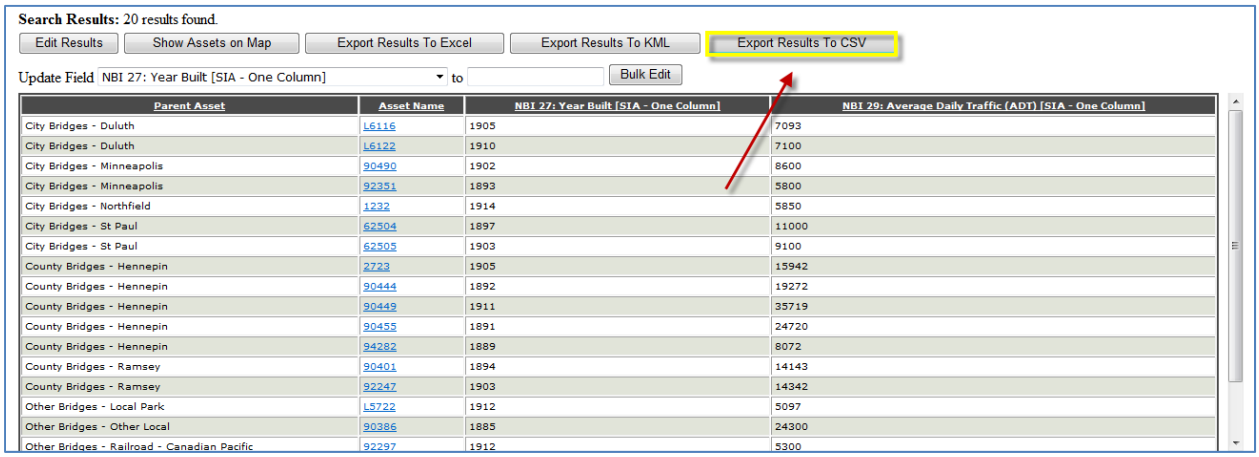


- Google Earth enables the user to shift the axis of the map to get viewing options of each bridge which are not generally available. The user may also save each "place" to refer to it in the future.

How to Export Results to CSV:

The last option is exporting the query results to Comma Separated Value. This is a common format supported by many applications.

1. In order to export the results to a CSV file, scroll to the bottom of the page where the returned results are located and click on the button labeled “Export Results to CSV”.



Parent Asset	Asset Name	NBI 27: Year Built [SIA - One Column]	NBI 29: Average Daily Traffic (ADT) [SIA - One Column]
City Bridges - Duluth	L6116	1905	7093
City Bridges - Duluth	L6122	1910	7100
City Bridges - Minneapolis	90490	1902	8600
City Bridges - Minneapolis	92351	1893	5800
City Bridges - Northfield	1232	1914	5850
City Bridges - St Paul	62504	1897	11000
City Bridges - St Paul	62505	1903	9100
County Bridges - Hennepin	2723	1905	15942
County Bridges - Hennepin	90444	1892	19272
County Bridges - Hennepin	90449	1911	35719
County Bridges - Hennepin	90455	1891	24720
County Bridges - Hennepin	94282	1889	8072
County Bridges - Ramsey	90401	1894	14143
County Bridges - Ramsey	92247	1903	14342
Other Bridges - Local Park	L5722	1912	5097
Other Bridges - Other Local	90386	1885	24300
Other Bridges - Railroad - Canadian Pacific	92297	1912	5300

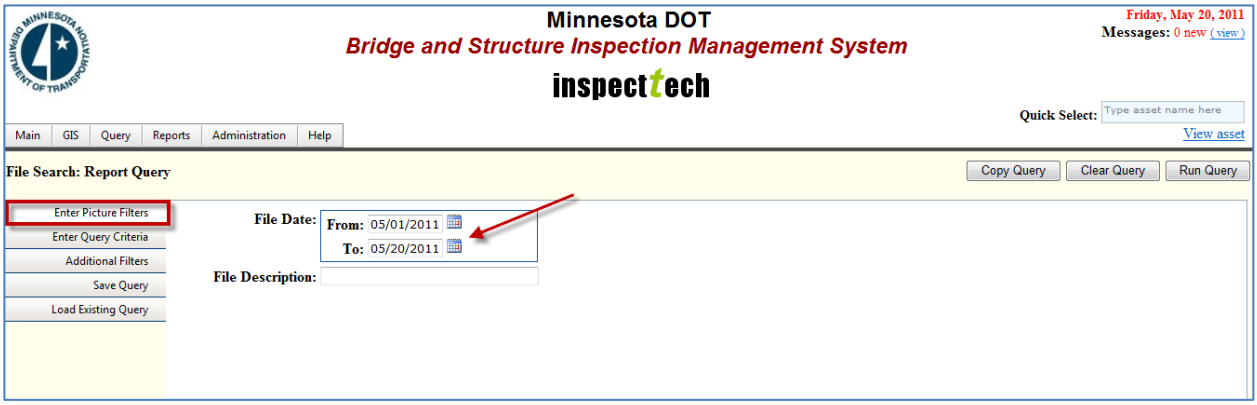
How to Use the Picture Search:

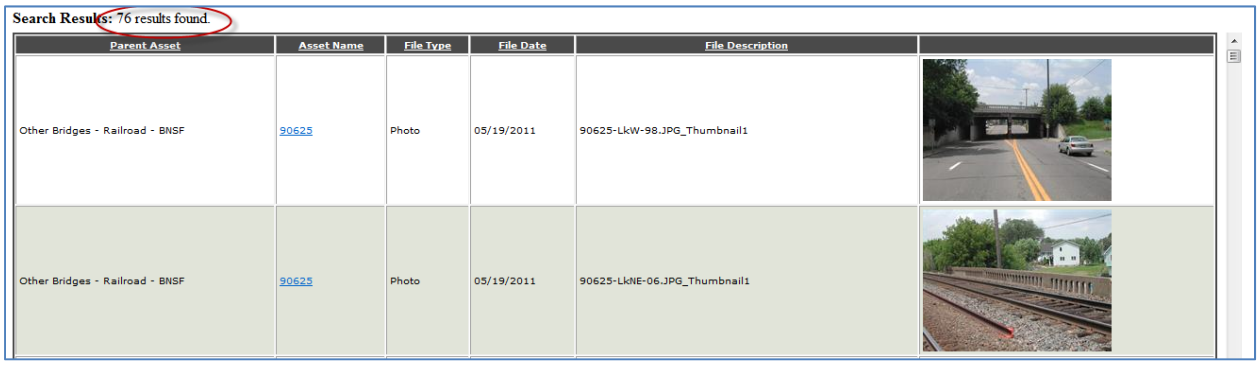
The picture search enables users to search through every photo that's stored in the software by date and/or file description. This can be useful a variety of ways as the query only returns bridges and their pictures which meet the description and criteria entered. The user can save the query and upload it again for future use as well as click on the link in the results to be directed to the Asset Detail Page.

1. Start by selecting the "Query" tab on the navigation menu and then choose "Picture Search". The picture search will look similar to a basic query, being the tabs on the left are the same. Choose the dates to filter the pictures appropriately, and enter a file description if looking for something specific. Enter any criteria or additional filters to the search and then click "Run Query". The results will generate at the bottom of the page. Note: The default setting is 50 pictures per page so there may be more than 1 page generated.

    - For example, suppose a user wanted to find all pictures uploaded to the software between May1st and May 20th, 2011. Here is a screenshot showing what the picture search looks like as well as an example of the results generated.

    - *<u>Note:</u> Users may narrow the results by adding additional filters to the search (i.e. entering a Query Criteria for a particular County, City, or Township). Users may also access the asset details page by selecting the link from the results.*





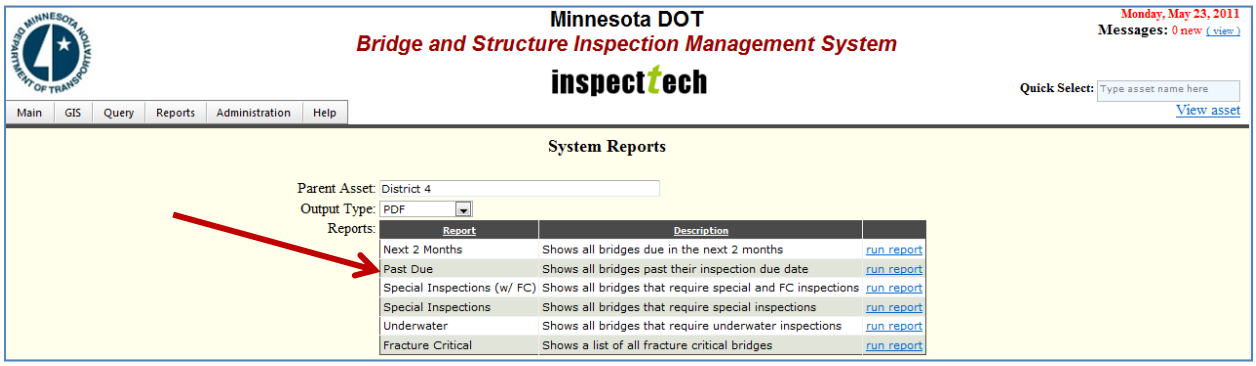
How to Run a System Report:

Minnesota DOT has a list of system reports which are predefined and can be uploaded, run, and printed with a click of a button. These are known as system reports and they contain important information which Minnesota users may need to use quite often. For example, a user may have to submit a report detailing all bridges in their District which are past their due inspection date. In this case, the user would open the system report and the software will automatically pull the information and place it in a predesigned report. The user can choose what type of output they want the report to be generated in (PDF, HTML, or spreadsheet) and pass it along to the next level of management.

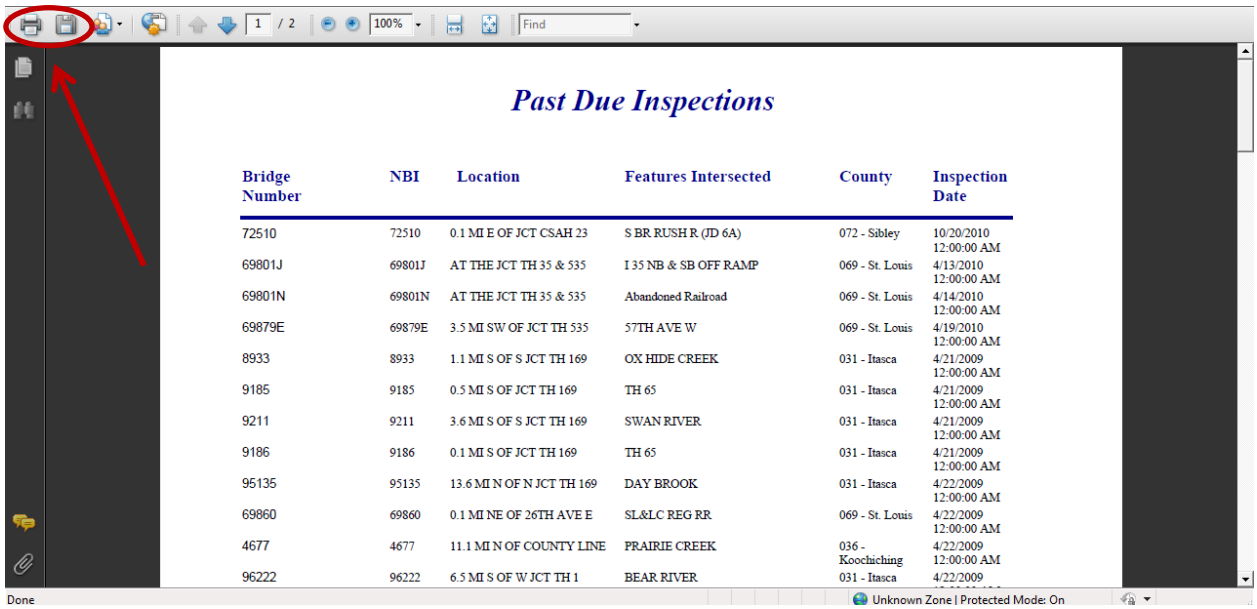
1. To run a sysytem report, begin by going to the "Reports" tab along the main navigation menu. Then choose "System Reports" from the drop down.

2. First choose the Parent Asset, which would be a single district, county, city, township or the entire state. Then scroll through the list of summary reports and click "Run Report" button next to the correct one. Remember to choose the output type of the report before running the report. The default setting for report type is PDF.

   - For this example we want to run the "Past Due Inspections" summary report for District 4. Here is a screenshot showing this process as well as a report PDF that is generated on the next page.



   - The report will be generated in a standard PDF format which will allow the user to print or save the report. The user will also have the ability to zoom in and out of the document as well as jump to specific pages. Below is a screenshot of a typical system report generated.



Past Due Inspections

Bridge Number	NBI	Location	Features Intersected	County	Inspection Date
72510	72510	0.1 MI E OF JCT CSAH 23	S BR RUSH R (JD 6A)	072 - Sibley	10/20/2010 12:00:00 AM
69801J	69801J	AT THE JCT TH 35 & 535	I 35 NB & SB OFF RAMP	069 - St. Louis	4/13/2010 12:00:00 AM
69801N	69801N	AT THE JCT TH 35 & 535	Abandoned Railroad	069 - St. Louis	4/14/2010 12:00:00 AM
69879E	69879E	3.5 MI SW OF JCT TH 535	57TH AVE W	069 - St. Louis	4/19/2010 12:00:00 AM
8933	8933	1.1 MI S OF S JCT TH 169	OX HIDE CREEK	031 - Itasca	4/21/2009 12:00:00 AM
9185	9185	0.5 MI S OF JCT TH 169	TH 65	031 - Itasca	4/21/2009 12:00:00 AM
9211	9211	3.6 MI S OF S JCT TH 169	SWAN RIVER	031 - Itasca	4/21/2009 12:00:00 AM
9186	9186	0.1 MI S OF JCT TH 169	TH 65	031 - Itasca	4/21/2009 12:00:00 AM
95135	95135	13.6 MI N OF N JCT TH 169	DAY BROOK	031 - Itasca	4/22/2009 12:00:00 AM
69860	69860	0.1 MI NE OF 26TH AVE E	SL&LC REG RR	069 - St. Louis	4/22/2009 12:00:00 AM
4677	4677	11.1 MI N OF COUNTY LINE	PRAIRIE CREEK	036 - Koochiching	4/22/2009 12:00:00 AM
96222	96222	6.5 MI S OF W JCT TH 1	BEAR RIVER	031 - Itasca	4/22/2009

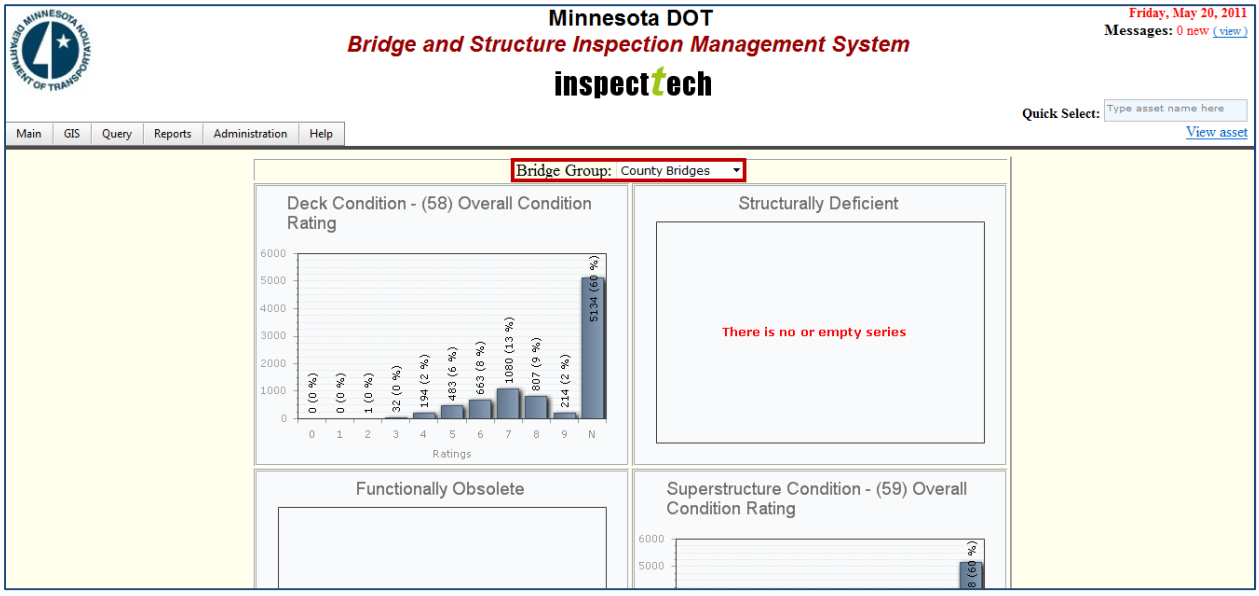
Executive Dashboard:

The Executive Dashboard is a recent feature to the Manager component which allows users to obtain summary information in visual graphs and charts concerning their bridge inventory (i.e. percentage of bridges considered "structurally deficient"). This feature makes analyzing summary data much easier and efficient compared to other means. The Executive Dashboard provides managers with percentages, averages and other statistical analysis between counties, cities, townships, districts, and throughout Minnesota with a click of a button. Overall, managers are given the ability to visualize the condition state and status of their assets with little effort.

1. To open the Executive Dashboard, go to the Main Manager page and select the "Reports" tab. Scroll down and choose the "Dashboard" option.

2. The Executive Dashboard page will upload and initially show statistical information for the entire state. However, the user may change this setting to only show summary information pertaining to a group of bridges (i.e. county, city, township or state). Choose whatever option is most suitable using the drop down at the top. Please note that future settings will likely be implemented to accommodate individual districts, counties, cities, etc.

   - Here is a screenshot showing section of the Executive Dashboard for County bridges:

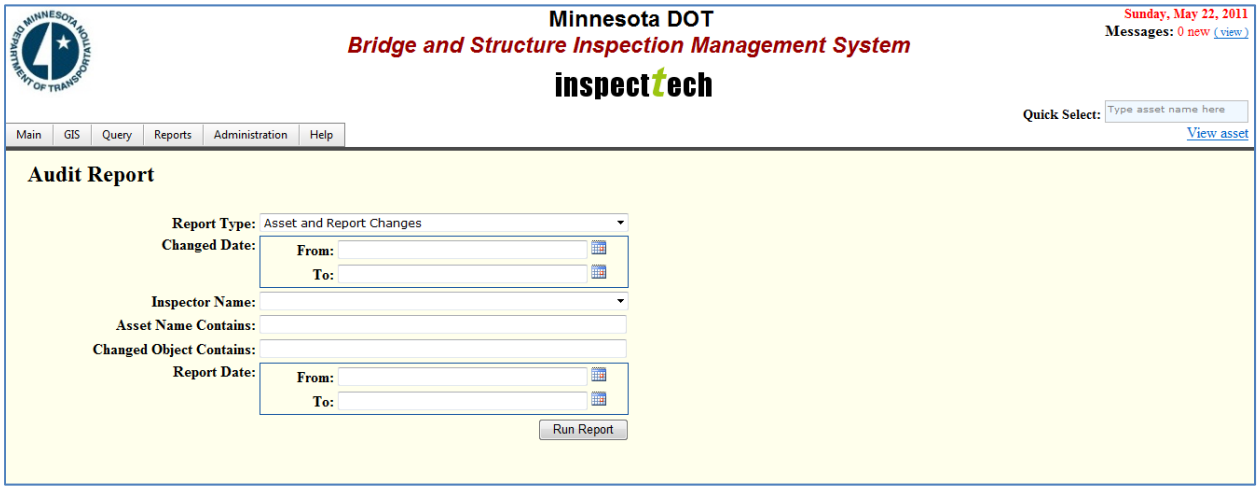


How to Run an Audit Report:

Audit-reporting provides a means to see all actions and changes made via the software. The "asset and reports changes" track any changes made to the assets and inspection reports while the "user access report" tracks when each user accessed the system. To run an audit report, follow the steps below.

1. Start by going to the "Administration" tab on the navigation bar. Scroll down and click on "Audit Report". The "Audit Report" provides two distinct types of audits reports for managers. One is "Asset and Report Changes" and the second type of report is "User Access".

   - This is a screenshot of what the "Audit Report" page looks like with the available choices. Go to the "Report Type" drop down and select between the two options. Note: The setup of this page depends on the report type chosen.



2. The "Asset and Report Changes" generates a report that tracks all changes between defined dates, on any bridge and its reports. A manager can additionally run an audit report specifically by inspector to see what they have changed on a report and when the change was made. If any field is left blank then it is not used to limit results. The user can also limit the report to certain assets and/or based on only certain objects/fields being changed. In addition, the user can run a report which does not specify an inspector, asset, or specific field, but looks at all changes made over a certain time period.

   - On the next page is an example of an audit report that was generated to show all changes made on every asset between May 16st and May 22nd 2011 by all users.

   - *Note: This is only one page of the entire report. The report shows the inspector's name, the location of the change, the type of change, the object that was changed, the exact date, the old value, the new value, the parent asset, the bridge number, the NBI number, the date the report was created and the date of the inspection.*

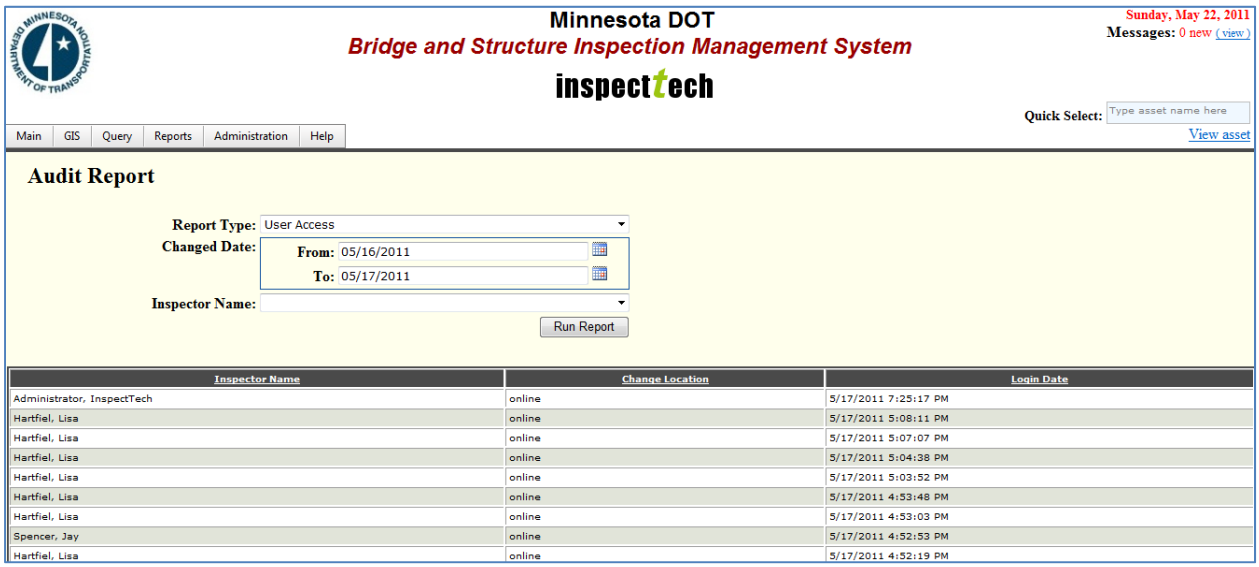
Continued on Next Page

Continued

Inspector Name	Change Location	Change Type	Changed Object	Changed Date	Old Value	New Value	Asset Name	Asset Code	Report Create Date	Inspection Date
Hartfiel, Lisa	online	Value Changed	Status	5/20/2011 4:05:33 PM	3	2	9030	9030	05/18/2011	07/29/2011
Hartfiel, Lisa	online	Value Changed	Submit report for review status undone.	5/20/2011 4:05:33 PM	3	2	9030	9030	05/18/2011	07/29/2011
Hartfiel, Lisa	online	Value Changed	audit	5/20/2011 4:03:47 PM	106	106	9030	9030	05/18/2011	07/29/2011
Hartfiel, Lisa	online	Inspection Report Submitted For Approval	Inspection Report Submitted for Review	5/20/2011 4:03:47 PM	106	106	9030	9030	05/18/2011	07/29/2011
Hartfiel, Lisa	online	Inspection Report Submitted For Approval	Report submitted for review	5/20/2011 4:03:47 PM	2	3	9030	9030	05/18/2011	07/29/2011
Hartfiel, Lisa	online	Value Changed	Status	5/20/2011 4:03:47 PM	2	3	9030	9030	05/18/2011	07/29/2011
Hartfiel, Lisa		Report Assignment Changed	Assignment	5/20/2011 4:03:47 PM		[To User: Lin, Jihshya], [Comment: test]	9030	9030	05/18/2011	07/29/2011
Hartfiel, Lisa	online	Value Changed	Status	5/20/2011 3:58:22 PM	3	2	9030	9030	05/18/2011	07/29/2011
Hartfiel, Lisa	online	Value Changed	Submit report for review status undone.	5/20/2011 3:58:22 PM	3	2	9030	9030	05/18/2011	07/29/2011
Zink, Jennifer	online	Value Changed	audit	5/20/2011 3:56:31 PM	106	106	9030	9030	05/18/2011	07/29/2011
Zink, Jennifer	online	Inspection Report Submitted For Approval	Inspection Report Submitted for Review	5/20/2011 3:56:31 PM	106	106	9030	9030	05/18/2011	07/29/2011
Zink, Jennifer	online	Inspection Report Submitted For Approval	Report submitted for review	5/20/2011 3:56:31 PM	2	3	9030	9030	05/18/2011	07/29/2011
Zink, Jennifer		Report Assignment Changed	Assignment	5/20/2011 3:56:31 PM		[To User: Lin, Jihshya], [Comment: (none)]	9030	9030	05/18/2011	07/29/2011
Zink, Jennifer	online	Value Changed	Status	5/20/2011 3:56:31 PM	2	3	9030	9030	05/18/2011	07/29/2011
Norrgard, Rick	online	Persisted Report Section Missing	Finalized report section viewed, but not persisted. Report: 109546, Section ID: 1235061	5/20/2011 11:26:11 AM		section id: 1235061	L8971	L8971	11/18/2010	11/18/2010
Norrgard, Rick	online	Value Changed	Unofficial Sufficiency Rating Date	5/20/2011 11:26:11 AM	05/13/2011	05/20/2011	L8971	L8971	11/18/2010	11/18/2010
Norrgard, Rick	online	Value Changed	Report Section TOC value changed	5/20/2011 11:26:01 AM		False	L8971	L8971	11/18/2010	11/18/2010
Norrgard, Rick	online	Value Changed	Report Section TOC value changed	5/20/2011 11:26:00 AM		False	L8971	L8971	11/18/2010	11/18/2010

3. The "User Access" audit report generates a report that shows user's name, any login or logoff actions, and the exact time of their login. This report can be run for a single inspector/individual or it can be run to report on all activity done between a certain dates. Here is an example of a report generated to see all activity between May 16th and May 17th 2011.

Note: This is only one page of the report and the rest of the data can be viewed using the numbers at the bottom to navigate between pages.



Minnesota DOT

Bridge and Structure Inspection Management System

inspecttech

Sunday, May 22, 2011

Messages: 0 new (view)

Quick Select: Type asset name here

View asset

Main | GIS | Query | Reports | Administration | Help

Audit Report

Report Type: User Access

Changed Date: From: 05/16/2011 To: 05/17/2011

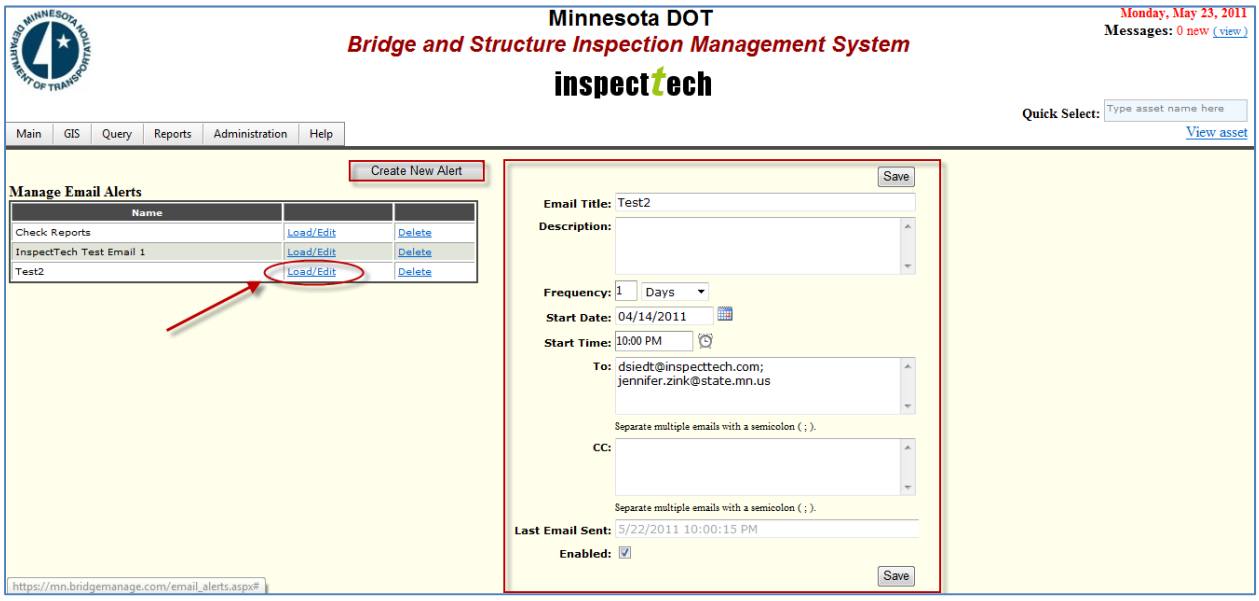
Inspector Name:

Run Report

Inspector Name	Change Location	Login Date
Administrator, InspectTech	online	5/17/2011 7:25:17 PM
Hartfiel, Lisa	online	5/17/2011 5:08:11 PM
Hartfiel, Lisa	online	5/17/2011 5:07:07 PM
Hartfiel, Lisa	online	5/17/2011 5:04:38 PM
Hartfiel, Lisa	online	5/17/2011 5:03:52 PM
Hartfiel, Lisa	online	5/17/2011 4:53:48 PM
Hartfiel, Lisa	online	5/17/2011 4:53:03 PM
Spencer, Jay	online	5/17/2011 4:52:53 PM
Hartfiel, Lisa	online	5/17/2011 4:52:19 PM

Manage Email Alerts:

The Manage Email Alerts page in SIMS allows users to upload and edit saved email notifications as well as create new notifications via the software. The purpose of this feature is to set up reoccurring notifications on a set schedule (i.e. once a week at 10:00 PM). You will choose the frequency as well as the start time for each e-mail notification. Below is a screenshot of this feature.



1. To open/edit an existing alert, click on the link labeled “load/edit”. The information will generate to the right and you will be able to edit information or “disable”/”enable” the notification using the checkbox at the bottom. Remember to click “Save”.

2. To create a new alert click on the button located above the existing alerts labeled “Create New Assets”. Fill in the information accordingly. Click “Save”.

Help and Technical Support - Contact Information:

Multiple outlets are provided to reach us with technical difficulties or issues concerning the software.

- To report software issues or to request additional technical support, please contact David Hedeen at 651-366-4528 or Jennifer Zink at 651-366-4573.

SIMS Support e-mail:
simshelp.dot@state.mn.us

Frequently Asked Questions and Other SIMS Information:
http://www.dot.state.mn.us/bridge/sims