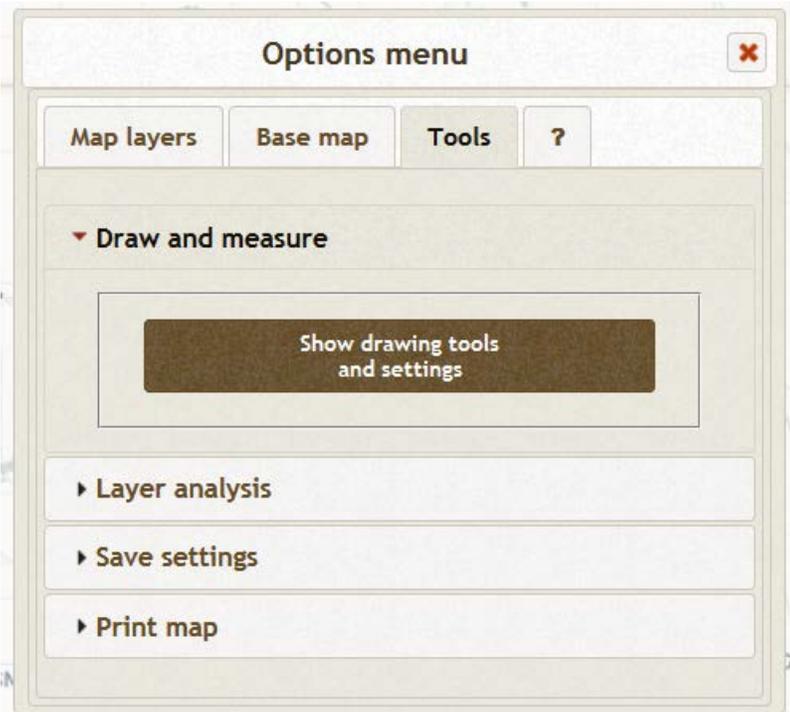


Draw and Measure

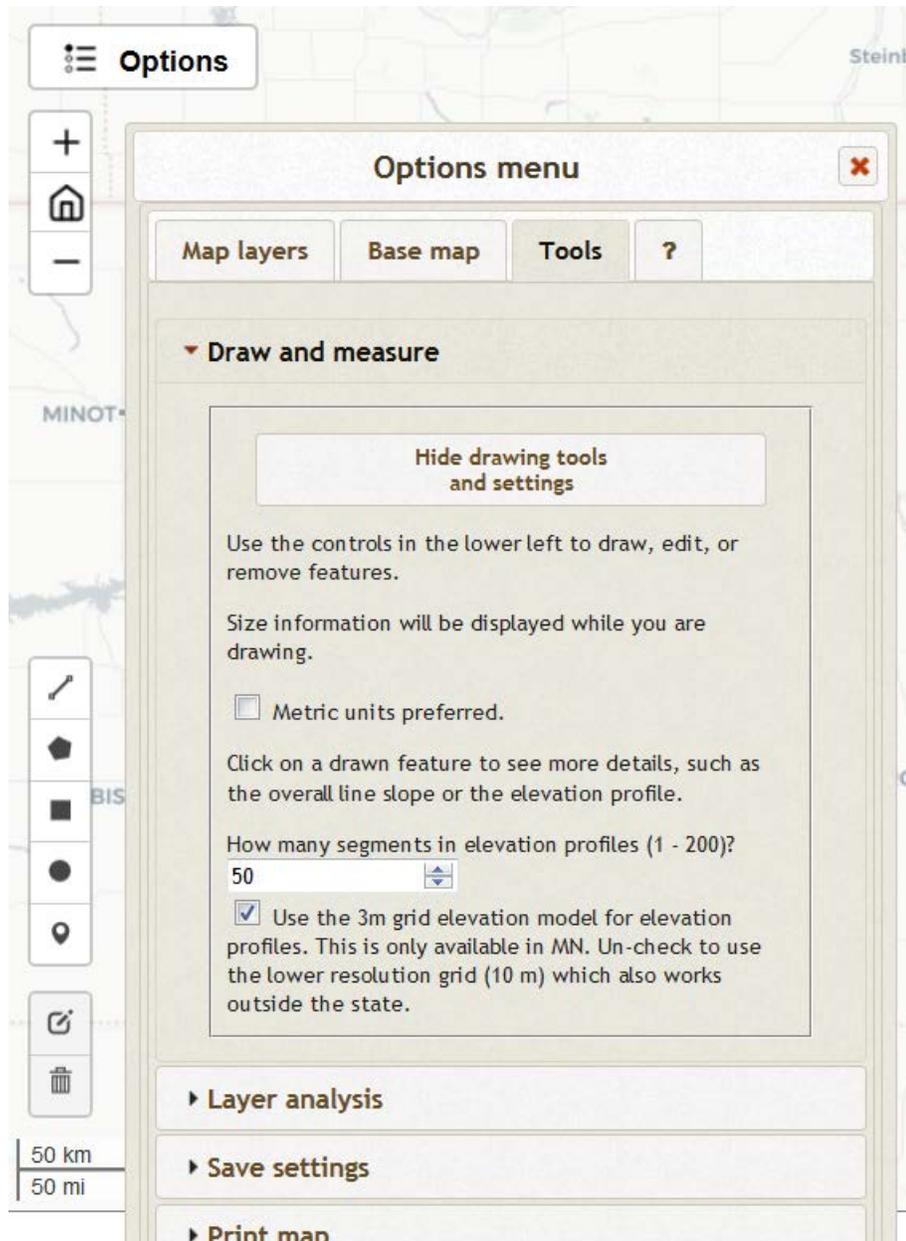
The **Tools** tab in the **Options menu** window gives you access to tools that allow you to draw and measure within the **Mapping Tool**.



Clicking on the **Draw and measure** drop down bar reveals the **Show drawing tools and settings** button that you need to click on to access the tools.



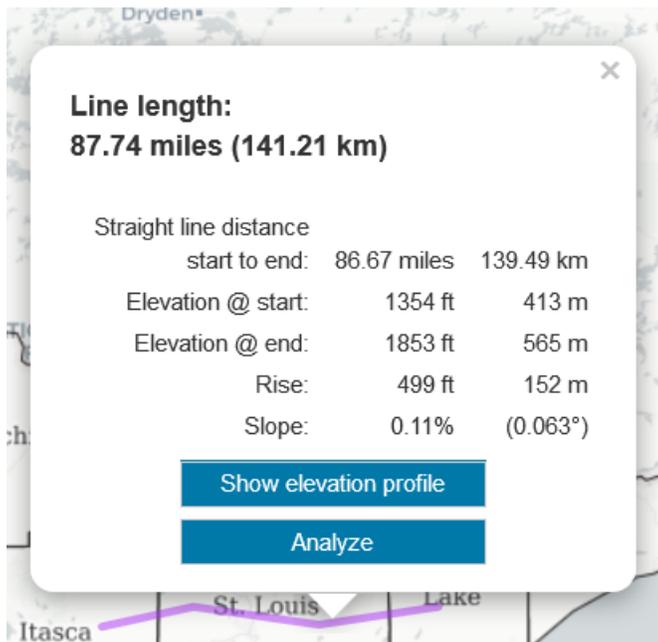
Clicking on the **Show drawing tools and settings** button opens the drawing tools (which are also used to measure) in the lower left hand corner of the **Mapping Tool**. It also displays within the window some options for these tools. If you prefer metric units, check the **Metric units preferred** box. If you want more or fewer segments in an elevation profile (default is 50), adjust accordingly. If you want an elevation profile that extends beyond the state border, un-check the box that indicates the 3m Digital Elevation Model will be used.



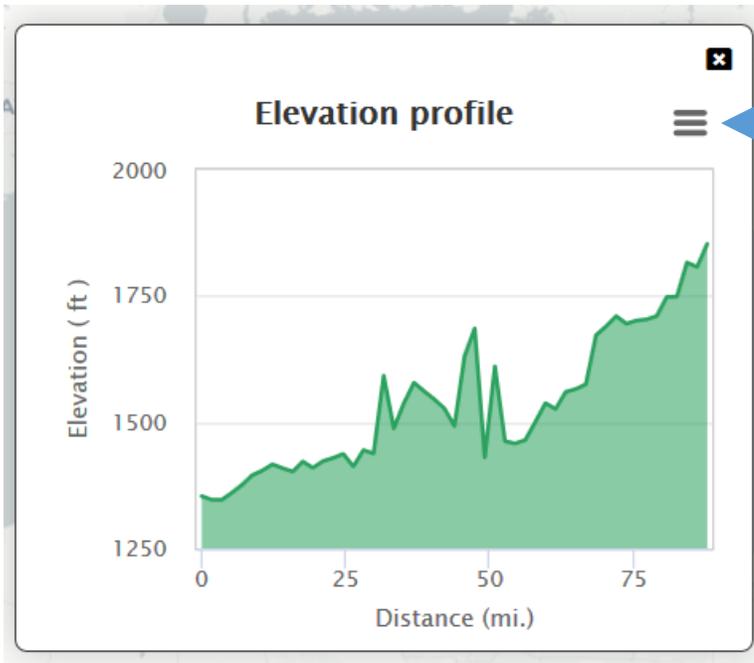
There are seven different icons for drawing and measuring.

-  This icon activates the **line** drawing tool.
-  This icon activates the **polygon** drawing tool.
-  This icon activates the **rectangle** drawing tool.
-  This icon activates the **circle** drawing tool.
-  This icon activates the **point** drawing tool.
-  This icon activates the ability to **modify** existing shapes.
-  This icon is used to **delete** existing shapes.

The **line** drawing tool can draw straight or multi-segment lines. Upon completing a line by double-clicking on the final point, a results window opens that contains length, start and stop elevation, absolute elevation rise or fall, and absolute slope. The window also includes an **Analyze** button and a **Show elevation profile** button. For more information on using the **Analyze** button, review the **Analyze** tutorial.

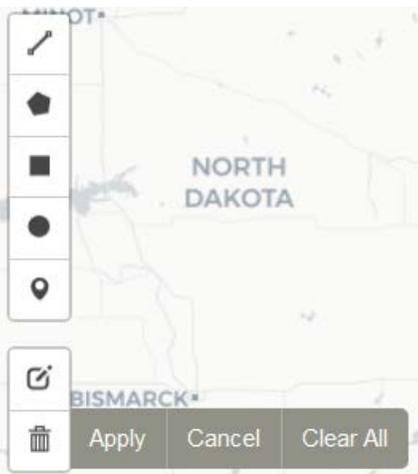


Clicking on the **Show elevation profile** button produces a graphic elevation profile that can be exported as an image or a csv file that contains the data.

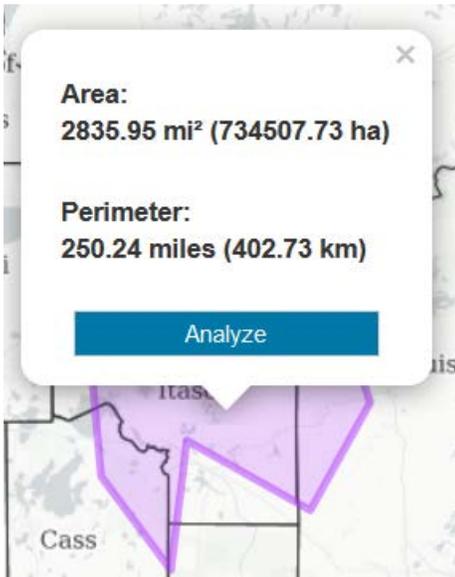


Click here for export options.

To delete a line, click on the **delete** icon, then click on the line, then click on the **Apply** button that appears next to the **delete** icon.

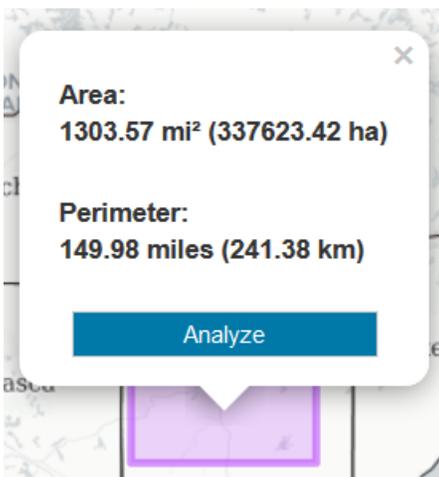


The **polygon** drawing tool can draw any shape of polygon. Left click the mouse everywhere a vertex in the polygon is desired. Upon completing a polygon by clicking on the original point to close it, a results window opens that contains the length of the perimeter and the area. The window also includes an **Analyze** button. To learn more about the **Analyze** button, review the **Analyze** tutorial.



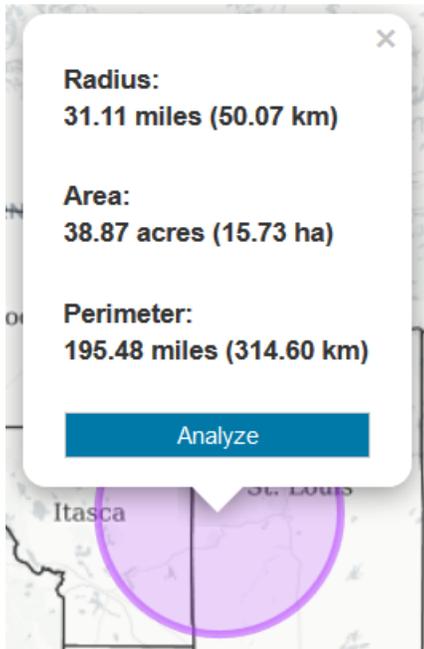
To delete a polygon, click on the **delete** icon, then click on the perimeter of the polygon, then click on the **Apply** button that appears next to the **delete** icon.

The **rectangle** drawing tool can draw any shape of rectangle. Start a rectangle by clicking and holding down the left mouse button. Pull the mouse in any direction until the rectangle is the desired size and shape. Release the mouse key. Upon completing a rectangle, a results window opens that contains the length of the perimeter and the area. The window also includes an **Analyze** button. To learn more about the **Analyze** button, review the **Analyze** tutorial.



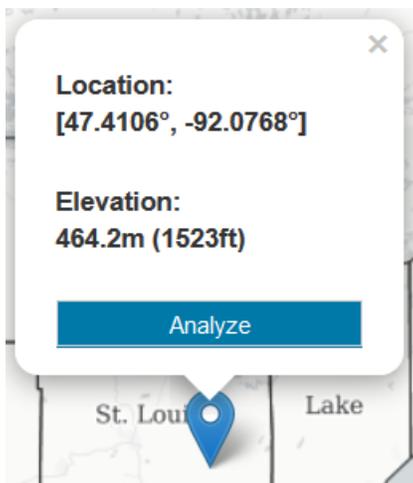
To delete a rectangle, click on the **delete** icon, then click on the perimeter of the rectangle, then click on the **Apply** button that appears next to the **delete** icon.

The **circle** drawing tool draws circles. Start a circle by clicking and holding down the left mouse button. Pull the mouse in any direction until the circle is the desired size. Release the mouse key. Upon completing a circle, a results window opens that contains the length of the perimeter, the radius, and the area. The window also includes an **Analyze** button. To learn more about the **Analyze** button, review the **Analyze** tutorial.



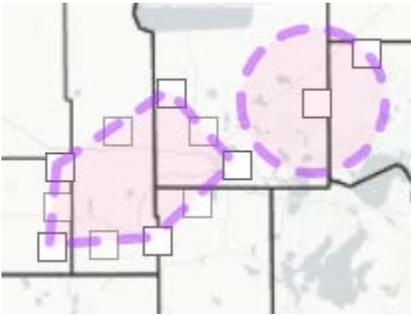
To delete a circle, click on the **delete** icon, then click on the perimeter of the circle, then click on the **Apply** button that appears next to the **delete** icon.

The **point** drawing tool places points on the map. Create a point by clicking anywhere on the map after clicking the point icon. Upon completing a point, a results window opens that contains the latitude, longitude, and elevation of the point. The window also includes an **Analyze** button. To learn more about the **Analyze** button, review the **Analyze** tutorial.



To delete a point, click on the **delete** icon, then click on the point, then click on the **Apply** button that appears next to the **delete** icon.

Clicking on the **modify** icon allows the modification of any existing shapes drawn on the map. Once in modify mode (indicated by the lines becoming dashed) click, hold, and move any of the points in the shape.



All shapes can also be deleted at once by using the **Clear All** button that appears after clicking the **delete** icon.



Those are the basic procedures for drawing and measuring.