

Layout Design Scale and Group Scales

When you design a page layout for printing in the TNTmips Display process (or TNTview / TNTedit), you set the overall map scale for the layout in the Layout Settings window. The Layout tabbed panel in this window (see illustration below right) includes a Design Scale field in which you provide the map scale for the layout. This panel also includes controls for setting the media size, orientation, and margins for the page layout (see the Technical Guide entitled *Printing: Layout Settings and Print Setup*). The Design Scale field shows the scale as a ratio value (e.g. 1:36000) but allows you to enter either the full ratio or just the denominator (scale number).

When you add a spatial group to the page layout, its default group map scale is automatically set to match the layout's Design Scale. However, all spatial groups in the layout do not have to have the same map scale. You can set different map scales for separate groups containing small location (index) maps or enlarged maps of small parts of the main map data.

You can set the map scale for a particular group on the Placement tabbed panel of its Group Settings window (see the illustrations below and the TechGuide entitled *Spatial Display: Settings for Groups in Layouts*). This panel includes a Group

Scale menu that is initially set to Match Layout Design Scale. To set a different scale for the group, choose either Constant or Vary with Layout Scale from the menu (see below). You can then enter the desired scale in the Group Scale field on this panel. For a small index map you can set a smaller scale (larger scale number) for the group, while for an enlarged detail group you would set a larger scale (smaller scale number). The sample layout in the illustration below includes both an index map and a detail group with scales differing from the layout Design Scale. If you have changed the group scale, you can easily reset it to the Design Scale if desired by reselecting Match Layout Design Scale from the Group Scale menu.

The options on the Group Scale menu let you set how the group scale is handled if you change the layout's Design Scale. If you choose the option *Vary with Layout Scale* from the menu next to the Group Scale field, the group scale changes proportionally to the Design Scale. The *Constant* option maintains a fixed map scale for the group if the Design scale is changed. Layouts with differently-scaled groups set to vary with layout scale will display correctly in legacy versions of TNTmips (prior to TNTmips 2014). Rescaled groups using the Constant option will not display at the proper scale in legacy versions of TNTmips.

The screenshot displays a map layout titled "Nebraska Panhandle Historic Change in Groundwater Level through Spring 2010". It features three map groups:

- Main Map Group:** A large map of the Nebraska Panhandle showing groundwater level changes. Its Group Settings window shows the Group Scale set to "Match Layout Design Scale" with a value of 1:1500000.
- Index Map Group:** A small map showing the location of the main map within the state of Nebraska. Its Group Settings window shows the Group Scale set to "Constant" with a value of 1:15000000.
- Detail Map Group:** An enlarged map of Scotts Bluff County. Its Group Settings window shows the Group Scale set to "Constant" with a value of 1:750000.

The Layout Settings window on the right shows the overall layout configuration, with the Design Scale field set to 1:1500000 (circled in red). The Group Settings window for the Main Map Group also shows the Design Scale value (1:1500000) in the Group Scale field.

Use the Layout Panel in the Layout Settings window to set the Design Scale and page size for a layout. Geospatial groups that you add to the page layout are initially set to the layout's Design Scale by default.

The Main Map Group in this layout has been left at the default map scale (1:1,500,000) inherited from the layout Design Scale.

This small index map group has been set to a map scale 10 times smaller (1:15,000,000) than the layout Design Scale.

This detail map group has been set to a map scale (1:750,000) that is half of the layout Design Scale.