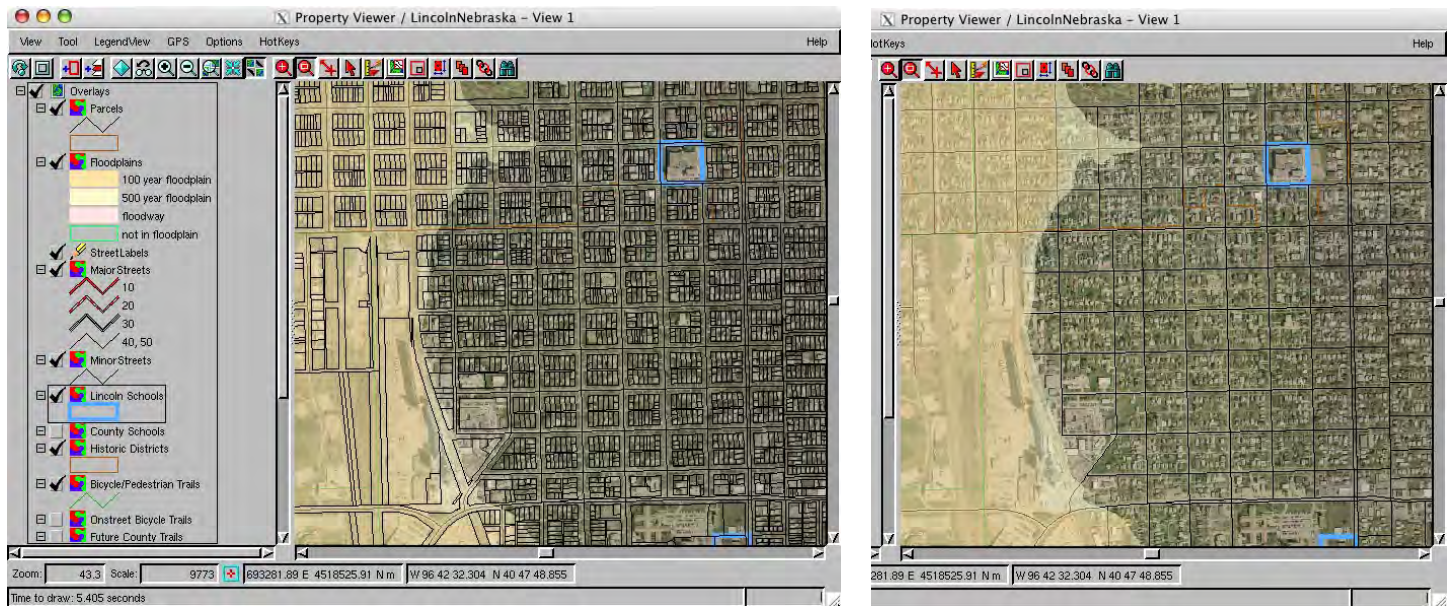


Spatial Display

Geometric Layer Caching

The fast display times in the TNT products are now even faster—in fact some aspects of viewing and using layers are almost instantaneous, even with hundreds of layers superimposed in a composite view or complex layout. The features described for rasters in the companion color plate entitled *Spatial Display: Raster Layer Caching* are implemented for geometric layers (vector, CAD, shape, and TIN) as well.

In this example, the complex display layout being viewed is made up of many large layers (16 layers totaling 4.3 GB). It can be opened to the view shown immediately below at the left in 5.405 seconds. In the view to the right, the parcels layer of over 100,000 polygons has been toggled off. The redisplay of the entire composite view of many layers without the parcels takes 0.222 seconds.



In addition to the benefits of layer caching outlined in the companion color plate for all object types, geometric layers require additional capability for element selection/deselection directly in a view of many layers. Highlighting individual graphic elements when selected has always been quick because only the selected elements need to be redrawn into the view. Deselecting elements, which erases their highlight, is now also almost instantaneous since only that individual layer is restored directly to the composite view or layout from its memory cache in a fraction of a second.

Highlighting a polygon as a result of a selection click (below, left) is instantaneous as is unhighlighting that polygon and highlighting another (right) as the result of a second mouse click.

