

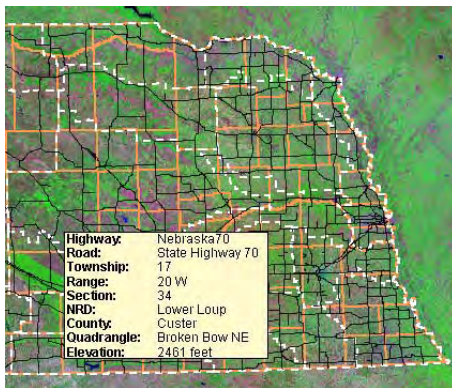
Planning Rural Development

TNTmips provides a variety of tools for managing spatial materials for rural development planning of rural industrial sites, developable residential land, agricultural land, tourism/recreation facilities etc. These tools help to identify economic development opportunities and publicize the existence of these opportunities for development. With GIS, 2D/3D visualization and geospatial analysis tools, TNTmips helps planners and decision makers plan, organize, and promote economic opportunities in rural areas. TNTmips also provides a variety of data publishing methods such as hardcopy printing, PDF creation, online mapping, electronic atlases, Google Earth overlays, and 3D simulations to assist in using your spatial information to promote, publicize and manage economic development.



Map Creation and Editing

Create and edit your map layers in the form of vector, CAD, TIN, shape, raster files and spatial databases to organize spatial information related to rural sites and communities.



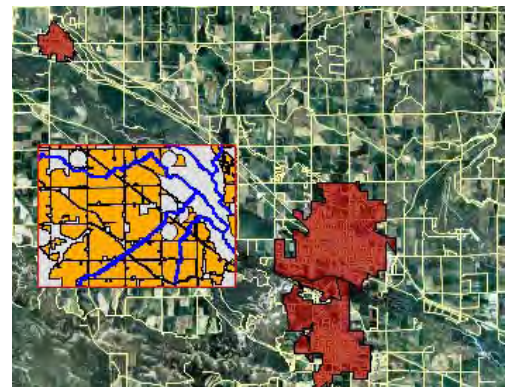
Create and edit spatial data and attach desired records to the elements to easily identify rural assets.

- **Reference layers:** map over composites of aerial or satellite images, scanned field map, Internet servers... [more](#)
- **Editable layers:** edit layers in a composite view with automatic backups and multiple undos [more](#)
- **Data integration:** generate new layers by extracting part of existing maps, combining layers, dissolving adjacent polygons based on shared attributes [more](#)
- **Relational database:** attributes for editable layers can be in relational database structure or linked to existing external database
- **Sketching:** draw sketches for interpretation and annotation on map and image layers and save results as CAD object [more](#)
- **Templates:** use templates to define relational database structure, database picklists, and styles [more](#)
- **GPS input:** read GPS coordinates to add elements to map layers

2D and 3D Visualization

TNTmips provides a wide range of 2D and 3D visualization options to organize, control, and monitor the rural development sites and the economic activities.

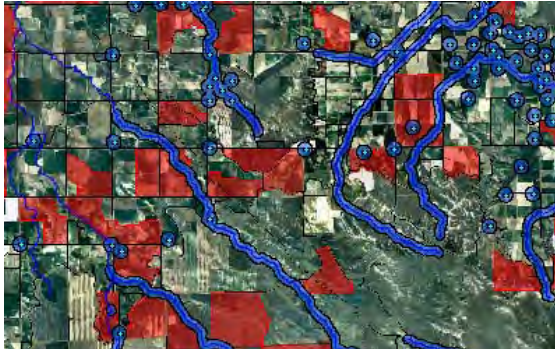
- **Data classification:** create color theme maps or graduated symbol maps for visualization and analysis [more](#)
- **3D views:** open oblique perspective 3D views with full control over viewing geometry and visualize your overlays in 3D [more](#)
- **Visual data integration:** use transparency effects, and advanced viewing tools in 2D and 3D displays to visually integrate map data with other layers [more](#)
- **Database queries:** use queries to select elements with specific attributes to answer location specific questions [more](#)
- **Digital photo integration:** visually integrate geotagged digital photos into maps as symbols or pop-in photo keyed to cursor location [more](#)



Parcel data and town borders displayed over an orthophoto along with a view-in-view showing hydrology and irrigation information.

Site Selection for Economic Development

Use wide variety of spatial analysis tools to derive new information from the existing layers and to select the most suitable site for the desired investment(s) based on the selected criteria.



Overlay Analysis to identify parcels between 12 and 20 hectares and outside the 500 meter buffer from water wells and rivers.

- **Overlay analysis:** combine two or more layers of data covering the same area using a variety of operations (union, intersect, subtract etc.) [more](#)
- **Proximity analysis:** create buffer zones to generate a zone of a specified distance around natural resources [more](#)
- **Network analysis:** define service areas within the network, or find shortest, fastest, ... routes to facilities [more](#)
- **Topographic analysis:** use digital elevation rasters to compute, slope, aspect, viewshed, watershed, ... [more](#)
- **Multi-criteria decisions:** compare a number of alternatives based on selected criteria using Multi-Criteria Analysis [more](#)

Remote Sensing for Monitoring and Change Detection

TNTmips includes a full range of tools for enhancing images to use for recognizing land cover.

- **Integrated enhancements:** contrast enhancement and spatial filtering integrated into the display and edit processes [more](#)
- **Image rectification:** rectify and reproject base images to any map reference system, and orthorectify satellite images [more](#)
- **Multispectral image tools:** pan-sharpening for added resolution, band ratios to highlight classification [more](#)
- **Classification tools:** image classification and feature mapping to distinguish one urban land cover type from another [more](#)
- **Custom processing:** powerful geospatial scripting environment for developing custom processing and enhancement tools [more](#)



Irrigation and hydrology data displayed over an orthophoto.

Publicize Economic Opportunities

Use TNTmips to lay out map data for printing, distribution as PDF files, or as electronic atlases.



Site selection analysis results for rural development rendered to KML and displayed in Google Earth.

- **Complete map layouts:** make hard-copy map layouts with map grids, legends, scale bars, database tables, marginalia
- **Publish to PDF/KML:** publish map and image layouts as KML files for Google Earth or PDF files for easy electronic distribution [more](#)
- **Publish as electronic atlas:** create electronic atlases to view in MicrolImages FREE TNTAtlas product with layer control, pop-in attributes keyed to cursor location, and access to complete attribute tables [more](#)
- **3D simulations:** create 3D simulation of your geospatial data and record the simulation as a movie using FREE TNTsim3D
- **Web-based mapping:** share your maps online by publishing your electronic atlases using TNTserver, view these atlases and combine them with web layers from other sources using FREE TNT client applications [more](#)
- **Data export:** export maps and map data to wide range of geospatial and relational database formats such as shape, geodatabase, KML, SID, SVG ... [more](#)