# Tourism Planning

TNTmips provides powerfull tools for managing spatial materials for tourism planning to identify tourism opportunities, develop diverse types of natural and cultural attractions, tourism infrastructure and provide tourism services. With GIS, image processing, 2D/3D visualisation and geospatial analysis tools, TNTmips help tourism planners create, modify, and analyze spatial data to plan tourism developments, monitor their implementation and impact on economy, environment, and culture. TNTmips also provides a variety of data publishing methods such as hardcopy printing, PDF creation, online mapping, electronic atlases, Google Earth overlays, 3D simulations to assist in using your spatial information to promote, publicize and manage your destinations.

Map Creation and Editing

TNTmips help you organize your tourism data by creating and editing your map layers in the form of Vector, CAD, TIN, shape, raster files and spatial databases
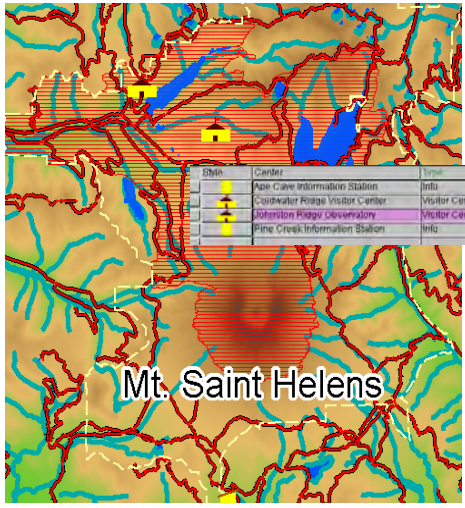
Edit visitor centers and attach records

- **Reference layers:** map over composites of aerial or satellite images, scanned field map, contour lines, database locations...
- **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 enhance interpretation and presentation.

- **Data classification:** create color theme maps or graduated symbol maps for visualisation and analysis   *more*
- **3D views:** open oblique perspective 3D views with full control over viewing geometry and visualise 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*

Pop-in photo keyed to cursor location from a touristic site.

Spatial Analysis and Modelling

Use wide variety of spatial analysis tools to derive new information from the existing layers.

- **Proximity analysis:** generate a buffer zone of a specified distance around geographic elements representing attraction sites *more*
- **Network analysis:** define service areas for touristic locations within the network, or find shortest, fastest, ... routes to interesting sites *more*
- **Concentration analysis:** find concentration of tourism services within a specified distance of certain attractions *more*
- **Multi-criteria decisions:** compare a number of tourism development alternatives based on selected criteria *more*
- **Overlay analysis:** combine two or more layers of data covering the same area using a variety of operations (union, intersect, subtract etc.)

Proximity Analysis that shows the location of tourist attractions within a distance of 1 km of historical districts.

Publish Hard-Copy and Electronic Versions

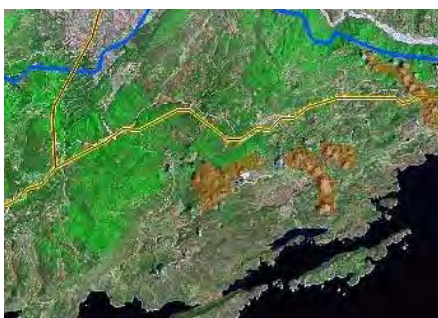Use TNTmips to lay out map data for printing, distribution as PDF files, or as electronic atlases.

- **Complete map layouts:** make hard-copy map layouts with map grids, legends, scale bars, database tables, marginalia
- **Publish to PDF/KML:** publish georeferenced 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 MicroImages 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*
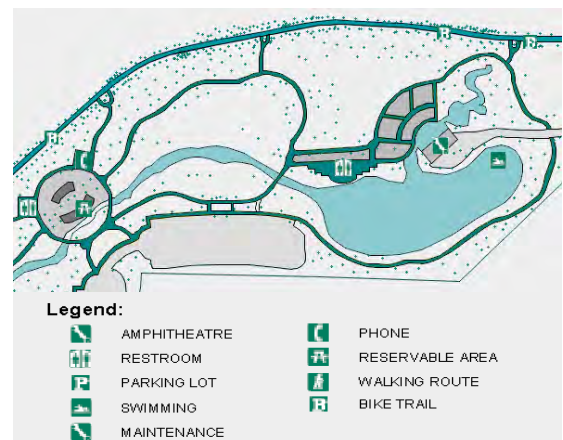
Map Layout that shows park facilities. It can be distributed to public using any of the Hard-Copy or Electronic publishing tools provided by TNTmips or other products.

Remote Sensing for Monitoring and Change Detection

TNTmips includes a full range of tools for image interpretation to use for monitoring tourism developments on sensitive geographies.

- **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 land cover type from another *more*
- **Custom processing:** powerful geospatial scripting environment for developing custom processing and enhancement tools *more*

Road, hydrology and build-up areas displayed over Landsat data.