

What's NEW in Maptitude® 2012

Maptitude 2012: New Features Overview

Maptitude 2012 is a major new release of Caliper Corporation's award-winning GIS and mapping software. This latest version of Maptitude continues to provide easy-to-use, professional mapping tools at an affordable price. This version also includes the most detailed and accurate U.S. data ever included with Maptitude.

The new features and enhancements enable you to create the maps you need faster, with better accuracy, more attractively, and with the most powerful analytical tools available.

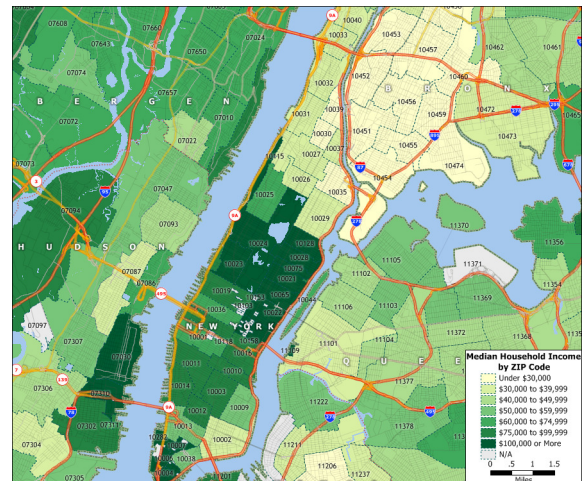
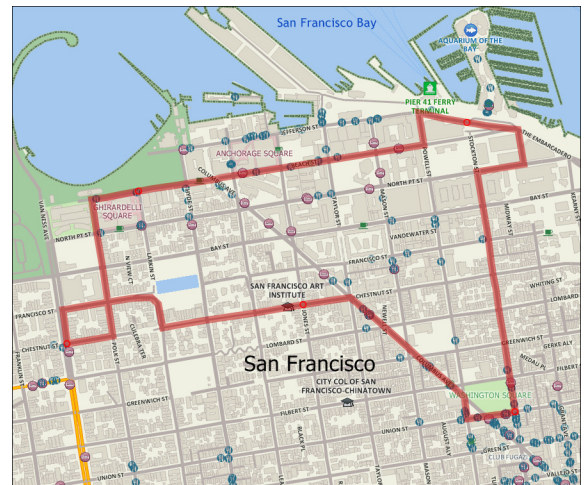
New Data

New U.S. data sets provide access to up-to-date geographic information. Maptitude now includes an October 2011 NAVTEQ® map, allowing accurate address locating and street visualization, plus robust data on which to calculate best route shortest paths, drive-time zones (network bands), and drive-time territories (network partitions).

Other 2011 U.S. layers from NAVTEQ® include building footprints for many urban locations, highways, railroads, and landmarks. The Points of Interest layer contains over 2 million named locations that range from public facilities to commercial buildings including shops, restaurants, and retail stores.

Maptitude also ships with the October 2011 ZIP Code updates ensuring that you are using the latest data. The 5-digit ZIP Code boundaries are a nationwide area database with ZIP Codes for all 50 states, the District of Columbia, Puerto Rico, and the territories. There is an updated 3-digit ZIP Code area database and an updated point database of ZIP Code centroids for the entire country. The ZIP Code area layers extend into non-deliverable areas, providing complete coverage of the continental U.S.

All of the US Census boundaries (e.g., Tracts, Counties, MSAs, States) that are included with Maptitude, plus 3- and 5-digit ZIP Code areas, contain several demographic profiles based on the data reported in the 2010 Census and the 2009 American Community Survey.



Network Analysis and Routing

Shortest Path Toolbox

There is a revamped shortest path toolbox with several enhancements:

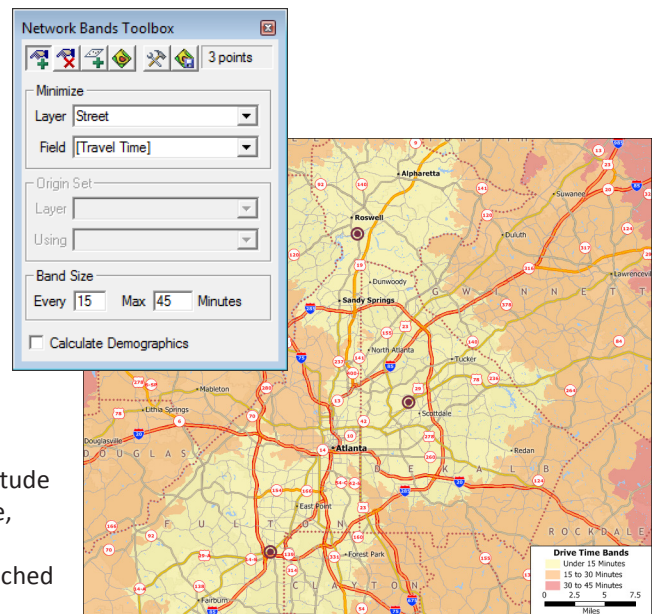
- Continuous live routing gives you instant feedback on the shortest or fastest routes as you drag the mouse over the map
- Routes can be manually edited by dragging the path to new destinations
- A new option to maximize the use of highways allows for faster routing over large geographic areas
- Formatted html (xml) directions can be created for any route with reduced "unknown" street names in the driving directions
- Unrestricted routing allows for nationwide routing on an unlimited number of stops
- Origins and destinations are explicitly listed in the directions, e.g., "From MIDDLESEX RD & CIRCUIT RD To HAROLD ST & ABBOTSFORD ST"

Network Bands Toolbox

The Network Bands tool has been completely overhauled and is now a simple toolbox that provides the most accurate drive-time zone analysis on the market. There is a default layer (Census Tracts) for calculating demographics for the travel time bands, as well as default Census fields and aggregation methods.

In addition to creating zones around records in a point layer, origins can be added by simply clicking on the map. Also, drive-time zones can be recalculated without the need to save them each time the tool is run.

The network bands that are produced by Maptitude are the most accurate of any mapping software, and take into account individual streets in the calculations of those locations that can be reached within the time specified.



Labels

Mapitude 2012 builds upon the major changes to labeling in Maptitude 6.0 with refinements that permit you to:

- Restore customized labels to their default style, location, callouts, and/or display priority
- Skip the snapping of labels by pressing the Space bar while dragging
- Format labels on numeric fields directly from the Labels dialog box
- Snap labels to the horizontal when you rotate labels
- Choose multi-line label colors immediately upon choosing multiple field labels

Styles and Display

Mapitude 2012 supports enhanced map styling and display features including:

- The ability to control the opacity for area borders in addition to area fills, line styles, and point styles
- New drawing item (freehand) masks to quickly hide the portion of a map you do not wish to display

Geotagging Images

Geotagging refers to the attaching of geographic coordinate information to images, video, and other media that are recorded by smart phones or GPS-enabled electronic devices. Maptitude reads geotags from images, and creates points in a geographic file based on the coordinate information in the images.

Fields for the layer are populated using the image file name and other location information that is imported from the geotags.

Regression and Binary Logit Models

Regression and binary logit models can be estimated on any map layer or table. You can choose to estimate the model parameters using all of the records in the layer or dataview, or only those records in a selection set filter.

The model estimation procedure creates two output files:

- a formatted report of the estimation results including all goodness-of-fit and importance measures
- a file containing the values of the estimated model parameters that can be used to evaluate the model on a data set having similar fields

To use the model evaluation tool, you choose the subset of records to be evaluated and the field that will receive the predicted dependent variable. You can also choose the fields that contain the values of the independent variables and make adjustments to the model parameters. The tool will calculate the new value based on the model type (regression or binary logit) and the parameters stored in the model file, and will fill in the designated field.

New Documentation

Maptitude continues to offer numerous ways to get you started with the software. There is a brand new color PDF User Guide, along with new and revised 60-second tutorials and training videos. The 60-second tutorials and video tutorials are incorporated into the Online Help.

The Geographic Information System Developer's Kit (GISDK) Programmer's Guide is now integrated into the Maptitude PDF User Guide.

System and Interface

Maptitude 2012 supports the latest Windows operating systems, file types, and common design elements:

- The improved software key reduces the incidence of license failure in aggressive security environments
- Maptitude attempts to recover your Workspace in the event of a software crash
- Maptitude automatically alerts you if a new version of Maptitude is available; you can also manually check for newer releases from the Maptitude Help menu
- All dialog box list items automatically support on-the-fly drop-down menu item filtering
- A USB keyed version of Maptitude 2012 allows the installation of Maptitude in a Citrix or Terminal Services environment

Improved Create-a-Map Wizard

Create-a-Map Wizard™ is now more robust and easier to use. When you need to map your own data, in addition to Maptitude auto-detecting the best fields to achieve this, you can explicitly choose and correct the fields used to geocode or to join your tabular information in order to visualize it in a map. Maptitude also suggests output file names based on your input table.

The Create-a-Map Wizard maps are all revised. The maps use the latest geography and also take advantage of the new features in Maptitude including new label and style options.

Imagery Improvements

Accessing and visualizing image layers is a core feature of Maptitude 2012. Maptitude now supports the GDAL 1.8.0 image library, which improves the handling of various image layer formats, and provides speed improvements in rendering these layers.

Options and Defaults

There are several new defaults and options in Maptitude 2012:

- A new "Degrees" unit of measurement allows map units to be specified and measured in degrees
- When adding a map to a report layout, the "Keep Map's Aspect Ratio" option is now the default in order to preserve the relative dimensions of your original map
- The "Count the number of features" option is now the default when performing overlay
- The Find tool no longer adds to the map a drawing item (freehand annotation) by default
- The Save As-Comma delimited Text (*.csv, *.txt) command now uses the ".csv" extension rather than the ".txt" file extension
- The Selection-Select by List command now defaults to the maximum 512 number of selection set filters
- The Map-Snapshot command has been removed from the Maptitude interface

Map Librarian

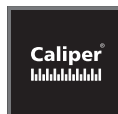
The Map Librarian makes it easy to access a series of pre-defined thematic visualizations of Census demographics. A new map library comes with Maptitude 2012 to help you get started exploring 2010 Census data for the USA. The new maps cover US ZIP Codes, Census Tracts, Counties, and States for several demographic profiles based on the data reported in the 2010 Census and the 2009 American Community Survey.

Geographic Information System Developer's Kit (GISDK)

Several new functions have been added to the GISDK. The main highlight is the ability to iterate over collections. The changes include:

- When using a for statement to create loops, you can now iterate over a collection, similar to foreach loops in other languages
- An option has been added to AddAnnotation() that indicates whether the annotation is temporary and whether it should be saved as part of the map or workspace
- For AddLink(), new options were added: "Snap From Node" and "Snap To Node"
- For DeleteFile(), the NotFound error was added
- New functions were added: ArrayTranspose() and GetPolygonInternalPoint()

Please see the "Listing of GISDK Functions" topic in the Online Help to view a full list of functions that were added, changed, or replaced in Maptitude 2012.



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