



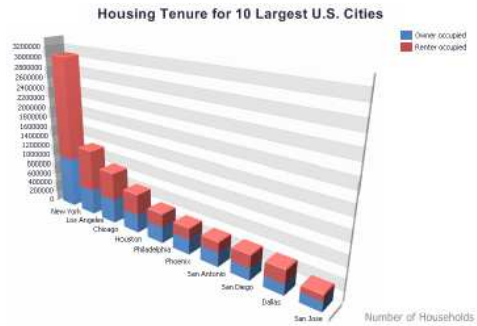
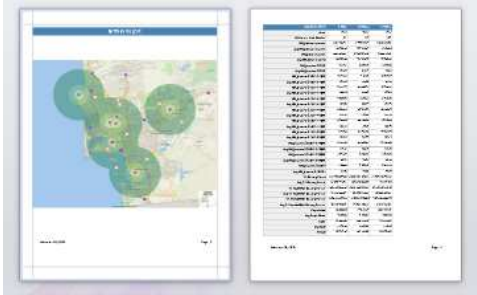
What's NEW in Maptitude® 2015

Maptitude 2015: New Features Overview

Maptitude 2015 is a major release of Caliper Corporation's popular GIS (Geographic Information System) and mapping software. The 2015 version contains the most up-to-date and accurate data ever provided with the software.

The release combines several significant enhancements in productivity and high quality output. Speed improvements provide faster access to maps, routes, drive-time rings, and geographic analysis. Address lists can be automatically mapped using a comprehensive suite of "locate" methods, and this will allow users to instantaneously view more data than ever before. Microsoft Office Excel data exports are accessible via a single click for the direct sharing of demographics and customer information. Maptitude continues to support the latest mapping tools and file formats including those for Google Maps, Microsoft MapPoint, and Excel.

Maptitude delivers easy-to-use, professional mapping tools at the unbeatable price of only US\$695. Annual (optional) upgrades cost US\$395 per user/license. For pricing and ordering information please visit the [Mapping Software Store](#), [e-mail Maptitude Sales](#), or call us at +1 617-527-4700.



New Data

Country Packages

Maptitude 2015 comes standard with one detailed Country Package of your choice, and additional Packages can be purchased separately. Each Package includes a wealth of data unavailable in any other product, such as an up-to-date street layer with addresses for pin-mapping (geocoding) and travel time information for computing routes and drive-time rings. Features such as building footprints for many urban locations, railways, and named landmarks are also built-in to the software. The comprehensive landmarks range from public facilities to commercial buildings including shops, restaurants, and retail stores. Postal data and detailed demographics--where available--are shipped with the product.

You can switch between the countries you have purchased, and Maptitude will seamlessly refresh the interface with country-specific tools such as those for finding, pin-mapping, routing, and the Create-a-Map Wizard™. New Map Libraries allow you to easily create attractive geographic and demographic maps while locating unlimited numbers of addresses and territory-based records.

The basic global map that is provided with every Maptitude license enables you to view your data anywhere on Earth, and it allows you to map your locations by coordinate, manually, or by any populated place (village/town/city).

United States

New U.S. data sets provide access to the most up-to-date geographic information. Maptitude 2015 comes with October 2014 HERE® Map Content, which allows for accurate address locating and street visualization, in addition to robust data with which you can calculate shortest paths, drive-time rings, and drive-time territories (network partitions).

Other updated U.S. map layers from HERE® include those for buildings, highways, railroads, and landmarks. The Points of Interest layer contains over two million named public and business locations.

Maptitude 2015 ships with the January 2015 ZIP Code update to ensure 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. Updated 3-digit ZIP Code areas and a point database of ZIP Code centroids for the entire country are also standard features with Maptitude 2015. The ZIP Code area layers extend into non-deliverable areas to provide complete coverage of the USA. The 3-digit and 5-digit ZIP Code areas include the updated number of businesses by detailed industry type (retail, finance, etc.), along with how many employees work at each business and the employees' annual payrolls. The ZIP Codes are also classified by their updated rural-urban commuting characteristics.

The US Census boundaries (e.g., Tracts, Counties, MCDs, MSAs, States) and the 3- and 5-digit ZIP code areas that come with Maptitude contain some or all of several demographic profiles from a variety of data providers. These sources include the 2010 Census and the 2013 American Community Survey (ACS) to name a few. This data is available for the USA, Puerto Rico, and the Territories. The ZIP Code, Tract, County, and State layers also include updated buying power (disposable income) figures. Tracts also list updated banking compliance FFIEC data for 2014. The Map Librarian makes it easy to access a series of pre-defined thematic and shaded maps of these data.

Finally, Maptitude includes some refreshed boundary files. The American Landmass, CBSA, and CSA layers have been updated.

Australia

- October 2014 HERE update
- Updated Local Government boundary layer
- Updated HERE postal boundaries and points

Brazil

- October 2014 HERE update
- Updated HERE postal point layer

Canada

- October 2014 HERE update
- Updated HERE postal FSA boundaries
- Updated HERE postal point layer

United Kingdom

- October 2014 HERE update
- Updated HERE postal boundaries

Mexico

- October 2014 HERE update
- Updated HERE postal boundaries
- 2010 Census demographics covering population by age and gender

New Zealand

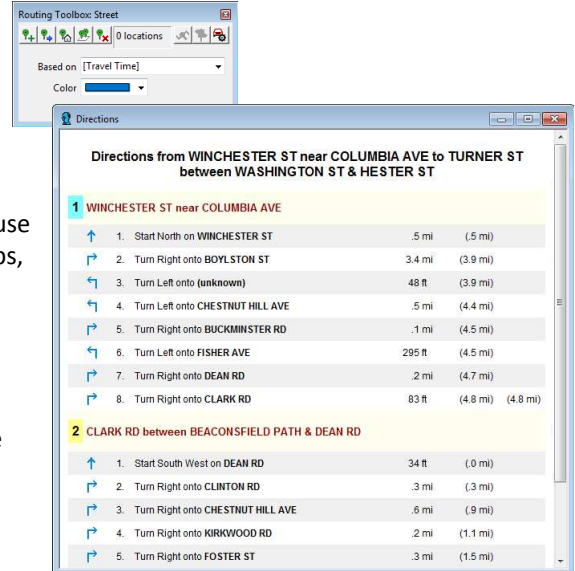
- October 2014 HERE update
- Updated HERE postal boundaries and points

Network Analysis and Routing

Shortest Path Toolbox

The revamped Shortest Path Toolbox now features :

- Improvements to the travelling salesman solution
- A redesigned and more intuitive interface
- Improvements to the shortest path calculations using multithreading
- Improvements to the speed and efficiency of the analysis
- Improvements to the Directions window with the use of direction arrows, row shading to distinguish steps, and numbered steps between stops
- Improvements to the design of the Excel report created via the Directions window right click menu



Network Bands Toolbox

The Network Bands tool improves your ability to create the most accurate drive-distance travel analysis on the market with the following enhancements to the tool:

- Updates to the shortest path calculations
- Improvements to the speed and efficiency of the analysis

New Map Styles

Maptitude 2015 gives you the greatest flexibility to-date in setting the styles of map features, themes, and selection sets.

Layers

- Line and border styles are now much easier to distinguish in the style menu

Themes

- The Scaled Symbol and Chart themes have the option to use Flannery perceptual scaling, a method that adjusts symbol sizes upward to account for the fact that map readers tend to underestimate the size of circular symbols
- The Manual Color Theme Settings allow the direct editing of range values
- The Manual Color Theme "Steps" method populates the value ranges using only a starting value and a range size

Map Legends

- The maximum number of legend columns has been increased from 9 to 24
- The legend is attached to maps by default
- The legend automatically updates the numeric ranges and feature counts for Manual Color Themes

Labels

Maptitude 2015 builds upon the powerful labeling engine with the following refinements:

- The "Do not display on the map" option allows you to hide labels without losing the label settings
- The default layer label priority is very high to help ensure that your labels show

New Database Functionality

New capabilities for geographic databases have been introduced:

- Shapefile layer attribute tables can be edited via **Dataview-Modify Table**
- SQL Spatial (point) layers can be geographically edited via **Tools-Map Editing-Toolbox**

Locating Data

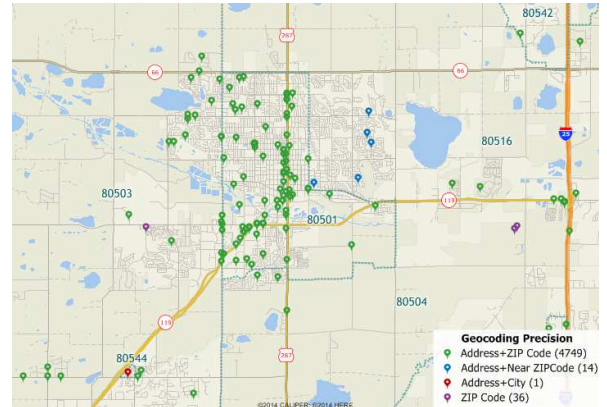
The geocoding tools support multi-country functionality. When you switch between the countries you have purchased, Maptitude seamlessly refreshes the interface, including Create-a-Map Wizard™, with country-specific tools such as those for finding and pin-mapping (geocoding).

The geocoding tools use the updated street and postal data, making the results of location matching more accurate. Improvements to the locate tools include:

- A Locate Wizard that automatically maps unfound locations to the next best match and produces a report indicating the method used to place each pushpin
- A point style that replaces the star symbol when locating your data on a map, reducing map cluster and improving clarity
- A better success rate when locating addresses with unit and apartment suffixes that are separated with a comma

Country Package specific changes:

- USA:
 - County geocoding and boundary mapping by full county name with state name or abbreviation in the same or a different field
 - State geocoding and boundary mapping by full state name as well as state abbreviation
- Australia:
 - Suburb geocoding and boundary mapping by full suburb name with state name or abbreviation in the same or a different field
- Canada:
 - Full 6-character postal code point geocoding using the Map My Own Data Wizard
- UK:
 - Full postal code point geocoding scattering placement option



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 Help system. In addition, live and pre-recorded training webinars with audio are available on the website.

The Maptitude and GISDK (Geographical Information Systems Developer Kit) Help have been separated under the Help menu to make it easier to access the help topics specific to using versus developing the software.

System and Interface

Maptitude 2015 supports the latest Windows operating systems, file types, and common design elements. Maptitude 2015:

- provides new custom or automatic installation choices to install the software as a 32-bit or 64-bit application on 32-bit or 64-bit Windows 8.1, 8, 7, Vista or XP
- installs in an Amazon Elastic Compute Cloud (EC2) compute.internal domain Microsoft Windows Instance when licensed for this type of remote access
- supports updated reporting interface standards
- includes new and redesigned buttons and toolbars that make tools more distinguishable, familiar, and accessible
- provides significant speedups in memory-intense operations and in map drawing with faster style drawing and simplified layers
- provides improved usability features:
 - when reading/writing data from a network drive, the file access permissions are no longer “Read Only” by default under Edit-Preferences
 - when saving a workspace and choosing to close you are not prompted to save each window
 - when closing a dataview you are only prompted to save if it is a joined view
 - when dropping/autoscaling off a layer, the working layer reverts to the last layer drawn rather than the first

New File Import Support

- Google Earth Documents (KML/KMZ)
- MapPoint Map Files (*.PTM)
- AutoCAD drawing binary file (*.DWG)
- Excel (*.XLS and *. XLSX) files in 32-bit and 64-bit Maptitude when Microsoft Office is not installed or when 32-bit pre-2013 Microsoft Office is installed

New File Export Support

- Microsoft Excel (*.XLSX)
- MIME HTML (*.MHT), for report windows only
- Portable Document Format (*.PDF), for report and chart windows only (For other window types Maptitude supports saving via PDF printer drivers)
- Rich Text Format (*.RTF) , for report windows only
- Windows Metafile (*.WMF), for chart windows only

New Native File Support

- Caliper Chart File (.CHART)

Improved Create-a-Map Wizard

Create-a-Map Wizard is now more robust and easier to use.

- The maps have been updated with the latest geography
- The new Locate Wizard choice (“Locate records in your file by Address, ZIP Code, or City”):
 - automatically maps unfound addresses to the next best match and a report is produced indicating the method used to place each pushpin
 - is available for most 2015 County Packages

Creating Selections and Formulas

There are several changes to the condition-building tools.

- The Formula dialog box and Selection Toolbox support the "matches" operation
- The "Not Found" selection set filters are not listed in tools that operate on geocoded/located records

Projections/Datums

Mapitude 2015 has expanded support for datums and projections with:

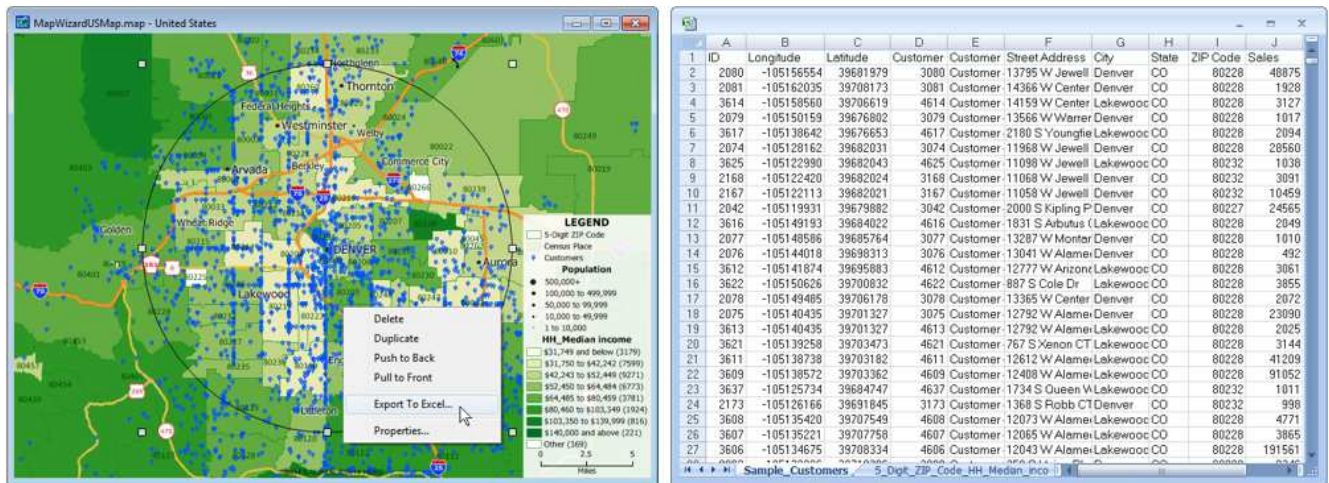
- Support for new datum conversions for Israel (3-parameter, 7-parameter and Molodensky methods)

Analysis Tools

New Features

Mapitude 2015 allows users to quickly and intuitively create reports in Microsoft Office Excel. By using the Drawing Toolbar to create a lasso, circle, or rectangle you can export data directly to Excel simply by right clicking on the map. Maptitude includes information about point layers (i.e. "pushpins") and area layer themes (i.e. chart and color/heat maps.) Any data mapped within the user defined shape is exported and presented in an Excel workbook on individual named tabs.

In addition to being copied, numeric data pulled from an area layer has an additional "overlay" field based on the percentage of each area inside the drawn shape. This percentage is applied to the attributes to provide a proportional overlay field.



Existing Tool Improvements

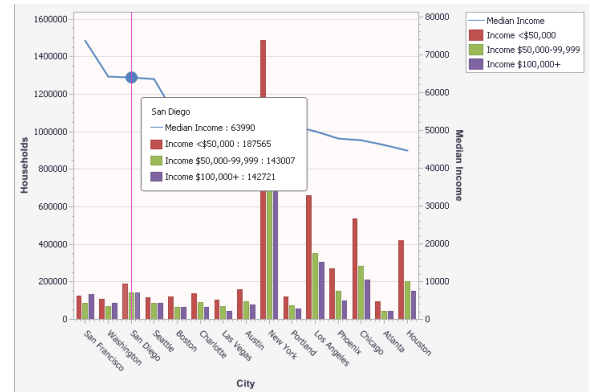
Several modifications to existing tools were implemented:

- In 3D maps, building footprints are placed on top of the surface layer when base elevation is missing
- Attribute tagging between layers can now use selection sets, and tagging with area layer data is much faster
- Voronoi diagram operations can buffer datasets faster
- **Tools-Geographic Analysis-Create Districts** renamed to **Create Territories**
- **Tools-Routing-Network Bands** renamed to **Drive Time Rings**
- **Tools-Routing-Shortest Path** renamed to **Routing Toolbox**
- **Tools-Geographic Utilities-District Reports** renamed to **Territory Reports**

Output Improvements

Maptitude 2015 provides new reporting capabilities for the analysis tools. The report tools have been redesigned to be much more intuitive. The new interface better supports selection of the thousands of demographic variables available, as well as counts by business and landmark type. Reports are included in the travel-time and distance tools, as well as for areas of influence and overlay. In Maptitude 2015 the reporting tools have customizable header, footer, and logo preferences. The logo can be one of the nine supported image types including bitmap and vector formats. The quality of map images inserted into reports has also been drastically improved.

Chart creation has been completely overhauled in Maptitude 2015. A comprehensive set of chart types address a broad range of business needs with ease. Users can create 2-D and 3-D charts, perform multi-dimensional data analysis and reporting, and interact with chart contents using tooltips and crosshair cursors. An easy-to-use wizard allows users to customize the chart appearance, and to print and save to popular file formats.



Imagery Improvements

Accessing and visualizing image layers is a core feature of Maptitude with:

- Updated support for live tiled web map image layers, including USGS Topographic Maps and USGS Aerial Imagery

Geographic Information System Developer's Kit (GISDK)

The main highlight is the new programmatic access to the underlying functionality of Maptitude.

The updated .NET APIs make it easier than ever before to add the location intelligence functions of Maptitude, including routing and geocoding, to any Windows desktop application written in C# or any other .NET programming language.

Firstly, the GISDK Extension Engine API lets you extend the Maptitude desktop application itself by writing in-process extensions in C# or any other .NET language, without the need to learn a new programming language.

Secondly, the GISDK Connection API lets you connect a new or existing .NET stand-alone Windows desktop application to Maptitude out-of-process.

Either way, you can program Maptitude in .NET to build custom applications for the desktop, and analyze and share data generated from a wide range of maps. For example, maps that show demographic trends, population density, and sales potential.

Rich Set of Geo-Processing Functions

Whether you use the in-process extension API or the out-of-process connection API, you can access more than 925 GIS functions. These functions include:

- Opening geographic files in many GIS formats
- Creating maps in many different geographic projections
- Geocoding street addresses using your licensed country data packages
- Geocoding tables of street addresses
- Reverse geocoding: obtaining information about all the map layers for an input geographic coordinate
- Selecting (filtering) map features near a geographic coordinate by circle, by shape, or by query
- Calculating the directions between geographic locations by minimizing the travel time
- Performing thematic and heat mapping, territory management, and spatial data import from a variety of source formats such as Excel, Access, SQL Server, and more

Several code examples are detailed here: <http://www.caliper.com/Maptitude/extending-maptitude-in-dot-net.htm>

What's New in Maptitude 2015

GISDK Functions

Please see the “Listing of GISDK Functions” topic in the Online Help to view a full list of GISDK functions that were added, changed, or replaced in Maptitude 2015. The highlights of these changes include:

- The GetDistances() routing function that computes distances and statistics from each point in a set of origins to each point in a set of destinations
- The TagLayer() data appending function option to define a selection set for the source layer

GISDK Interface

There have also been improvements to the GISDK interface:

- The Tools-Setup Add-Ins... window has tabs to better handle interfaces and button enabling
- The GISDK Debugger supports adding an expression in the source code to the watch list via a right click menu
- The GISDK Debugger supports the toggling of breakpoints via a right click menu
- The GISDK Debugger supports breakpoints and watch expressions that are persistent between sessions
- The GISDK Debugger supports conditional breakpoints

About Caliper

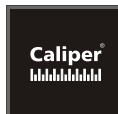
[Caliper Corporation](#) develops state-of-the-art [Geographic Information Systems \(GIS\) software](#). With a focus on usability, [Maptitude](#) is designed to be a cost-effective professional [mapping software](#) product. Maptitude enables organizations to leverage their location-based data to improve decision making and planning, while minimizing expenditure through competitively priced solutions.

Caliper is a privately held corporation and is a leading developer of [mapping](#), [redistricting](#), [transportation](#), [traffic simulation](#), and [GIS software](#).



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Maps for Life



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