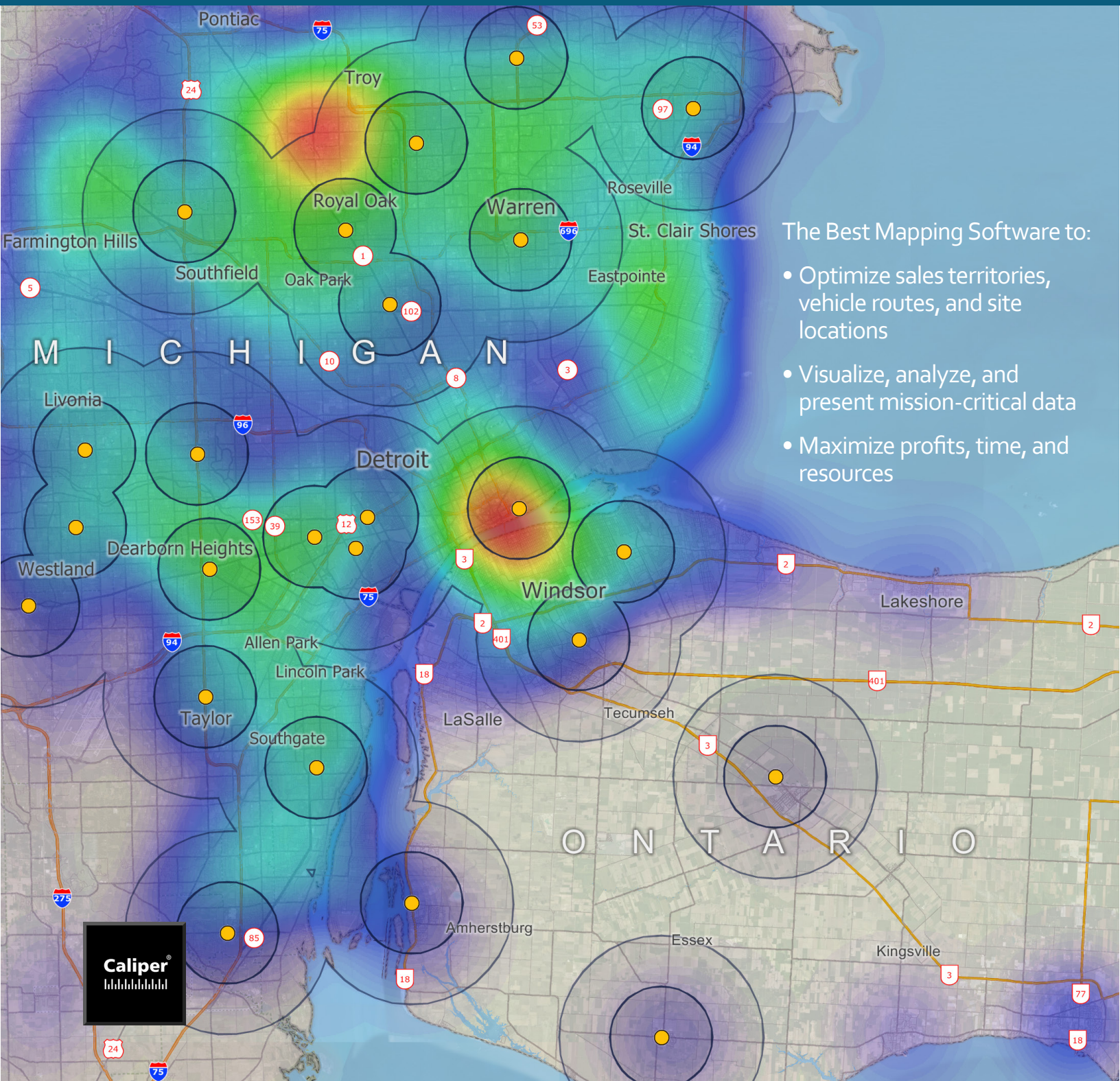# Maptitude®
Geographic Information System

The Best Mapping Software to:

- Optimize sales territories, vehicle routes, and site locations

- Visualize, analyze, and present mission-critical data

- Maximize profits, time, and resources

Caliper®

Features:

- Territory optimization, radius/buffer, market area, density/heat map, facility/site location, desire line, market share, statistical, and overlay tools
- Shortest/fastest paths, routes, drive-time rings, distances between/nearest locations, and vehicle deliveries and pickups
- Travel-time tables
- Unlimited pin mapping (batch geocoding/locating) by address, postal code, and more
- Thematic Color, pattern, bar and pie chart, size, dot-density, and 3D prism maps
- Demographic, site, and market reports in PDF, Excel
- Fully customizable maps
- Easy-to-use and intuitive MapWizard® driven interface
- Built-in database engine
- Feature/data selection/filtering/geographic queries
- Formula/expression columns
- Upload maps to Maptitude Online for sharing (separate subscription required)
- Native support for popular files including MapPoint PTM, Excel, Google KML/KMZ, Esri Shapefiles and File Geodatabases, and MapInfo TAB files
- Support for images layers/tiles/backgrounds including Google Earth, aerial/satellite imagery, Open Street Map, USGS topographic maps
- GPS interface
- GISDK programming language and API
- Surface analysis and 3-D mapping tools
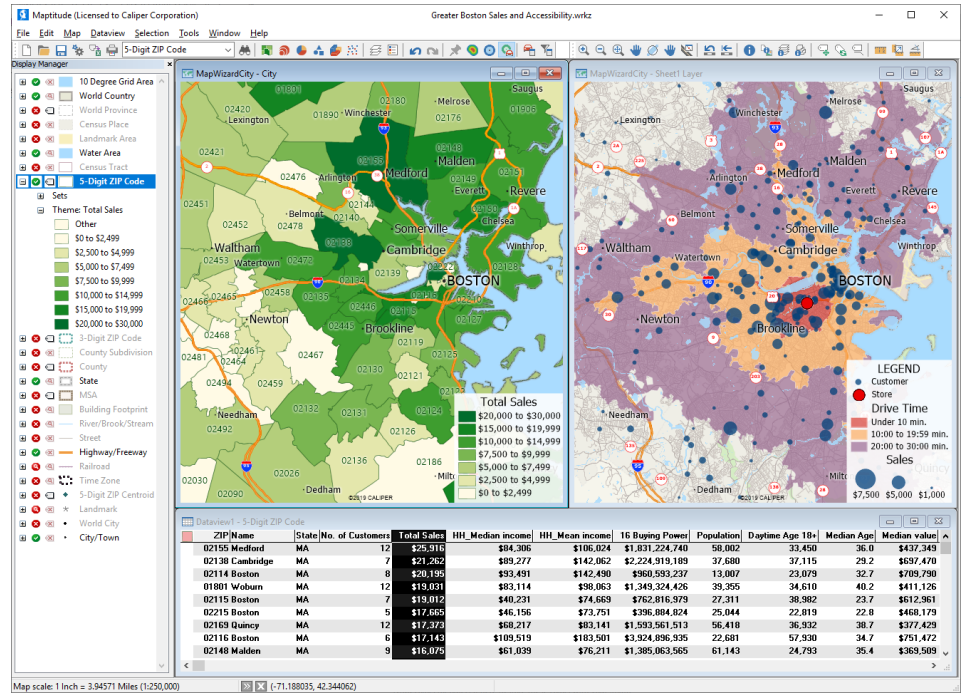
Maptitude® Geographic Information System (GIS) software is the intelligent mapping solution for business, government, and education. Maptitude 2025 provides ways for you to use the maps you create to analyze and understand how geography affects you and your business. With Maptitude you can:

- Create beautiful, informative map displays
- Enhance reports and presentations with maps that clearly illustrate your message
- Find geographic patterns that cannot be seen in database tables and spreadsheets
- Answer geographic questions that impact your operations
- Share geographic data with your group, department, or organization

Maptitude is a powerful combination of software and geographic data that provides everything you need to realize the benefits of desktop mapping and spatial analysis with a single, easy-to-use package. Maptitude has the richest feature set and highest performance of any mapping system, and it provides many new and enhanced tools that make it easier for you to create and edit maps, analyze geographic data, and connect to corporate data resources.

In addition, Maptitude gives you the maps and demographic data you need, plus special functions to allow you to tie in the data you use every day in your work. With Maptitude you can visualize data in new and different ways, unearth geographic patterns in your data, and convey information in a straight-forward manner.
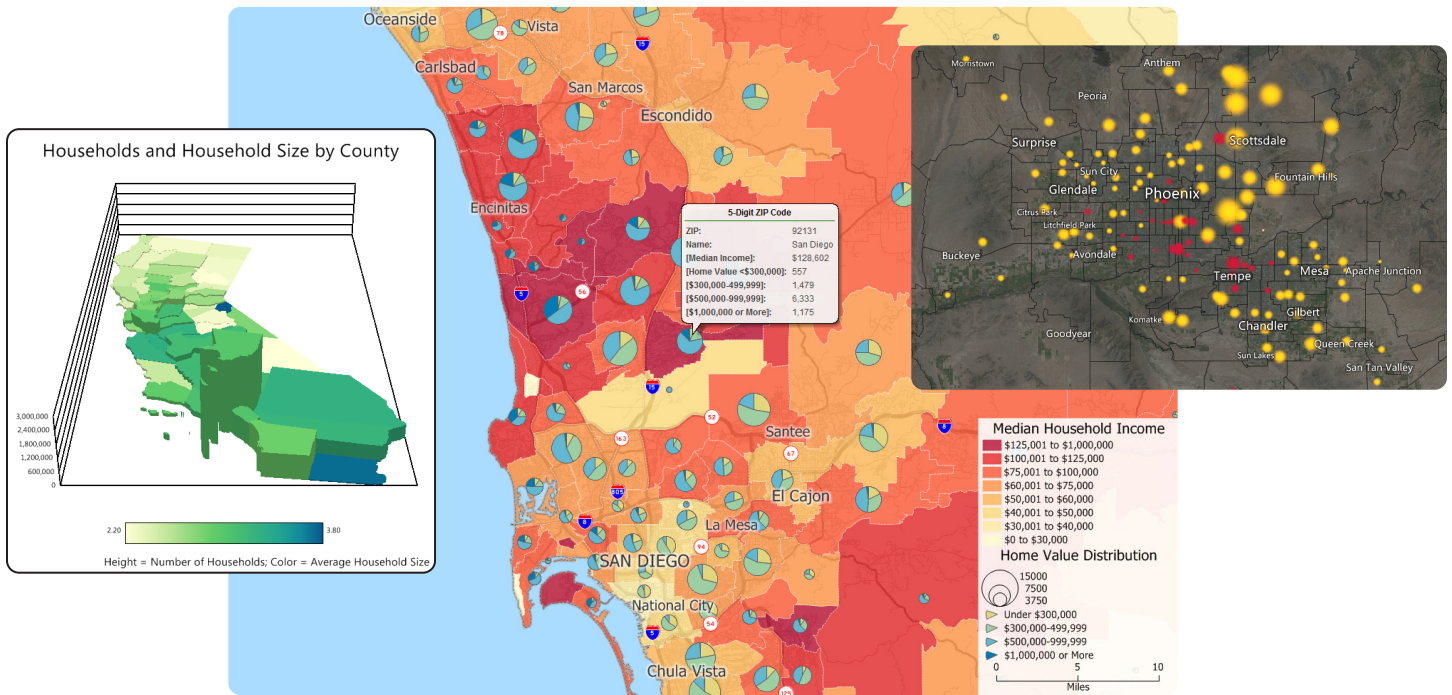
The Easiest Way to Make Maps

Map Creation: Maptitude is the best software for making maps. Maptitude brings data to life with maps that impress and inform. Answer a few simple questions and Create-a-Map Wizard™ makes a map at any scale from all the countries of the world to streets around a U.S. address, landmark, or intersection.

Maptitude provides astonishing flexibility and power so you can enhance and customize maps in numerous ways. With a few clicks of the mouse, MapWizard automatic mapping technology helps you create color and pattern maps, dot-density maps, scaled-symbol maps, and maps with integrated pie or bar charts. You can choose from a wide selection of colors, patterns, and symbols to enhance your presentation, and use editing and drawing tools to customize maps to match your needs.

Maptitude also provides a map library that contains pre-designed maps listed by category. These include thematic maps of the Census profile data by Tract, County, and State, plus attractive default maps for the United States and the world. The Map Librarian lets you open one or more of these maps for a chosen location, allowing you to quickly analyze U.S. Census data for your area of interest. In addition, you can create map libraries to organize your own maps.

Tables: Maptitude lets you see the attribute data associated with map features in spreadsheet-like tables from which you can easily edit values, calculate new variables, or compute statistics. You can also click on map features to see the information associated with them. You can also "tag" features, such as customers, with the distance to or the name of the nearest feature in another map layer, such as stores.

Output: Page layout tools help you design and create professional presentations that combine the results of your analyses into a single powerful display. You can also copy and paste maps, charts, figures, and layouts into documents, spreadsheets, and presentation software. You can print your maps and layouts on any printer or plotter, or save them to vector or raster formats. You can also save your work in a variety of formats, including PDF, Excel, JPEG, BMP, PNG, and GIF files, or publish interactive maps using Maptitude Online.

www.MappingSoftware.com

Maptitude includes extensive geographic and demographic data so that you can get started as soon as you install the software.

Maptitude includes a basic global map and ships with one detailed Country Package of your choice. Each Country Package includes a wealth of data unavailable in any other product, including an up-to-date street layer with addresses for pinmapping (geocoding) and travel time information for computing routes and drive-time rings. Also included are political boundaries, postal layers (where available), building footprints for many urban locations, and comprehensive named landmarks that include shops, restaurants, and other retail establishments. Many Country Packages also include detailed demographic data that you can use to determine the characteristics of your own territories, trade areas, or markets.
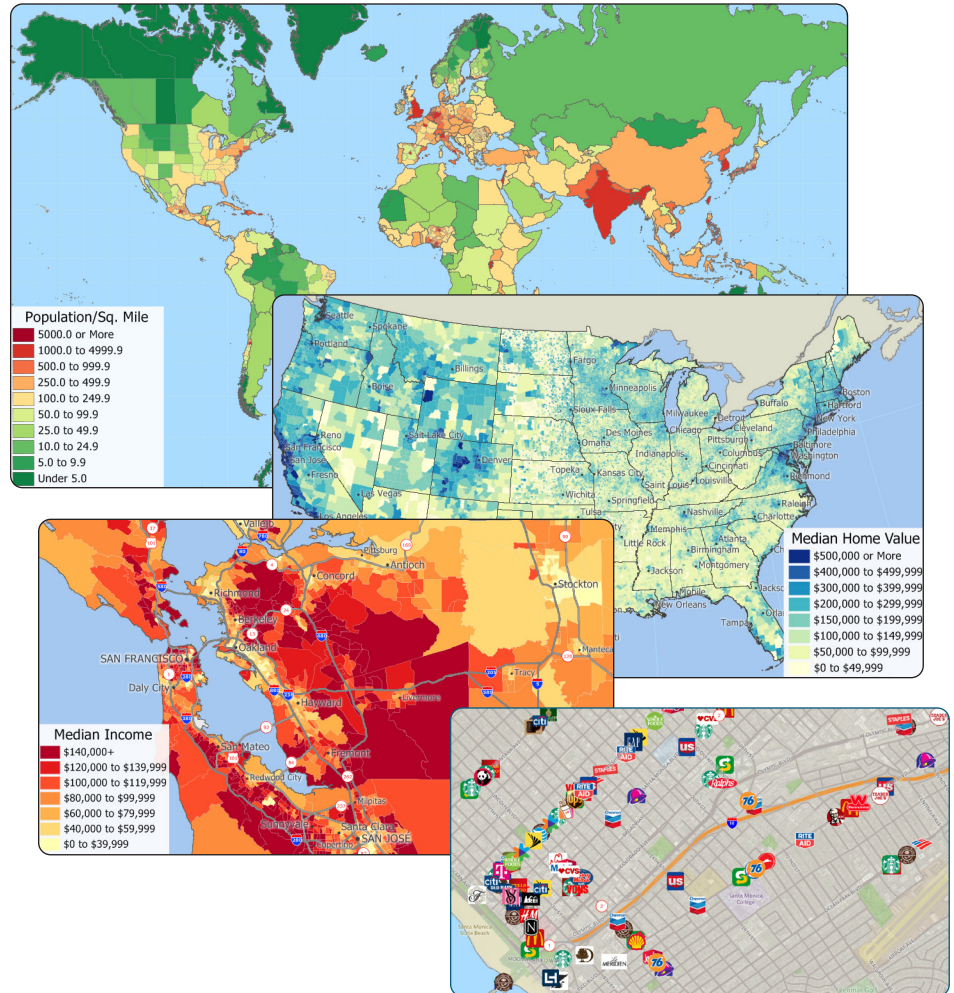
Maptitude Country Packages Include:

- Administrative boundaries
- Building footprints (where available)
- Highways
- Landmark areas including airports, cemeteries, golf courses, military facilities, national and state parks, and shopping areas
- Points of interest including airports, border crossings, business facilities, hospitals, hotels, museums, parks, restaurants, retail stores, schools, and transportation facilities
- Populated places
- Postal code boundaries (where available)
- Railroads
- Rivers and water areas
- Streets with address and travel time information

Available Country Packages: Argentina, Australia*, Belgium, Bolivia, Brazil*, Canada*, Chile, Colombia, DACH*, Ecuador, France*, India, Ireland*, Italy*, Mexico*, Netherlands*, New Zealand*, Peru, Portugal, Russia, Scandinavia, South Africa, Spain*, United Arab Emirates, United Kingdom*

*Include demographic data

U.S. Country Package Highlights:

The 2025 United States Country Package includes the following nationwide boundary files with 2020 and 2010 Census data describing population, age, and households, and 2023 American Community Survey data describing income, ethnicity, race, ancestry, education, employment, nativity, language spoken, marital status, and housing units:

- Census Block Groups
- Census Tracts
- Census Places (Cities)
- Counties
- County Subdivisions (MCD/CCD)
- Indian Reservations
- MSAs
- States
- 3- and 5-Digit ZIP Codes

Additional data describing healthcare, disposable income, gross domestic product, employees, payroll, and business establishments are provided for some summary levels.
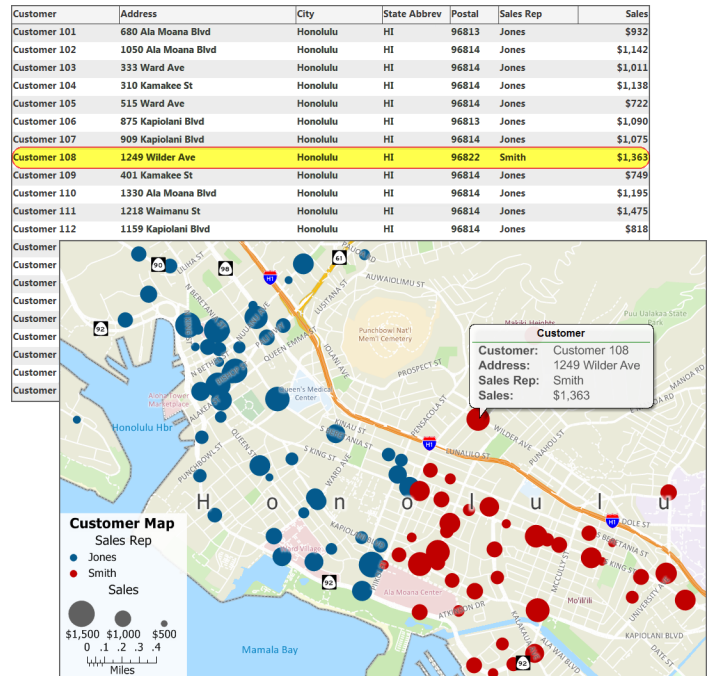
Map Your Own Data

Maptitude lets you create maps using your own data. Whether you store your data in Excel worksheets, Access tables, or any ODBC-compliant data source such as Oracle or SQL Server, Maptitude can work with your data. Create-a-Map Wizard gives you start-to-finish assistance for locating, analyzing, and mapping your data. One way to use your data is to pin map a point feature for every record in your table. This geocoding capability allows you to see the distribution of your customers, facilities, and other resources. Alternatively, you can use the powerful database capabilities of Maptitude to join your data to a map layer. You can then use your data to create themes, add labels, or perform geographic analysis.

Maptitude also supports over 50 file types and more than 100 GIS and CAD file formats allowing you to easily migrate your existing geographic data. You can map Esri Shapefiles and file

Compatible with Esri, MapInfo, MapPoint, and Oracle Spatial

geodatabases, Microsoft MapPoint PTM files, MapInfo TAB files, and Oracle Spatial tables directly, or use the built-in translators to import geographic data from a variety of other software packages and public sources. This extensive library of importers and exporters is one of the largest in the industry and comes at no additional charge. See https://www.caliper.com/maptitude/mapyourdata. htm#formats for a complete list of the supported file formats.

You can also use raster images such as satellite or aerial photo-graphs directly in your maps. Maptitude includes toolboxes for quickly accessing on-line images from OpenGIS Web Map Services and Google Earth. These images can be used as a means of reference or in conjunction with the map editing tools to create or edit geographic files.

Finally, a built-in interface to GPS devices lets you track and record your location, and build geographic databases as you work. With a GPS and a laptop, users in the field can create accurate geographic files of public utilities, corporate facilities, geographic features, and more.

Customer	Address	City	State Abbrev	Postal	Sales Rep	Sales
Customer 101	680 Ala Moana Blvd	Honolulu	HI	96813	Jones	$932
Customer 102	1050 Ala Moana Blvd	Honolulu	HI	96814	Jones	$1,142
Customer 103	333 Ward Ave	Honolulu	HI	96814	Jones	$1,011
Customer 104	310 Kamakee St	Honolulu	HI	96814	Jones	$1,138
Customer 105	515 Ward Ave	Honolulu	HI	96814	Jones	$722
Customer 106	875 Kapiolani Blvd	Honolulu	HI	96813	Jones	$1,090
Customer 107	909 Kapiolani Blvd	Honolulu	HI	96814	Jones	$1,075
Customer 108	1249 Wilder Ave	Honolulu	HI	96822	Smith	$1,363
Customer 109	401 Kamakee St	Honolulu	HI	96814	Jones	$749
Customer 110	1330 Ala Moana Blvd	Honolulu	HI	96814	Jones	$1,195
Customer 111	1218 Waimanu St	Honolulu	HI	96814	Jones	$1,475
Customer 112	1159 Kapiolani Blvd	Honolulu	HI	96814	Jones	$818

Customer
Customer: Customer 108
Address: 1249 Wilder Ave
Sales Rep: Smith
Sales: $1,363

Customer Map
Sales Rep
• Jones
• Smith
Sales
$1,500 $1,000 $500
0 .1 .2 .3 .4
Miles

Map Layers
Parcels
Buildings
Street Pavement Edge
Total Parcel Value
$2,000,000 or More
$1,500,000 to 1,999,999
$1,250,000 to 1,499,999
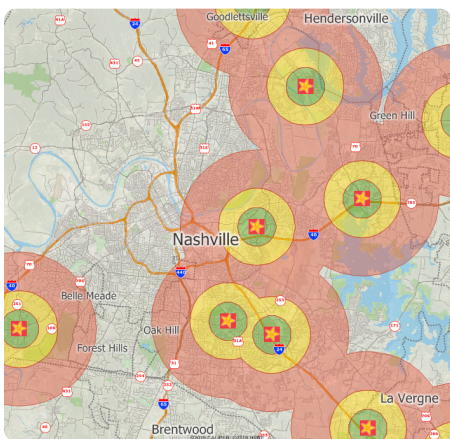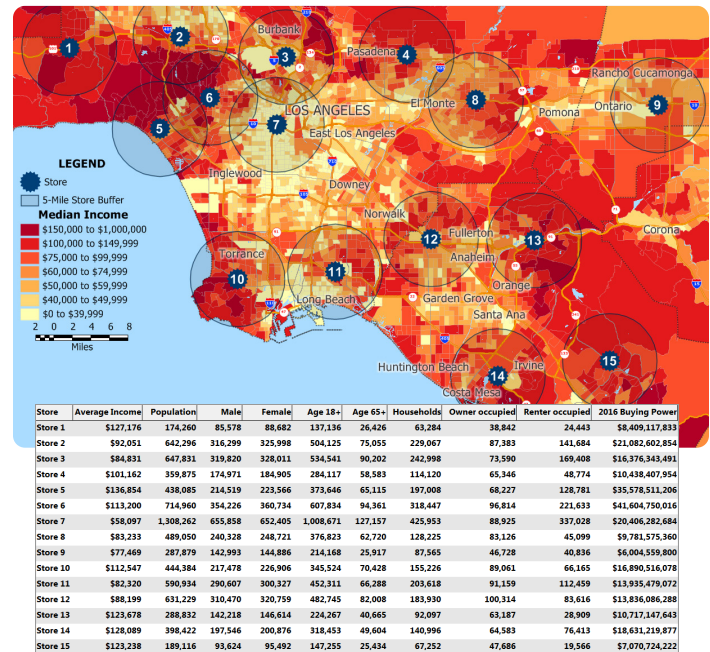$1,000,000 to 1,249,999
$750,000 to 999,999
$500,000 to 749,999
$250,000 to 499,999
Under $250,000

Geographic Analysis Tools

One of the best reasons to use a GIS is to unearth and analyze the geographic components of your data. Maptitude includes numerous analysis and logistics tools enabling you to answer questions such as: Where are areas with the highest population density? How many people live within one, two, and three miles of this site? How many customers are more than 30 minutes from a store? What is the shortest route between delivery points?

Maptitude lets you understand trends, evaluate sites, and define optimal routes. You can integrate Census statistics with your own data to identify geographic characteristics that impact you and your operations. You will be amazed at how quickly you can enhance your decision making using this easy-to-use GIS tool.

Store	Average Income	Population	Male	Female	Age 18+	Age 65+	Households	Owner occupied	Renter occupied	2016 Buying Power
Store 1	$127,176	174,260	85,578	88,682	137,136	26,426	63,284	38,842	24,443	$8,409,117,833
Store 2	$92,051	642,296	316,299	325,998	504,125	75,055	229,067	87,383	141,684	$21,082,602,854
Store 3	$84,831	647,831	319,820	328,011	534,541	90,202	242,998	73,590	169,408	$16,376,343,491
Store 4	$101,162	359,875	174,971	184,905	284,117	58,583	114,120	65,346	48,774	$10,438,407,954
Store 5	$136,854	438,085	214,519	223,566	373,646	65,115	197,008	68,227	128,781	$35,578,511,206
Store 6	$113,200	714,960	354,226	360,734	607,834	94,361	318,447	96,814	221,633	$41,604,750,016
Store 7	$58,097	1,308,262	655,858	652,405	1,008,671	127,157	425,953	88,925	337,028	$20,406,282,684
Store 8	$83,233	489,050	240,328	248,721	376,823	62,720	128,225	83,126	45,099	$9,781,575,360
Store 9	$77,469	287,879	142,993	144,886	214,168	25,917	87,565	46,728	40,836	$6,004,559,800
Store 10	$112,547	444,384	217,478	226,906	345,524	70,428	155,226	89,061	66,165	$16,890,516,078
Store 11	$82,320	590,934	290,607	300,327	452,311	66,288	203,618	91,159	112,459	$13,935,479,072
Store 12	$88,199	631,229	310,470	320,759	482,745	82,008	183,930	100,314	83,616	$13,836,086,288
Store 13	$123,678	288,832	142,218	146,614	224,267	40,665	92,097	63,187	28,909	$10,717,147,643
Store 14	$128,089	398,422	197,546	200,876	318,453	49,604	140,996	64,583	76,413	$18,631,219,877
Store 15	$123,238	189,116	93,624	95,492	147,255	25,434	67,252	47,686	19,566	$7,070,724,222

Buffers: Create rings around any number of map features and then analyze the characteristics of those areas. Find out how many customers live within a certain distance of a store, compute the demographic characteristics around potential store sites, analyze the neighborhoods most affected by noise pollution from a highway, or determine accessibility to facilities.
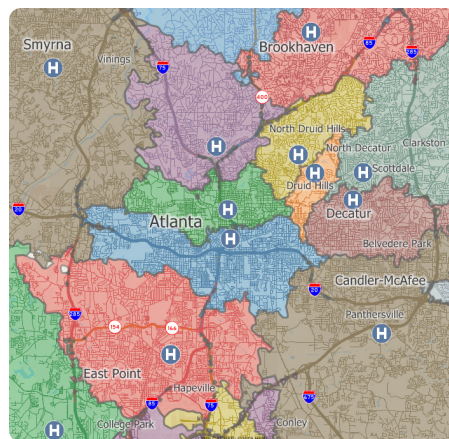
Areas of Influence/Catchment Areas: Determine the areas closest to each of your facilities by building areas of influence, then estimate the attributes within each area to determine areas that are under- or over-served. Areas can be based on straight-line distances or drive time.
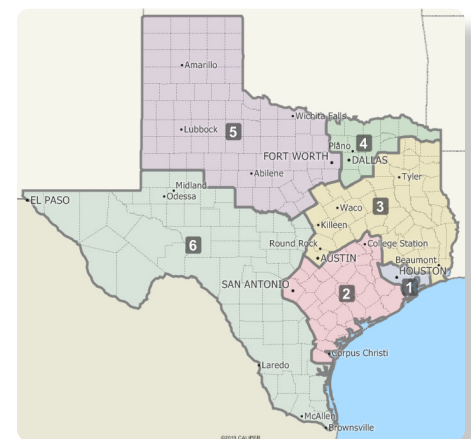
Territories: Merge smaller areas into hierarchical territories and compute the attributes for each one. For example, you can group ZIP Codes or states together to create sales territories. An automatic territory creation tool simulates thousands of plans to find the most compact and well balanced ones. Your territories can also overlap.

"Maptitude is excellent for doing geographic analysis projects looking at where existing customers are and new ones might be, identifying hot-spots, patterns and trends that can't be seen in Excel. It is really helpful with network design tasks - which sites are best"

Kirsten Tisdale, Aricia Limited
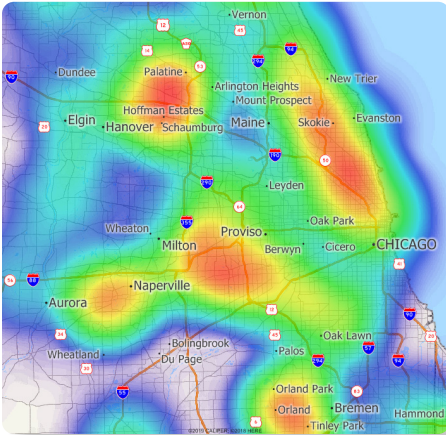
Density Grids: Visualize point data by transforming the points into a regular grid. This makes it easy to identify customer concentrations or crime hot spots. In addition, the grid can be weighted based on a value you choose.
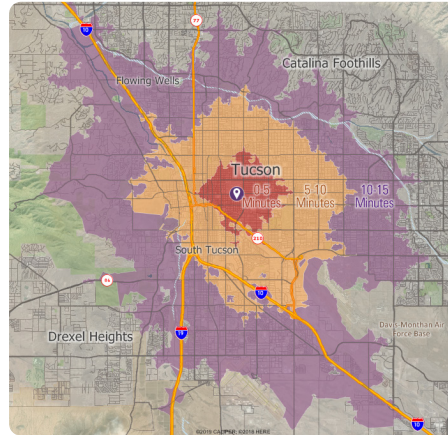
Drive-Time Rings: Create rings around one or more locations that show how long it takes to drive to your locations so that you can determine underserved markets.
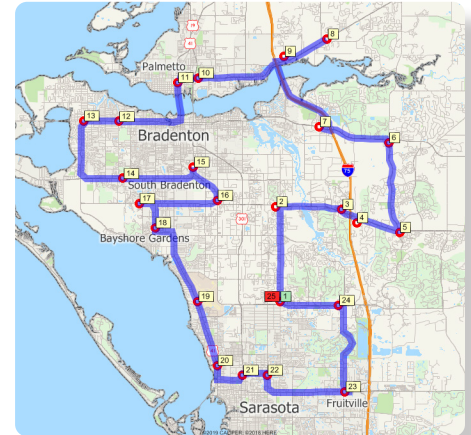
Routes: Identify routes between points and generate driving directions. When a trip involves several stops, Maptitude can even help you decide the best order in which to visit them.
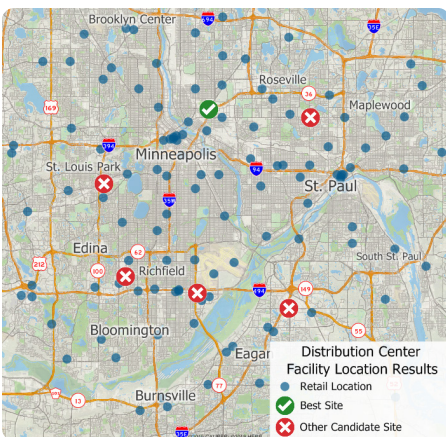
Facility Location: Identify good locations for warehouses, hospitals, retail stores, manufacturing facilities, and other types of facilities by evaluating a set of candidate locations and determining which will provide the highest level of service.

City	Albuquerque	Anaheim	Bakersfield	Carson City	Flagstaff	Fresno	Las Vegas
Albuquerque	--	791.0	811.1	1,018.4	329.8	923.0	588.8
Anaheim	790.6	--	140.9	457.4	462.1	252.7	272.5
Bakersfield	812.0	137.7	--	371.3	483.5	112.9	293.9
Carson City	1,019.3	458.5	377.0	--	690.8	268.6	430.5
Flagstaff	330.9	462.7	482.8	690.1	--	594.7	260.5
Fresno	924.3	250.0	112.9	262.4	595.8	--	406.2
Las Vegas	590.1	274.0	294.1	430.2	261.6	405.9	--
Long Beach	808.2	26.4	135.6	459.0	479.7	247.4	290.1
Los Angeles	810.0	35.4	115.5	439.0	481.5	227.4	291.9
Monterey	1,016.1	330.8	205.3	277.8	687.6	137.5	498.0
Oakland	1,081.6	396.3	270.8	208.1	753.1	172.4	563.5
Palm Springs	691.0	96.4	218.6	470.3	395.7	330.5	285.3
Phoenix	425.2	365.6	487.9	741.0	144.1	599.8	311.4
Reno	1,029.6	493.2	405.8	36.1	701.1	297.5	440.9
Sacramento	1,085.8	412.4	274.5	124.8	757.3	166.1	567.7
Salt Lake City	590.4	686.1	706.2	538.0	520.9	818.1	425.8
San Diego	776.9	95.5	236.3	523.6	481.6	348.2	338.7
San Francisco	1,093.1	407.9	282.3	212.7	764.6	184.0	575.0
San Luis Obispo	950.2	220.3	139.4	394.5	621.7	146.3	432.1
Santa Fe	49.6	840.4	860.5	1,067.8	379.2	972.4	638.2
Scottsdale	413.8	370.7	493.0	749.4	152.5	604.8	319.8
Sedona	361.2	461.7	514.2	721.5	31.9	626.0	291.9
Tucson	455.3	481.4	603.7	858.1	262.7	715.5	428.5

Distance and Travel-Time Tables: Determine the drive time and distance from one or more origins to one or more destinations. Use these tables to determine the closest as well as the best alternative locations.

Other Geographic Analysis Features:

- Compute market share using a Huff Gravity Model
- Route deliveries and pickups to find optimized routes for several vehicles needing to reach many destinations in fixed time windows
- Filter features by condition, by value, by location, or manually
- Measure areas, distances, and angles
- Aggregate and disaggregate attribute data
- Generate statistics (count, sum, mean, minimum, maximum, and standard deviation)
- Analyze and display surfaces on a two-dimensional map or as a 3-D map
- Calculate the viewshed for any location
- Compute adjacency
- Create lines from groups of points
- Create areas from line features or lines from area features
- Illustrate point-to-point flow with desire lines

Maptitude
Geographic Information System

Maptitude Online

Maptitude Online is both a map sharing add-in for desktop Maptitude and a stand-alone mapping application. Share your maps with others in several ways:

- Privately via a username and login
- Publicly with a URL
- Embedded within a webpage or blog using one line of simple iframe code
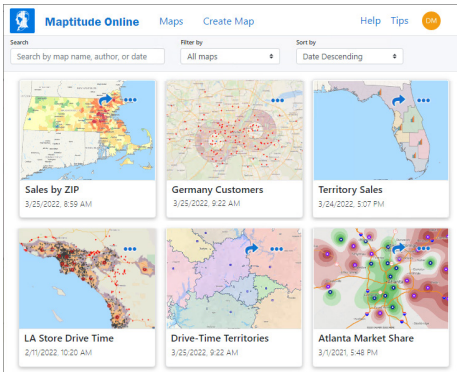
In addition, even without a copy of desktop Maptitude, any subscriber can:

- Upload Excel or CSV data, or copy and paste your locations, or even type your addresses
- Batch geocode/pushpin address, ZIP Code, and city locations
- Create thematic visualizations such as color/heat maps, pie charts, and cluster, symbol, and size themes
- Create radii/buffers/circles, straight line influence areas, weighted centers
- Determine accessibility by creating drive-time rings at any interval
- Create balanced territories based on demographics

- Create demographic report PDFs and overlays
- Export map images
- View, query, select, and filter tabular data and map layer features
- Create multiple selections to analyze different subsets of your data
- Modify maps (hide, delete, or add layers/spreadsheets, selections, themes, labels, or analytics).

API

Customize Maptitude and access the extensive built-in GISDK API using C#, .NET, Python, VBA, COM, and R.

Maptitude User Services

Our comprehensive help system, learning portal, tutorials, videos, webinars, technical support, training, and consulting services ensure the successful deployment of Maptitude. Training can be customized to meet your needs and can be conducted virtually or in a classroom, at our training center or at your location.

About Caliper

Caliper Corp. develops state-of-the-art 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.

System Requirements

- Microsoft 64-bit Windows 11 and 10
- Internet connection for download
- 8GB+ RAM for optimal performance
- 10GB disk space.

Ordering & Information

For more information, please visit **caliper.com** or call Caliper sales at **+1 617-527-4700** or email **sales@caliper.com**.

Maptitude Applications:

• Accessibility	• GPS Mapping
• Address Mapping	• Health Care
• Banking	• Heat Mapping
• Business	• Insurance
• Community Planning	• Land Use
• Compliance	• Logistics
• Crime Analysis	• Market Research
• Customer Mapping	• Market Share
• Demographics	• Planning
• Drive-Time Rings	• Public Safety
• Drive-Time Zones	• Public Works
• Emergency Response	• Real Estate
• Energy Mapping	• Retail Management
• Engineering	• Route Planning
• Environmental Analysis	• Sales Analysis
• Excel Mapping	• Site Selection
• Facility Location	• Telecommunication
• Forensic Mapping	• Territory Mapping
• Franchise Planning	• Thematic Mapping
• GIS Mapping	• Utilities