

# Top 5 Reasons Utilities Need AutoCAD Map 3D 2011 Software

## The Power of AutoCAD Map 3D

AutoCAD Map 3D software can provide direct access to data needed for infrastructure planning, design, and management activities. AutoCAD Map 3D helps engineers, planners, surveyors, and GIS professionals working on transportation, land development, water, and power projects to create better designs, enhance productivity, and improve data quality. AutoCAD Map 3D enables users to more easily aggregate cadastral, utility, topographic, environmental, image, LIDAR, and asset data; better visualize and evaluate existing conditions; improve decision making by performing corridor, network, and site analysis; and exchange information with government agencies, utilities, and contractors in both CAD and GIS data formats.

## Now Is the Time

Improve your infrastructure planning, design, and management processes with AutoCAD Map 3D—a better AutoCAD® software for planning and managing infrastructure. It provides innovative engineering design and drafting tools that are easier for AutoCAD® software users to learn and use. Discover why so many engineers, designers, and drafters switch to AutoCAD Map 3D.

For more information about AutoCAD Map 3D, visit [www.autodesk.com/map3d](http://www.autodesk.com/map3d).

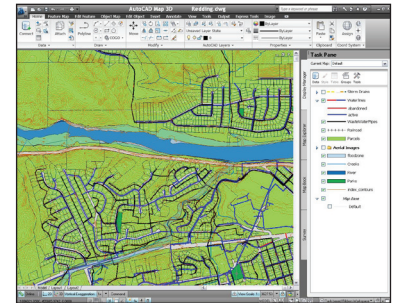
To locate the reseller nearest you, visit [www.autodesk.com/reseller](http://www.autodesk.com/reseller).

Utilities and engineering firms are under increasing pressure to do more with less, while maintaining high reliability and customer service. Faced with aging assets, capital constraints, and rising energy demands, you need solutions that help improve productivity and cost efficiencies on all of your infrastructure projects. AutoCAD® Map 3D 2011 software can help you take full advantage of your CAD-trained workforce to precisely create, edit, and maintain maps, network layouts, schematics, and data needed to design and manage electric, gas, and water networks; substations; pumping stations; power plants; renewable generation facilities; and water treatment plants. Using AutoCAD Map 3D, your CAD and engineering staff can:

### 1 Access data needed for planning, design, and asset management activities

Create base maps by directly accessing a broad variety of spatial data—such as utility, road, cadastral, topographic, environmental, and image data—without waiting for the GIS department to convert the data. More easily integrate data collected in the field via survey and GPS devices to more accurately update drawings, maps, and databases. AutoCAD Map 3D interoperates with major design and GIS software so you can read, write, and convert data between most standard formats, including DWG™, ESRI® SHP, and Microstation® DGN.

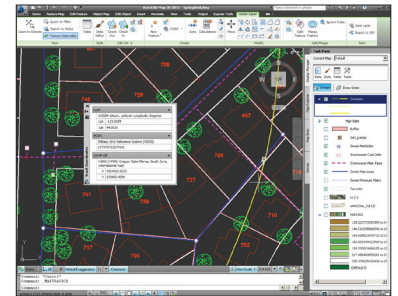
*RESULT: Improve accuracy and efficiencies during the planning and design phases of projects, as CAD and GIS professionals can collaborate on common datasets to create maps, plans, and reports.*



### 2 Design in a more real-world context

Built on AutoCAD software, AutoCAD Map 3D lets you work with more than 4,000 real-world coordinate systems, perform coordinate transformations, and use tools such as Transform, Rubbersheeting, and Track Coordinates to more accurately georeference AutoCAD design data. With AutoCAD tools to precisely create and edit maps, network layouts, spatial data and more, your CAD-trained workforce can help better manage processes and reduce backlogs using one of the world's leading CAD software products.

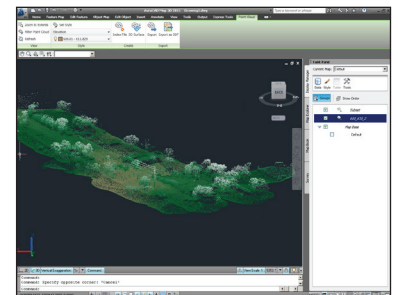
*RESULT: More quickly integrate georeferenced data from a variety of sources to create more accurate drawings and maps while helping to reduce data translation costs and efforts.*



### 3 Better visualize and evaluate existing conditions

Get more insight into the real world by using point cloud functionality to view, style, and create 3D features and surfaces from LiDAR data. Visualize and evaluate up-to-date utility, cadastral, topographic, environmental, image, and tabular data in a variety of formats to help evaluate existing conditions and perform corridor, network, and site analysis. Then use mapping and analysis functions to more easily create maps that highlight information such as service areas, land usage, pipe and cable installation dates, diameters, and more.

*RESULT: More quickly evaluate existing conditions and create designs, maps, plans, and reports that support better infrastructure design and maintenance decisions.*



## 4 Support design and as-built data flow to GIS, asset management, and other applications

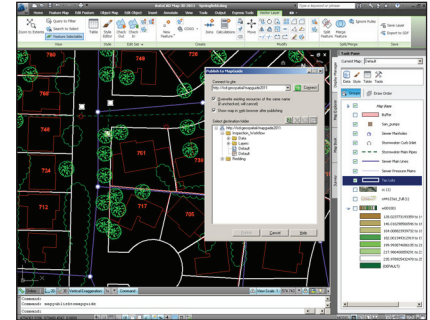
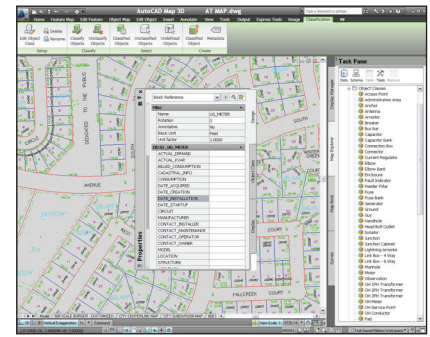
Prepare data for use by back-end applications such as GIS, load modeling, outage management, and mobile dispatch and field systems. Define and apply data standardization by classifying objects in drawings according to the real-world features they represent, using industry objects with corresponding real-world attributes and a set of preconfigured industry symbols. Use powerful tools to help correct common drafting and digitizing inaccuracies to enhance data accuracy for downstream systems, and integrate field-collected data to better reflect as-found locations and more accurately update the system of record.

*RESULT: Establish standards and improve data consistency throughout drawings and maps so that design data can be more effectively understood and used throughout the plan, design, build, and manage lifecycle.*

## 5 Exchange information with government agencies, other utilities, and contractors in both CAD and GIS data formats

Distribute and exchange information in different ways, according to project needs. Provide data in CAD and GIS data formats for regulatory agencies and other stakeholders. Create drawings, designs, and maps, and then publish them to the Internet more quickly using Autodesk MapGuide® Enterprise 2011 software or distribute them as more secure georeferenced DWF™ files, map books, or paper plots. Using free\* Autodesk® Design Review 2011 software, field team members can digitally review, measure, mark up, and comment on 2D and 3D designs, plans, and maps while better protecting your intellectual property.

*RESULT: Help improve coordination by providing stakeholders—including the mobile field force—with information they require.*



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