

POB 2004 CAD/Surveying Software Survey

PROGRAM/VERSION	Autodesk Survey 2005	Autodesk Civil 3D	Autodesk Civil Design/2005	Autodesk Land Desktop/2005	Autodesk CADD Visual Survey	InRoads Survey 2004	InRoads Suite 2004	Site Suite 2004
MANUFACTURER	Autodesk	Autodesk	Autodesk	Autodesk	Autodesk	Bentley Systems Inc.	Bentley Systems Inc.	Bentley Systems Inc.
WEB ADDRESS	www.autodesk.com	www.autodesk.com	www.autodesk.com	www.autodesk.com	www.autodesk.com	www.bentley.com	www.bentley.com	www.bentley.com
Price	\$995	Subscription customers only	\$2,995	\$4,995	\$4,795	Call for quote	Call for quote	Call for quote
Discounts for multiple copies?	Yes	N/A	Yes	Yes	Yes	Yes	Yes	Yes
List types of documentation included with software.	[1]	Electronic	Yes, printed and electronic	Yes, printed and electronic	Yes, printed and electronic	[14]	[14]	[14]
Can the software installation and data be server based?	Yes	Yes		Yes	Yes	Yes	Yes	Yes
OPERATING SYSTEMS								
Windows 95/98/ME? (Specify which.)	No	98 (second edition)	95/98	N/A	98 (second edition)	No	No	No
Windows NT/2000/XP? (Specify which.)	NT/2000/XP	[9]	NT 4/2000	[9]	[9]	NT/2000/XP	NT/2000/XP	NT/2000/XP
GDI+ and .NET support?	Yes for .NET [2]	No	No	No	No	No	No	No
Other: UNIX, Macintosh, Linux, CE, Pocket? (Specify which.)	N/A	No	No	N/A	No	No	No	No
SYSTEM AND PROJECT SETUP								
Project setup assistance or wizard?	Yes	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Can Settings be established for network computers?	Yes	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Support for:								
Map projections?	Yes [2]	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Datum transformations?	Yes [2]	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Geoid models?	Yes [2]	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
USPCS?	Yes [2]	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Open access to databases?	Yes [2]	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
COGO CAPABILITIES								
Do the point objects have intelligence? (See Note A on p. 57)	Yes	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Can points be chosen with selectable snap options?	Yes	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Is there an external point database?	Yes	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Are user-definable point groups supported?	Yes	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Are multiple, persistent groups supported?	Yes	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Is point sharing between groups supported?	Yes	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Can point ranges be locked to prevent access by others?	Yes	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Do point data, blocks and text rescale when scale changes?	Yes	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Are COGO operations and data editing supported via command line?	Yes	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Does the software have batch file capabilities?	Yes	No	Yes [2]	Yes	Yes	Yes	Yes	Yes
TRAVERSE ANALYSIS								
Compass (Bowditch), Transit and Crandall's Adjustment supported?	Yes	N/A	Yes [5]	Yes [5]	Yes	Yes	Yes	Yes
Least squares analysis and adjustment? (2D, 3D or No)	Yes	N/A	Yes [5]	Yes [5]	Yes	Yes	Yes	Yes
Least squares analysis and adjustment of networks?	Yes	N/A	Yes [5]	Yes [5]	Yes	Yes	Yes	Yes
Are reports available?	Yes	N/A	Yes [5]	Yes [5]	Yes	Yes	Yes	Yes
ELECTRONIC FIELD RECORDERS (DATA COLLECTORS)								
Number of data collectors/formats supported? Specify.	More than 60 [3]	N/A	Yes [5]	Yes [5]	Yes [3]	[15]	[15]	[15]
Are GPS recorders supported? If yes, specify whether raw data is supported from the data collector, receiver memory or both.	[4]	N/A	Yes [5]	Yes [5]	[4]	Yes, data collector	Yes, data collector	Yes, data collector
If GPS receivers are supported, how many brands? (List if desired.)	[3]	N/A	Yes [5]	Yes [5]	[3]			
Is Face1/Face2 or doubling the angle supported?	Yes	N/A	Yes [5]	Yes [5]	Yes	Yes	Yes	Yes
Automatic symbology and linework supported for upload and download? (Specify upload, download, both or neither.)	Yes	N/A	Yes [5]	Yes [5]	Yes	Yes	Yes	Yes
Is GPS construction machine control supported?	Yes	N/A	Yes [5]	Yes [5]	Yes	Yes	Yes	Yes
DTM CAPABILITIES								
Can multiple surfaces be open and accessed simultaneously?	Yes [2]	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Support TINs that accommodate representation and calculations (such as volumes) of such features as escarpments, mines, tunnels, etc.?	Yes [2]	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Compute volume to specific elevation or other surface?	Yes [2]	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Are contour smoothing algorithms user selectable?	Yes [2]	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Are TIN editing capabilities supported?	Yes [2]	Yes	Yes [2]	Yes	Yes	Limited	Yes	Yes
Is there an audit trail to track TIN editing?	Yes [2]	Yes	Yes [2]	Yes	Yes	No	No	No
USGS Digital Elevation Models supported?	Yes [2]	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Soft breaklines supported?	No	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Sharing, locking and save as supported for surface management?	Yes [2]	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Earthwork take-offs supported?	Yes [2]	Yes	Yes [2]	Yes	Yes [12]	Limited	Yes	Yes
Prismoidal based earthworks supported?	Yes [2]	Yes	Yes [2]	No	Yes	No	Yes	Yes
Gridded earthworks methods supported?	Yes [2]	No	Yes [2]	Yes	Yes	Yes	Yes	Yes
Section method earthworks supported?	Yes [2]	No	Yes [2]	Yes	Yes	No	Yes	Yes
Automatic watershed or drainage divide computations included?	Yes [2]	No	Yes [2]	Yes	Yes	No	Yes	Yes
Surface analysis routines supplied with the software?	Yes [2]	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
3D surface viewing supported?	Yes [2]					Yes	Yes	Yes
DESIGN CAPABILITIES								
Can alignments be designed or edited?	Yes [2]	Yes	Yes [2]	Yes	Yes	No	Yes	Yes
Can alignments be drafted or annotated?	Yes [2]	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Roadway templates or string theory support?	Roadway templates	N/A	Roadway templates	Yes [10]	Roadway templates [13]	No	Yes	Yes
Is there an external route alignment database?	Yes [2]	N/A	Yes [2]	No	Yes	Yes	Yes	Yes
Access alignments within the same project simultaneously?	Yes [2]	Yes	Yes [2]	Yes	Yes	Yes	Yes	Yes
Can profiles and vertical alignments be generated?	Yes [2]	Yes	Yes [2]	Yes	Yes [13]	Yes	Yes	Yes
Symmetrical and asymmetrical vertical curves supported?	Symmetrical curves [2]	Yes	Symmetrical only	Yes [10]	Yes [13]	No	Yes	Yes
Design drafting of storm, sanitary and waterlines supported?	Yes [2]	No	Yes	Yes [10]	Yes [13]	No	Yes	Yes
Parametric design supported?	No	Yes	Yes	Yes [10]	Yes [13]	No	Yes	Yes
DRAWINGS (SHEETS)								
User defined templates?	Yes [2]	Yes	Yes	Yes	Yes	No	Yes	Yes
Are templates page size/layout independent? (Text blocks, etc. automatically reposition.)	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Dynamic resizing of scalebars and title blocks?	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dynamic legend? (Automatically includes all used symbols.)	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Dynamic line and curve tables?	Yes [2]	Yes	Yes	Yes	Yes	No	Yes	Yes
Reference survey data to images by picking reference points?	Yes [6]	Yes	No	No	Yes	Yes	Yes	Yes
Automatic clipping for placing annotations, labels and notes?	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Can lines be trimmed to a symbol and/or broken and still maintain the true length in the database?	Yes [2]	Yes	Yes	Yes	Yes	No	Yes	Yes
Is hatching supported?	Yes [2]	Yes	Yes	Yes	No	Yes	Yes	Yes
- If yes, can hatch patterns contain non-linear objects such as symbols or blocks?	Yes [2]	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Can points and curvilinear geometry labeling be customized?	Yes [2]	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Associative/dynamic labeling for linework and points supported?	Yes [2]	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Associative/dynamic labeling across multiple drawings?	Yes [2]	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CUSTOMIZING ABILITIES								
Can the interface, menus or toolbars be customized?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Databases customizable?	No	No	No	No	Yes, through VBA	No	Yes	Yes
Scripting/add-on support provided?	Yes [7]					Yes	Yes	Yes
FILE IMPORT/EXPORT ABILITY								
Are multi-version DWG/DXF import/exports supported?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Is XML supported for the CAD graphics?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Are Microstation V7 and V8 supported?	Yes [2]	N/A	Yes [2]	Yes, translation	Yes	Yes	Yes	Yes
ASCII coordinate file?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Are Arcview, ArcInfo Coverage and Shape file transfers supported?	Yes [2]	N/A	No	Yes [11]	Yes, through VBA	No	No	No
Image Files (BMP, JPG, etc.)? Specify.	Yes [6]	BMP, JPG, TIF	No	BMP, JPG, TIF	Yes	Yes	Yes	Yes
FUNCTIONALITY EXTENSIONS (INDICATE AVAILABILITY AND COST)								
Sewer/pipe networks?	Yes [8]	Yes [8]				No	Yes	Yes
Hydrology?	Yes [8]	Yes [8]				No	Yes	Yes
Road design/road layout?	Yes [8]	Yes [8]				No	Yes	Yes
Other?							Yes	Yes
READER SERVICE NUMBER	1	2	3	4	5	6	7	8

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PROGRAM/VERSION	Carlson SurvCADD XML v2	Carlson Survey 2004	Summit Evolution [24]	Capture [17]	Map Editor [23]	Eagle Point 2004	PowerCAD Pro 6.0	PowerCAD Classic 6.0
MANUFACTURER	Carlson Software	Carlson Software	DAI/EM Systems International	DAI/EM Systems International	DAI/EM Systems International	Eagle Point	GiveMePower Corp.	GiveMePower Corp.
WEB ADDRESS	www.carlsonsw.com	www.carlsonsw.com	www.datem.com	www.datem.com	www.datem.com	www.eaglepoint.com	www.givempower.com	www.givempower.com
Price	\$1,000 - \$5,000	\$1,495	TBD	TBD	TBD	Call for pricing	\$595	\$249
Discounts for multiple copies?	50% for multiple licenses	No	Yes	Yes	Yes	Call for pricing	Yes	Yes
List types of documentation included with software.	[16]	PDF	[18]	[18]	[18]	Online help and PDF	Online Learning Center	Online Learning Center
Can the software installation and data be server based?	Yes	Yes	No	No	No	Yes	Yes	Yes
OPERATING SYSTEMS								
Windows 95/98/ME? (Specify which.)	Yes	No				98/ME	98/ME	98/ME
Windows NT/2000/XP? (Specify which.)	Yes	Yes	XP/2000	XP/2000	XP/2000	[19]	All [21]	All [21]
GDI+ and .NET support?	No	No				No	No	No
Other: UNIX, Macintosh, Linux, CE, Pocket? (Specify which.)	No	No				No	No	No
SYSTEM AND PROJECT SETUP								
Project setup assistance or wizard?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Can Settings be established for network computers?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Support for:								
Map projections?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Datum transformations?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Geoid models?	Yes	Yes	Yes	Yes	Yes	No	No	No
USPCS?	Yes	Yes	Yes	Yes	Yes	No	No	No
Open access to databases?	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
COGO CAPABILITIES								
Do the point objects have intelligence? (See Note A on p. 57)	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Can points be chosen with selectable snap options?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Is there an external point database?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Are user-definable point groups supported?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Are multiple, persistent groups supported?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Is point sharing between groups supported?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Can point ranges be locked to prevent access by others?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Do point data, blocks and text rescale when scale changes?	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Are COGO operations and data editing supported via command line?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Does the software have batch file capabilities?	Yes	No	Yes	Yes	Yes	Yes	No	No
TRAVERSE ANALYSIS								
Compass (Bowditch), Transit and Crandall's Adjustment supported?	Yes	Yes				Yes	No	No
Least squares analysis and adjustment? (2D, 3D or No)	Yes	Yes				3D	No	No
Least squares analysis and adjustment of networks?	Yes	Yes				No	No	No
Are reports available?	Yes	Yes				Yes	No	No
ELECTRONIC FIELD RECORDERS (DATA COLLECTORS)								
Number of data collectors/formats supported? Specify.	All major manufacturers	All major manufacturers				31	[22]	No
Are GPS recorders supported? If yes, specify whether raw data is collected from the data collector, receiver memory or both.	Yes, both	Yes, both	No	No	No	Yes, data collector	No	No
If GPS receivers are supported, how many brands? (List if desired.)	All major manufacturers	All major manufacturers	No	No	No	5	No	No
Is Face1/Face2 or doubling the angle supported?	Yes	Yes	No	No	No	Yes	No	No
Automatic symbology and linework supported for upload and download? (Specify upload, download, both or neither.)	Yes	Yes				Yes	No	No
Is GPS construction machine control supported?	Yes	Yes				No	No	No
DTM CAPABILITIES								
Can multiple surfaces be open and accessed simultaneously?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Support TINs that accommodate representation and calculations (such as volumes) of such features as escarpments, mines, tunnels, etc.?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Compute volume to specific elevation or other surface?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Are contour smoothing algorithms user selectable?	Yes	Yes	Yes	Yes	Yes	Yes [20]	No	No
Are TIN editing capabilities supported?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Is there an audit trail to track TIN editing?	No	No	Yes	Yes	Yes	No	No	No
USGS Digital Elevation Models supported?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Soft breaklines supported?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Sharing, locking and save as supported for surface management?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Earthwork take-offs supported?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Prismoidal based earthworks supported?	Yes	No	Yes	Yes	Yes	Yes	No	No
Gridded earthworks methods supported?	Yes	Yes	Yes	Yes	Yes	No	No	No
Section method earthworks supported?	Yes	No	Yes	Yes	Yes	Yes	No	No
Automatic watershed or drainage divide computations included?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Surface analysis routines supplied with the software?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
3D surface viewing supported?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DESIGN CAPABILITIES								
Can alignments be designed or edited?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Can alignments be drafted or annotated?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Roadway templates or string theory support?	Yes	Yes	Yes	Yes	Yes	Templates	No	No
Is there an external route alignment database?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Access alignments within the same project simultaneously?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Can profiles and vertical alignments be generated?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Symmetrical and asymmetrical vertical curves supported?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Design drafting of storm, sanitary and waterlines supported?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Parametric design supported?	Yes	Yes	Yes	Yes	Yes	No	No	No
DRAWINGS (SHEETS)								
User defined templates?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Are templates page size/layout independent? (Text blocks, etc. automatically reposition.)	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Dynamic resizing of scalebars and title blocks?	Yes	Yes	Yes	Yes	Yes	No	No	No
Dynamic legend? (Automatically includes all used symbols.)	Yes	Yes	Yes	Yes	Yes	No	No	No
Dynamic line and curve tables?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Reference survey data to images by picking reference points?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Automatic clipping for placing annotations, labels and notes?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Can lines be trimmed to a symbol and/or broken and still maintain the true length in the database?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Is hatching supported?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
— If yes, can hatch patterns contain non-linear objects such as symbols or blocks?	—	—	—	—	—	—	No	No
Can points and curvilinear geometry labeling be customized?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Associative/dynamic labeling for linework and points supported?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Associative/dynamic labeling across multiple drawings?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
CUSTOMIZING ABILITIES								
Can the interface, menus or toolbars be customized?	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Databases customizable?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Scripting/add-on support provided?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
FILE IMPORT/EXPORT ABILITY								
Are multi-version DWG/DXF import/exports supported?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Is XML supported for the CAD graphics?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Are Microstation V7 and V8 supported?	No	No	Yes	Yes	Yes	Yes	No	No
ASCII coordinate file?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Are Arcview, ArcInfo Coverage and Shape file transfers supported?	Yes	No	Yes	No	Yes	Yes	No	No
Image Files (BMP, JPG, etc.)? Specify.	Yes	Yes	Yes	Yes	Yes	Yes	[25]	[25]
FUNCTIONALITY EXTENSIONS (INDICATE AVAILABILITY AND COST)								
Sewer/pipe networks?	Yes	No	Yes	Yes	Yes	Yes, call for pricing	No	No
Hydrology?	Yes	No	Yes	Yes	Yes	Yes, call for pricing	No	No
Road design/road layout?	Yes	No	Yes	Yes	Yes	Yes, call for pricing	No	No
Other?			Yes	Yes	Yes	Landscaping	PowerSYMBOLS: \$99	PowerSYMBOLS: \$99
READER SERVICE NUMBER	9	10	11	12	13	14	15	16

Numbers in brackets refer to notes (see page 57).

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PROGRAM/VERSION	PowerCAD Viewer 6.0	PowerCAD Architect 5.2	PowerCAD SiteMaster XP	DWF Anywhere Viewer	PowerCAD CE Pro 5.5	PowerCAD CE Classic 5.5	PowerCAD CE Viewer 5.5
MANUFACTURER	GiveMePower Corp.	GiveMePower Corp.	GiveMePower Corp.	GiveMePower Corp.	GiveMePower Corp.	GiveMePower Corp.	GiveMePower Corp.
WEB ADDRESS	www.givempower.com	www.givempower.com	www.givempower.com	www.givempower.com	www.givempower.com	www.givempower.com	www.givempower.com
Price	\$99	\$995	\$995	Free	\$595	\$249	\$99
Discounts for multiple copies?	Yes	Yes	Yes	No	Yes	Yes	Yes
List types of documentation included with software.	Online Learning Center	Online Learning Center	Online User Guide	None	Online User Guide	Online User Guide	Online User Guide
Can the software installation and data be server based?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
OPERATING SYSTEMS							
Windows 95/98/ME? (Specify which.)	98/ME	98/ME	98/ME	98/ME			
Windows NT/2000/XP? (Specify which.)	All [21]	All [21]	All [21]	All [21]			
GDI+ and .NET support?	No	No	Yes	Yes	Yes	Yes	Yes
Other: UNIX, Macintosh, Linux, CE, Pocket? (Specify which.)	No	No	No	[26]	[26]	[26]	[26]
SYSTEM AND PROJECT SETUP							
Project setup assistance or wizard?	Yes	Yes	Yes	No	Yes	Yes	No
Can Settings be established for network computers?	No	Yes	No	No	No	No	No
Support for:							
Map projections?	No	No	No	No	No	No	No
Datum transformations?	No	No	No	No	No	No	No
Geoid models?	No	No	No	No	No	No	No
USPCS?	No	No	No	No	No	No	No
Open access to databases?	Yes	Yes	Yes	No	Yes	Yes	Yes
COGO CAPABILITIES							
Do the point objects have intelligence? (See Note A on p. 57)	No	No	No	No	No	No	No
Can points be chosen with selectable snap options?	Yes	Yes	Yes	No	Yes	Yes	Yes
Is there an external point database?	No	No	No	No	No	No	No
Are user-definable point groups supported?	Yes	Yes	Yes	No	Yes	Yes	No
Are multiple, persistent groups supported?	No	No	No	No	No	No	No
Is point sharing between groups supported?	Yes	Yes	Yes	No	Yes	Yes	No
Can point ranges be locked to prevent access by others?	No	No	No	No	No	No	No
Do point data, blocks and text rescale when scale changes?	Yes	Yes	Yes	No	Yes	Yes	Yes
Are COGO operations and data editing supported via command line?	Yes	Yes	Yes	No	Yes	Yes	Yes
Does the software have batch file capabilities?	No	Yes	No	No	No	No	No
TRAVERSE ANALYSIS							
Compass (Bowditch), Transit and Crandall's Adjustment supported?	No	No	No	No	No	No	No
Least squares analysis and adjustment? (2D, 3D or No)	No	No	No	No	No	No	No
Least squares analysis and adjustment of networks?	No	No	No	No	No	No	No
Are reports available?	No	No	No	No	No	No	No
ELECTRONIC FIELD RECORDERS (DATA COLLECTORS)							
Number of data collectors/formats supported? Specify.	No	ASCII import	[22]	No	[22]	No	No
Are GPS recorders supported? If yes, specify whether raw data is supported from the data collector, receiver memory or both.	No	No	No	No	No	No	No
If GPS receivers are supported, how many brands? (List if desired.)	No	No	No	No	No	No	No
Is Face1/Face2 or doubling the angle supported?	No	No	No	No	No	No	No
Automatic symbology and linework supported for upload and download? (Specify upload, download, both or neither.)	No	No	No	No	No	No	No
Is GPS construction machine control supported?	No	No	No	No	No	No	No
DTM CAPABILITIES							
Can multiple surfaces be open and accessed simultaneously?	No	No	No	No	No	No	No
Support TINs that accommodate representation and calculations (such as volumes) of such features as escarpments, mines, tunnels, etc.?	No	No	No	No	No	No	No
Compute volume to specific elevation or other surface?	No	No	No	No	No	No	No
Are contour smoothing algorithms user selectable?	No	No	No	No	No	No	No
Are TIN editing capabilities supported?	No	No	No	No	No	No	No
Is there an audit trail to track TIN editing?	No	No	No	No	No	No	No
USGS Digital Elevation Models supported?	No	No	No	No	No	No	No
Soft breaklines supported?	No	No	No	No	No	No	No
Sharing, locking and save as supported for surface management?	No	No	No	No	No	No	No
Earthwork take-offs supported?	No	No	No	No	No	No	No
Prismoidal based earthworks supported?	No	No	No	No	No	No	No
Gridded earthworks methods supported?	No	No	No	No	No	No	No
Section method earthworks supported?	No	No	No	No	No	No	No
Automatic watershed or drainage divide computations included?	No	No	No	No	No	No	No
Surface analysis routines supplied with the software?	No	No	No	No	No	No	No
3D surface viewing supported?	Yes	Yes	Yes	No	Yes	Yes	Yes
DESIGN CAPABILITIES							
Can alignments be designed or edited?	No	No	No	No	No	No	No
Can alignments be drafted or annotated?	No	No	No	No	No	No	No
Roadway templates or string theory support?	No	No	No	No	No	No	No
Is there an external route alignment database?	No	No	No	No	No	No	No
Access alignments within the same project simultaneously?	No	No	No	No	No	No	No
Can profiles and vertical alignments be generated?	No	No	No	No	No	No	No
Symmetrical and asymmetrical vertical curves supported?	No	No	No	No	No	No	No
Design drafting of storm, sanitary and waterlines supported?	No	No	No	No	No	No	No
Parametric design supported?	No	No	No	No	No	No	No
DRAWINGS (SHEETS)							
User defined templates?	Yes	Yes	Yes	No	Yes	No	No
Are templates page size/layout independent? (Text blocks, etc. automatically reposition.)	No	No	No	No	No	No	No
Dynamic resizing of scalebars and title blocks?	No	No	No	No	No	No	No
Dynamic legend? (Automatically includes all used symbols.)	No	No	No	No	No	No	No
Dynamic line and curve tables?	No	No	No	No	No	No	No
Reference survey data to images by picking reference points?	No	No	No	No	No	No	No
Automatic clipping for placing annotations, labels and notes?	No	No	No	No	No	No	No
Can lines be trimmed to a symbol and/or broken and still maintain the true length in the database?	No	No	No	No	No	No	No
Is hatching supported?	Yes	Yes	Yes	No	Yes	Yes	No
- If yes, can hatch patterns contain non-linear objects such as symbols or blocks?	No	No	No	No	No	No	No
Can points and curvilinear geometry labeling be customized?	No	No	No	No	No	No	No
Associative/dynamic labeling for linework and points supported?	No	No	No	No	No	No	No
Associative/dynamic labeling across multiple drawings?	No	No	No	No	No	No	No
CUSTOMIZING ABILITIES							
Can the interface, menus or toolbars be customized?	Yes	Yes	Yes	No	Yes	Yes	Yes
Databases customizable?	No	No	No	No	No	No	No
Scripting/add-on support provided?	No	Yes	Yes	No	Yes	No	No
FILE IMPORT/EXPORT ABILITY							
Are multi-version DWG/DXF import/exports supported?	Yes	Yes	Yes	No	Yes	Yes	Yes
Is XML supported for the CAD graphics?	No	No	No	No	No	No	No
Are Microstation V7 and V8 supported?	No	No	No	No	No	No	No
ASCII coordinate file?	Yes	Yes	Yes	No	Yes	No	No
Are Arcview, ArcInfo Coverage and Shape file transfers supported?	No	No	No	No	No	No	No
Image Files (BMP, JPG, etc.)? Specify.	No	[25]	[25]	DWF Import	[25]	Export DWF	No
FUNCTIONALITY EXTENSIONS (INDICATE AVAILABILITY AND COST)							
Sewer/pipe networks?	No	No	No	No	No	No	No
Hydrology?	No	No	No	No	No	No	No
Road design/road layout?	No	No	No	No	No	No	No
Other?	No	PowerSYMBOLS: \$99	PowerSYMBOLS: \$99	No	PowerSYMBOLS: \$99	PowerSYMBOLS: \$99	No
READER SERVICE NUMBER	17	18	19	20	21	22	23

POB 2004 CAD/Surveying Software Survey

PROGRAM/VERSION	PowerCAD SiteMaster CE	I-SITE Studio 2.4	MicroSurvey CAD 2005 Premium	MicroSurvey CAD 2005 Standard	MicroSurvey inCAD 2005 Premium	MicroSurvey inCAD 2005 Standard	SiteComp Survey
MANUFACTURER	GiveMePower Corp.	I-SITE	MicroSurvey Software Inc.	MicroSurvey Software Inc.	MicroSurvey Software Inc.	MicroSurvey Software Inc.	SiteComp Inc.
WEB ADDRESS	www.givemepower.com	www.site3d.com	www.microsurvey.com	www.microsurvey.com	www.microsurvey.com	www.microsurvey.com	www.sitecomp.net
Price	\$995	\$24,000	\$1,495	\$995	\$1,295	\$895	Call for options
Discounts for multiple copies?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
List types of documentation included with software.	Online User Guide	Online	[27]	[27]	[27]	[27]	[30]
Can the software installation and data be server based?	Yes	No	No	No	No	No	Yes
OPERATING SYSTEMS							
Windows 95/98/ME? (Specify which.)		No	98/ME	98/ME	98/ME	98/ME	All
Windows NT/2000/XP? (Specify which.)		All	NT/2000/XP	NT/2000/XP	NT/2000/XP	NT/2000/XP	All
GDH+ and .NET support?	Yes	No	No	No	[29]	[29]	No
Other: UNIX, Macintosh, Linux, CE, Pocket? (Specify which.)	Windows Mobile 2003	No	No	No	No	No	No
SYSTEM AND PROJECT SETUP							
Project setup assistance or wizard?	Yes	Yes	Yes	Yes	Yes	Yes	No
Can Settings be established for network computers?	No	No	No	No	No	No	Yes
Support for:							
Map projections?	No	Yes	Yes	Yes	Yes	Yes	Yes
Datum transformations?	No	Yes	Yes	Yes	Yes	Yes	Yes
Geoid models?	No	Yes	Yes	Yes	Yes	Yes	Yes
USPCS?	No	N/A	Yes	Yes	Yes	Yes	Yes
Open access to databases?	Yes	No	Yes	Yes	Yes	Yes	Yes
COGO CAPABILITIES							
Do the point objects have intelligence? (See Note A on p. 57)	No	Yes	Yes	Yes	Yes	Yes	Yes
Can points be chosen with selectable snap options?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Is there an external point database?	No	N/A	Yes	Yes	Yes	Yes	No
Are user-definable point groups supported?	Yes	N/A	Yes	Yes	Yes	Yes	Yes
Are multiple, persistent groups supported?	No	N/A	Yes	Yes	Yes	Yes	No
Is point sharing between groups supported?	Yes	N/A	Yes	Yes	Yes	Yes	Yes
Can point ranges be locked to prevent access by others?	No	N/A	Yes	Yes	Yes	Yes	Yes
Do point data, blocks and text rescale when scale changes?	Yes	No	Yes	Yes	Yes	Yes	Yes
Are COGO operations and data editing supported via command line?	Yes	N/A	Yes	Yes	Yes	Yes	Yes
Does the software have batch file capabilities?	No	N/A	Yes	Yes	Yes	Yes	No
TRAVERSE ANALYSIS							
Compass (Bowditch), Transit and Crandall's Adjustment supported?	No	N/A	Yes	Yes	Yes	Yes	Yes
Least squares analysis and adjustment? (2D, 3D or No)	No	N/A	Yes, 2D and 3D	Yes, 2D and 3D	Yes, 2D and 3D	Yes, 2D and 3D	Yes
Least squares analysis and adjustment of networks?	No	N/A	Yes	Yes	Yes	Yes	No
Are reports available?	No	Yes	Yes	Yes	Yes	Yes	Yes
ELECTRONIC FIELD RECORDERS (DATA COLLECTORS)							
Number of data collectors/formats supported? Specify.	[22]	N/A	[28]	[28]	[28]	[28]	TDS, Sokkia
Are GPS recorders supported? If yes, specify whether raw data is supported from the data collector, receiver memory or both.	No	N/A	Yes, coordinates only	Yes, coordinates only	Yes, coordinates only	Yes, coordinates only	No
If GPS receivers are supported, how many brands? (List if desired.)	No	N/A	No	No	No	No	No
Is Face1/Face2 or doubling the angle supported?	No	N/A	Yes	Yes	Yes	Yes	Yes
Automatic symbology and linework supported for upload and download? (Specify upload, download, both or neither.)	No	N/A	Yes	Yes	Yes	Yes	Download
Is GPS construction machine control supported?	No	N/A	No	No	No	No	No
DTM CAPABILITIES							
Can multiple surfaces be open and accessed simultaneously?	No	Yes	Yes	No	Yes	No	Yes
Support TINs that accommodate representation and calculations (such as volumes) of such features as escarpments, mines, tunnels, etc.?	No	Yes	Escarpments and mines	No	Escarpments and mines	No	No
Compute volume to specific elevation or other surface?	No	Yes	Yes	No	Yes	No	Yes
Are contour smoothing algorithms user selectable?	No	Yes	Yes	No	Yes	No	No
Are TIN editing capabilities supported?	No	Yes	Yes	No	Yes	No	Yes
Is there an audit trail to track TIN editing?	No	No	No	No	No	No	No
USGS Digital Elevation Models supported?	No	Yes	Yes	No	Yes	No	No
Soft breaklines supported?	No	Yes	Yes	No	Yes	No	No
Sharing, locking and save as supported for surface management?	No	Yes	Yes	No	Yes	No	Yes
Earthwork take-offs supported?	No	Yes	Yes	No	Yes	No	Yes
Prismoidal based earthworks supported?	No	Yes	Yes	No	Yes	No	Yes
Gridded earthworks methods supported?	No	Yes	Yes	No	Yes	No	No
Section method earthworks supported?	No	Yes	No	No	No	No	No
Automatic watershed or drainage divide computations included?	No	No	Yes	No	Yes	No	No
Surface analysis routines supplied with the software?	No	Yes	Yes	No	Yes	No	Yes
3D surface viewing supported?	Yes	Yes	Yes	No	Yes	No	No
DESIGN CAPABILITIES							
Can alignments be designed or edited?	No	N/A	Yes	No	Yes	No	Yes
Can alignments be drafted or annotated?	No	N/A	Yes	No	Yes	No	Yes
Roadway templates or string theory support?	No	N/A	Yes	No	Yes	No	Available
Is there an external route alignment database?	No	N/A	Yes	No	Yes	No	No
Access alignments within the same project simultaneously?	No	N/A	Yes	No	Yes	No	No
Can profiles and vertical alignments be generated?	No	Yes	Yes	No	Yes	No	Available
Symmetrical and asymmetrical vertical curves supported?	No	Yes	No	No	No	No	Symmetrical, available
Design drafting of storm, sanitary and waterlines supported?	No	No	Yes	No	Yes	No	Available
Parametric design supported?	No	No	No	No	No	No	No
DRAWINGS (SHEETS)							
User defined templates?	Yes	N/A	Yes	Yes	Yes	Yes	Yes
Are templates page size/layout independent? (Text blocks, etc. automatically reposition.)	No	N/A	Yes	Yes	Yes	Yes	No
Dynamic resizing of scalebars and title blocks?	No	N/A	No	No	No	No	No
Dynamic legend? (Automatically includes all used symbols.)	No	N/A	No	No	No	No	No
Dynamic line and curve tables?	No	N/A	No	No	No	No	No
Reference survey data to images by picking reference points?	No	N/A	Yes	Yes	Yes	Yes	No
Automatic clipping for placing annotations, labels and notes?	No	N/A	No	No	No	No	Yes
Can lines be trimmed to a symbol and/or broken and still maintain the true length in the database?	No	N/A	Yes	Yes	Yes	Yes	Yes
Is hatching supported?	Yes	N/A	Yes	Yes	Yes	Yes	Yes
- If yes, can hatch patterns contain non-linear objects such as symbols or blocks?	No	No	No	No	No	No	No
Can points and curvilinear geometry labeling be customized?	No	N/A	Yes	Yes	Yes	Yes	Yes
Associative/dynamic labeling for linework and points supported?	No	N/A	Yes	Yes	Yes	Yes	Yes
Associative/dynamic labeling across multiple drawings?	No	N/A	No	No	No	No	No
CUSTOMIZING ABILITIES							
Can the interface, menus or toolbars be customized?	Yes	No	Yes	Yes	Yes	Yes	Yes
Databases customizable?	No	No	No	No	No	No	No
Scripting/add-on support provided?	Yes	No	LISP and Scripting	LISP and Scripting	LISP and Scripting	LISP and Scripting	No
FILE IMPORT/EXPORT ABILITY							
Are multi-version DWG/DXF import/exports supported?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Is XML supported for the CAD graphics?	No	No	No	No	No	No	Yes
Are Microstation V7 and V8 supported?	No	No	Yes	Yes	Yes	Yes	Yes
ASCII coordinate file?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Are Arcview, ArcInfo Coverage and Shape file transfers supported?	No	No	No	No	No	No	Available
Image Files (BMP, JPG, etc.)? Specify.	[25]	All	BMP, JPG, TIFF	BMP, JPG, TIFF	BMP, JPG, TIFF	BMP, JPG, TIFF	MrSid, BMP, JPG
FUNCTIONALITY EXTENSIONS (INDICATE AVAILABILITY AND COST)							
Sewer/pipe networks?	No	No	No	No	No	No	Available
Hydrology?	No	No	No	No	No	No	No
Road design/road layout?	No	No	No	No	No	No	Available
Other?	PowerSYMBOLS: \$99						
READER SERVICE NUMBER	24	25	26	27	28	29	30

Numbers in brackets refer to notes (see page 57).

POB 2004 CAD/Surveying Software Survey

PROGRAM/VERSION	PC Survey	TPC Desktop Real Estate Edition	TPC Desktop Personal Edition	TPC Desktop Premium Edition	TPC Desktop Professional Edition	Terramodel	ForeSight
MANUFACTURER	Soft-Art	Traverse PC	Traverse PC	Traverse PC	Traverse PC	Trimble Navigation Limited	Tripod Data Systems
WEB ADDRESS	www.pcsurvey.com	www.traverse-pc.com	www.traverse-pc.com	www.traverse-pc.com	www.traverse-pc.com	www.trimble.com	www.tdsurvey.com
Price	\$195 - \$995	\$199 [33]	\$799 [33]	\$1,299 [33]	\$1,799 [33][34]	Varies with module	\$999 - \$2,389
Discounts for multiple copies?	Yes	Yes [35]	Yes [35]	Yes [35]	Yes [35]	Yes	Yes
List types of documentation included with software.	[31]	[36]	[36]	[36]	[36]	[42]	Printed manuals
Can the software installation and data be server based?	Yes	Yes	Yes	Yes	Yes	Yes	No
OPERATING SYSTEMS							
Windows 95/98/ME? (Specify which.)	All	98/ME	98/ME	98/ME	98/ME	95/98/ME	All
Windows NT/2000/XP? (Specify which.)	All	NT4/2000/XP	NT4/2000/XP	NT4/2000/XP	NT4/2000/XP	NT/2000/XP	All
GDI+ and .NET support?		Yes	Yes	Yes	Yes	No	Not required
Other: UNIX, Macintosh, Linux, CE, Pocket? (Specify which.)	No	N/A	N/A	N/A	N/A	No	No
SYSTEM AND PROJECT SETUP							
Project setup assistance or wizard?	Unnecessary	Yes	Yes	Yes	Yes	Yes	Yes
Can Settings be established for network computers?	Yes	Yes	Yes	Yes	Yes	Yes	Not required
Support for:							
Map projections?	Yes	No	No	Yes	Yes	Yes	No
Datum transformations?	Yes	No	No	Yes	Yes	Yes	No
Geoid models?	Yes	No	No	[37]	[37]	Yes	No
USPCS?	Yes	No	No	Yes	Yes	Yes	No
Open access to databases?	No	Yes	Yes	Yes	Yes	Yes	Yes
COGO CAPABILITIES							
Do the point objects have intelligence? (See Note A on p. 57)	Yes	Yes	Yes	Yes	Yes	Yes	[49]
Can points be chosen with selectable snap options?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Is there an external point database?	No	Internal [38]	Internal [38]	Internal [38]	Internal [38]	No	No
Are user-definable point groups supported?	N/A	Yes	Yes	Yes	Yes	Yes	Yes
Are multiple, persistent groups supported?	N/A	Yes	Yes	Yes	Yes	Yes	[50]
Is point sharing between groups supported?	N/A	Yes	Yes	Yes	Yes	No	[50]
Can point ranges be locked to prevent access by others?	No	Yes	Yes	Yes	Yes	No	[51]
Do point data, blocks and text rescale when scale changes?	Yes	No [39]	No [39]	No [39]	No [39]	Yes	[52]
Are COGO operations and data editing supported via command line?	Yes	Auto [40]	Auto [40]	Auto [40]	Auto [40]	Yes	No
Does the software have batch file capabilities?	No	Auto [40]	Auto [40]	Auto [40]	Auto [40]	No	No
TRAVERSE ANALYSIS							
Compass (Bowditch), Transit and Crandall's Adjustment supported?	Yes	No	Yes	Yes	Yes	Yes	[53]
Least squares analysis and adjustment? (2D, 3D or No)	2D	No	No	2D or 3D	2D or 3D	3D	Yes
Least squares analysis and adjustment of networks?	Yes	No	No	No	Yes	Yes	[54]
Are reports available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ELECTRONIC FIELD RECORDERS (DATA COLLECTORS)							
Number of data collectors/formats supported? Specify.	SDR, TDS, SMI	None	Most/8	All/25	All/25	[43]	[55]
Are GPS recorders supported? If yes, specify whether raw data is supported from the data collector, receiver memory or both.	Yes	No	No	Yes	Yes	Yes [44]	[56]
If GPS receivers are supported, how many brands? (List if desired.)	Sokkia, Leica	N/A	N/A	Yes, Garmin	Yes, Garmin	Yes, 6 [45]	[56]
Is Face1/Face2 or doubling the angle supported?	Yes	No	No	Yes	Yes	Yes	Yes
Automatic symbology and linework supported for upload and download? (Specify upload, download, both or neither.)	Yes	No	Yes	Yes	Yes	Both	[57]
Is GPS construction machine control supported?	No	No	No	No	No	Yes	
DTM CAPABILITIES							
Can multiple surfaces be open and accessed simultaneously?	Yes	No	No	Yes	Yes	Yes	Yes
Support TINs that accommodate representation and calculations (such as volumes) of such features as escarpments, mines, tunnels, etc.?	No	No	No	No	Yes	Yes	
Compute volume to specific elevation or other surface?	Yes	No	No	No	Yes	Yes	Yes
Are contour smoothing algorithms user selectable?	Yes	No	No	Yes	Yes	Yes	[58]
Are TIN editing capabilities supported?	Yes	No	No	Yes	Yes	Yes	[59]
Is there an audit trail to track TIN editing?	No	No	No	No	No	No	[59]
USGS Digital Elevation Models supported?	No	No	No	No	No	Yes	No
Soft breaklines supported?	Yes	No	No	Yes	Yes	Yes	[60]
Sharing, locking and save as supported for surface management?	No	No	No	Yes	Yes	Yes	
Earthwork take-offs supported?	Yes	No	No	No	Yes	Yes	[61]
Prismoidal based earthworks supported?	Yes	No	No	No	Yes	Yes	
Gridded earthworks methods supported?	Yes	No	No	No	No	Yes	
Section method earthworks supported?	Yes	No	No	No	No	Yes	Yes
Automatic watershed or drainage divide computations included?	No	No	No	No	No	Yes	No
Surface analysis routines supplied with the software?	No	No	No	Yes	Yes	Yes	[62]
3D surface viewing supported?	Yes	No	No	No	No	Yes	Yes
DESIGN CAPABILITIES							
Can alignments be designed or edited?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Can alignments be drafted or annotated?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Roadway templates or string theory support?	Yes	N/A	N/A	N/A	N/A	Yes	Templates
Is there an external route alignment database?	No	Internal [38]	Internal [38]	Internal [38]	Internal [38]	No	No
Access alignments within the same project simultaneously?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Can profiles and vertical alignments be generated?	Yes	No	No	No	Yes	Yes	Yes
Symmetrical and asymmetrical vertical curves supported?	Yes	No	No	No	Yes	Yes	[63]
Design drafting of storm, sanitary and waterlines supported?	No	No	No	No	No	Yes	[64]
Parametric design supported?	No	No	No	No	No	Yes	
DRAWINGS (SHEETS)							
User defined templates?	Yes	No	Yes	Yes	Yes	Yes	Yes
Are templates page size/layout independent? (Text blocks, etc. automatically reposition.)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dynamic resizing of scalebars and title blocks?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dynamic legend? (Automatically includes all used symbols.)	No	No	Yes	Yes	Yes	No	Yes
Dynamic line and curve tables?	Yes	No	No	Yes	Yes	Yes	Yes
Reference survey data to images by picking reference points?	N/A	Yes	Yes	Yes	Yes	Yes	No
Automatic clipping for placing annotations, labels and notes?	Yes	Yes	Yes	Yes	Yes	No	Yes
Can lines be trimmed to a symbol and/or broken and still maintain the true length in the database?	[32]	Yes	Yes	Yes	Yes	Yes	Yes
Is hatching supported?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
- If yes, can hatch patterns contain non-linear objects such as symbols or blocks?	No	Yes	Yes	Yes	Yes	No	Yes
Can points and curvilinear geometry labeling be customized?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Associative/dynamic labeling for linework and points supported?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Associative/dynamic labeling across multiple drawings?	Yes	Yes	Yes	Yes	Yes	Yes	3
CUSTOMIZING ABILITIES							
Can the interface, menus or toolbars be customized?	No	Yes	Yes	Yes	Yes	Yes	No
Databases customizable?	Yes	Yes	Yes	Yes	Yes	Yes	No
Scripting/add-on support provided?	No	No	No	No	No	Yes	No
FILE IMPORT/EXPORT ABILITY							
Are multi-version DWG/DXF import/exports supported?	Yes	No	DXF	DXF/DWG	DXF/DWG	Yes	Yes
Is XML supported for the CAD graphics?	No	No	No	No	No	Yes	No
Are Microstation V7 and V8 supported?	No	No	No	No	No	V7	No
ASCII coordinate file?	Yes	No	Yes	Yes	Yes	Yes	Yes
Are Arcview, ArcInfo Coverage and Shape file transfers supported?	Yes	No	Yes	Yes	Yes	Yes	No
Image Files (BMP, JPG, etc.)? Specify.	Yes	Numerous [41]	Numerous [41]	Numerous [41]	Numerous [41]	[46]	
FUNCTIONALITY EXTENSIONS (INDICATE AVAILABILITY AND COST)							
Sewer/pipe networks?	No	No	No	No	No	Yes [47]	No
Hydrology?	No	No	No	No	No	Yes [47]	No
Road design/road layout?	Yes	No	No	No	No	Yes [47]	Yes, \$499
Other?		No	No	No	No	Yes [48]	Yes, varied
READER SERVICE NUMBER	31	32	33	34	35	36	37

2004 CAD/Surveying Software Survey Notes

POB does not assume responsibility for any errors or omissions that may be contained within the survey.

Note A: Intelligence refers to enhanced point properties such as symbol attachment that places, moves, rotates or deletes symbols as points are manipulated; pixel-based point symbol sizing; pixel-based point attribute sizing; automatic lat/long attached to point coordinates; the ability to alter a lat/long and the point coordinates recompute and relocate the new point; etc.

- Getting Started guide, electronic documentation and integral help system.
- Through Land Desktop 2005, which is required to operate Autodesk Civil Design and Autodesk Survey.
- Carlson, Leica, Trimble, TDS, Sokkia, and many others.
- Yes, raw data from the data collector.
- Through Survey, which is an add-on to Land Desktop 2005.
- Through the use of Autodesk Raster Design.
- Survey has a Survey Command Language that is scriptable, called batch files. AutoCAD portion of Land Desktop is scriptable for creating AutoCAD primitives. VBA automation is also supported.
- Autodesk Civil Design.
- NT (SP6a or later)/2000/XP.
- Through Civil Design 2005, which is an add-on to Land Desktop 2005.
- Shape and coverages.
- Supported with the addition of Autodesk CAICE's Visual Construction module.
- Supported with the addition of Autodesk CAICE's Visual Roads module.
- Online reference manual, help, tutorial.
- Leica, Topcon, TDS, SDMS, SMI, Wild, Sokkia Zeiss, Geodimeter, Nikon and others.
- Hard copy manual and PDF.
- DAT/EM Capture for AutoCAD or for MicroStation collects 3D image features directly from a stereoplotter into an AutoCAD or MicroStation drawing file. DAT/EM Capture includes many mapping-specific tools and Map/Editor, which is a collection of useful automated editing tools. Capture for AutoCAD or for MicroStation can be run with Super/Imposition, which is included with the Summit Evolution stereoplotter, and is sold separately for other compatible stereoplotter types. Features from the AutoCAD or MicroStation file are optically superimposed over the stereoplotters imagery for immediate feature verification.
- Hardcopy manual and CD-ROM.
- NT/2000/XP Home and Professional.
- Smoothed Surface or B-Splined.
- Including XP Tablet Edition.
- Direct laser measurement and ASCII import.
- DAT/EM Map/Editor for AutoCAD or for MicroStation is a full 3D editing package for AutoCAD DWG files. It has many time saving tools such as global block changes, clipping inside closed polylines and file size reduction. Map/Editor contains both interactive and batch mode commands to accommodate every editing need, from running a single command on a single element to running many commands across multiple files. Map/Editor for AutoCAD is an ADS application that works completely within AutoCAD release 2000+/XP. Map/Editor for MicroStation is an MDL application that works completely within MicroStation V8 and J with Widows 2000+/XP.
- Summit Evolution takes 3D digital mapping and photogrammetry to a new level with its powerful combination of digital stereoplotter CAD/GIS interface, video superimposition and automated feature editing. Image features from a Summit Evolution project are digitized directly into AutoCAD, MicroStation or ArcGIS files. DAT/EM Super/Imposition system is integrated into every Summit Evolutin system, as well as orientation procedures, coordinate transformation, automated mapping-related tools and Map/Editor software. Summit Evolutions projects may be created from a wide range of imagery, including scanned film and digital aerial, close range, digital sensor, orthophoto, synthetic aperture radar and satellite sources. It can also import projects from 3rd-party systems, and bring them into immediate production as Summit Evolution projects. Projects that are not already 3D can use the Follow Terrain tool to automate and produce 3D results.
- Import JPG, BMP, PNG, RLC, TIFF and GeoTIFF Export WMF BMP and DWF.
- Windows Mobile including: CE, CE .NET, PPC and HPC.

- Print manuals, movies, help.
- TDS, SMI, SDR, RW5, FieldGenius.
- Same as AutoCAD R14-2005.
- Context sensitive help and tutorials.
- Tutorial and reference manual.
- Object oriented connected lines eliminate the need for this.
- Prices subject to change without notice. Special pricing is available through web specials and monthly promotions.
- Budget plan pricing available through our Private Surveyor Plan (PSP).
- Network and site licenses are also available.
- Getting Started, Learning Guide, Advanced Learning Guide, online help.
- Standard and user-defined ellipses.
- Survey data is the most important thing to a land surveyor and an integral part of any survey. All point data is available all the time in the Traverse PC Visible Data environment and no external database is necessary. This feature allows surveyors to have all the data available all the time rather than forcing them to look through a tunnel at one point at a time.
- With Traverse PC, users can change the scale at any time during the drawing process without affecting text sizes.
- Dynamic drawing elements automatically reflect changes in the data, automating and replacing the command line and the batch file process.
- BMP, GIF, TIF, JPG, ICO, PNG, EMF, WMF.
- User's Guide, all other reference material on CD.
- A wide range of data formats are supported to leading data collection platforms including: Trimble Job, DC, TDS, ASCII, TXT, SDR, Zeiss, Geodimeter, Nikon, SMI.
- RTK data is supported from the data collectors but no raw GPS data processing is available in the office software.
- Trimble, Thales (Ashtech), Topcon (TPS, GP), Novatel, Sokkia, Leica.
- BMP, DCX, DIB, GIF, JPEG, PCX, PICT, PSD, TIFF, TGA, WMF and WPG.
- Contact Trimble dealer for pricing.
- Additional extensions include: Automated Sheet Assembly and Production Terramodal Visualizer (contact Trimble dealer for pricing).
- Points are an integral part of the program and are handled as a surveyor would expect points to be handled.
- ForeSight supports layering and multiple selection methods. Points that share specific attributes can be sorted on layers or easily selected via the points description. Points are also grouped via sets.
- ForeSight is a single user environment. Points are protected from accidental modification or deletion.
- ForeSight supports dynamic scaling for sheet layout. Objects can be scaled appropriately and independently.
- Traverse rule (Bowditch) and angle balancing.
- ForeSight supports networks of redundant measurements to all points using total stations.
- TDS, SDR, Nikon, all others via ASCII. ForeSight supports other raw data and data file conversions.
- ForeSight supports GPS data collected by TDS data collectors.
- ForeSights supports the TDS Job file format, which allows native support for lines, points and alignments.
- ForeSight supports smoothing of contour lines. The option can be turned on or off.
- TIN is modified via the use of breaklines.
- ForeSight supports breaklines, boundaries and exclusion areas.
- ForeSight supports digitizers.
- ForeSight supports editing, viewing and 3D views of DTM surfaces.
- Vertical curves are supported.
- ForeSight supports grading design of lines. It does not design pipe networks.

Participating Companies

Autodesk

www.autodesk.com

Bentley Systems Inc.

www.bentley.com

Carlson Software

www.carlsonsw.com

DAT/EM Systems

International

www.datem.com

Eagle Point

www.eaglepoint.com

GiveMePower Corp.

www.givemepower.com

I-SiTE

www.isite3d.com

MicroSurvey Software Inc.

www.microsurvey.com

SiteComp Inc.

www.sitecomp.net

Soft-Art

www.pcsurvey.com

Traverse PC

www.traverse-pc.com

Trimble Navigation Limited

www.trimble.com

Tripod Data Systems

www.tdsway.com