# Top Myths About Carlson Software

I’m asked many of these questions on a fairly regular basis and thought it was time to look into some of them and provide the fullest answer I could. Where possible, I’ve researched and found the answer myself. In a few cases I had to rely on Carlson representatives to supply the answers.

**Myth #1  Autodesk stopped working with Carlson in February 2008.**

***False.*** In February 2008 Carlson simply stopped being a reseller of Autodesk products.

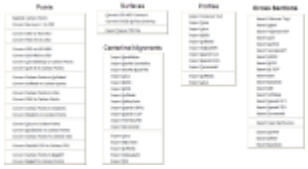
In other words, if you want to run Carlson on top of AutoCAD, Map, Land Desktop or Civil 3D, you’ll have to buy it from an Autodesk reseller instead of from Carlson. Carlson remains part of Autodesk’s Developer Network (ADN) and is listed on Autodesk’s partner page. The ADN designation provides tools to developers to help build their products on top of Autodesk products. As a point of comparison, Eagle Point Software is also a development partner of Autodesk.

**Myth #2  Carlson is owned by Autodesk or, (“bonus”-myth) Carlson will be sold to another, larger software company.**

***False.*** Carlson Software was started in 1983 by Bruce Carlson and remains a private, family-owned business. No one can absolutely guarantee the future, but I have heard Bruce Carlson speak many times about the value he places on competition in the marketplace and his belief that the consolidation of many other

software companies has come at the expense of the end-user of the software.

Selling out? I don't see it. But partnering? Yes. Carlson places a great deal of value on working with any company who wants to work with them.  Click on the image below to see the many different programs Carlson imports data from and exports data to.



**Myth #3  Because Carlson Software uses basic AutoCAD entities instead of "intelligent objects", it does not have 3D or dynamic abilities.**

***False.*** Carlson Software uses basic AutoCAD entities so that all drawings produced by their programs can be easily shared with any other DWG- or DXF-compatible program, regardless of version. Carlson has figured out a way to have the dynamic reactions work on basic entities such as lines, polylines and text. One example would be having profiles and storm drain structures automatically adjust their elevation as a centerline alignment is edited and changed along a surface. And, all of this happens without having to fight the dreaded "proxy objects"!

**Myth #4  Because Carlson now works on top of Intellicad, it no longer works on top of AutoCAD-based products.**

***False.*** Carlson Software has always worked on top of AutoCAD-based products and, if you listen to Bruce Carlson discuss the issue, hopes to always continue doing so.

In April 2008, Carlson began giving their customers an

IntelliCAD-based “stand-alone” copy of their software with every purchase of Carlson Civil, Survey, Hydrology, GIS, TakeOff and other programs. (IntelliCAD is widely described as an “AutoCAD-clone”. You can read more HERE.). This, again, gives more power and options to Carlson users because it allows the user to choose whether to run Carlson on top of practically any version of AutoCAD, AutoCAD Map, Land Desktop, Civil 3D or on top of IntelliCAD.

Also, with their Sight Survey program (launched in 2008), Carlson created their first program to run on top of MicroStation.

At last year’s 25th Anniversary users’ conference, Bruce Carlson stated that Carlson hopes to have their software working on 4 different platforms within the next few years: IntelliCAD, AutoCAD, Microstation and ESRI.

**Myth #5  Carlson doesn’t have CIVIL “BIM”-ability.**

First, the premise of the statement is incorrect. BIM (Building Information Modeling), by definition, has no relationship to the civil engineering industry. It is architectural in scope and refers to actual buildings and facilities.

However, for several reasons there has been a push to re-define the term BIM to apply to Civil Engineering (in general) and Civil 3D (in particular). When discussing BIM in the context of Civil Engineering, it simply means that a software program has the ability to:

- design to specific criteria
- show a great visual representation of all the components of your project in 3D view and

- dynamically reflect changes to your project.

Can Carlson Software do all that? Absolutely.

Carlson can, and has been able to, produce true 3D models of civil/survey/utility project sites for years. These models can be viewed in 3D and quantities are dynamically updated whenever the model changes.

Because Carlson has strongly served the U.S. mining industry for over 20 years, they long ago developed features for grading, material quantity calculations and surface viewing and visualization to meet the demands of this industry. In fact, the civil industry pales in comparison to the mining industry in regard to these demands.

**Myth #6  Carlson has only been developing civil software since 2007.**

***False.*** To make sure I got this right, I asked the folks at Carlson for help and received the following in response:

> *Bruce Carlson began developing his software for the mining industry in 1983. By 1984, the program was able to extract profiles and cross-sections, calculate volumes and design road profiles. 3D Surface viewing abilities have been available in Carlson Software since the early 1990's.*
>
> *Carlson developed the stand-alone Carlson Survey program in 1996 and in 1999 Autodesk contracted to market and sell a version of it called "Autodesk Field Survey". Autodesk did away with Field Survey after a few years and Carlson migrated most users over to Carlson Survey where it has grown to become a favorite of surveyors.*
>
> *Various civil features were organized as modules in a package*

> *called SurvCADD that was released in 1989. The civil engineering routines were renamed as Carlson Civil in 2006.*
>
> *The first Hydrology module for Carlson was released in 1993. It was re-packaged as Carlson Hydrology in 2006.*

Carlson Hydrology was the first and, I believe, is still the only H & H software to function entirely within the DWG-environment. If I learn differently after this document is made public, I will post a correction in this space.

**Myth #7  Carlson may have found a spot in some surveying firms, but larger firms aren't using it.**

***False.***  Again, I requested generic customer data from Carlson and was told that,

> *Among our 30,000+ users, there are many DOT agencies and also ENR Top 50 firms using Carlson Software. Carlson Software is very experienced in working with large firms, due to their mining background. All 20 of the top 20 U.S. coal companies use Carlson Software at some level, most being standardized on the software for mine planning and design.*

As far as my personal experience, I've only been working with Carlson Software for a couple of years and companies I work with tend to have fewer than 25 users. I can personally say that I have seen or know of a few large firms who have moved to or are in the process of moving to Carlson.

These do not include the many customers of mine who have recently let their software contracts lapse, purchased one or more seats of Carlson and have told me they plan to purchase and

implement Carlson when the economy rebounds.

**Myth #8  Carlson Software does not support the full project lifecycle – Concept to Completion.**

***False.*** I think Carlson probably has the project lifecycle covered better than any other software firm in existence.

Carlson Software has data collection, survey processing, civil design, hydrology, GIS, construction material takeoff and machine control software in their stable.

**Myth #9  Carlson Software doesn't have the support system in place to adequately support its users.**

***False.*** Carlson provides free technical support directly out of their Maysville, KY and Boston, MA offices. Again, I have heard Bruce Carlson say that keeping tech support free and in-house ensures that their software will remain easy-to-use and that the company will always be responsive to the wishes of their customers.

If a bug or other problem with the software is encountered and logged into Carlson's tech support department, the corrected files will be emailed to you as soon as the programmers develop the fix. Periodically a collection of the updated files will be released to all users as a maintenance patch. These updates are available to all users whether or not they are under a maintenance contract with Carlson.

I received this testimonial from a customer on March 13, 2009.

*"Recently I found that the Time of Concentration input boxes*

*were inadequate under the hydrology portion of Carlson Civil Suite so I emailed a description of the problem to them. I was very impressed to get a phone call the same day. They discussed the problem with me and had a revised program update to me in under a week. I've been emailing Autodesk for over a year on problems with Civil 3D and never heard a peep. Needless to say I'm very happy with the customer service I have received from Carlson thus far."*

*David Farina, CCAD Engineering*
*– Greenville, SC*

Other examples of Carlson's responsiveness:

Example 1: The ability of the Carlson Civil & Hydrology "Design Bench Pond" command to have multiple interior benches was added to the software after an attendee at a workshop I held in Raleigh, NC in December 2007 requested it.

Example 2: In the LotNet command, the prompts asking users to specify minimum and maximum building offset distances for lot layout generated too many tech support calls. In the next release, the prompts were re-worded to make the intent more clear.

Example 3: The LotNet command now allows you to designate "sub-areas" (such as wetlands, stream buffers, poor soils, etc.) to be excluded from your area to be subdivided during the lot layout routine. This request came from a prospect during a demonstration in Raleigh.

Example 4: I understand that Carlson's tech support team was bombarded by requests to change the default cul-de-sac location from the "Start" of the road to the "End" of the road in the RoadNet command. This was changed in the 2009 release.

Example 5: The ability to draw multiple building pads inside lots during the lot layout routine in LotNet was requested by a firm out of Savannah, GA.

**Myth #10  Carlson Software can't share data with Land Desktop or Civil 3D.**

***False.*** Carlson has many tools in their software to import civil/survey data from and export data to Land Desktop and Civil 3D. It can be said that Carlson Software works with Civil 3D data as well as Land Desktop or any other civil/survey software and also works with Land Desktop data as well as Civil 3D or any other software.

Carlson has LandXML import and export functionality, can directly convert Land Desktop points and contours into Carlson points and contours and also imports a Civil 3D surface as elevated contours.

Regardless of the civil/survey software being used, LandXML is the best mechanism to import/export a surface model because it maintains the TIN lines of the surface.

**Myth #11  To be continued.**

If anyone thinks of other question(s) they'd like to supply, please email me HERE. I'm open to suggestions and don't mind expanding beyond 10 Myths.

Originally posted on **Carlson Connection** by Jennifer Dibona

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# Welcome!

Thanks for taking the time to visit us at Carlson Connection.

The site is a little bare right now, but keep checking back. We hope to make it an active community with lots of good information and discussion.

If  you'd like to be a Contributor to the site, please **email me here**.

Originally posted on **Carlson Connection** by Jennifer Dibona

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# Welcome from Carlson Software

Carlson Software would like to take this opportunity to welcome you to the Carlson Connection forum.  Thanks to the invaluable input made by Jennifer and Felicia, they are able to offer an all-access pass to the world of Carlson Software users.

Here you will find Carlson users, consultants and Carlson team members available to answer your questions and help you find solutions to your software needs.

Please visit the site often and let us know what you'd like to hear from us.

Scott Griffin

National Sales Director

904-292-1607 Office

Originally posted on **Carlson Connection** by Scott Griffin

# That CAD Girl – March Newsletter

Our March Newsletter can be downloaded HERE

# Is IntelliCAD&#0174 A Good Alternative?

Carlson Software now includes a copy of the IntelliCAD engine with each copy of their software so that users
who have planned to install Carlson on top of their AutoCAD&#0174-based program can try it out, do a comparison and judge for
themselves whether it is a good option for their office. You can see the
history, a comparison to AutoCAD and a 5-minute video demonstration of IntelliCAD by following the links.

I have been told that the current IntelliCAD platform (version 6.4) contains approximately 70% of the functionality of AutoCAD. Also, some commands currently run slower than in AutoCAD and some will run faster than in AutoCAD. The next major release will be IntelliCAD 7 which will have ObjectARX type abilities and will run faster.

**For current AutoCAD users who dive into every new feature or**

**push customization to its limits…**
I doubt you'd be happy with the IntelliCAD version at this time because some of those commands are missing or have legacy behavior.

**For current AutoCAD users not as invested in the bells and whistles…**
IntelliCAD will probably be a fantastic, cost effective alternative to your AutoCAD.

**The ideal situation(s) for IntelliCAD?**

- Offices currently using AutoCAD LT as a "gap-filler" instead of more costly CAD licenses. Why? Because IntelliCAD supports
  LISP files, 3D data, XREFs, Images and several other AutoCAD functions that are not included in AutoCAD LT
- Survey/inspection field crews using an IntelliCAD version on laptops to be taken out of the office
- Offices needing a low-cost CAD option for project managers
- Offices needing short-term CAD licenses for summer interns

Visit our IntelliCAD with Carlson software page and our More About IntelliCAD page to learn more.

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# The Case for Online Training

With the economy what it is and everyone trying to get as much bang for their buck as possible, I'm finding that online training for your CAD software programs is an increasingly popular and cost effective option. Although this post describes

my personal approach and may be different considering your trainer, hopefully it will answer some of your questions about online training and will encourage you to give it a try.

**How does it work?**

There are several online services that trainers may use for online training. WebEx, GoToMeeting and GoToWebinar are all very commonly used and popular. My preference is GoToMeeting and GoToWebinar as they have a very low footprint on your computer and are simple to use. When first entering an online meeting, a small installation of the program occurs allowing you to view and interact with the presenter's computer.

GoToMeeting is smaller scale and better for personalized training. GoToWebinar can handle up to 1,000 "attendees" and is typically used for presentation or demonstration to a large group.

Some of the online meeting services are free, but most require a monthly fee. The fee is paid by the organizer who then has the ability to schedule meetings/webinars in advance or "Meet Now" for meetings on the fly. Your organizer will either email you a link to the meeting site or can tell you the link on the phone. Each meeting has a unique "Meeting ID" that you will enter at the main page.

GoToMeeting is typically used for standard training where more than one person may need to show their screen and/or be given control of the mouse and keyboard. This interaction can take place in a variety of ways. When in a meeting, anyone can be given (and must accept) the "Presenter" role which allows others to view their computer. And, even though the Presenter always has priority, control of the mouse movement and keyboard entry may be granted to others in the meeting. This allows someone else to work on my computer remotely.

The audio portion of the training usually takes place by calling in on a conference call line supplied by GoToMeeting. VOIP (Voice Over Internet Protocol) is also available allowing you to use your computer's speakers and microphone but it is not recommended because of quality.

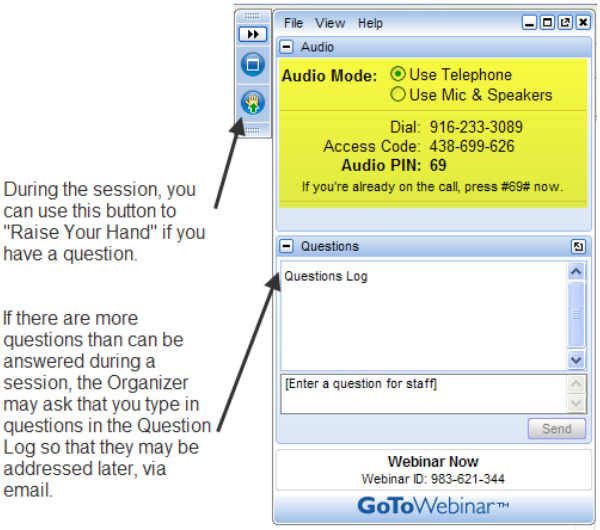
GoToWebinar is used for larger scale demonstration and presentations and can accommodate up to 1,000 Attendees. Online Webinars are generally structured to have one or more Presenters making the presentation.

Like GoToMeeting, the audio portion of GoToWebinar usually takes place by calling in on a conference call line supplied by GoToWebinar. However, in a Webinar setting, the Attendees are muted automatically by the Presenter so that everyone isn't blessed with the sound of crinkling potato chip bags and elevator music when someone puts the call on hold! The Presenter has the ability to un-mute one or more Attendees as needed. The audio of all Attendees is managed by the Presenter by having each Attendee enter a unique "Audio PIN" upon arrival.

GoToWebinar has 2 ways to ask and respond to questions from Attendees. The Control Panel has a "Raise Your Hand" button that notifies the Presenter there is a question. Depending on time constraints, the Presenter may decide to un-mute and answer the question during the online session. If there are more questions than can be answered during a session, the Organizer may ask that you type in questions in the "Questions Log" so that they may be addressed at a later time.

**Pros and Cons**

I've put together what I consider to be the Pros and Cons of online training for CAD Software programs.




## Pros

- Can eliminate travel time and expenses
- Very cost effective option for customized one-on-one training
- Allows for personalized, absolutely customized training because it's normally one on one.
- Can't find a local trainer? No problem. Felicia Provencal can train you from Hawai'i – although you may want to go to her!
- Can be set up within minutes if there is a pressing technical support issue or project that suddenly comes up.
- Can be scheduled in shorter blocks of time – one of the best ways to make sure you retain what you are taught. I like to schedule 2 hours maximum per session.
- Shorter blocks of time allow for easy customization of training topics from one session to the next. If more time is needed on certain features, it's easy to squeeze in another 2 hour session.
- It IS interactive!
- All sessions can be recorded and played back at your convenience for a refresher

**Cons**

- Some people are more comfortable sitting beside and working directly with the trainer
- It’s less interactive than hands-on, in person training.
- For hands on training and depending on the material being covered, it may not work as well if you have several folks needing training at one time.
- Requires a high-speed connection and a telephone headset allowing two hands on keyboard. A speakerphone can be used as long as feedback doesn’t become an issue.

**Real World Example**

I recently worked with a client from out of state. He is a grading contractor who thought he needed Carlson TakeOff training but, after some discussion, realized training in basic CAD (IntelliCAD) needed to come first and then TakeOff training.

The initial proposal was for me to travel there and spend 3-4 days training this client plus a second person (a competitor, in this case) who needed the same training. Both of them decided to give online training a try.

We scheduled online training for every morning one week. I worked with one from 7:30 to 9:30 am and then with the other from 10:30 – 12:30 pm. After the 3rd day, we had covered so much material that one asked to skip the next day so he could work with it himself and apply what he’d learned so far.

We ended up skipping two days. By the time we met again, he’d worked with it enough and become so much more proficient with the basic CAD operation that we were able to fast-forward

through the next couple sessions and started working on his current project. Another subsequent session was cancelled because the rain finally stopped!

And then a few days later, he needed to get his project finished and out to bid. So, after our first session one morning, we set up another session at 4:00 that afternoon and worked until almost 7:00 that evening.

Both customers ended up very happy with the amount of material we covered and where they were with the software when we wrapped up our regular training. They still have the video recordings of the training for their reference to go back to when needed. In the end, the cost was almost the exact same as it would have been had I fulfilled the original proposal but they both learned and retained much more because the training was customized and personalized to their specific jobs.

Like to know more?
If you'd like to discuss online training for yourself or your group, please call 919.417.8351 or email us at ContactUs@thatcadgirl.com.

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# Top Ten Benefits of Carlson Software

1. **Gives Users Platform Choice**
   Carlson Software is built on both AutoCAD® and IntelliCAD®, allowing its users to choose their CAD platform. The software can be run on AutoCAD, AutoCAD

Map®, Land Desktop® or Civil 3d® for versions as far back as those built on AutoCAD 2000. The IntelliCAD that is included for Free is a virtual clone of AutoCAD that works natively in DWG format files (no need for import, export or conversion).

2. **Goes from Concept to Completion**
   From data collection, to design and drafting, to estimating, through stakeout, to machine control, you'll find complete, interactive software solutions with Carlson, therefore allowing you to skip rework and data conversions.
3. **Provides Advanced Technology & Innovation**
   Carlson provides industry-leading breakthrough features across land surveying, civil engineering, construction and mining to enable its users to do more, do it better and in less time.
4. **Enables Dynamic 3D Design Using Standard Drawing Entities**
   A unique approach that gives Carlson users all the power they need for automatic or by-command updates and still allows for regular drafting on the entities plus seamless sharing of drawings with other design professionals.
5. **Works For and With Its Customers**
   To us at Carlson, success is measured in the quality of our products and the satisfaction of the individuals and companies that use them. Customer input leads directly to new state-of-the-art features.
6. **Believes in Independence**
   Carlson Software's independence fosters both our creativity and innovation and that of our users. We are free to focus on our customers to provide better, constantly improved software that "does more."
7. **Provides Full Data Compatibility**
   Carlson's product line provides full data interoperability through the use of dozens of built-in drivers, including

full support of the industry standard LandXML format for civil data exchange.

8. **Gives Free Technical Support**
   Get support from Carlson via phone, email, discussion groups and webcasts. There is no limit on the number of support calls and no product retirement. We service all versions of all of our products.
9. **Has World-Class Training Options**
   Software is an investment and you can learn how to best put it to work for you at Carlson College. Attendees get personal one-on-one attention – it’s a hands-on learning experience.
10. **Allows Choice of Maintenance as Needed**
    Each new product line at Carlson Software provides new customer-driven features. Carlson customers are allowed to choose to upgrade based solely on the merits of the software’s new features. There is no retirement of software.