

Carlson Software: Student Version

Answering a need that's been out there for some time, Carlson has recently announced the availability of a "Student Version" of their products.

From the announcement in the American Surveyor magazine:

Carlson Software is offering civil engineering, land surveying and mining students the option of purchasing their own software on which to learn and work at home for \$99 for a full academic year. This program is available for fulltime students.

The software that Carlson is offering for this program includes the following:

- *Carlson Civil Suite – Carlson Survey, Carlson Civil, Carlson Hydrology and Carlson GIS in one powerful package.*
- *Carlson Survey – now with C&G Survey included is the ultimate office survey software*
- *Carlson Takeoff – provides fast and accurate CAD-based estimating, plus essential quantity and quality controls*
- *Carlson Mining – the software choice of the U.S. coal mining industry in Underground, Surface and Geology modules*

To apply for your Student Version of Carlson Software, you must complete this application and submit it online. Lauren Brown, the Academics Coordinator for Carlson Software, will contact you to complete your purchase.

Carlson Software: In the Classroom

Did you know that there are almost 200 colleges and universities currently participating in Carlson's Academics Program?

Carlson works simply and simply works – making it the ideal CAD-based software program to learn while in school. Why spend time fighting the peculiarities of a software program when Carlson, rightly, allows students to concentrate on learning the concepts essential to their chosen Surveying, Engineering, Construction or Mining fields?

Learning to use Carlson Software helps improve students' chances to get jobs after graduation and makes it possible for them to complete projects on their own both during school and after. Because Carlson includes a FREE copy of IntelliCAD with every Carlson license, learning institutions can also use Carlson with IntelliCAD for basic CAD training in other programs such as general design, architectural & mechanical design and many others.

For an annual fee of \$650, Carlson Software provides **unlimited** desktop licensing to qualified colleges and universities. Carlson Software with IntelliCAD allows institutions to stay within their budget while still providing their technical students with the tools they need to be competent and competitive in the marketplace.

Interested in receiving your first year for FREE?

Contact Lauren Brown, Carlson's Academic Coordinator, at

606.564.5028 and let her know you heard about this offer from "That CAD Girl".

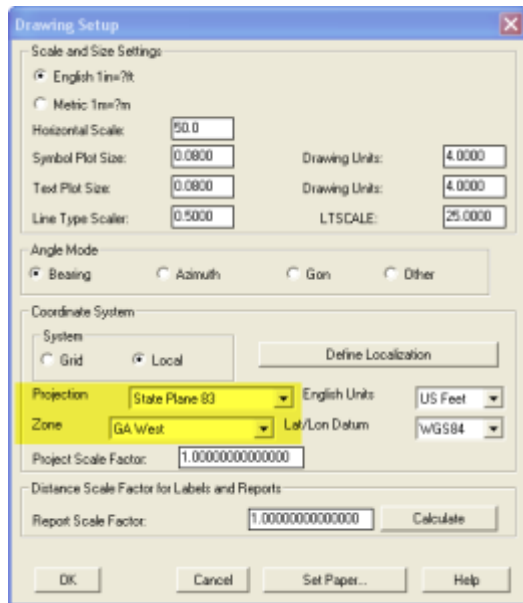
That CAD Girl is working with Carlson to schedule "Train the Trainer" events for the Summer of 2010. These hands-on, multi-day training events will assist classroom instructors with development of lesson plans and exercises. Events are tentatively being planned for Eastern Tennessee, Ohio, Florida and Oregon. Please contact us at 919.417.8351 or ContactUs@thatcadgirl.com to request additional locales.

Export IntelliCAD or AutoCAD DWG files to Google Earth

I've recently started using a very cool feature in Carlson Software. The bad thing... it was in the 2009 version and I didn't even realize it!

I had no idea exporting our DWG files from IntelliCAD or AutoCAD out to Google Earth was so easy.

1. Download and install Google Earth. You can download it here: <http://earth.google.com/>
2. Open any one of your project DWG files that has been positioned at its correct state plane coordinate system.
3. In Carlson, go to Settings -> Drawing Setup and then select the correct **Projection** and correct **Zone** for the project site. If you're not sure of the **Projection**, try using "State Plane 83". This will work for most systems.



4. Next, go to File → Polyline File → Write Polyline File. When prompted for “Polyline File Format”, type “G” for Google. You will be prompted to specify a new filename and save location for a “Google Earth File to Write (.kml)”.
5. You will then be prompted to select the entities that are to be exported out to the .kml file and viewed in Google Earth. After selecting the entities, press Enter. For this exercise, we only want to see the drawing entities in 2D, so press “N” for “No” when prompted to “Use elevation from drawing in Google Earth [Yes/<No>]?”
6. Finally, you are then prompted “Would you like to display the file in Google Earth now [<Yes>/No]?”. Press “Y” for “Yes”. Google Earth should automatically launch and zoom into the project location.

In the example shown below and pointed out with arrows, notice how closely the new roads and designed turn lanes match up to the existing roadway. Also, you can see the designed graded slopes perfectly avoiding the tank that is to be preserved during construction.

Not too shabby...

This feature is available in all of the Carlson Desktop

products: Carlson Civil, Survey, Hydrology, Construction and TakeOff.

Look for a future post on bringing Google Earth surface data into Carlson Software. Hint: It's easy too!

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

PDF Conversion in Carlson 2010

With more construction bid sets being issued in Portable Document Format (PDF), more companies find themselves in the position of needing to generate estimating and construction data from these files. Carlson Software now provides tools to import PDF files into a drawing as either an image or as CAD linework. These tools are available exclusively through Carlson Takeoff 2010 and the new Carlson Construction 2010.

To import a PDF file into your CAD drawing, go to the Tools pull-down menu, then choose Import/Export, then choose Import PDF. You will be prompted to select whether you want the file imported as a background image or as linework. If you choose the linework option, it will automatically convert the elements of the PDF image into separate polylines. Please note, since this is an automatic conversion, it may take a while, so be patient as it processes.

Once the polylines have been brought into the drawing, you can use the standard clean-up tools to assign elevation information to these polylines. These tools can elevate polylines representing contours (single elevations) as well as those representing breaklines (varying elevations). This can be done with most of the Carlson desktop software modules including

Takeoff, Construction, Survey, and Civil.

Once the polylines have been updated with the elevation information, they can be used to create surface models for design, estimating, staking, or machine control. This procedure can literally save hours of time that used to be spent manually recreating the information released as paper drawings or PDF files. Digitizing may have become a thing of the past!

Originally posted on **Carlson Connection** by Felicia Provencal

Carlson End of Year Pricing Specials

Through the end of 2009, Carlson Software is offering special discounts on their Civil Suite and TakeOff office software and SurvCE data collection software.

- Carlson Civil Suite – \$ 2,500 (Regularly \$ 3,500)
- Carlson TakeOff – \$ 7,200 (Regularly \$ 9,000)
- Carlson SurvCE – 50% off with TopSurv or TDS trade-in (Prices vary according to configuration)

[Click here to download an advertisement detailing this offer](#)

That CAD Girl offers additional discounts on Civil Suite, Civil, Survey, Hydrology, GIS and TakeOff. We also include one FREE hour of online training with any Carlson Software purchase.

[Click here for a complete list of Carlson pricing.](#)

Carlson 2010 Products Are Here

Carlson released their long-awaited 2010 programs early last week. If you are running these programs on top of an AutoCAD-based program or IntelliCAD, you can download a full install of 2010 [here](#). Versions of Carlson 2010 with Embedded AutoCAD will be released at a later date.

This version offers support for 64-bit operating systems, Windows 7, and AutoCAD® 2010. You can view the complete list of updated features [here](#).

For those currently on Carlson's Maintenance program, follow this link to automatically generate your 2010 serial number. You will need your current 2009 serial number for this process.

Follow this link for pricing, upgrades and other information about purchasing Carlson Software.

Carlson 2010 Is Here

The 2010 version of Carlson software running with IntelliCAD is officially available. This version offers support for 64-bit operating systems, Windows 7, and AutoCAD® 2010. This release is available from the Carlson website for download, or contact us for more information on requesting a demo CD. For those of you on the Carlson maintenance program, you may download the latest release from the Software download section of the Carlson

website which can be found [here](#).

If you are already using Carlson software and are part of their maintenance program, the Carlson update page has a new feature that allows you to receive your 2010 serial numbers through an on-line lookup feature. This can be found [here](#). If you want to install your 2010 upgrade immediately, use this tool to look up your serial number, then download and install the software. CD's will be shipped out to maintenance customers automatically, but you don't have to wait, you can get started with all of the new features today!

To view the archived webinars covering several of the new features of this release, please visit the Carlson webinar archive [here](#).

More information on this latest release will be provided as it becomes available.

Update by Jennifer: You can download a PDF with a list of Improvements in 2010 [here](#): Carlson 2010 Improvements

Originally posted on **Carlson Connection** by Felicia Provencal

Why Carlson Civil Suite and Not Civil 3D®

I've worked with DCA®, then SoftDesk®, then Land Desktop® since 1990. Anyone I've worked with, sold software to or trained in that time knows that I've always been a huge fan of these

programs. Not that the programs were terribly easy to learn, but mostly because they functioned in a logical, consistent manner. I, and many others, got to a point that, if I didn't get the result I intended, it's because the software had done exactly what I'd *told* it to do instead of what I'd *meant to tell* it to do. Frustrating? Of course. But manageable.

I worked for an Autodesk® reseller when Civil 3D was introduced to the world. Since then I've attended Civil 3D classes at Autodesk University every year, Autodesk reseller training on Civil 3D and at one time was even certified an "Implementation Certified Expert" (ICE) for Civil 3D. As a consultant I've also worked and collaborated with people I consider to be the PHDs of Civil 3D. In short, I feel like I have performed my due diligence with regard to Civil 3D. More than once I thought Civil 3D had gotten to a point where it would be a good option for some of my clients. But, after careful consideration of all the associated costs, my clients disagreed. They decided to stick with Land Desktop.

Initially, there were several reasons my clients weren't interested in moving to Civil 3D from Land Desktop: lack of stability, lack of survey features, inability to work with pipes, lack of H & H functionality, etc. Most of these have been addressed to some extent.

Now, however, the primary reason people aren't moving to Civil 3D seems to be: It's too complicated. They have come to the conclusion that, "Even if we wanted to, we can't manage it and learn it on our own."

That seems to me a nearly impossible problem for Autodesk to solve.

What makes it so complicated and difficult to implement? Here are a few of the reasons...

Project and data management

Because it doesn't have a single, centralized project structure, the last recommendation for file and data management that I've seen involves 9 or 10 different drawings using multiple methods of linking such as XREFs and Vault.

Development of styles

This will be an ongoing effort. Most companies will find themselves needing new styles for every project. You'll need an expert on staff or will need to rely on a consultant or reseller to keep up with the technology and demand.

True Cost of Implementation

Unbelievably, the cost of the software, subscription and hardware is typically just the beginning. I've heard that, not including software, hardware or loss of productivity, the cost of implementing Civil 3D in an office ranges from \$6,000-\$10,000 per person.

Civil 3D doesn't play well with Land Desktop

Using Civil 3D on a project means KEEPING it in Civil 3D. You can't bail out and move it to Land Desktop if deadlines loom. And if a project was started in Land Desktop, don't use that data in Civil 3D. Yes, there are converters and importers and exporters of data, but the message boards and discussion groups are full of comments like, "Yes, you can. But don't."

A friend of mine in the industry recently said, "It looks like the programmers became too enamored by what they COULD do, instead of making it do what it NEEDS to do."

I think that's exactly right. It's become a program for programmers, IT personnel and consultants who spend a majority of their time figuring out how to make it work.

What is the evidence of this trend/mindset?

1. Try to purchase and implement Civil 3D through a reseller without receiving a hard-sell on “consulting” or “implementation” services. This isn’t simply the resellers trying to make a buck. They understand that Civil 3D is impossible to put into production without significant help from experts. And the only experts are those in the reseller or consulting community.
2. Part of the “Implementation Plan” requires that new users try Civil 3D on a “Pilot Project” instead of an active project.
3. Considering blogs, websites, discussion groups, users groups, road-shows and all, I have never seen such a wealth of available support options for any piece of civil design software. And yet for all this, I might be able to point to a couple of dozen people I’d consider to be very knowledgeable or experts who would be able to support the software. And, these people fall into the reseller/consultant category. I have my suspicions whether even they could turn a profit on a project in an office setting with typical project flow and deadline challenges.
4. Everyone thinks everyone else is using it – but they’re not. I had heard for years that a certain very large (national) engineering firm in Raleigh had moved to Civil 3D. I spoke to someone working there a couple of weeks ago and found out that wasn’t the case. Only a couple of people in their Charlotte office are trying it out and it wasn’t getting rave reviews. Everyone else is still using Land Desktop Companion. I know of two and suspect that several other large firms who have implemented or have attempted to implement Civil 3d are in the

same boat. My (educated) guess, based on reading discussion groups, users forums and discussions during sales calls, is that they have now had enough time to study the metrics comparing the money they have spent versus the resulting productivity gain/loss. Unfortunately, so much money has been spent that they must decide whether to continue to throw good money after bad hoping that Autodesk finally comes up with the product they have promised or to start from scratch by re-evaluating the products available.

5. Outside of the reseller/consultant network, I can point to a lot of people who I'd consider experts in Land Desktop and Civil Design. These people might not know everything there is to know about Land and Civil Design, but they are incredibly productive and can design and develop a project with the best of them. Many in this group have tried to perform the same tasks and produce the same work with Civil 3D and have given up out of exasperation because either they can't get it to work the way they need it to or can't get it to look the way they need it to. When it is determined that this vast group of competent people needs to rely on the expertise of a reseller or consultant to produce their work, there is a problem.
6. Someone recently pointed me to a couple of posts on the Autodesk Civil 3D Discussion Group that expresses many of these thoughts: Message to Autodesk I know I'll be tagged a Flammer for this but I don't care at this point

Now, Why Carlson?

1. It's easy to learn The single biggest reason I have

become a fan of Carlson Software is that it's so easy to do the things surveyors and civil engineers need to do. Especially for someone fairly competent with Land Desktop or Civil Design, learning Carlson doesn't take much time at all. And if you are totally new to civil/survey software, Carlson is intuitive because they have a high percentage of civil engineers and surveyors helping to design the software. It works the way we work.

2. They stand behind and support their products Carlson provides free technical support to their users. Whether you are using a 30-day trial or have purchased any of their products, you can call or email them with questions. Providing tech support is also a way for Carlson to stay on top of their customers wants and needs. If they receive too many questions about how to use a feature, you can expect to see that feature re-worked in a future release. If someone makes a suggestion during a support call, it'll end up on a feature wish-list for a future release. What happens if you find a bug? You (and any others encountering the same issue) will receive the updated files to fix the problem as soon as the programming team completes the fix. Others receive it when a service pack is released. They also don't retire their products so there are no forced upgrades. Carlson only wants their customers to upgrade when they think it's worth it.
3. I don't have to give up what I know Carlson works on top of AutoCAD, AutoCAD Map, Land Desktop or Civil

3D. As you start moving your projects over to Carlson, you have the freedom to continue working in Land Desktop but take advantage of some of the tools that Carlson offers. As you learn more of the features of Carlson, you can do more of the project using Carlson. It's a relief to know that you can make the switch by taking baby steps or by leaps and bounds.

4. I have full 3D and dynamic functionalityWho *wasn't* excited the first time we saw that Civil 3D gave us the ability to grip-edit an alignment and have the profile update automatically? Or to see we could lay out and edit subdivision lots and have it automatically label lots for us? But then we tried to do it. It wasn't quite so easy to get it to work the way we needed it to or look the way we needed it to. Most of us ended up going back to Land Desktop. But, we'd seen what was possible with the dynamic features and Land Desktop no longer seemed up to the task.Carlson allows you to design dynamically but gives you more control. You have the ability to set each dynamic action to "Off", "On" or "Prompt". Turning it "Off" requires you to pick a "Process" button to force updates through the design. "On" will process those changes automatically as they happen. "Prompt" will ask you before applying updates.
5. Carlson Civil Suite 2009 meets or beats Land Desktop and Civil 3D in features and functionalityA feature-to-feature comparison of Carlson's Civil Suite to Land Desktop or Civil 3D shows that Carlson can do more for you than either of those products.

These are obviously anecdotal examples and I expect some people to take exception. All I can state is what I've witnessed and

attempt to explain the reasons behind my decision. My eyes aren't closed and I'll continue to do my homework with Civil 3D – if something changes, I won't hesitate to express my opinion.

I've told the folks at Carlson that, as much as I enjoy working with them, the reason I'm selling and supporting their software is because I fully believe it's the right thing for my customers at this time. If that changes and Carlson is no longer the best option, I'll move on.

I encourage anyone to try out Carlson Civil Suite and try out Civil 3D and judge for yourself. Ask your Civil 3D reseller to mimic my 5 Minute RoadNet Video or my 5 Minute LotNet Video in Civil 3D and see how it compares. This isn't a set up... I've never asked anyone to do that before. I'd just be interested to see the results.

Update 9/2/2009: Welcome to those from www.civil3d.com.

Other discussion of this topic can also be found on this thread on the Autodesk Civil 3D discussion group: Carlson Vs 3D.

Continue to watch this space for an update. I'm interested to see what comments will be left at civil3d.com and will post a response here in a week or so.

Update 9/12/2009: I've posted my response to the comments from both www.civil3d.com and the Autodesk Discussion Group here: Carlson VS Civil 3D – Revisited

Carlson 2010 Preview – CAD Standards

The new CAD Standards feature included in Carlson is one of the most time-saving features to come along in a long time. This feature is a collection of commands allowing you to create, manage and draw standardized Symbols, Linework and Annotation entities that are stored in a Standards Database file.

Carlson includes two Standards Database files (.sdb) with the installation: the Carlson_NCS_SurveyCivil.sdb which is a fully populated database based on the US National CAD Standard and empty.sdb which is a functional, but empty, database with which to start a new Standard Database.

Updates and additions to the .sdb files provided by Carlson Software will be posted to this website: www.carlsonsw.com/cadstandards.html.

You can click this link to view a webinar introducing the new feature.

The CAD Standards interface (loaded with the Carlson_NCS_SurveyCivil database) is shown here:

IMAGE!

That CAD Girl – October 2009

Newsletter

Our October 2009 Newsletter can be downloaded [HERE](#)