



PRACTITIONERS' TOOLBOX

On the Level:

## Computer Toys for the Workplace: Requiem for the Clipboard

BY JACK JENSEN

Upon graduation from trade school, I was awarded a 22-ounce Estwing framing hammer. They shook my hand and said, "You're a carpenter."

Six years later, my boss took me into his office and handed me a metal clipboard. "Congratulations, kid," he said, shaking my hand. "You're a foreman."

So it goes. I still have both of them.

Sadly, both are dinosaurs, trundling off to the Tarpit of Trumped Tools as technology whizzes by them at sub-atomic speed. Not because they don't still both work. The noble hammer is largely unchanged from Neanderthal times, and the Estwing is particularly indestructible. But it long ago lost its John Henry showdown to the pneumatic nail gun. The trusty clipboard, whether it's the Dollar Store "Clippy" style – a spring clamp on a slab of Masonite – or the fancy, stainless, multi-pocketed waterproof variety seen on the dashboards of pickup trucks all over America, will soon be a Neanderthal itself. Everything you have in there will soon be in your phone.

Armand Magnelli, senior program director at The Enterprise Foundation's Housing and Community Development WorkGroup, is one of those gizmo guys who always has a small crowd around him of other gizmo guys, checking out his latest laptop or cellphone. But it's not vanity. He's actually testing out new products, and develops community-development software for them as part of his job.

### The Challengers

He has two babies that will soon be sending that clipboard to the dump: Housing Developer Pro® Version 2 and Neighborhood Survey Pro®. Housing Developer Pro® automates specification writing, cost estimating, and other highly repetitive functions related to housing rehabilitation. Neighborhood Survey Pro® automates data on neighborhoods, land use, building use, and demographics in a form that's identical to the Census Bureau format. You can use it for windshield surveys, interviews with heads of households, or any number of repetitive footwork jobs.

Neighborhood Survey Pro® uses both a personal computer (PC) and a Palm hand-held computer (Palm) interface. Surveying is done on a standard Palm, and then you pop it in the cradle and data transfers to your desk PC.

"Information is power," said Magnelli, "The value of these tools is around making strategic business decisions on which projects to choose. The value is understanding your market."

It's a powerful tool for neighborhood-based programs that need to make strategic decisions on how to use limited resources. Multifaceted revitalization work requires all kinds of information on a variety of activities. Instead of collecting hundreds of paper checklists on a clipboard, and then laboriously entering that data into a computer, days are shaved on every project. But it's not just the speed at which you enter data – it's the quality of the data you can collect, interface with, and manipulate that spells doom for our pal, "Clippy."

Housing Developer Pro® will, hands-down, spit out construction documents more quickly and accurately than anything your office is currently using. Neighborhood Survey Pro® is bilingual. You can print out maps. The next version is likely to have Global Information System (GIS) access linked to Global Positioning Satellites (GPSs), so you'll be able to track yourself on the map you're drawing. And the next generation of wireless will make it possible for field staff to never have to see the inside of an office again. Can "Clippy" buy you that?

Leigh Alexander, partner, Community Development Services LLC, of Plainview, Nebraska, bought Housing Developer Pro® to handle a statewide lead paint hazard-control program, and is a big fan.

"We need to keep our housing specialists, who have that construction background and training, in the field doing the work that we need them to do," Alexander said. "It's easier to train office staff than a lead-risk assessor, for example. I don't want them sitting in the office doing typing."

"The old way, Randy had to write up notes on a clipboard, come in, give them to the typist, interpret notes, she'd type them up, and then he'd have to sign off on corrections. We had a long turn-around time between the field inspection and when you'd get the written report. Not to mention the challenge of trying to catch him when he's in the office. Having him out there with a clipboard instead of a Palm Pilot was a waste of your most limited resource."

**4911 WANDAR ST**

**BCLU**

Display English?

Parcel: 22054300000

Inspection Date: 5/21/04 4:16 pm

Building Condition: 1 2 3 4 5

Site Condition: 1 2 3 4 5

Incentive Program:

Use:

Other Use Detail:

Bldg Occupancy: ↓

Vacant Land: ↓

End [Navigation icons]

HDP Inspection Input screens, which matched the format of the checklist.

Housing Developer Pro - [Location Details: Bane Rev. 1 - 72 Willey Pond Rd. \ 72 Willey Pond Road \ SF \ Exterior]

File Edit Construction Contacts Budget Reports Tools Palm Help

Location Name: Exterior Width: 0.00

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**Inspection Input**

Specification Number: 3145 Version: 1 Quantity: 1.00 Unit of Measure: EA

Specification Title: DOOR-EXTERIOR FLUSH Total Cost of Spec: 315.00

Specification | Costs

Trade: Carpentry [Re-apply Library Specification]

Specification Title: DOOR-EXTERIOR FLUSH

Specification: Install a 1-5/8" solid core, flush panel, exterior wood door with entrance lock set, and mortised dead bolt keyed alike. Include three 3"x4" butt hinges, interlocking threshold, spring metal weatherstripping, and wide peepsight. Prime and topcoat.

Last Modified: [Empty]

Addendum: [Empty]

Priority: [Dropdown]

[Update] [Apply] [Cancel]

QTY	ISS	1	DESCRIPTION	UOM	PRICE	TOTAL
6	895	1	FOOTING-PIER	EA	0	\$0.00
10	3465	1	DECK-TONGUE AND GROOVE	SF	0	\$0.00
10	3500	1	PORCH CEILING-1/4" 8C PLYW	SF	0	\$0.00
10	3505	1	PORCH CEILING-T&G	SF	0	\$0.00
6	905	1	CONCRETE SLAB-PATCH	SF	0	\$0.00
6	930	1	CONCRETE-LIGHTWEIGHT DECK	SF	0	\$0.00

[OK] [Apply] [Cancel]

Location Details: Bane Rev. 1 - 72 Willey Pond Rd. \ 72 Willey Pond Road \ SF \ Exterior

Neighborhood Survey Pro® screen shot of the Building Condition and Land Use survey (BCLU).

SOURCE: THE ENTERPRISE FOUNDATION

There are laptops you can write on, either the Mylar type that rolls up to the size of a pencil, or models with detachable keypads. They have screens you can read on a sunny rooftop or in a dark basement. Most have phone, calendar, e-mail, and Internet capability all built in.

The future is (duh) wireless, and the next generation of these gizmos

is likely to be based on voice-recognition software. So, rest assured, your new 2005 Blackberry will someday be on technology's trash heap.

### The Future

The future, of course, is limitless, but it looks something like this. One interface, as big as your phone, that

can do anything you can currently do with a phone, camera, scanner, or computer, hands-free, from anywhere on the planet. Not Dick Tracy stuff. Five to 10 years.

My high school graduation gift was a new-fangled "calculator." It cost \$120 in 1974 dollars, took eight D-cell batteries, was as big as a Bible, and had four functions – add, subtract, multiply, and divide – six less than my trusty slide rule. There was no such thing as a personal computer; the smallest available was about the size of a bathroom.

Is the world using slide rules or calculators today? Technology inexorably gets faster and cheaper, and our cool new stuff becomes worthless junk before the check clears. The tough question is this: When do you pull the trigger on buying new toys?

"You need a plan," says Tom Madden, senior housing development specialist at Ibero American Development Corporation in Rochester, New York. "We're a small shop, so we can't always buy the latest stuff. And technology money is the hardest to find, in my experience. But it always pays for itself – *always*."

The best approach is to imagine the system you want, and build toward it, using the rule of thumb that you'll be upgrading it in five years or so.

The costs really aren't prohibitive. High quality Palms with built-in cameras are running around \$300, and more basic models run half that. The software is around \$500 per license. Do the math: If it increased productivity of your average rehab coordinator by 10 percent, it would pay for itself in less than a month and a half.

The other hurdle is trickier. "Getting contractors to utilize Palm technology is a great challenge for me," said Madden. "I feel like I'm dragging them kicking and screaming into the new millennium.

They can see the advantages. It allows us all to be freer with our time. They can e-mail me draw requests. Even if they lose the paperwork, we've got records. I'm able to keep a better file in case of audits, better-run jobs, and they can make a better profit.

"Still, it's scary for contractors. The bigger ones use it. The small ones still use matchbooks and napkins. But, as we're bringing the new folks into the system, it's getting better. Young people grew up on computer games, now they get to bring their toys to work."

For a good place to start planning for the next wave of technology, drop in at one of Magnelli's classes on project management at a NeighborWorks® Training Institute. Neighborhood Reinvestment's networking sessions are also a great help in easing you into the techno waters gradually.

Everybody is facing these issues, so you don't need to feel overwhelmed.

And don't despair as your old pal "Clippy" goes clomping off to the techno tarpit. He can always call you on your Blackberry if he gets lost. You'll be able to locate him within a four-foot circle with the GPS feature. ■

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#### **Further Resources**

*Housing Developer Pro® Web page:  
<http://www.enterprisefoundation.org/resources/software/hdp2/>*

*Neighborhood Survey Pro® Web page:  
<http://www.enterprisefoundation.org/resources/software/nsp/>*

*Link to HP Compaq's Tablet PC Web page  
<http://h18000.www1.hp.com/products/tablet/etpc/>*

*Toshiba  
<http://www.toshibadirect.com/td/b2c/cmd.to?rcid=-26367&coid=-26385&ccid=1291021&seg=HHO&sel=1>*

*For more information from Housing Developer Pro® users: Tom Madden, rehabilitation specialist, Ibero American Development Corporation, (585) 467-6410 ext. 25.*

*Or Leigh Alexander, partner, Community Development Services LLC, Plainview, Nebraska, (402) 582-3580.*