

**TITLE: Best Practices – Data Collection Using New Technologies  
Bureau of Local Assessment**

*Submitted by Stephen Sullivan, BLA Certification Field Supervisor*

The Division of Local Service's Bureau of Local Assessment (BLA) is committed to highlighting innovative and cost-saving data collection and retention practices and procedures wherever they may be. We understand that large workloads coupled with tight budgets, deadlines and limited resources can often leave municipalities scrambling to meet certain regulatory and administrative expectations. Because the collection and maintenance of current and accurate property inventory data is a critical element in the development of uniform, fair market values, and can contribute to the community's cyclical re-inspection program, BLA requires that communities re-inspect all town property, including tax-exempt parcels, at least once every nine years. (See BLA Certification Standards). In order to meet this requirement, we highly encourage communities to embrace new, low-cost technologies that help expedite this process. In eastern Massachusetts, Assessor Chris Wilcock is doing just that.

Chris Wilcock believed that utilizing tablets and laser measuring could assist with his inspection program. While visiting properties in Weston as the Assistant Assessor, Chris would manually write any sketch changes, data changes, or any other pertinent notes on the property record cards during the inspection process. He would then return to the office and enter that information into the town's property database, knowing that even the most steadfast note takers and record keepers are subject to mistakes during the data entry process.

With this in mind, Chris had an idea. If he could get an iPad tablet to take with him into the field, it would significantly cut down on data entry redundancy and increase efficiencies in the collection process. After reviewing his proposal, the town signed off on his request and Chris used his iPad to record these changes just once on a live database. When he moved on to become the Chief Assessor in Tewksbury in February 2012, Chris left behind the iPad, but he kept the concept, this time with a Windows 8 tablet. Recently appointed Chief Assessor in the City of Melrose and now the Chairman of the MAAO Technology Committee, Chris found that real-time changes improve data accuracy.

"The ability to use a tablet with a live database in the field has been a huge breakthrough in the assessing field and in my opinion we are not far away from a completely automated data collection process in which there is no redundancy and accuracy is greatly improved," he says.

But how, exactly, can cities and towns do the same?

A new application offered by some CAMA vendors allows an assessor to access a live database stored in the Cloud with a setup designed for tablets. Besides a tablet, a MiFi for a mobile connection (a MiFi is a wireless router that acts a mobile Wi-Fi hotspot) is necessary to access the live database. Setup is done by the CAMA vendor. This takes the work of hosting, access, and updating out of the hands of the municipalities and puts it in the hands of the CAMA vendor, providing access to the database while in the field.

The CAMA vendor's application for tablets even adjusts to spotty or unpredictable WiFi connections. The new application retains all the necessary sketch changes, data changes, and notes to the property and saves them automatically. Once connected to a WiFi spot or back into the office, the device then provides a prompt, asking the user to "save/upload" all changes.

If your CAMA system does not currently have the above capability, assessors can still access the database while in the field. Assessor would need the tablet, a MiFi for a mobile connection, and a remote access setup with the help of your communities IT department. This would allow an assessor in the field to remote into their computer in the office and is essentially what Chris did when he was in Weston with his iPad.

The second technology Chris has been utilizing is a Laser Measuring Device, also known as a "Electronic Tape Measure" or a "Laser Distance Finder." This device has replaced the "measuring tape" in many assessing offices.

Rather than getting tangled up in a taxpayer's prize rosebush or taking an unexpected dive down a muddy slope in March, you can point the laser measuring device's at a target and the device will record the distance on its screen. These devices are one of the fastest and most accurate ways to record measurements.

Chris has been using a LMD for a few years now estimates "a 50% reduction in time in the field over a tape and a drastic increase in accuracy over the measuring tape."

He adds, "The laser has also evolved with technology with advancements like an overview camera with a 4x zoom, a tablet sketching program, and new touch screen model. Over the years, I have converted numerous assessors to measuring with lasers".

We're pleased to have to opportunity to highlight Chris Wilcock's use of new technology, but tablets and laser measuring are just two of a wide range of tools available to help increase accuracy and efficiency within an assessing office. If your town adopted any tool or process that you would like to share with us, please let us know by calling Steve at 617-626-2393 or by emailing us at [bladata@dor.state.ma.us](mailto:bladata@dor.state.ma.us).