

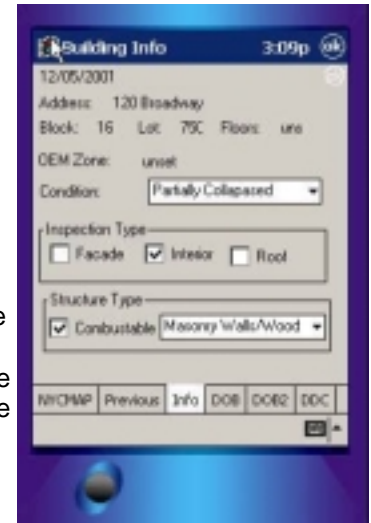


City of New York, Department of Buildings Mobile Inspection

Challenge

As a result of the World Trade Center disaster, there is an increased need for the NYC Department of Buildings to perform building inspections. There are many damaged buildings that need to be inspected and subsequently re-inspected as repairs are completed and as the “red-zone” (the area immediately surrounding the disaster site) shrinks. In addition, there is a need to have timely access to building inspection information in order to produce reports for various agencies involved in the recovery effort.

The existing paper-based processes are inefficient: Inspectors do not have access to the pertinent information they need while onsite performing inspections; Once an inspection is completed, the results are manually entered into a variety of electronic formats and are not always available to those who need them; Inspectors don't have a way to validate the address of the building they are inspecting; There is no standardized approach to managing building inspection information across the five boroughs.



Solution

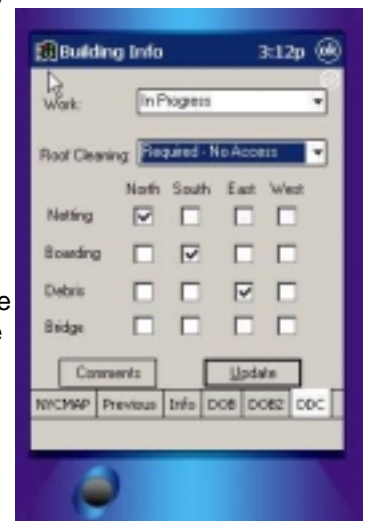
In response to the DOB's need, LinksPoint developed a wireless, handheld solution that would automate the process of inspecting a building. The inspection results are digitized. The inspector has access to building GIS data, displaying a graphical representation of the building which allows the inspector to validate the building to be inspected.



LinksPoint's solution includes an application running on the Windows CE operating system and was launched using the Compaq iPAQ handheld. The solution combines middleware software from Links Point that integrates information from the NYCMap, a GIS system that maps New York City to within one foot orthophotography. It includes key features such as building footprints, curb lines, subway stations, power lines, parks and over 20 other geographic features, as well as the back-end database that houses the Department of Buildings data.

LinksPoint's solution allows the inspector to choose the address of the building to be inspected, downloads an image of the building to the handheld and allows the inspector to validate the building he is inspecting by viewing a map of the building footprint and the corresponding address. In addition, the inspector is able to input all of his inspection results on the handheld through a user-friendly form with minimal free text input. The inspection results are then wirelessly uploaded to the Department of Buildings database. Reports can then be generated for the DOB management in real time, thus eliminating the need for manual input. In the event that a wireless connection is not available, the data is stored on the

handheld until a wireless connection is detected. This solution, built on open protocols like TCP/IP and ODBC, is compatible with various back-end databases, including Oracle, Sequel and IBM.



Benefits

Giving the inspectors remote access to data allows them to inspect damaged buildings quicker and more accurately, improving efficiency and effectiveness of the DOB. Inspectors can inspect more buildings thus improving all processes of the recovery effort. Eliminating the paper forms and manual input reduces administrative costs and improves data integrity.