Innovation Award Application 2014

Greeneville Public Works Department Mobile311 Data Collection System

Brad Peters, P.E.

Public Works Director – Town Engineer

Town of Greeneville (TN)

708 W. Summer St., Greeneville, TN 37743

423-787-6382

bpeters@greenevilletn.gov

Describe the Program/project/ product/ service innovation:

The Town of Greeneville has implemented a GIS/gps based data collection system to track work items assigned to our Municipal Solid Waste Division. The system, called Mobile311, is a smartphone application that is used in concert with smartphones and tablets mounted in garbage trucks, brush/leaf collection trucks, and bulk item trucks. Since the garbage trucks visit every street in the city at least once per week they serve as the "hunters", using the system to flag items such as brush/leaf piles and bulk items to be picked up. Those points appear in real time on the devices assigned to the brush/leaf and bulk item trucks, who serve as the "gatherers". Once they collect the items they check them off as "complete", giving the Department an efficient mechanism for cataloging work orders.

Short description of the importance, internal impact, and community benefits:

The importance of this system is that it takes much of the guess work out of solid waste collection. In the past we relied on defined routes to collect these items since we had no way of knowing whether a citizen had put something out for pickup. Since we routinely traversed streets that had no collectible items much time and fuel was wasted, as well as additional wear and tear on vehicles. With Mobile311 we are able to develop a more efficient collection route at the beginning of each shift since we know exactly where the items to be collected are located.

What makes this a quantum leap of creativity?

This system is a quantum leap of creativity because it represents a paradigm shift in the way Public Works Departments have collected solid waste for decades. Instead of using antiquated methods to locate refuse GIS can now be used.

Who benefits?

Ultimately, the tax payers benefit since public funds are used more efficiently.

How was the program/project/product/service initiated and implemented?

The program was implemented by personnel from Mobile311 who provided on-site training for the software and continue to provide technical support.

What risks were taken?

A significant financial investment was made in the hardware and software for the system, as well as resistance from employees who were required to change a decades-old mindset of how to do their job.

What, if any were the costs and/or savings?

The software is approximately $9,500 annually, the hardware approximately $2,000 (one time investment), and the cost of the wireless data approximately $150 per month. We hope to save at least that much in fuel costs and vehicle wear and tear. But the real savings comes in increased productivity which we have yet to accurately quantify.

What are the lessons learned that other local governments can learn from?

The primary lesson is that all public departments (police, fire, recreation, etc.) can benefit from the technology that is currently available if they are willing to think outside the box and are not afraid of a few raised eyebrows.

What department and/or individual(s) championed the innovation? If a contractor was used, please list the name and their contact information.

The folks at Mobile311 (Chuck Wright or Eddie Staley 919.238.0444) were imperative to the implementation from a technical standpoint, but without our City Administrator Todd Smith's backing, this achievement would not have been possible.

Any additional information you would like to share?