

Solar trash compactor pilot

Project Manager:

Steve Joplin

Tel: (352) 393-7961

Email: joplinsh@cityofgainesville.org

Schedule:

Installation began in December 2010.

Description:

The Solid Waste Division working together with RTS began installing solar powered trash compactors at some of the city's busiest bus stops. Manufactured by BigBelly Solar of Needham, Ma. and marketed in conjunction with Waste Management, Inc.; the compactors use the sun's energy to automatically compact trash as people dispose of it, thereby increasing the capacity of the trash can by 400%. Since the city has to pay a set rate each time a public trash can is emptied, the city can potentially save money by reducing the frequency of service at each location that has a compactor.

Each solar powered unit is self-contained, requiring no wiring or external electrical connection; and at 26 inches square, each one takes up about the same amount of space as a conventional public trash receptacle. The units automatically compact the trash whenever it rises to a certain level, and users can actually continue to deposit waste into the unit even while compaction is taking place. During normal functioning an LED light on the front panel flashes green until the unit has filled up to the point that it's ready to be collected, at which point it displays a flashing yellow LED. The units can also be equipped with a wireless monitoring and notification system that uses



text message technology to signal the Solid Waste Division when the unit is ready to be emptied.

Although the solar trash compactors cost between \$3,500 and \$4,000 each, the Solid Waste Division estimated that the units would pay for themselves within a little over three years by reducing the city's collection costs if they were installed in place of frequently serviced public trash cans. To test the concept and evaluate the long-term reliability and dura-

(Continued on page 2)

