Strategic renovation

A parking system retrofit in Salt Lake City has improved system reliability and enhanced customer convenience

Words | **Nicole Ybarra, IPS Group, USA**

Salt Lake City, Utah, is a cosmopolitan US city with a vibrant and thriving downtown business district, where fine dining, shops and the arts draw residents into the city, placing a premium on its limited on-street parking resources.

To help manage this demand, Salt Lake City purchased 300 Siemens pay stations in 2012, which allowed motorists to pay for their parking fares by credit card. It was envisioned that the meters would improve customer convenience as a result of enhanced payment options, but early on, the meters were plagued with system reliability issues, according to the City. Poor connectivity at the machines meant that credit card processing times were lengthy, unavailable, and often ended in incomplete transactions. Customers were often found to be in violation due to payment errors at the machines, leading to customer complaints and enforcement problems. Coupled with a complex user interface, numerous maintenance issues and a lack of customer support, the system was unpopular both with the public and the City, and prompted a strategic reevaluation of the city's parking assets.

Innovative solution

Despite their issues, the existing units were only three years old and the cabinets were in good condition. As such, the City was reluctant to purchase entirely new machines but there were limited options available on the market. The City turned to technology vendor IPS Group, for an innovative solution to its faulty system. The City conducted field visits, observed the assembly of the units at IPS headquarters in San Diego, and collected data on the volume of transactions handled by IPS and the average uptime of its units, which aided in the decision-making process. Subsequently, the City purchased 300 IPS Revolution Upgrade Kits.

The Revolution Upgrade Kit retrofits the City's existing Siemens cabinet, and comprises a patented new machine door that houses a compact main operating board, single-sided thermal printer, coin acceptor and card reader. Certain models of the kits feature LED lights that illuminate the display screen and can also be used to provide additional lighting for maintenance personnel.

Once upgraded, the multispace meters feature a large, backlit graphical display with the ability to show graphics and text in any language. What's more, the meters use the latest cellular technology optimized for the parking application, which decreases processing times from minutes to seconds, which was especially important to Salt Lake City. Customers benefit from the IntelliTouch feature, which provides additional flexibility when completing a transaction. Users may begin the payment sequence in the manner most intuitive to them, after which the pay station will guide them through the transaction. The upgrade kits enabled the City to maximize the life of its existing infrastructure and provide state-of-the-art technology at a fraction of the cost of a new machine, saving more than US$1m.

Reshaping perceptions

The upgraded units have been well received by the public. According to Robin Hutcheson, director, transportation division, community and economic development, Salt Lake City Corporation, the number of customer complaints has reduced by 65%. Because the IPS meter uses the cellular network for all credit card processing and data transmissions (such as rate configurations, sensor info and fault notifications), all transactions are online in real time. This ensures faster credit card processing time and greater system reliability.

Due to the ease of use of the system and an average system uptime in excess of 99.6%, the City has also reported an increase in the volume and value of transactions as well as a notable reduction in meter faults. The entire meter park is networked to a web-based data management system (DMS), which allows the City to wirelessly manage its assets from any web-enabled device. The DMS provides real-time data on revenue, system uptime and occupancy, and will notify the City in the event of a meter fault, thereby reducing downtime and minimizing customer inconvenience.

Facing increasing pressure from the public for a more reliable system, the partnership between Salt Lake City and IPS Group resulted in an enhanced user experience, improved uptime, increased meter transactions and a dramatic decrease in maintenance issues following the introduction of the upgrade kits, while enabling the City to extend the life of its existing cabinets and maximize its budget.

"IPS provided excellent customer service throughout the meter retrofit process by adapting to our unique urban conditions and providing daily on-site support," says Hutcheson. "Their attentiveness to Salt Lake City smoothed a difficult transition time." ■

A modernized unit retrofitted with the patented IPS upgrade kit in Salt Lake City, Utah