

CALE Pay & Display Multi-Space Meter Pilot

March 1, 2011- March 1, 2012



Charles Kindred, Parking Manager

A twelve-month pilot project was undertaken to evaluate multi-space pay & display meter technology in a production environment and determine its suitability for broader use within the city. This technology has the potential to increase occupancy and turnover of parking spaces, provide more complete and timely information and statistics, increase parking meter revenue, and provide greater flexibility and control of parking meter rates. The technology also provides a broader range of payment options including credit cards and one of many important components necessary to maximize overall parking utilization.

Based on the competitive procurement process utilized by the cities of Baltimore and San Diego, CALE was selected as the multi-space parking meter vendor for this pilot project. Pasadena has the option to take advantage of the favorable pricing negotiated by the city of Baltimore. The City has the option to purchase multi-space parking meters via a monthly lease purchase that does not require up front capital.

On March 1, 2011, seven CALE multi-space (pay & display) pay stations were put into service on Colorado between Los Robles and Arroyo Parkway. Another three multi-space (pay & display) pay stations were deployed in the city owned surface lot at Union and El Molino Street. The CALE multi-space (pay & display) pay stations replaced ten Duncan multi-space (pay by space) pay stations. Baseline data for existing parking meters at these locations was compiled in preparation for later comparison with data gathered during the pilot project period.

All multi-space pay stations were installed in a *Pay & Display* mode. In this configuration, customers are provided a printed receipt that must then be displayed on the dash of their car showing proof of payment of the posted parking rate.

Discussion

The purpose of this report is to summarize data and provide recommendations related to lessons learned during the Pay & Display Multi-space parking pay-Station Pilot Project.

Cost

We are able to take advantage of a competitive bidding process conducted by the city of Baltimore, Maryland. Contractually, Baltimore (and by extension Pasadena) pay \$7,150, per pay station. CALE has agreed to provide Pasadena a "no upfront cash" 60 month lease purchase opportunity. The monthly cost of \$153.29 per month, per meter, plus an additional \$35.00 per month, per meter for the "back office" web access, wireless communication, and support; total monthly payment will be \$188.00 per month, per meter.

At inception, the Duncan meters were approximately \$7,125.00, per meter.

Currently, the Duncan pay stations cost us .36 a transaction, CALE costs are .23 a transaction (.13 savings). Additionally, because of the Duncan's communication issues, credit transactions are processed multiple times (at a cost of .36 each time). These fees are EIRF fees that are a result of the delay in processing at the point of sale (pay stations).

The Duncan system was set up to process credit card transactions as card not present. Duncan pay stations do not validate the credit cards in real time, nor do they provide a “blacklist” (track invalid credit cards). Duncan cannot change that setup unless we upgrade the modems. CALE meters validate credit cards in real time, but transfer the transactions in batch mode. According to our Finance Staff, the reconciliation process with CALE meters /reports is seamless and not as time consuming as the Duncan meters.

Enforcement

There was an increase in the number of parking citations issued for parking meter related violations in the blocks where the CALE pay & display pay stations were installed.

Parking Citations	Duncan 3/1/10- 3/1/11	CALE 3/1/11 -3/1/12	Difference (%)
Number issued	864	1176	36.11%
Revenue generated (citation revenue)	\$39,744	\$54,096	36.11%

Enforcement	Duncan	CALE	Difference (%)
Approximate time to enforce one block face	14 min	7 min	50%

Citation Appeals

CALE

Parking Citation Appeals	# Requested	# upheld	# Dismissed
Appeals	10	10	0

Duncan

Parking Citation Appeals	# Requested	# upheld	# Dismissed
Appeals	385	201	184 ¹ (48%)

¹ This represents a loss of \$8,556, not including staff time (enforcement, citation processing & adjudication), and supplies.

There are a number of possible reasons for the increase in issued citations. We are of the opinion the pay & display configuration is similar to the single space meter in that it enables efficient enforcement. With our current Duncan equipment and configuration, enforcement officers state that it is difficult and time consuming to enforce. They are required to go to each pay station on the block and generate a stall report before they begin issuing citations. The challenge is that while the officer is at one machine generating the report, a citizen could be at a different machine paying for a space. Generating the report is time consuming and often inaccurate due to equipment malfunctions. The officers are not consistently checking/citing for meter violations; they default to enforcing the posted time limits.

Concerning pay & display configuration, our enforcement staff noted the following challenges:

- Incorrectly displaying receipts (upside down, overturned)
- Difficulty viewing receipts on oversized vehicles
- Purchasing a second receipt for additional time immediately after purchasing initial time

Other enforcement issues

With a pay & display configuration, staff will need to discontinue using Pasadena Municipal Code (PMC) Section 10.45.030, Deposit of money, to cite vehicles parked in Pay & Display zones without a receipt displayed. It is opined that a driver is not in violation of this section, in its current form, when the receipt is not properly displayed. However, vehicles should be cited for violation of PMC Section 10.40.70 (c), Parking – Limitation or prohibition, as a result of the driver's failure to obey the "Display" requirement of the Pay & Display zone signage.

Revenues

March -February (2010 vs. 2011)

Duncan vs. CALE

Civic Center	Duncan		CALE		% change
Revenue	\$71,415.05		\$91,599.60		28%
# Trans	102863		89,870		-13%
Avg Trans	\$ 0.69		\$ 1.02		47%
Cash	\$42,210.90	59%	\$33,984.70	37%	-19%
# Trans	77401	75%	46,967	52%	-39%
Avg Cash Trans	\$ 0.55		\$ 0.72		33%
Credit	\$29,204.15	41%	\$57,614.90	63%	97%
# Trans	25462	25%	42,903	48%	68%
Avg Credit Trans	\$ 1.15		\$ 1.34		17%

Parking meter revenue and equipment reliability

CALE parking pay stations can be monitored, programmed, and controlled remotely by a central computer. Varying parking rates and time limits and other parking restrictions such as special event parking prohibitions can be changed from the central computer eliminating the need to individually program meters on-site and allowing staff to monitor and control services from a remote location.

The multi-space parking pay stations store each transaction executed allowing the central computer to create reports and graphical statistics showing revenue, maintenance activities, and alarms. The stored information can be exported in various formats for presentation or subsequent processing. It may also be possible to extract parking occupancy and duration information for street segments making this data available to planners and engineers when evaluating parking related changes and improvements. The pay stations also report malfunctions directly on the machine display as well as by transmitting alert/alarm messages to the central computer and maintenance staff ensuring quick repair and minimal downtime.

Parking Supply

Typically, City parking spaces are generally installed with a length of 20-24 feet at single head parking meter and multi space (pay by space) locations in order to accommodate most passenger vehicles. Operationally, delineated parking spaces are not required in Pay & Display multi-space

pay station zones. According to industry standards, a pay & display configuration will yield an additional parking space per block face.

Implementing the Pay & Display pay stations on a large scale without delineated spaces or Parking "T"s will result in a significant increase in parking spaces. In addition, marked parking T's require frequent maintenance and their absence may reduce the associated maintenance burden the City currently bears. However, the fact that removing parking "T"s will eliminate the City's ability to impound vehicles for parking too close and prohibiting other vehicles from exiting a parking space should also be considered. State law requires a vehicle to be parked illegally, in this case across a stall marking, to remove it for blocking another vehicle.

CONCLUSION

The CALE parking pay stations performed well over the duration of the pilot period (including in inclement weather). As shown during the pilot costs are offset over time by significantly lower coin collection and data gathering costs coupled with resulting parking meter revenue increases. The equipment is reliable and the vendor provided excellent service and support throughout the pilot period.

Overall feedback from users was highly favorable. Customers welcomed having a receipt and visual reminder of when their parking privilege would expire. Those in the business community embraced the fact they now had a receipt for tax purposes.

The modular aspects of the internal components equate to "plug & play" in terms replacing parts. This serves to lower maintenance and repair cost. The CALE pay stations are all equipped with solar panels which charge the batteries. Batteries are touted to last a minimum of five years (a significant cost savings).