

City of Alexandria, Virginia

MEMORANDUM

DATE: APRIL 16, 2010

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

FROM: JAMES K. HARTMAN, CITY MANAGER 

SUBJECT: BUDGET MEMO #76 RESPONSE TO COUNCILMAN KRUPICKA'S AND COUNCILMAN'S SMEDBURG'S QUESTIONS REGARDING PARKING METER UPGRADES

The following information is in response to Councilman Krupicka and Councilman Smedberg's questions regarding parking meters.

What is the cost to upgrade parking meters to accept credit cards?

The City currently operates 1,039 single space meters in Old Town and 40 multi-space boxes in Carlyle. The multi-space boxes accept credit cards. All of the single space meters were converted to digital meters in 2004, but they cannot accept credit card payments. In order to accept credit cards, the current meters would need to be replaced with new single space units or multi-space pay boxes. The budget cost to upgrade the existing single space parking meters to accept credit cards is estimated to be \$500 per meter or about \$520,000 to convert all of the meters in Old Town. This cost will change depending on the capabilities required of the meter. For example, basic meters can be purchased that accept coins and credit cards but do nothing else, or meters can be purchased that monitor occupancy and clear out any unused meter time when the parked vehicle leaves. More advanced systems can even display on a mobile terminal the locations of all the meter violations. Still an even more advanced feature would be the ability to provide congestion priced parking. This technology is in its infancy so reliable budget estimates for these features are not available. The best course of action would be for the City to determine what features are needed and issue a request for proposal. Installing pay boxes would cost approximately \$1,000 per space, or \$1.0 million total. The cost of pay boxes is twice that of single space meters because the multi-space meters require infrastructure elements, such as printers, credit card acceptors and solar panels, which are not included in the single space meters.

What are the merits and costs of individual meters vs. pay boxes (multi-space meters)?

One advantage of multi-space meters (which are also known as pay boxes) is that they provide more flexibility to charge variable rates during different periods of the day. Furthermore, they can accept multiple forms of payment including credit cards and paper bills.

The operational costs of multi-space meters are much lower than the individual electronic meters which accept credit cards. The problem with single space meters and credit cards is that the credit card transaction must be uploaded through the credit card gateway. This is a difficult task and very expensive because each parking meter must be connected to a wireless network. The fee

for the wireless service for the individual meters will cost about \$20 per month per meter (\$240/yr) while the multi-space meters will only cost about \$7 per month per space (\$84/yr). Traditional coin-operated meters cannot accept credit cards and thus have no wireless fee.

Furthermore, the multi-space meters help reduce collection costs. The collection process is more efficient because the technicians collect from one location with the multi-space meter system versus several locations per block with the individual electronic meters. One important advantage of the multi-space meters is that they help clean up the sidewalk by eliminating all of the meter posts.

Advantages of individual meters are that they are less expensive to install than multi-space meters (\$500 for individual meter versus \$1,000 per space for multi-space meters) and require less walking for the users to conduct the parking meter transaction. With the installation of individual meters drivers do not have to walk the extra steps to insert the payment in the multi-space meter and back to the car to display the receipt.

Using traditional parking enforcement methods, individual meters may be slightly easier to enforce than some multi-space meters. Because some multi-space meters require a “pay and display” process whereby a receipt is displayed on the dashboard of the parked vehicle, parking enforcement officers must look in every parked car to find the ticket and see if it has expired. However, new receipt technology has been developed to get the receipt to change color once expired making it easier for enforcement officers to identify violators. Newer “pay-by-space” multi-space meters may improve enforcement methods by allowing officers to monitor parking space violations from their vehicles. Enforcement methods must be considered with any planned modifications to the city’s parking system.

How long would it take before meters paid for themselves?

Without a corresponding rate increase, replacing the existing single space meters in Old Town with credit card enabled (electronic) single-space meters may never recover the cost of replacement because these parking spaces are already generating revenue. To date the multi-space meters in Carlyle are generating \$810 per space per year while the single space meters in Old Town are generating \$1,072 per space per year. This is partly a reflection on demand and space utilization. Without a corresponding rate increase, staff does not believe that new electronic single-space meters or multi-space meters will generate significantly more revenue than the existing single-space meters because added revenue from improved enforcement may be offset by new operational costs associated with those meters.