

DATE ISSUED: February 1, 2002

REPORT NO. 02-029

ATTENTION: Public Safety and Neighborhood Services Committee  
Agenda of February 6, 2002

SUBJECT: Street Sweeping Program

REFERENCE: Manager's Report No. 00-246, dated November 8, 2000  
Manager's Report No. 98-111, dated May 27, 1998

### SUMMARY

THIS IS AN INFORMATION ITEM ONLY. NO ACTION IS REQUIRED ON THE PART OF THE COMMITTEE OR THE CITY COUNCIL.

### BACKGROUND

The current street sweeping program was implemented in the spring of 1997 as a result of changes suggested during the competition process. Those changes resulted in an increase in sweeping from one time per year to a goal of one time per month for residential streets. Commercial streets increased from one time per month to one time per week. Other significant changes made during the competition process included the elimination of unloading the sweeping debris directly on the ground, decreasing the number of staff and reducing the cost of sweeping per curb mile.

To accomplish this improved level of service, new sweeping routes were created. The sweeping routes were determined by a number of factors including; miles per shift, start/end times, topography (dead end streets, canyons), major streets, water source, trash dumping facilities, amount of debris collected in an area, and the travel time to community areas.

### DISCUSSION

The goal of street sweeping is to reduce storm water pollution by removing silt, trash and chemicals from the roadside gutter before they enter the storm drain system. Street sweeping is included as one of the City's Best Management Practices (BMPs) in controlling pollutants. It also serves to clean and maintain the attractiveness of the communities, thus enhancing business viability and residential values.

In the Manager's report dated May 27, 1998, the Street Division identified three alternative service levels. The alternatives identified the staff, equipment and funding required to provide a 75%, 90% or 100% level of service. In 1998, the street sweeping program was funded to maintain the city's 2,689 miles of streets at a 75% level of service. A survey

conducted in 2001, revealed the number of miles of city streets increased to 2,863. Some of these streets have been added to the sweeping schedule at the expense of reducing sweeping of some other routes to every other month. Many other streets remain to be included in the sweeping schedule.

There are two performance measures used to track the efficiency of the street sweeping program. The first performance measure is to sweep a total of 10,516 curb miles of residential and commercial streets per month. The second performance measure is to sweep streets at an average cost not to exceed \$29.00 per mile. During the first half of FY02, 11,671 curb miles were swept per month at an average cost of \$25.84 per mile.

### **Current Level of Service:**

The current street sweeping program consists of 20 motor sweeper operators and eight support staff that is split between residential and commercial routes. Residential routes are swept during the day and most commercial routes are swept at night. If one motor sweeper operator is ill, injured or takes a vacation, a scheduled sweeping route is usually missed. Every effort is made to have the other operators cover the route during their shift or with overtime.

The current level of service requires that the motor sweeper vehicles be used during the day and night shifts. Double shifting the motor sweeper vehicles has caused added wear and tear. The motor sweepers are breaking down more frequently and are taking longer to return to service, as the needed repairs are more extensive. This has resulted in more down time than would be experienced if the program had a separate fleet of residential and commercial sweepers. 10 of the 18 motor sweepers began service in February 1997, four in October 1998 and four in February 2001. 14 of the 18 motor sweepers have surpassed their life cycle. Industry practice is to replace a motor sweeper when it reaches 50,000 miles. The average mileage on the 14 motor sweepers is 70,000.

Approximately 10% of the routes are posted with permanent "No Parking" street sweeping signs. The streets with these permanent "No Parking" signs are primarily located within commercial areas. Five Parking Enforcement Officers (PEOs) are responsible to enforce the permanent "No Parking" signs throughout the city. The PEOs also work with the street maintenance program to remove vehicles interfering with the resurfacing and slurry sealing contracts.

### **75% Level of Service:**

This level of service will provide for all improved streets to be included in the sweeping program. In the event of a holiday, rain, illness, injury, vacation or mechanical failure of the motor sweepers, sweeping routes will be missed. This level of service requires an additional 6 Motor Sweeper Operators, 4 PEOs, 4 Motor Sweepers, and 4 pick up trucks.

### **90% Level of Service:**

This level of service will provide for all sweeping routes to be completed every month, unless the route is canceled due to a holiday or rain. This level of service assumes the addition of 2 standby operators. These operators will provide back up when other operators are not available to complete their routes. The double shifting of sweepers will be eliminated. This level of service requires an additional 8 Motor Sweeper Operators, 5 PEOs, 10 Motor Sweepers and 5 pick up trucks.

### **100% Level of Service:**

This level of service will provide for all sweeping routes to be completed every month. In the event of a holiday or rain, the sweeping will be rescheduled. Routes with posted “No Parking” signs will be rescheduled during a non-posted time period. This level of service will require an additional 12 Motor Sweepers Operators, 5 PEOs, 14 Motor Sweepers, and 5 pick up trucks.

### **Other Sweeping Services:**

The levels of services mentioned above do not include sweeping of Center Islands, Alleys or Bikeways non-contiguous with the street. Currently, requests to sweep center islands, alleys and non-contiguous bikeways are only performed occasionally. Since the equipment needed is not available, the sweeping is typically performed by hand. Street sweeping routes are missed when this service is provided.

To establish a monthly sweeping program for Center Islands throughout the city will require a 7-person crew, including a supervisor. Equipment for the program will include one full size sweeper, one mini-sweeper, one dump truck, and trailer. The full size sweeper will sweep around the center islands and the mini-sweeper will sweep the center islands. The estimated cost of this Center Island Sweeping Program is \$745,000.

To establish a monthly sweeping program for the 213 miles of improved alleys will require a 5-person crew. Equipment for the program will include 2 sweepers and 2 dump trucks. The estimated cost of this Alley Sweeping Program is \$920,000.

To establish a monthly sweeping program for approximately 27 miles of non-contiguous bikeways will require a 2-person crew. Equipment for the program will include 1 mini-sweeper, 1 dump truck, trailer and 1 pick-up. The estimated cost of this Bikeways Sweeping Program is \$300,000.

### **Enforcement of Parking Restrictions:**

If a vehicle is parked in a posted “No Parking” area before the street sweeper arrives, the vehicle will be cited. If a vehicle parks after the sweeper has passed and it is still within the restricted time period, the vehicle will not be cited. When a street sweeper breaks down and is unable to complete the route or the route is simply not going to be swept, the “No Parking” signs are not enforced. Since the PEOs are usually ahead of the sweeper issuing citations, some tickets may have already been written. These tickets will be rescinded.

Street Division, Parking Management Division and the Police Department are in agreement to not issue citations to vehicles parked during the “No Parking” time frame, if the street has already been swept. Parking Management Division and the Police Department will only issue citations if requested by Street Division.

### **Customer Contacts:**

Street Division receives in excess of 100 phone calls per week from residents regarding street sweeping. The majority of the phone calls are inquiries about the program, such as, “are the routes being swept today” and “when will my street be swept.” The complaints usually focus on three areas: missed routes, effectiveness of the sweeping and parking citations. The missed routes are typically due to staff illness, vacation or injury. Other circumstances of missed routes are due to the motor sweepers breaking down.

The effectiveness of the sweeping is usually the result of sweeping in areas where there are too many vehicles parked on the street. Although the area will not be swept due to the parked vehicle, in most instances, the area is swept the next scheduled sweeping day. Parking citation complaints vary from “why did I receive a citation?” to “why aren’t you issuing citations,” to “why is the enforcement inconsistent?” Regardless of the question, a complete explanation is given to the caller.

### CONCLUSION

The Street Sweeping Program had a service level goal of 75%. This goal is unattainable given the current level of funding, the continued growth of the city, the practice of double shifting the motor sweepers, sweeping for special events and the limited number of motor sweeper operators, PEOs and support staff.

The following table summarizes the alternatives previously presented and the funding needed to return the street sweeping program to the 75% level or higher:

<b>Program Levels</b>	<b>Motor Sweeper Operators</b>	<b>Motor Sweepers</b>	<b>Total Cost (FY 02)</b>
Current	20	18	\$3.7 million
75%	26	22	\$5.1 million
90%	28	28	\$6.3 million
100%	32	32	\$7.1 million

Respectfully submitted,

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Approved: George I. Loveland  
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