

DATE ISSUED: February 3, 2005 REPORT NO. 05-034

ATTENTION: Natural Resource and Culture Committee  
Agenda of February 9, 2005

SUBJECT: Refuse Collection Re-Routing/Greenery Expansion Project Status

REFERENCE: Manager's Report No. 04-083, dated April 21, 2004

#### SUMMARY

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

#### BACKGROUND

On June 7, 2004, the Environmental Services Department implemented a project that re-routed every refuse, recycling and yard waste collection route Citywide. It changed the day of collection for approximately 70% of all residents, and converted weekly greenery (yard waste) collection for 121,000 homes to a bi-weekly schedule allowing for the expansion of bi-weekly greenery collection to an additional 30,000 homes. The department collects refuse from 318,000 residences and small businesses, recyclables from 276,000 residences, and greenery from 184,000 residences Citywide. This report provides a six-month status report on the Citywide Re-routing/Greenery Expansion Project.

On June 18, 2001, the new Environmental Services Operations Station was opened at 8353 Miramar Place. This allowed for the consolidation of all City residential refuse and recycling collection operations at a single location near the Miramar Landfill and drop-off location for recycled commodities. These collection services had been operated from four other City locations, three of which were located more distant from the Landfill. This consolidation reduced total fleet miles traveled because the last trip of the day, from the Landfill (or the recycling center) to the station, is shorter, on the average, than had been the case. The Citywide Re-routing Project was planned to optimize this consolidation, and further reduce fleet miles traveled, by redesigning all City collection routes to begin and end at the new station rather than from the four previous locations.

In addition, the department designed and implemented a pilot program expanding greenery collection routes Citywide by utilizing resources made available by the re-routing improvements that converted existing greenery routes from weekly to bi-weekly collection, alternating with the bi-weekly curbside recycling collection. As savings of equipment and crews occur, greenery collection will be expanded further within existing resources.

## **DISCUSSION**

***Reduction of Routes.*** During the first two weeks after June 7, 2004, the number of collection routes (excluding street litter routes) was reduced by about 7% from approximately 700 each week to 650 within all waste collection streams. Staff and vehicles freed up by converting to a bi-weekly greenery collection schedule were applied to expand the greenery collection service to 30,000 additional homes, representing an increase of 20% in the homes provided this service. The expansion of the greenery program demonstrates a good faith effort toward our 50% diversion mandate.

Two drivers and two vehicles made available by the re-routing design have been re-assigned to provide a dedicated field function to address customer service requests. This work was previously accomplished by the regularly assigned route drivers who would collect service requests after they completed their assigned route on that day. This process often resulted in overtime, and delayed response to the request. By shifting this responsibility to dedicated staff, the work can be batched and completed more quickly during regular work hours, avoiding the overtime expense and ensuring a quick response. Providing excellent customer service remains one of the department's primary goals.

***Reduction of Fleet Miles.*** The fleet now travels about 900 fewer miles each day resulting in a daily fuel savings of 390 gallons and reduced greenhouse gas and other pollutant emissions. Fuel and mileage savings are reflected in the savings described below.

***General Fund Savings.*** The re-routing project is anticipated to result in cost avoidance savings for the General Fund of approximately \$675,000 during Fiscal Year 2005, increasing to as much as \$1 million per year thereafter (including General Fund savings related to increased diversion of greenery). These reduced costs are expected to be realized in salaries, equipment costs, and disposal fees. The department anticipates similar reductions in future budgets. In addition, increased diversion will likely occur this year and next which will also result in additional General Fund disposal fee savings. This amount cannot be quantified at this time. The Recycling Fund, however, will experience an increase in disposal costs associated with processing the added yard waste into compost.

Overtime costs increased immediately following project implementation on June 7, 2004, as anticipated. During this time period, citizens were becoming familiar with their new collection day and bi-weekly schedule, and drivers were learning their new routes. Although overtime hours worked this past summer were higher than this same period the previous year, actual overtime hours worked in the current year are only 2.4% higher than in Fiscal Year 2004, and 35% below Fiscal Year 2003. Moreover, the number of overtime hours worked has been steadily declining with each pay period since the implementation date.

Additional General Fund savings will likely occur in Fiscal Year 2006 as a result of increased

diversion from additional greenery program expansions currently being planned. The department will carefully monitor project savings throughout the fiscal year to ensure that this financial goal is being met.

***Diversion of Recyclables from Landfill.*** Total greenery diverted from the landfill declined by 14.9% during the period July 1, 2004 through December 31, 2004, from the same period the year before. Comparing this same period, all non-City hauled yard waste delivered to Miramar Landfill declined by approximately 7.0%. This non-City decline is most likely due primarily to the continuing drought during most of this period. The difference between the decline in City hauled diversion and non-City diversion of about 7.9% is most likely attributable to three factors, 1) a drop-off in participation resulting from the change to a bi-weekly collection schedule, 2) lower than anticipated participation in expansion areas, and 3) reduced collection in areas affected by the Cedar Fire. Because diversion was lower than anticipated, the department initiated a direct mailing on greenery recycling to residents on the new expansion routes. Following these mailings, greenery loads collected on those routes increased by 35%. Overall, City collected greenery tonnage has increased in each month since expansion of the program, and in the most recent data, has reached the previous levels of diversion. Additional educational outreach efforts are planned to continue to influence participation rates and diversion. Further expansion within existing resources will result in a net increase in diversion as a result of the expansion made possible by conversion to the bi-weekly schedule.

While the department had anticipated that conversion from weekly to bi-weekly greenery collection would cause some issues for some residents, most have accepted the need for expansion of the program, and the rationale for achieving it within existing resources. The department developed a number of mitigating measures to help residents cope with the change in frequency of collection. Since June 7, 2004, residents have purchased about 200 green 96 gallon automated containers. The Department continues to work with residents on mitigation measures to help address their concerns with the schedule change.

Participation and diversion rates declined by as much as 25% in a few areas, such as in Rancho Bernardo, La Jolla, and Del Cerro. At the same time, diversion increased by 33% in Tierrasanta, 28% in San Ysidro and 14% in Bay Park. While it is not feasible to return to the previous weekly collection schedule because these resources have been used to expand to other neighborhoods, the department plans to initiate a pilot program in Rancho Bernardo on a bi-weekly route that was previously serviced on a weekly schedule. This pilot would convert this route to a semi-automated collection process on a bi-weekly schedule. The City would supply approximately 250 homes with two 96 gallon automated containers for greenery. The pilot will test this collection process as an acceptable mitigation measure to recover the lost participation and diversion while preserving the more cost effective bi-weekly collection schedule.

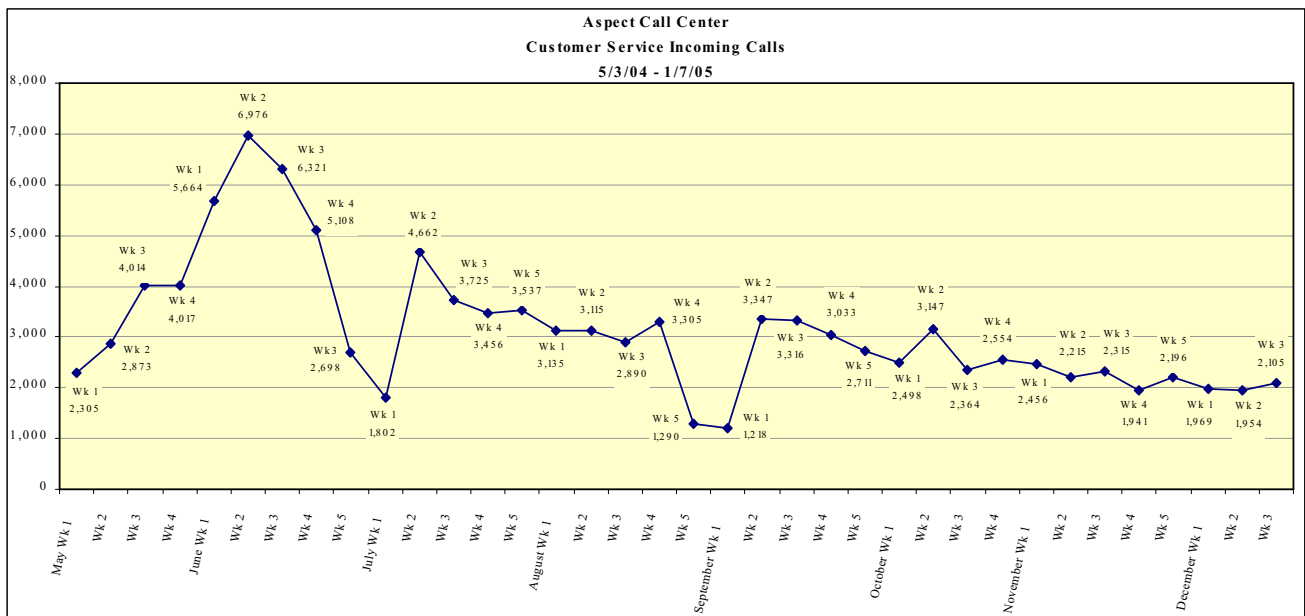
***Community Outreach.*** Public outreach in the form of post cards, calendar mailings, and newspaper articles were completed in a timely manner. Departmental representatives attended 30 community meetings prior to the re-routing implementation.

***Customer Service Request Response.*** A new field function was created to address critical service requests more quickly and reduce the need for overtime. As anticipated, the re-routing project resulted in an increased demand for information as well as an increase in service requests. As the graphs below demonstrate, the number of phone calls and service requests increased during the

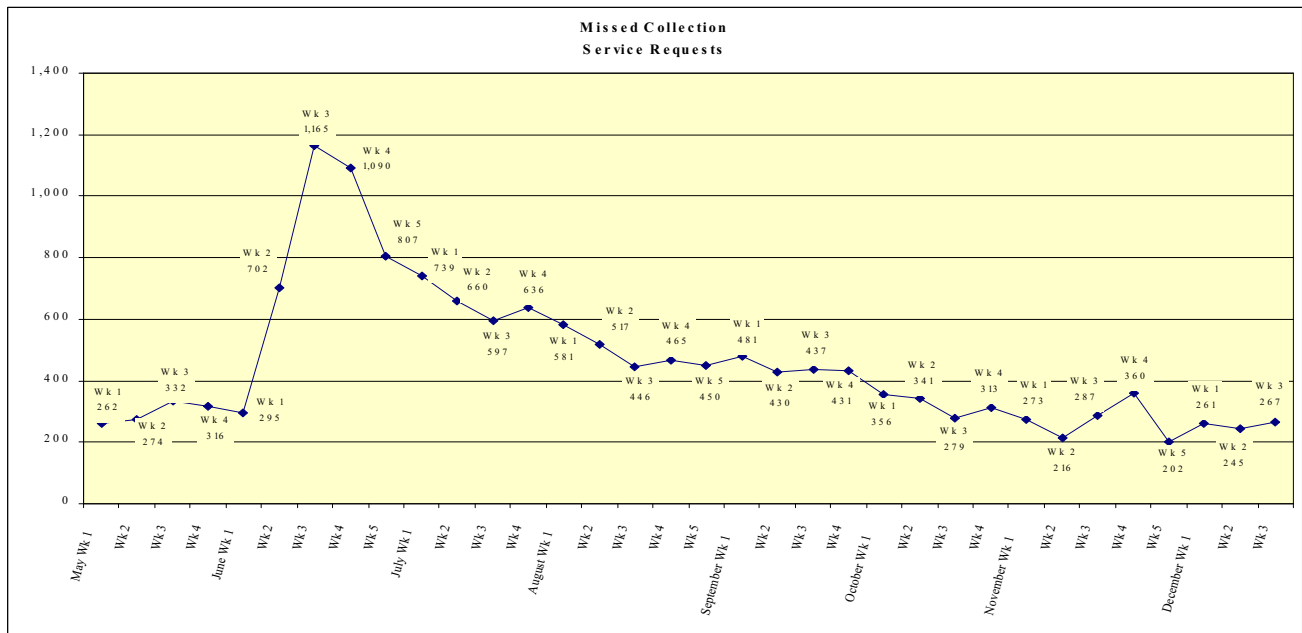
weeks immediately following the implementation, and are decreasing as time goes by. Residents are becoming accustomed to their new schedules. Sanitation Drivers are becoming more familiar with their new routes. Supervisors are identifying route design or map deficiencies and correcting them to smooth out the service delivery.

The department hired additional temporary customer service representatives and expanded customer service lines to Miramar Place to increase our capacity to handle the anticipated increase in calls. Prior to re-routing, the department typically responded to 600 - 650 phone calls each day. During June, the phone calls surged to 1,700 daily, an increase of more than 160%. The majority of the calls were informational inquiries.

As shown in the chart below, call volume has since dropped significantly, and has returned to the levels experienced prior to project inception.



“Service Requests” shown in the chart below relate to locations that were either missed by the collection crew or set out late by the resident.



As residents request service, the Department dispatches a crew to pick up the missed stop or satisfy other requests. Field Supervisors follow up to investigate the source of the problem and work to correct it so that it is not missed in the future. As anticipated, the number of service requests immediately rose following the re-routing implementation, but have returned to their previous levels. The average number of service requests experienced during past summers has been approximately 300 per week. The department expects service requests per week to fall well below previous averages within a year of the rerouting project implementation.

Repeated missed collection stops, at the same addresses, were an unanticipated problem which was a direct result of a longer learning curve for drivers on their new routes. As illustrated in the chart above, calls associated with missed collection stops have returned to their previous levels. The increases in reported missed collections at the end of December, 2004, and beginning of January, 2005, reflect a normal trend experienced during the holiday season. Procedures were instituted to correct this problem, and these calls have steadily declined. Each Area Supervisor maintains a log of repeated missed collection stops, and personally checks the stop to ensure that it has been collected. District Managers monitor these service requests and hold Area Supervisors accountable for missed stops.

**Internal Balance of Resources.** The project design allowed us to review the entire collection system and balance equipment and staffing across the five days of the work-week to better utilize available resources. The re-routing project created the opportunity for Sanitation Drivers to “bid” for their work assignments contributing to employee support of the project. The bid process was developed with the department’s Labor Management Advisory Committee comprised of members of AFSCME Local 127 and members of the department management team.

***Greenery Collection Program Expansion.*** Greenery collection was expanded by 20% to include 30,000 additional residences. As operational efficiency is increased, the department will utilize existing resources to expand greenery collection service further. This will be contingent upon the Recycling Fund's ability to support this increased operating expense.

**CONCLUSION**

In summary, the Re-routing Project implementation for the most part has progressed as anticipated. Collection routes have been reduced in all three waste streams and will result in the reduction over the next year of three refuse trucks and 7.50 budgeted positions in the General Fund. In addition, greenery collection has been extended to 30,000 additional residences on a bi-weekly schedule. This expansion helps us demonstrate a good faith effort to meet the State AB 939 diversion mandate, and is expected to provide greater General Fund savings as additional greenery materials are diverted from the Landfill. Since early diversion rates have not been as high as was expected, a pilot program will be run in an area with a high percentage drop in participation to test the effectiveness of utilizing semi-automated collection of greenery with 96 gallon green automated containers to recoup participation.

Re-routing the City's collection routes is just the latest phase in an environment of continual improvement that began when the refuse routes were converted from manual collection to automated collection between 1993 and 1998. The City implemented curbside recycling collection between 1998 and 2001. All of the refuse and recycling operations were centralized at the Environmental Services Operations Station in 2001. Each of these phases resulted in the department's ability to collect an increasing amount of solid waste with fewer staff while protecting the environment and managing the financial burden on the General Fund. Attachment A illustrates this increase in productivity.

Respectively submitted,

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Director  
Environmental Services Department

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Approved: Richard Mendes  
Deputy City Manager

HEAP/CEW

Attachment - [Collection Services Productivity Gains: 1994-2004](#)