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# AGENDA REPORT

**TO:** Sabrina B. Landreth  
City Administrator

**FROM:** Jason Mitchell  
Director OPW

**SUBJECT:** Update on Illegal Dumping

**DATE:** August 7, 2017

City Administrator Approval

Date:

8/31/17

## RECOMMENDATION

**Staff Recommends that City Council Receive A Supplemental Report On An Update For Oakland Public Works On Illegal Dumping In The City Including Evaluation Of Waste Management's Proactive Pickup Of Illegal Dumping Program.**

## EXECUTIVE SUMMARY

On January 24 and April 25, 2017, Oakland Public Works (OPW) provided the Public Works Committee (PWC) informational reports on the status of illegal dumping in Oakland. The reports were organized based on the City's three-pronged approach to addressing illegal dumping: eradicate, enforce, and educate. This report addresses questions asked by the PWC in response to both informational reports.

## BACKGROUND / LEGISLATIVE HISTORY

Staff has provided informational reports on illegal dumping on March 27, 2012, September 24, 2013, October 15, 2013, March 25, 2014, June 10, 2014, September 16, 2014, and December 2, 2014. Additionally, staff presented reports on illegal dumping on, December 15, 2015, October 11, 2016, December 6, 2016, January 24, 2017 and April 25, 2017.

## ANALYSIS AND POLICY ALTERNATIVES

Most cities tackling the scourge of illegal dumping use a three-pronged approach to address the illegal activity: **eradicate, enforce, and educate**. The first prong is to eradicate: remove the illegally dumped materials from the streets. The second prong is enforcement: catch and prosecute illegal dumpers. The third prong is educate: provide information to residents and businesses on legal methods of disposal, enlist public support in reporting illegal dumpers, and encourage residents and businesses to adopt locations by providing stewardship opportunities to support positive change in the community.

Item: \_\_\_\_\_  
Public Works Committee  
September 12, 2017

This section discusses the findings of a survey conducted in the spring of 2017 as well as, the items that were brought up at the PWC January 24 and April 25, 2017 meeting.

1. Provide recommendations for targeted education and outreach strategies based on survey
2. Information on the Bulky Collection Program for multi-family buildings
3. Illegal dumping associated with multi-family buildings
4. How do we assign "pickups" to Waste Management?
5. Assigning work by "geographical areas" rather than "service request"

### *Survey of Illegal Dumping Piles*

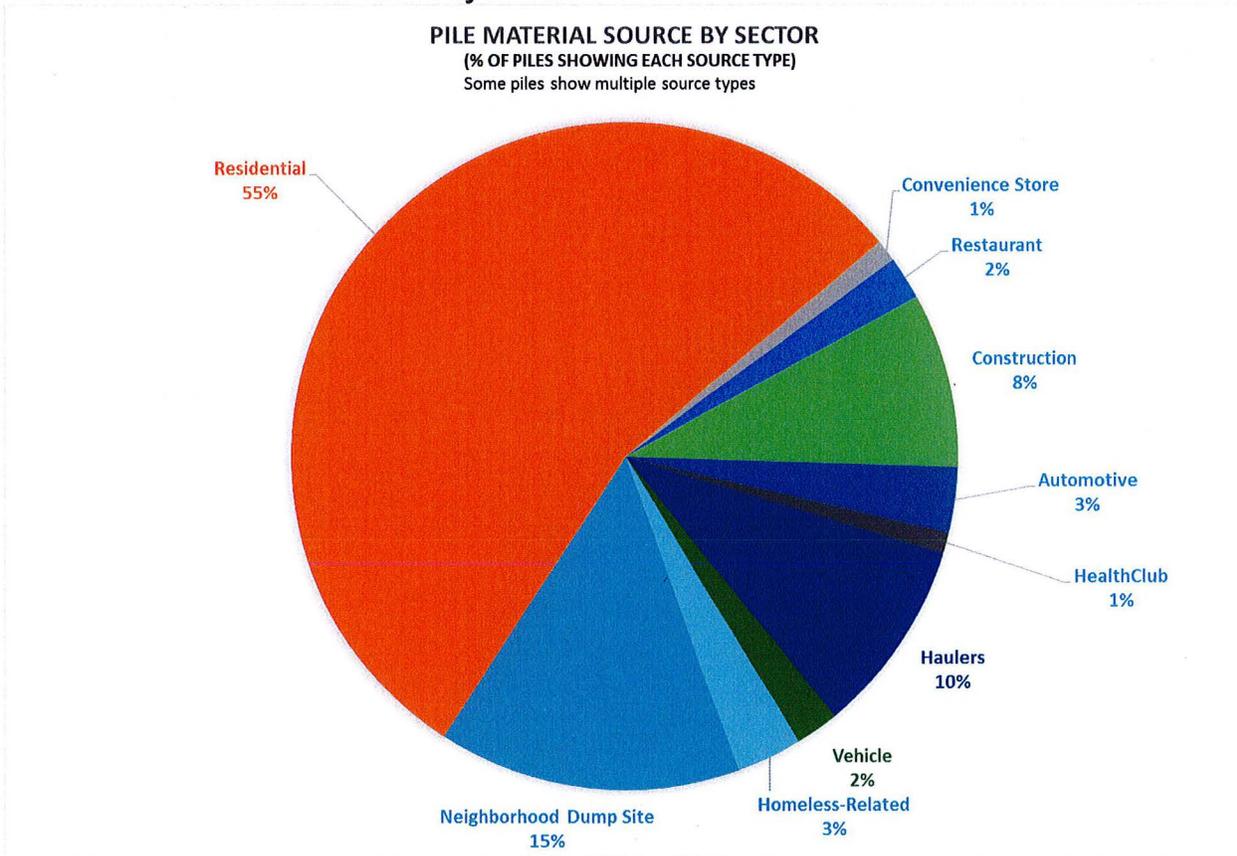
In spring 2017, OPW contracted with Environmental Science Associates (ESA) to conduct a survey of illegal dumping piles to help staff better understand the materials found in the public right of way and to determine the sources of the materials. The data will assist staff with making recommendations for enforcement, education, and remediation strategies.

ESA sampled 75 piles over a three-week period in March 2017, in all four Keep Oakland Clean and Beautiful (KOCB) operational areas of the city. The sample size was the equivalent of one day's worth of service requests. ESA randomly selected sites within the operational areas based on each day's service requests, which KOCB made available. ESA logged and photographed each pile, recording size, shape, type of materials, source of material by jurisdiction, general condition of surrounding area, and distance from nearest street light.

In summary, the findings of the survey are as follows: (1) more than 55% of the piles found included illegally dumped materials from residential sources, (2) the geographic source of 29% of the piles was identified as Oakland, and (3) 32% of the piles were found in areas where the infrastructure was moderately to severely neglected. Further detail on each finding follows.

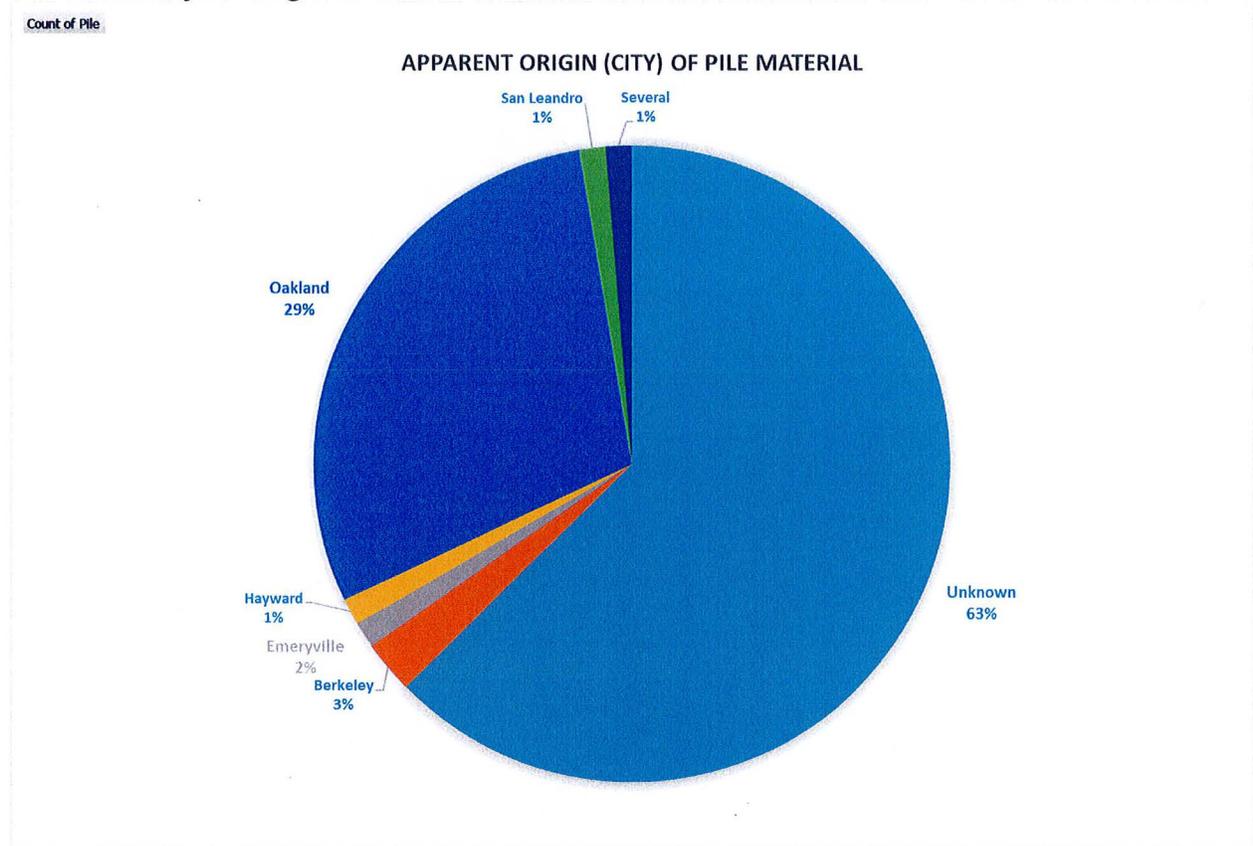
**Chart 1** shows that 55% of the material found in the right of way was from Residential sources. This evidence included packaging, food, textiles, furniture, and small appliances. The category "Neighborhood Dump Site" is a designation that KOCB staff uses to indicate a location that is habitually used by the neighborhood to dump, and accounts for 15% of the piles surveyed. In these cases, the materials clearly come from the neighborhood, and most often are residential in source. Combining Neighborhood Dump Sites and Residential sources yields a combined 70% of the sampled piles as coming from the residential sector. Additionally, the observations showed that 10% was dumped by "experienced dumpers," e.g., from a dump truck, tied to a pallet or a tarp to a pole.

**Chart 1 – Pile Material – Source by Sector**



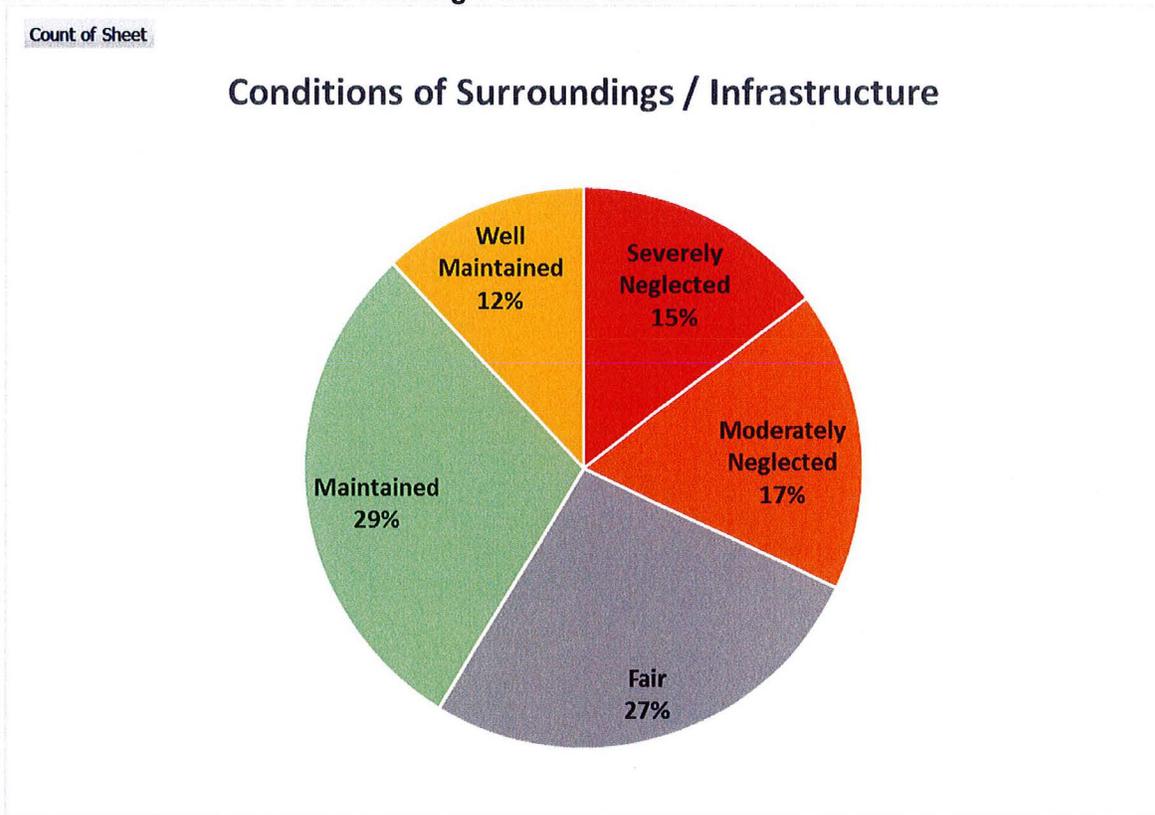
**Chart 2** shows the evidence that would indicate the city of origin for each pile. In 63% of the piles no confirming city of origin was found. For the remaining 37% of the piles where city of origin could be confirmed, Oakland was the greatest at 29%, with nominal amounts from the bordering communities of Berkeley, Emeryville, and San Leandro, along with Hayward.

**Chart 2 – City of Origin of Pile Material**



**Chart 3** shows the condition of the infrastructure that is adjacent to the piles of the illegally dumped material. The conditions of the infrastructure (e.g., concrete, asphalt, fences, landscaping, graffiti) was noted during the survey on a five-point scale from well-maintained to severely neglected. Most piles were observed in areas with moderate levels of maintenance. Thirty-two percent of the piles were noted to be in moderately neglected to severely neglected surroundings.

**Chart 3 – Conditions of Surroundings/ Infrastructure**



A final element of noteworthy data that was collected: none of the observed piles were closer than 30 yards to a retail establishment, and more than 90% of the observed piles were more than 100 yards (one block) away from the nearest retail.

*Recommendations From The Research*

The research shows that the majority of material was from residential sources and a significant percentage was identified as from Oakland. CityWorks data shows illegal dumping is rampant across the city below Hwy 580 and Hwy13, based on that information staff suggests that the place to start outreach and education is a media campaign directed to Oakland residents.

A long-term media campaign focused on resetting community norms is recommended. The campaign would be designed to change the current social practice of putting excess garbage in the right of way and simply hoping it will disappear, or using the Call Center to report it. The

campaign would emphasize that this is an unacceptable habit. The campaign would speak to “if we want a clean and beautiful city, community or neighborhood it starts with us and where we live.” A media effort of this type would be a high profile campaign in all neighborhoods, using outdoor media, like billboards, buses, bus shelters, and BART. Additionally, in-home impressions through on-line media, direct mailings, targeted radio and TV, and bill inserts could be used. At a minimum, a cost to run an intensive media campaign sequencing imprints over a one-year period would be \$300,000 shown in **Table 1**. Staff submitted a grant to CalRecycle Illegal Disposal Site Abatement Grant Program that included \$125,000 of funding for this campaign, the maximum allowed. Should the grant be funded, OPW can begin developing an intensive media campaign. Staff will continue to look for funding opportunities for the campaign including other grants and possible philanthropic partnerships.

**Table 1 – Stop Illegal Dumping Media Campaign Cost**

Item	Estimated Cost
Media Buy	\$110,000
Direct Mail	\$92,000
Radio and On-line Media	\$48,000
Development & Production	\$50,000
Total	\$300,000

*Bulky Waste Pick-up For Apartments*

New services to address illegal dumping were added as part of the Mixed Material and Organics Collection Services Contract (MM&O Contract) which began on July 1, 2015. The MM&O Contract provides for bulky waste pick-up from apartments and condominiums, which previously was only available to single-family homes. This new service provides for an additional 56,000 plus bulky waste collections annually at 3,500 apartment and condominium complexes. Oakland Municipal Code (O.M.C. 8.28.140D) requires that property owners must ensure residents have reasonable access to all collection services provided.

*The Service*

Apartments and condominiums are eligible for free bulky pickup service once per year of up to 1.5 cubic yards of bagged, boxed or bundled trash per apartment or condo unit, plus: 1 large appliance, 2 televisions or computer monitors, 2 tires, 2 mattresses or box springs, 2 carpets, and consumer electronics.

The property manager receives, on the monthly billing statement, the building’s allotment for bulky pickup, measured in cubic yards. With each scheduled Bulky Collection, the allotment is decreased by the volume collected, and the remaining balance is reported on the next bill.

In multi-family buildings of 5+ units, residents may self-schedule a bulky pickup directly with Waste Management (the MM&O Contractor), with a waiver from the property manager, or by arranging the pickup through the property manager. Apartment residents may download a waiver from OaklandRecycle.com website. This is recommended for buildings 5 to 14 units without on-site property managers. Bulky collection at curbside or by debris box can be scheduled as well. Curbside collection is recommended for buildings with easy curbside access and 20 units or fewer. Debris box collection can be used to promote an “event” at an apartment

complex to maximize participation. This type of service is recommended for buildings with a higher number of units.

More information about bulky pickup service at apartments and condominiums can be found at [www.oaklandrecycles.com](http://www.oaklandrecycles.com). Multi-family Bulky Collection can be scheduled by calling 510-613-8710.

*Multi-family Bulky Collection Facts*

In the first full year (2016) of the new Multi-Family (MF) Bulky Collection program, there were 1,057 appointments serviced. As the year progressed, and program information was pushed out, an increase in monthly appointment was experienced as shown in **Table 2**.

**Table 2 – MF Bulky Collection 2016 Appointments**

2016	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>Number of MFD Pickups</b>	23	76	100	66	88	64	79	103	96	115	111	136	1,057

A total of 1,321 tons of material was collected from the 1,057 appointments along with 6,553 items that are counted instead of weighed. An average single-family bulky appointment consists of 225 pounds of material and 1 to 2 items that are counted not weighed. Using these averages, each of the Multi-Family Dwelling (MFD) Bulky Collection appointments represents approximately 5 units of participation per appointment. Using 5 units of participation per appointment the multi-family Bulky Collection program experienced just under 10% participation in the first year. See **Table 3**.

**Table 3 – 2016 Multi-Family Bulky Collection Tonnage**

2016 Total Bulky Collection - Multi-Family						
Large Appliances	Televisions	Computers	Tires	Mattresses	Small Electronics	Mixed Material
Units	Units	Units	Units	Units	Units	Tons
<b>1,012</b>	<b>980</b>	<b>978</b>	<b>910</b>	<b>1,055</b>	<b>1,618</b>	<b>1,321.00</b>

*Promotion for Multi-Family Bulky Collection Program*

Increasing participation in the Multi-Family Bulky Collection program is a high priority. The planned activities over the next year to get the word out to apartment tenants, managers, and owners include:

1. Program Collateral Materials Distribution
  - Program postcards mailed to each of the 50,000 addresses
  - Distribution of postcards at public counters (Libraries, Senior Centers, Recreation Centers) and National Night Out
  - Bill inserts
  - City of Oakland webpage
  - OaklandRecycles webpage

2. Advertising
  - Nextdoor – rotation over next two years
  - Facebook – targeted by zip code
  - YouTube Ads
  - Multi-family Building Owners and Manager Association
3. Direct Outreach to Building Owners and Managers
  - One-on-one contact to provide positive customer experience in bulky program
  - Hands-on site assessment and assistance is setting up collection service
  - Implement “ReCollect” App that provides reminders
    - i. Pushes message out / collection days/ holidays
    - ii. Bulky Collection appointments
4. Direct Outreach to Residents
  - Community Events
  - Promotion of the Pay-As-You-Go garbage collection service

*Illegal Dumping Due to Move Outs at Multi-Family Buildings*

At the April PWC it was suggested that there is more illegal dumping around the first of the month due to tenants in multi-family buildings moving out. **Table 4** shows CityWorks data for illegal dumping service requests for one year plotted by day of month over the year. The cells in green demonstrate low call volume for that day for illegal dumping calls; the red cells represent high/very high call volume; yellow/orange is middle to high call volume. The data does not substantiate a conclusion that there is more illegal dumping around the first of the month.

**Table 4 – Number of Service Requests Received by day of month for 2016**

Day of Month	Month												Grand Total
	January	February	March	April	May	June	July	August	September	October	November	December	
1	6	92	116	81	25	116	93	133	118	47	100	74	999
2	5	102	133	28	114	85	41	135	102	47	89	58	939
3	13	111	94	40	80	71	45	110	30	130	84	29	837
4	107	66	81	122	72	44	36	111	36	96	79	37	887
5	80	67	20	82	93	56	136	103	61	99	35	86	918
6	75	45	33	87	63	118	108	51	153	73	21	94	921
7	83	31	103	78	23	120	116	66	120	76	118	80	1014
8	78	105	102	77	30	84	96	128	93	39	81	52	965
9	6	72	119	23	94	114	44	90	69	40	41	53	765
10	3	74	95	18	100	74	51	108	23	107	83	14	750
11	163	92	41	108	71	31	107	93	47	78	45	40	916
12	84	39	30	91	63	28	86	118	123	101	25	94	882
13	79	28	20	89	64	120	113	39	94	86	32	78	842
14	73	34	85	63	26	110	103	31	85	51	86	64	811
15	65	35	90	71	12	124	103	115	111	26	101	55	908
16	27	114	66	64	96	85	32	108	85	18	76	41	812
17	23	98	63	36	78	90	37	114	35	79	49	25	727
18	40	98	84	104	80	22	158	75	41	94	67	17	880
19	66	80	38	68	74	27	173	88	167	82	22	87	962
20	97	24	37	82	76	115	106	31	86	89	16	63	822
21	63	45	60	84	33	111	98	41	86	68	78	78	845
22	74	122	67	76	48	82	84	147	94	27	81	95	997
23	31	113	77	34	114	73	29	124	80	24	54	38	791
24	26	107	64	24	71	74	41	87	25	91	11	14	635
25	140	101	75	124	85	40	111	100	39	77	15	16	923
26	87	92	26	100	70	34	119	93	126	73	19	31	870
27	81	37	38	66	78	111	96	37	104	67	41	81	837
28	76	68	92	56	28	121	107	29	126	56	69	71	899
29	76	130	88	61	35	105	85	144	88	32	88	68	1000
30	39		83	16	52	76	26	109	84	24	92	70	671
31	38		88		110		51	93		81		19	480
Grand Total	1,904	2,222	2,207	2,053	2,058	2,460	2,631	2,851	2,521	2,078	1,798	1,722	26,505

*Illegal dumping Assigned to WMAC*

In July 2015, as part of the new MM&O Contract with Waste Management of Alameda County (WMAC), KOCB began assigning 25 illegal dumping service requests each week day to WMAC to supplement the City's capacity for illegal dumping removal. As of June 30, 2017, KOCB assigns 30 services requests per week day as provided in the MM&O Contract. Currently, this support provides approximately 5,600 collections in a year. The service requests are received through the Oakland Call Center and entered into CityWorks (a work management system) and assigned through CityWorks to WMAC. The service requests were originally assigned by day of week where WMAC collection trucks were scheduled on that day of the week and by the size of the pickup (only 3 cubic yards) by looking through the service requests with photo attached to determine the size of the pile.

In an effort to obtain the greatest value from the MM&O Contract, the Environmental Services Division (ESD) assigned a contractor to assist KOCB with examining how the City assigns illegal dumping locations to WMAC, and with WMAC staff to review their procedures and practices. The field work included visiting over fifty illegal dump work order locations throughout the City.

The findings provided opportunities to improve procedures related to assigning the service requests that reduced administrative steps and improved efficiency, as well as tracking and resolution of service requests that would improve operational practices and better support KOCB in its goals to clean the streets of Oakland.

The most significant improvement was that WMAC agreed to change operations as defined in the MM&O Contract, where the assignment is based on day of week for their collection routes, to allowing assignment of work in any location. WMAC achieved this change by creating a new illegal dumping crew and bidding out the "route." WMAC now has consistent staff performing the function. The second recommendation that is being piloted is looking at the daily assignment in total cubic yards (75) instead of number of piles (25). This provides KOCB staff greater flexibility in assigning work, and ensures that when a location is assigned, the total pile will be removed resulting in greater community satisfaction.

With the increase in reported illegal dumping and homeless camps cleanups, the support provided to KOCB through the MM&O Contract has been an important factor in keeping up with the increased demand.

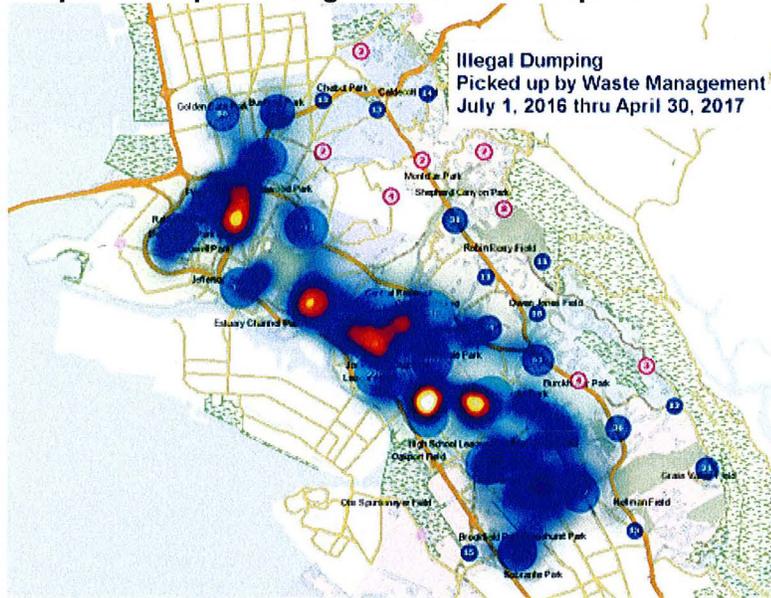
The PWC requested data on the number of work orders completed by WMAC and where the service was provided. **Table 5** shows the number of work orders completed from July 1, 2016 through April 30, 2017.

**Table 5 – Work Orders Assigned to Waste Management July 2016 To April 2017**

	Jul 2016	Aug 2016	Sept 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	Total
# WO	348	439	296	440	386	402	397	420	425	353	3,888
Mattress	86	103	91	125	102	92	99	120	113	65	996

Following in **Graph 1** the location of each of the work orders is plotted on a map showing the locations where WMAC crews provided service based on work orders received. The “flare” on the map is the area where there is an intensity of work performed by WMAC.

**Graph 1 – Map Showing Table 6 Data Graphed**



*Work Assigned By Geographical Area Instead of Service Requests*

As described in previous reports KOCB divides the City into four geographic operational areas. KOCB receives service requests that come through the Oakland Call Center, which are assigned to staff as work orders. Work is then assigned to the crew designated for the geographical area that corresponds to work order. Crews remove the illegally dumped materials seven days a week and address 85% of the requests within three business days.

The City of Oakland is 55 square miles. Using CityWorks data for April 2017, for one operational area and work orders assigned to that area for the four Thursdays showed that the assigned work orders were within the following square mile radius:

- 1<sup>st</sup> Thursday = 1.6 square miles
- 2<sup>nd</sup> Thursday = 1.0 square mile
- 3<sup>rd</sup> Thursday = 1.8 square miles
- 4<sup>th</sup> Thursday = 2.4 square miles

This data does not indicate that the compactor trucks servicing illegal dumping work orders are driving significant distances to respond to service requests.

In FY 2015-16, 29,370 illegal dumping removal work orders were completed. Illegal dumping service requests received through the Oakland Call Center have increased 100% in the past five years.

The PWC has suggested that KOCB could collect more illegal dumping if the trucks were dispatched to a single area, and picked up whatever they saw; a block-by-block system. The current measurement of success is number of work orders completed and time to complete the work order – 85% within three business days. In a block-by-block system, the measurement would need to be tons of material collected for the units accomplished and would not be tied to service requests from the public.

Staff is developing a pilot project to test the effectiveness of a block-by-block system compared to the existing system of responding to community generated service requests, with 85% addressed within three business days. Such a pilot would have an impact on the current method of deployment and measurement in one of the geographical areas and redeploying the crews and equipment in the pilot area to drive block-by-block to collect illegal dumping. KOCB will design and run a pilot project in the next eight months and report back in April 2018 with its findings.

### **FISCAL IMPACT**

No fiscal impacts are associated with this informational report.

### **PUBLIC OUTREACH / INTEREST**

This item did not require any additional public outreach other than the required posting on the City's website.

### **COORDINATION**

The Office of the City Attorney, Finance Department, Oakland Police Department, and the City Administrator's Office were consulted for the preparation of this report.

### **SUSTAINABLE OPPORTUNITIES**

**Economic:** The continued efforts of staff to remove illegal dumping and graffiti will assist in improving the physical appearance of the City of Oakland, which translates directly into attracting and retaining business and promoting civic pride.

**Environmental:** A decrease in the amount of dumped materials and litter will lessen the amount of debris that enters the storm-drain systems, polluting our creeks and waterways.

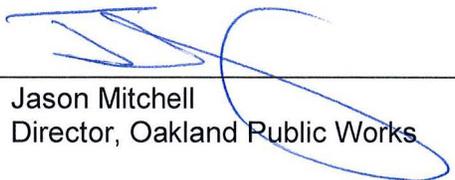
**Social Equity:** The enhanced efforts of collaboration and partnering between the Public Works Department, our residents and business community will improve the quality of life and public safety.

**ACTION REQUESTED OF THE CITY COUNCIL**

Receive an Update from Oakland Public Works on Illegal Dumping in the City including evaluation of Waste Management's Proactive Pickup of Illegal Dumping Program.

For questions regarding this report, please contact Susan Kattchee, Assistant Director, Public Works at 510-238-6382.

Respectfully submitted,



Jason Mitchell  
Director, Oakland Public Works

Prepared by:  
Susan Kattchee, Assistant Director