



## Kriss Worthington

Councilmember, City of Berkeley, District 7  
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### CONSENT CALENDAR

February 9, 2016

To: Honorable Mayor and Members of the City Council  
 From: Councilmember Kriss Worthington  
 Councilmember Lori Droste  
 Subject: Budget Referral: Including BigBelly Solar Compactor Bins Allocation in the 2016 Mid-Year Budget Process

### RECOMMENDATION

Refer to the 2016 Mid-year budget process the purchasing of BigBelly Solar Compactor Bins in order to save money, meet zero waste goals, and reduce Berkeley's greenhouse gas emissions.

### BACKGROUND

BigBelly Solar Compactor bins are self-powered, patented, and compacting, with a capacity 5 times greater than traditional bins. This higher capacity lessens the need for collection trips, saving fuel, labor, and maintenance costs. Equally important, these innovative recycling, composting, and trash bins divert waste from the landfill, educate the public on what materials go into each bin, and have been shown to cut greenhouse gas emissions by up to 80%.

According to a news report from Cleveland.com, Philadelphia saved \$900,000 in its first year after purchasing about 1,000 BigBelly Solar Compactors and the program reduced the number of collections downtown from 17 to 5 times a week.

[http://www.cleveland.com/metro/index.ssf/2012/11/cleveland\\_tries\\_solar-powered.html](http://www.cleveland.com/metro/index.ssf/2012/11/cleveland_tries_solar-powered.html)

Oakland is the nearest city to have BigBelly solar compactors available on public property.

### FINANCIAL IMPLICATIONS:

\$137,000 first year. Save money in the long run through reduced number of trash collections, fuel costs, and labor costs.

### ENVIRONMENTAL SUSTAINABILITY:

Increase Berkeley's diversion rate and contribute to achieving the Zero Waste by 2020 goal. Reduce greenhouse gas emissions through fewer collection trips and maximizing recycling and composting, contributing to meeting the Climate Action Plan Waste Reduction and Recycling goals.

### CONTACT PERSON

Councilmember Kriss Worthington      510-981-7170

### Attachment:

1. BigBelly Executive Summary to DBA and TBID



EXECUTIVE SUMMARY  
DBA & TELEGRAPH BID  
DRAFT 11/5/15



## OVERVIEW

- **Cleaner Streets** – Reduced overflows and litter due to additional capacity and enclosed containers.
- **Increased Sustainability** – Reduced carbon footprint via fewer collections.
- **Reduced Operating Expenses** – Fewer collections translating to time, fuel and money savings.
- **Resource Efficiencies** – Re-allocation of resource time based on reduced collections.
- **Secure Containers** – Enclosed design prevents weather, animals, rodents, and birds from accessing containers.
- **Operational Transparency** – Results-based data analytics that can be shared with stakeholders and community.

## ANNUAL BIGBELLY OPERATIONS - PRODUCTIVITY/SAVINGS GAINS

DBA - Premium Zone	Current	Bigbelly	Savings/Gain
Collection Locations	60	48	12
Number of DBA Top offs or Services	15,600	2,496	13,104
Total Labor Hours Spent Servicing Bins	7,280	1,456	5,824
Associated Labor Cost <sup>1</sup>	\$189,280	\$37,856	\$151,424
<b>Total Estimated DBA Annual Cost Savings:</b>			<b>\$151,424</b>

Telegraph BID – Telegraph Ave.	Current	Bigbelly	Savings/Gain
Collection Locations	54	33	21
Number of Telegraph BID Top offs or Services	14,040	1,716	12,324
Total Labor Hours Spent Servicing Bins	1,170	143	1,027
Associated Labor Cost <sup>1</sup>	\$30,420	\$3,718	\$26,702
<b>Total Estimated Telegraph BID Annual Cost Savings:</b>			<b>\$26,702</b>

City of Berkeley (DPW) <sup>2</sup> – Service of both BIDs	Current	Bigbelly	Savings/Gain
Collection Locations	114	81	33
Number of DPW Total Collections	71,344	17,472	58,872
Total Collection Hours	3,567	287	3,280
Associated Labor Cost <sup>3</sup>	\$220,382	\$17,733	\$202,649
Collection Vehicle Cost – FEMA rate	\$167,658	\$13,491	\$154,167
Vehicle GhG Emissions (tons)	197.23	15.87	181.36
<b>Total Estimated City of Berkeley Annual Cost Savings:</b>			<b>\$356,816</b>

DBA, Telegraph, & City of Berkeley	
<b>Total Estimated DBA, Telegraph, &amp; City of Berkeley Collective Annual Cost Savings:</b>	<b>\$534,942</b>