



# County of San Diego Strategic Plan to Reduce Waste



**Final Plan**  
**April 12, 2017**



HF&H Consultants, LLC

in collaboration with



**O'Rourke**

This Final Strategic Plan to Reduce Waste presents analysis and recommendations prepared by HF&H Consultants, LLC for the County's achievement of 75% diversion by 2020 and Zero Waste (90% diversion) by 2040.

The County has not endorsed or approved this Strategic Plan or any of its recommendations. County staff will present this Strategic Plan to the County Board of Supervisors in mid-2017 for consideration.

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## ATTACHMENTS

- A. Visioning Workshop Memorandum
- B. Stakeholder Participation and Outreach Strategy
- C. June 2016 Public and Internal Stakeholder Presentations
- D. Results from Questionnaires for Residents, Businesses, and County Departments
- E. Summary of Stakeholder Engagement Process and Input Received
- F. Case Studies of Businesses with High Diversion Programs
- G. Demographic Information
- H. Baseline Waste Characterization and Tonnage Data
- I. List of Non-Exclusive Hauling Companies and Recyclers
- J. Summary of Non-Exclusive Hauler Service
- K. Facility Infrastructure Inventory
- L. Current Programs and Policies for the Unincorporated Areas
- M. Current Programs and Policies for Internal Operations
- N. Comprehensive Menu of Program and Policy Options for Unincorporated Areas
- O. Comprehensive Menu of Program and Policy Options for Internal Operations
- P. Program and Policy Descriptions
- Q. Recommended Internal Program and Policy Cost and Staffing Information
- R. Sustainable Funding Background Information

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**Subject: Strategic Plan to Reduce Waste**

Dear Michael,

HF&H is pleased to submit the final version of the Strategic Plan to Reduce Waste to the County of San Diego (County). The Strategic Plan responds to the County Board of Supervisors' direction to staff to report back on the County's current diversion efforts and to develop a strategy for increasing its diversion rate to 75% by 2020 and Zero Waste (90% or greater) by 2040. We have addressed the Board's request by including the following elements in the Strategic Plan:

- Summary of current diversion programs and policies in the County, including an overview of the County's materials management system and inventories of programs, policies, and facilities;
- Baseline data including demographic information, waste characterization data, historical tonnage data, and customer account data;
- Identification and assessment of over 230 program and policies options to support increased diversion for the unincorporated areas and internal County operations with a near-term focus on 75% diversion;
- Overview of the stakeholder input process conducted to obtain input on the Strategic Plan; and,
- Recommendations for achieving the County's diversion targets including separate implementation plans for diversion of materials generated: (i) in the unincorporated areas; and, (ii) by the County's internal operations.

Mr. Michael Wonsidler  
April 12, 2017  
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The Strategic Plan lays out an aggressive timeline for reaching 75% by 2020. It will require swift and concentrated action by the County to implement numerous recommended initiatives and anticipates achievement of diversion results on the high end of the diversion estimates reflected in the Strategic Plan analysis. It may be more pragmatic for the County to consider a longer planning horizon for achieving 75% diversion to allow more time to implement programs and policies and to allow the programs to mature into high-performing diversion programs. It should be noted that regardless of the County's diversion goal or desired timeframe for achievement, the County will need to move ahead with several of the programs and policies analyzed as part of this Strategic Plan to meet current State regulations, including those with phased implementation requirements those in the process of being finalized.

Regardless of the diversion goal(s) and timeline pursued by the County, the Strategic Plan provides the County with useful information including estimates of diversion potential, cost, cost-per-diverted ton, greenhouse gas (GHG) emissions reductions, potential job creation, and County staffing needs for 20 programs for the unincorporated areas and 20 programs for internal County operations.

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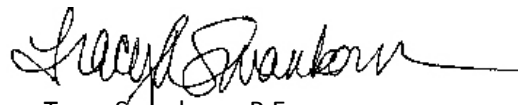
Thank you for providing excellent leadership and guidance throughout the development of this Strategic Plan. Your dedication, oversight, and input were invaluable in shaping this Strategic Plan to address the County's unique conditions and interests. We would also like to thank several other County personnel that participated in monthly meetings during this year-long process, providing valuable input and direction for the Strategic Plan including: Ramin Abidi, Department of Public Works; Alex Bell, Land Use and Environmental Group; Megan Jones, Land Use and Environmental Group; Charley Marchesano, Department of General Services; Robert Laudy, Department of Public Works; Rebecca LaFreniere, Department of Environmental Health; and, Ricardo Serrano, Department of Environmental Health.

We appreciate you and the County entrusting us to prepare this Strategic Plan. If you have any questions, please contact Rob Hilton at (925) 977-6959 or [rchilton@hfh-consultants.com](mailto:rchilton@hfh-consultants.com); or, Tracy Swanborn at (925) 977-6963 or [tswanborn@hfh-consultants.com](mailto:tswanborn@hfh-consultants.com).

Very truly yours,  
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## EXECUTIVE SUMMARY

On January 27, 2015, the County of San Diego's (County) Board of Supervisors (Board) directed staff to identify how the County is achieving its current diversion rate, and on programs, policies, and resources needed to achieve 75% Diversion by 2020 and Zero Waste (90% or greater Diversion) by 2040 (collectively "Diversion Targets"). The Board further identified an interest in assessing diversion opportunities and strategies for residents and businesses in the unincorporated areas of the County and for its own operations (internal operations) to support efforts towards Zero Waste. This Strategic Plan to Reduce Waste (Strategic Plan) is a response to the Board's direction. It presents a set of diversion programs and policies to achieve 75% Diversion and additional strategies targeting Zero Waste. Strategies focus on waste prevention, reuse, repair, recycling, composting, and more.

The County's diversion rate was 62% in 2015, as calculated using the State of California (State) reporting methodology. It is reflective of waste prevention and reuse efforts as well as hauler diversion programs. The non-exclusive franchise haulers divert approximately 27% percent of the materials they collect in the unincorporated areas. Given the current diversion rate, reaching 75% Diversion and Zero Waste will necessitate a significant, well-planned, and well-funded effort. Initially, materials targeted for diversion will include traditional recyclables, yard trimmings, food scraps, compostable paper, and construction and demolition debris (C&D); and, later, nearly all types of materials discarded will be targeted.

The County's focus on achieving its Diversion Targets at this time is advantageous for several reasons.

- The State set a 75% State-wide recycling policy goal in 2011 and has passed several pieces of legislation in the past five years supporting this goal;
- Landfills in San Diego County may not have sufficient capacity beyond 2028 if diversion levels are maintained at current levels<sup>1</sup>. Increased diversion will extend local landfill capacity;
- Zero Waste programs and policies will support the County's mission, values, and initiatives including the County's *Live Well San Diego* vision, Climate Action Plan, 2015-2020 Strategic Energy Plan, Eat Well Standards, and Food System Initiative; and,
- Materials diverted from landfill disposal will reduce greenhouse gases, which will support the County's Climate Action Plan goals.

The strategic planning process involved a robust program and policy analysis that included identification of over 230 program and policy options, and in-depth analysis of 40 short-listed options. The in-depth analysis examined costs, diversion potential, cost-effectiveness, greenhouse gas (GHG) emissions reductions, and job creation potential. Program and policy options addressed a broad range of sectors, material types, and materials management solutions, including waste reduction, reuse and repair, recycling, composting, and education strategies. A stakeholder outreach process invited input from various parties including residents, businesses, members of the recycling and waste industry, non-profit organizations engaged in diversion programs, and various County departments.

### Strategy for Achieving Diversion Targets in the Unincorporated Areas

A recommended set of programs and policies was developed to reach 75% Diversion and move towards Zero Waste. The County has approximately 3.5 years (from mid-2017 to 2020) to achieve 75% Diversion. Several recommended programs require one to two years of planning and implementation time, with

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<sup>1</sup> The 2012 Five-Year Review Report of the San Diego County Integrated Waste Management Plan (CIWMP) included a forecast that the landfill infrastructure in San Diego County will have sufficient capacity through 2028 depending on many factors. An updated report is anticipated to be completed in summer of 2017.

more time needed for organics processing facility infrastructure development. Furthermore, programs need time to mature to achieve the diversion success anticipated. Given these factors, reaching 75% Diversion by 2020 will require that the County initiate programs immediately, move quickly with implementation, fully dedicate needed resources, and make a strong commitment to support and manage current and new diversion programs and policies.

It may be more pragmatic for the County to consider a longer planning horizon for achieving 75% Diversion to allow more time to implement programs and policies and to allow the programs to mature into high-performing diversion programs. It should be noted that regardless of the County's diversion goal(s) or desired timeframe for achievement, the County will need to move ahead with several of the programs and policies analyzed as part of this Strategic Plan to meet current State regulations, including those with phased implementation requirements as well as those in the process of being finalized. Regardless of the diversion goal(s) and timeline pursued by the County, the Strategic Plan provides useful information including estimates of diversion potential, cost, cost-per-diverted ton, greenhouse gas (GHG) emissions reductions, potential job creation, and County staffing needs for 20 programs and policies for the unincorporated areas and 20 programs and policies for internal County operations.

Actual diversion performance and costs for the diversion programs and policies will differ depending on: the manner in which the programs are implemented; participation levels of the residents and businesses in the programs; the County's ongoing commitment to the programs; and, external factors such as: the economy; actual composition of the waste stream; growth in population; changes in demographic conditions; number and types of new businesses; product design and packaging; collection and processing technology; changes in federal and State legislation and regulations; and, more. For these reasons, the County will need to periodically assess program performance and adjust its plans over time.

The implementation strategy presented in this Strategic Plan is organized using three planning phases. The Near-Term Phase includes a portfolio of programs and policies selected to achieve 75% Diversion by 2020; and, the Mid- and Long-Term Phases include plans to move diversion to Zero Waste by 2040.

### **Near-Term Programs (2017-2020) to Achieve 75%**

Figure ES-1 presents the recommended list of Near-Term programs and policies and identifies priorities for 2017/2018 and 2019/2020 timeframes. The primary focuses for the 2017/2018 timeframe include:

- Supporting development of large-scale organics processing facilities, on-site community and farm composting, and reducing food waste because 40% (64,000 tons per year) of the diversion needed to achieve 75% Diversion requires processing of yard trimmings, food scraps, and compostable paper. Without significant increases in organics processing capacity, achievement of 75% by 2020 is not realistic. While capacity is being developed, food waste prevention and food donation programs can reduce the amount of food waste disposed and help feed those in need;
- Implementing changes to the non-exclusive solid waste management agreements to increase residential and commercial diversion and C&D diversion by C&D haulers. These changes represent 73% (121,000 tons per year) of the diversion needed to achieve 75% Diversion (and are inclusive of some organic materials reflected in the above point on organics processing); and,
- Amending the County's C&D ordinance to expand its C&D recycling requirements to cover more C&D projects, potentially diverting 6% (10,000 tons per year) of the total diversion needed.

The 2017/2018 focus on these three key efforts must be immediate and intensive, as they are critical to provide the infrastructure and framework to support implementation of several programs needed to reach 75% Diversion. The 2019/2020 programs and policies, including: expanded technical assistance and public education and outreach programs; promotion of reuse and repair opportunities; and, support for and promotion of drop-off sites for paint, mattresses, carpet/padding, and other materials covered



by State product stewardship legislation/regulation are also critical to achieving 75% Diversion. Two household hazardous waste (HHW) programs reduce the illegal disposal of materials that creates potentially significant health risks for the community and the environment and support the County’s compliance with State AB 939 requirements for safe collection and disposal of HHW generated by residents.

Near-term implementation of supplemental programs (listed in Figure 5-2) will provide additional diversion that will serve as a contingency if the diversion from the programs and policies presented in Figure ES-1 do not result in achievement of 75% Diversion. Lastly, implementation of the recommended funding strategies (presented at the end of this section) should be accomplished in 2017/2018 to provide the essential funding resources that will enable implementation of this Strategic Plan.

**Figure ES-1: Recommended Near-Term Priorities (2017 – 2020) for Unincorporated Areas**

	Program/Policy	Estimated Diversion (d) (tons/year)	2017 / 2018 Priorities	2019 / 2020 Priorities
1	Enhance zoning ordinance to support organics processing (a)	---	✓	
2	Support organics processing facility development (a)	---	✓	
3	Implement commercial food scraps collection (b)	34,000	✓	
4	Regulate C&D haulers with minimum diversion requirements	29,500	✓	
5	Enhance single-family collection with consistent hauler requirements	24,700	✓	
6	Enhance commercial collection with minimum recycling level requirements	21,000	✓	
7	Enhance C&D diversion with ordinance amendment to lower project threshold	10,300	✓	
8	Expand social/behavior change marketing program	9,200		✓
9	Support on-site community/commercial/farm composting	7,500	✓	
10	Expand technical assistance for multi-family, businesses, schools	6,000		✓
11	Support efforts for reuse of textiles and State Extended Producer Responsibility (EPR) for mattresses, carpet/padding, paint	5,300		✓
12	Collect food waste from single-family premises (b)	4,200	✓	
13	Enhance hauler performance standards, including minimum diversion goals	3,900	✓	
14	Improve diversion, tracking and oversight of haulers	2,600	✓	
15	Promote food waste prevention	2,500	✓	
16	Support food donation through County Food System Initiative (c)	1,600	✓	
17	Establish additional hauler-provided drop-off facilities	1,500	✓	
18	Provide regular education on County and State recycling requirements	1,400		✓
19	Collaborate with industry to establish an HHW facility in North County unincorporated area	---		✓
20	Provide additional HHW mobile drop-off events	---	✓	
	<b>Total</b>	<b>165,200</b>		

- (a) Diversion is not listed for "Enhance Zoning Ordinance" and "Support Organics Processing Facility Development" because the organics diversion is included in other programs.
- (b) Food scraps collection implementation is dependent on availability of organics processing facilities; implement collection as soon as possible.
- (c) Food donation diversion is dependent on implementation of the County’s Food System Initiative. Staffing and costs will be covered by the Initiative, and are not in the High Diversion/Zero Waste Strategic Plan.
- (d) Estimated diversion shows the high end of estimates provided in the High Diversion/Zero Waste Strategic Plan. Actual results may be less.

### Mid-Term Programs (2021-2030) to Progress Towards Zero Waste

A recommended set of Mid-Term programs is presented in Figure ES-2. Over the next five years, conditions will change both in response to the implementation of this Strategic Plan as well as other external factors like State regulations and the global economy. Given this, the County should evaluate

the Mid-Term programs and policies presented here prior to, or at the commencement of, the Mid-Term Phase and proceed with implementation, unless conditions change to reduce the need for the programs. Additional program and policy options, not listed here, may gain traction in the next few years and will warrant consideration as well.

**Figure ES-2: Mid-Term (2021 – 2030) Programs and Policies for the Unincorporated Areas**

	Program/Policy*
1	Evaluation of the achievement of the franchise collection system diversion targets, and, if warranted, evaluation of other options that may improve hauler diversion
2	Expanded hauler diversion requirements
3	If warranted, evaluation and adoption of a universal collection ordinance
4	Enforcement of County and State mandatory diversion requirements
5	Amendment of C&D ordinance to increase diversion
6	Landfill bans on selected materials
7	Producer responsibility ordinances
8	Product or packaging bans
9	More convenient organics collection service
10	Mixed materials processing

\* The Mid-Term program and policy options presented here will be evaluated prior to or at the commencement of the Mid-Term Phase and implemented, if warranted.

### Long-Term Programs (2031-2040) to Achieve Zero Waste

Between now and 2040, technological, legislative, economic, political, global marketplace, and cultural changes will impact waste generation, characterization of materials discarded, and the future of the materials management industry. State legislation and industry perspectives on this subject are highly dynamic. Given these factors, the Strategic Plan does not include recommendations for the Long-Term Phase. If the implementation of Near- and Mid-Term recommendations do not achieve Zero Waste, it will be critical to prepare a new Zero Waste strategic plan during the later portion of the Mid-Term Phase to assess then-current conditions and identify how to reach Zero Waste within that context.

### Strategy for Achieving Diversion Targets in County Internal Operations

The County’s goals for this Strategic Plan include a focus on increasing diversion for the County’s internal operations. Because the County does not have a definitive baseline assessment of the current diversion level, making significant long-term commitments of staff time and costs for program and policy implementation does not seem prudent; therefore, recommendations presented for internal operations focus only on the Near-Term Phase (2017 to 2020). Key programs and policies include the following:

- Establishing a measurement and reporting process and determining baseline performance to better understand diversion and materials management practices of internal operations;
- Increasing reuse of the County’s surplus property by revising the process for surplus property disposal when the contract is rebid in 2017; and offering incentives and recognition to departments that acquire surplus property through the reutilization program;
- Establishing a comprehensive Environmentally Preferable Purchasing Policy (EP3) that focuses on choosing environmentally-friendly products and services more broadly;
- Updating the County’s procurement process with more diversion objectives and requirements in the County’s RFPs and resulting contracts for product purchases and service providers (such as food service providers, janitorial services, maintenance services, landscaping, etc.); and,

- Enhancing diversion through new requirements in the County collection contract, new facility leases, and facility lease renewals including requirements for education of employees and janitorial staff; technical assistance to departments; improved recycling container placement and signage; and diversion of additional food waste and yard trimmings.

After these recommendations are implemented and monitored for a year or two to establish a baseline, the County can integrate continual improvement in diversion as part of its Department Excellence Goals. Figure ES-3 identifies the recommended Near-Term programs and policies for internal operations.

**Figure ES-3: Recommended Near-Term Programs and Policies for Internal Operations**

Program/Policy	
<b>2017 / 2018 Timeframe</b>	
1	Establish High Diversion/Zero Waste policy and organization (a)
2	Establish measurement and reporting process and baseline
3	Increase use of County's existing reutilization process
4	Expand the B-67 Recycled Products Purchasing Policy into an Environmentally Preferable Purchasing Policy (EP3)
5	Incorporate Zero Waste objectives into County procurements
6	Enhance diversion requirements in waste collection contracts (b)
7	Ensure optimal recycling at facilities owned and/or leased by County (b)
8	Increase diversion of yard/wood /food waste generated by County (b)
9	Provide waste reduction and recycling training to employees
10	Require regular training of janitorial staff including contractors
<b>2019 / 2020 Timeframe</b>	
11	Revise G-15 Design Standards to include renovations of facilities
12	Prioritize use of recycled materials in road construction
13	Partner with non-profit organization to provide reuse collections or drop-off boxes at County facilities for employees
14	Partner with Sheriff's Inmate Re-entry Services to consider training program on repair
15	Create capability for collection of used pallets from County facilities
16	Require recycling and composting for County-sponsored events
17	Support food waste reduction and food donation at County operations (b)
18	Increase use of locally-produced mulch/compost at County facilities
19	Support waste reduction and recycling by departments through technical assistance (b)
20	Consider expanding partnerships with artists to create displays from repurposed material

(a) Establishment of a High Diversion/Zero Waste policy (Program 1) is anticipated to occur after a baseline of current conditions is developed (Program 2).

(b) Program implementation for leased facilities may be delayed until lease renewal or amendment.

## Funding Strategy

Funding for current County diversion programs for the unincorporated areas is primarily obtained from franchise fees paid on material disposed by the non-exclusive haulers. As the County continues to implement programs to reduce material disposed, it inherently reduces funding received to support its programs. To reach the County's Diversion Targets, a sustainable funding strategy needs to be implemented in 2017 to generate funds to support current and recommended programs. The following funding mechanisms are recommended:

- **Franchise Fee Modifications.** The funding strategy recommends changing the franchise fee collection method, which is now a \$2.35 per-ton fee on solid waste disposed (that has not been adjusted since 1997), to a 4.3% franchise fee charged as a percentage of haulers' gross rate receipts.

Since gross receipts keep pace with inflation and are tied to all tonnage collected (not solely declining solid waste tonnage), this funding will be more sustainable than the County's current method. If the County chooses to continue with a per-ton franchise fee, a \$6.50 per-ton franchise fee is estimated for all tons collected. It should be assessed on all materials collected including solid waste, recycling, organics, and C&D and adjusted annually by an inflation factor. If the County chooses to recover the HHW program costs through the franchise fees, the franchise fees will need to be increased by adding 1.4% for the gross receipts basis or \$2.00 for the per-ton basis. If the County chooses to recover franchise administration costs through the franchise fees, the franchise fees will need to be increased by adding 0.3% for the gross receipts basis or \$0.40 per ton for the per-ton basis.

- **Franchise Administration Fees.** To recover costs related to the administration of the non-exclusive hauling system, recommendations include establishing annual hauler fees (\$8,000 to \$12,000 per hauler per year) subject to annual inflation adjustments and periodic review.
- **C&D Permit Fees.** To recover administration costs related to the C&D permit review process, recommendations include establishing C&D permit fees (\$750 to \$3,000 per C&D permit) subject to annual inflation adjustment and periodic review.
- **HHW Fee.** To fund HHW program costs, establishment of an HHW fee is recommended on occupied residential dwelling units in the unincorporated County, using a Proposition 218 assessment process.<sup>2</sup> The fee is estimated to be \$5.10 to \$6.50 per dwelling unit per year subject to annual inflation adjustment and periodic review.
- **Customer Rates.** Several recommended programs and policies will increase costs to the non-exclusive haulers providing these expanded diversion services. Haulers will pass these costs onto their customers. Estimated rate impacts range from 9.9% to 11.9%, including franchise fees. Actual rate impacts will be determined by the haulers and will vary widely, with residents likely experiencing smaller impacts and businesses and industry experiencing greater impacts.

While one-time and ongoing program costs are estimated for the recommended programs and policy options for the internal operations, funding for the recommended diversion programs and policies for internal operations is not addressed in detail in the Strategic Plan. After a diversion baseline has been established, the cost estimates for the recommended programs and policies in this Strategic Plan will be reevaluated. It is anticipated that funding for one-time costs would be requested through appropriations from the Board and ongoing costs would be funded through increased internal service funds or general agreements paid by departments.

## County Implementation Team

The Strategic Plan anticipates that the Department of Public Works – Solid Waste Planning and Recycling Section will be designated as the lead department for oversight and monitoring of the unincorporated areas' progress towards its Diversion Targets and the Department of General Services will be designated as the lead department for oversight and monitoring of the County internal operations' progress towards its Diversion Targets. Other departments that will play significant roles include: Department of Purchasing and Contracting; Department of Environmental Health; Department of Planning and Development Services; and, Health & Human Services Agency.

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<sup>2</sup> Costs incurred by the County in implementation of an HHW fee would be in addition to the estimated HHW fee.

## SECTION 1: INTRODUCTION

### 1.1 County's High Diversion/Zero Waste Targets

On January 27, 2015, the County of San Diego's (County) Board of Supervisors directed staff to: (1) identify how the County is achieving its current diversion level, as well as identify programs, policies, and resources needed to achieve 75% Diversion by 2020 for County operations; (2) identify how the County can support Zero Waste through its purchase of goods and services; and, (3) collaborate with industry to create a scope, timeline, and cost and funding options for a Zero Waste plan. The County was interested in developing a strategy for increasing its solid waste diversion rate to 75% by 2020 and Zero Waste (90%) by 2040 (collectively "Diversion Targets"). The County further identified the following objectives:

- Understand how to build off existing County programs and policies to increase diversion;
- Focus on diversion of materials generated by residents and businesses in the unincorporated areas of the County;
- Assess opportunities for the County to increase diversion of materials generated by the County's own operations ("internal operations");
- Evaluate and present new strategies to make significant advances with diversion; and,
- Seek input from stakeholders to inform the program and policy options analysis.

In response to the Board's directive, the County retained HF&H Consultants, LLC (HF&H) in March 2016 to develop this Strategic Plan to Reduce Waste (Strategic Plan). The HF&H team included HF&H as the prime consultant, with Inika Small Earth (Inika) and O'Rorke, Inc. (O'Rorke) as subconsultants. The Department of Public Works (DPW) – Solid Waste Planning and Recycling Section (DPW Recycling) managed the strategic planning effort. Representatives from the Land Use and Environmental Group (LUEG), Department of General Services (DGS), and Department of Environmental Health (DEH) were actively involved in providing input.

<p><b>2015 Diversion</b> Unincorporated Area Diversion Rate: 62%</p> <p>Hauler-Controlled Diversion Rates: 44% residential 7% commercial 27% industrial</p>
---

The Strategic Plan identifies the current conditions and diversion efforts that resulted in a 62% diversion rate for the unincorporated areas of the county in 2015.<sup>3</sup> It presents identification of over 230 diversion program and policy options and a detailed analysis of 40 options. It provides a recommended set of programs and policies focused on increasing diversion and reducing disposal to reach 75% Diversion and additional programs and policies to move towards Zero Waste. An implementation plan presents a strategy for moving forward framed around three planning phases: Near-Term (2017 to 2020), Mid-Term (2021 to 2030), and Long-Term (2031 to 2040). A sustainable funding approach presents a methodology for funding the high diversion efforts for the unincorporated areas to reach 75% Diversion.

<sup>3</sup> The current 62% diversion level is calculated based on the target and actual per-person disposal rates in the County's 2015 Annual Report to CalRecycle. It reflects waste prevention and reuse, non-exclusive hauler recycling, as well as recycling that occurs in addition to the hauler-controlled diversion programs.

The types of programs and policy options evaluated and included in the recommendations reflect a diverse range of alternatives for advancing to Zero Waste. Options presented include “upstream” strategies such as encouraging waste reduction by using less resources and materials through product decisions, reuse and repair efforts, and food waste prevention and food donation programs. Also considered were “downstream” strategies including enhancement of recycling and organics collection and drop-off programs, organics processing, expanded public education and outreach activities, and policy changes that support diversion.

## 1.2 Legislation, Regulations, and Policies Supporting Diversion

The County’s focus on achieving 75% diversion and Zero Waste is supported by many actions of the State of California (State) and the County as summarized below.

### State

In 1989, the State enacted the California Integrated Waste Management Act (commonly “AB 939”), which established a requirement for all cities and counties within the State to divert 25% of their waste by 1995 and 50% by 2000. In late 2011, the State started looking beyond the AB 939 diversion requirements and has recently passed several pieces of legislation to drive diversion to 75% and beyond. Key legislation includes:

- Mandatory commercial recycling (AB 341, 2011) – State-wide recycling goal of 75% by 2020; requires businesses and multi-family properties to recycle;
- Organics Waste Recycling Act (AB 1826, 2014) – Specifies organic materials recycling requirements for businesses and multi-family properties, phased in through 2020;
- Yard Trimmings Diversion (AB 1594, 2014) – Disallows diversion credit by agencies for processed yard trimmings that are used as landfill alternative cover;
- Organics Management Infrastructure Planning Act (AB 876, 2015) – Requires each county or regional agency to provide a 15-year estimate of organics processing generation and identify additional processing capacity needed to process this material and areas for new or expanded processing capacity for the unincorporated areas and cities within the county;
- Organic Waste Diversion from Landfills (SB 1383, 2016) – Requires State-wide reduction of organic disposal volumes by 50% by 2020 and 75% by 2025 and recovery of 20% of edible food by 2025; and,
- 2016 California Green (CALGreen) Buildings Standards Code (Cal. Code Regs., Title 24) – Requires at least 65% diversion of construction and demolition debris (C&D) effective January 1, 2017 for new construction and demolition projects, additions, and alterations with some exemptions.

#### **Diversion Milestones**

- 1989 – State enacted AB 939 with 50% County requirement
- 1995 – County to achieve 25% diversion per AB 939
- 2000 – County to achieve 50% diversion per AB 939
- 2011 – State enacted AB 341 with a 75% State-wide goal and mandatory recycling for multi-family and businesses
- 2015 – County Board of Supervisors requests Plan on reaching 75% diversion by 2020 and Zero Waste (90%) by 2040
- 2016 – State passed SB 1383 requiring 75% reduction of organic disposal volumes by 2025
- 2016 – State CALGreen Building Standards Code requires 65% C&D diversion by 2017

## County

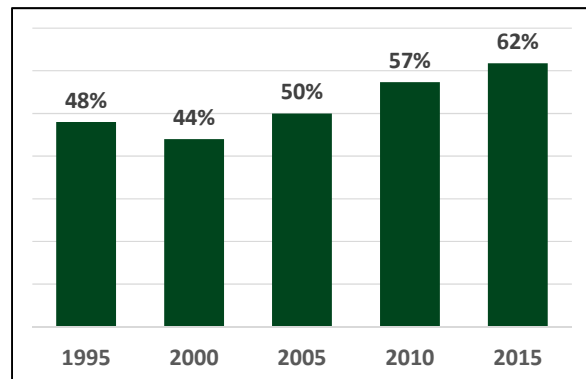
Since the passing of AB 939 in 1989, the County has adopted several policies and regulations to support diversion. The County has focused on specifying minimum recycling requirements for residents and businesses, minimum recycling collection requirements for haulers; C&D recycling requirements for construction and demolition projects; and internal policies to increase the County’s use of recycled-content products and to design County facilities and property with consideration of recycling and waste reduction practices.

### 1.3 Historical Diversion Rates

Since the State passed AB 939, the County has implemented numerous recycling and organics collection and diversion programs and policies designed to increase its diversion rate. Since 1990, the County has estimated its annual diversion rate in accordance with the State-established methodology.

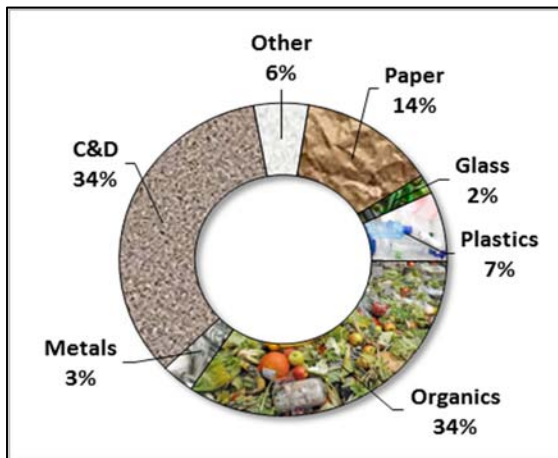
Figure 1-1 shows that the County’s annual estimated diversion rates have generally trended upwards increasing from 48% in 1995 to 62% in 2015. The County’s 2015 estimated diversion rate of 62% is just below the 2014 State-wide rate of 65%.<sup>4</sup>

**Figure 1-1: County Historical Diversion Rate from 1995 through 2015**



### 1.4 Diversion Needed to Reach 75%

**Figure 1-2: Overall Characterization of Waste Disposed by Unincorporated Areas**



In 2015, 474,750 tons of solid waste was disposed by the unincorporated areas of the County. Figure 1-2 presents the characterization of these materials.<sup>5</sup> This characterization shows that diversion of recyclables, organic materials (including food scraps), and C&D are key focus areas for reaching 75% and beyond.

The County’s Diversion Targets include: 75% by 2020 and Zero Waste (90%) by 2040. The main focus of this strategic planning effort is identifying what is needed to achieve 75% Diversion. For this reason, HF&H estimated that 164,000 tons per year of solid waste will need to be diverted to yield a 75% diversion rate. This figure is an average for the most recent three-year period (2013 to 2015). The 164,000 ton-per-year diversion target is used in determining what programs and policies have the

potential of driving the County to 75% Diversion. Note that each year the State-calculated disposal rate (and related diversion rate) varies due to multiple factors, including economic conditions that impact waste generation and disposal rates. As a result, the target diversion tonnage will change over time.

<sup>4</sup> Source: <http://www.calrecycle.ca.gov/LGCentral/GoalMeasure/DisposalRate/Graphs/EstDiversion.htm>

<sup>5</sup> The overall waste characterization was developed using data from the 2012 – 2013 City of San Diego Waste Characterization Study adjusted to reflect average material disposed by unincorporated areas for 2013 to 2015.

## 1.5 Report Overview and Key Terminology

The Strategic Plan presents a summary of the research, analysis, and recommendations prepared by HF&H. This report and its attachments include the following:

- Description of the strategic planning process, including stakeholder engagement efforts;
- Overview of the County's materials management system including facility infrastructure and current programs and policies;
- Baseline data for current conditions including demographic information, waste characterization data, and tonnage of materials collected, diverted, and disposed;
- Identification of programs and policy options considered and summary of the options analysis;
- Recommendations of programs and policies for reaching 75% Diversion as well as other recommendations to move towards Zero Waste;
- An implementation strategy that sets priorities and presents phased implementation efforts; and,
- Sustainable funding strategy that lays out an approach to funding current DPW Recycling programs, current DEH household hazardous waste (HHW) programs, and the recommended programs and policies for the unincorporated areas for 75% Diversion.

In the Zero Waste community and recycling and solid waste industry, various terminology can be used or interpreted in different ways. Given that the County Diversion Targets are based on the State's measurement and accounting of diversion, this Strategic Plan is focused on diversion and disposal reduction. A brief description of key terms has been provided below to clarify the meaning of the terminology in the context of this Strategic Plan.

- County vs county – When “County” is capitalized, it refers to the County of San Diego as an entity, whereas when “county” is used in lower case form, it refers to the geographic areas of the County;
- Diversion – Diversion is used broadly to describe processes for reducing the amount of material landfilled including waste prevention, reuse, repair, recycling, composting, anaerobic digestion, and other forms of processing;
- Diversion Targets – Diversion Targets reflect the County-specific targets of achieving a 75% Diversion by 2020 and Zero Waste (90%) by 2040;
- Diversion rate – For the unincorporated areas, the diversion rate refers to the diversion rate calculated using the State-reporting methods and information. This method involves tracking actual annual quantities of waste disposed against a target disposal rate, where the target disposal rate can be correlated to a diversion rate. In the case of internal operations, the diversion rate refers to the amount of materials diverted from disposal divided by the sum of the amount diverted and disposed;
- Materials management – Management of materials including recyclables, organics, solid waste, C&D, electronic waste, HHW, and other material streams from the point of generation through collection, transportation, processing, and/or disposal;
- Programs – Programs is often used to broadly refer to both programs and policies; and,
- Zero Waste – Zero Waste is defined as reaching a 90% or greater diversion rate.



## SECTION 2: STRATEGIC PLANNING PROCESS

This Section presents an overview of the strategic planning process, which involved consideration of over 230 diversion programs and policies that ranged from advocacy activities, waste prevention programs, and regulatory actions to collection and processing services. It also provides a description of the Zero Waste framework that was used to categorize the various types of program and policy options. Lastly, it describes the visioning process and stakeholder outreach efforts that were conducted.

### 2.1 Overview of the Strategic Planning Process

The strategic planning process, which is summarized in Figure 2-1, was initiated in March 2016. Initial focus was on understanding and documenting the County’s current diversion-related efforts including those programs and policies that impacted residents, businesses, and the County’s own internal operations. The stakeholder outreach process was designed to invite input from various parties including residents, businesses, the recycling and waste industry, agricultural industry, reuse and repair businesses, non-profits engaged in diversion programs, and County staff from various departments. Three phases of stakeholder input were planned throughout the strategic planning process (more details are provided in Section 2.4). In May 2016, the first round of stakeholder input was initiated to educate the stakeholders and hear ideas. Following the first round of stakeholder input, the HF&H team developed a large menu of programs and policy options focused on diversion from the unincorporated areas. The County provided input on this menu and expanded it. Approximately 150 options were included in the final comprehensive menu for the unincorporated areas. A short-list was then generated consisting primarily of those options projected to yield high diversion results. For the County’s internal operations, an initial menu and a subsequent short-list of menu options were prepared based on feedback from participating County departments.



In June 2016, the short lists of programs and policies were shared with stakeholders. Additional refinement was made to the short-list menus based on input received from stakeholders. HF&H then conducted an analysis of each short-listed program with a focus on diversion potential, costs, cost-per-diverted ton, greenhouse gas (GHG) emissions reductions, and potential job creation. Section 4 more thoroughly describes the program and policy analysis process and results. The analysis was presented to

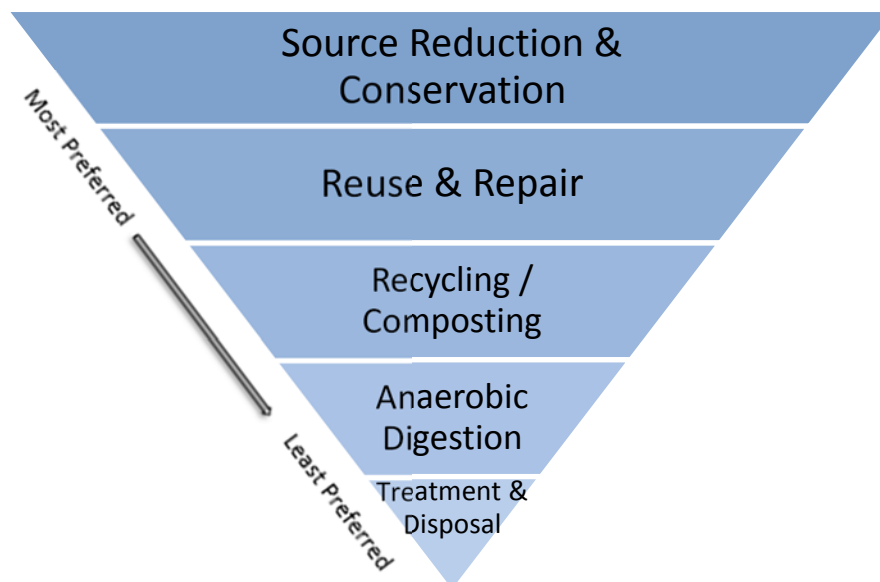
the County in July 2016. The analysis resulted in a final set of 40 program and policy recommendations that appear in Sections 5 and 6. HF&H shaped the implementation plan and sustainability funding strategy around those recommended programs.

Throughout the process, DPW, which has the authority and responsibility for the County’s solid waste planning and management functions for the unincorporated areas, provided oversight, input, and guidance. In addition, a team of County representatives from DPW, DGS, DEH, and LUEG (“Core Team”) met with the HF&H on at least a monthly basis to guide the process and provide input. DGS was included as it ensures that other County departments have the necessary facilities, workspaces, services, and vehicles to accomplish their business objectives. DGS’ responsibilities include management and oversight of the County facilities’ contract for solid waste, recyclables, and organics collection services. DEH was included in the Core Team because of their role in managing the County’s HHW facility in Ramona (operated by a contractor), contracts with the cities of El Cajon and Chula Vista for a limited number of HHW drop-off appointments, and occasional mobile HHW collection events for the unincorporated areas; regulating hazardous and solid wastes including processing, transfer, and disposal facilities in the unincorporated areas; and, regulating food handling and food-generating businesses. LUEG participated in the process to provide the perspective as the management group for the County’s departments involved in land use, protecting the environment, and public health.

## 2.2 Zero Waste Framework

Various organizations, including U.S. Environmental Protection Agency (EPA), have developed materials management hierarchies that present program and policy categories from the most to least environmentally desirable. Figure 2-2 shows the EPA’s hierarchy with minor modifications. This hierarchy was used in this strategic planning purposes.

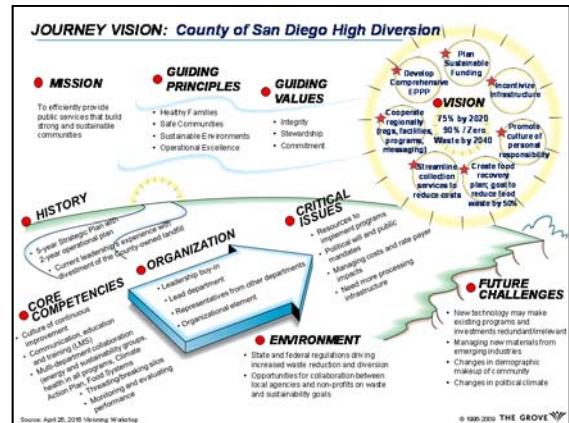
**Figure 2-2: Zero Waste Framework for the Strategic Plan<sup>6</sup>**



<sup>6</sup> Modifications to the EPA hierarchy included changing “Source Reduction and Reuse” to read “Source Reduction & Conservation”; adding a new level “Reuse & Repair”; and changing “Energy Recovery” to “Anaerobic Digestion”.

### 2.3 Visioning Process

As part of the process for developing the Strategic Plan, HF&H facilitated a Visioning Workshop with the County shortly after the project began. The purpose of the Visioning Workshop was to develop an understanding of the County’s perspective and vision to inform the development of the Strategic Plan. To capture a diverse perspective of the County’s interests and concerns, representatives from 13 departments participated. The Visioning Workshop resulted in two graphic maps that reflect the context for the Strategic Plan and the County’s mission, goals, and objectives. These graphic maps have been reviewed at various points throughout the development of the Strategic Plan to confirm the process is in alignment with the context issues and targets identified. Attachment A includes a June 26, 2016 memorandum from HF&H to the County that presents the completed context map and journey vision, identifies the workshop participants, and provides additional information on the Visioning process.



### 2.4 Stakeholder Engagement Process

The stakeholder engagement and outreach strategy was designed to help create a Strategic Plan that considers the diversity of the unincorporated communities and reflects the internal operations of the County. The goal of the stakeholder engagement and outreach was to engage a relevant mix of stakeholders to provide input on the menu of program and policy options, leverage their interests and capacity to play a long-term role in the implementation of the Strategic Plan, build broad public support for the Strategic Plan, and set the stage for a financially-viable and operationally-efficient implementation.

The stakeholder engagement strategy was customized to “internal” stakeholders (County departments) and “external” stakeholders. External stakeholders comprised three groups – businesses and residents of the unincorporated areas; system partners engaged in provision of material management services; and community partners that support diversion activities in various ways. The external stakeholders are further described in Figure 2-3. The Stakeholder Participation and Outreach Strategy was prepared by the HF&H team with input from the Core Team and is presented in Attachment B.

Figure 2-3: Description of External Stakeholders

Primary Clients	System Partners	Community Partners
<ul style="list-style-type: none"> <li>•Residents - Single- and multi-family</li> <li>•Businesses - Retail, commercial, industrial, hospitality, agricultural</li> <li>•Public entities</li> </ul>	<ul style="list-style-type: none"> <li>•Haulers</li> <li>•Transfer/processing facility operators</li> <li>•Landfill operators</li> <li>•Recyclers</li> <li>•Repair/reuse businesses</li> </ul>	<ul style="list-style-type: none"> <li>•Non-profit organizations</li> <li>•Community groups</li> <li>•Other cities/agencies</li> </ul>

The Stakeholder Participation and Outreach Strategy was structured around conducting phases (or rounds) of engagement with the stakeholders – Round 1 was the “Educate Phase;” Round 2 was the “Engage and Innovate Phase;” and Round 3 was the Public Draft Strategic Plan Input Phase. Round 1 (Educate) was conducted in April and May 2016. The goals of the Educate Phase were to inform stakeholders about current regulations and existing programs to increase diversion and to provide participants an opportunity to share suggestions and recommendations on issues related to diversion. Round 2 (Engage and Innovate) started with public and industry meetings in June 2016 and was extended into September 2016 with presentations to business organizations. During Round 2 Engage and Innovate Phase, the preliminary menu of policies and programs was presented to the stakeholder groups to gauge support for the various strategies and to receive feedback. Attachment C includes the presentations made to the public and internal stakeholders during Round 2 (with items suggested by stakeholders in Round 1 presented in blue font).

During Rounds 1 and 2, the County conducted town-hall-style public meetings; several group meetings focused on different system and community partners; one-on-one meetings with the four largest hauling companies and the primary private landfill operator; presentations to various business groups; and online questionnaires to gather input and encourage participation. An online questionnaire was made available to residents and businesses to provide feedback regarding hauling services and barriers to improving diversion in the unincorporated areas. The online questionnaire was open from May 10 through August 8, 2016. Results are presented in Attachment D.

The final round of stakeholder presentation, Round 3, involved a public meeting on November 7, 2016, during which the Public Draft Strategic Plan was presented and feedback was solicited. In summary, external stakeholders were provided multiple opportunities to engage and provide input on the Strategic Plan, including opportunities to attend more than 20 meetings.

Attachment E provides more details on the stakeholder engagement process and feedback received.

## 2.5 Case Studies of Businesses

Local businesses with exemplary high diversion programs were profiled to serve as models for other businesses in the County. A range of business types was selected including a farm, college, grocery store, retirement village, and senior living facility. Each business was interviewed about their programs, best management practices, and diversion results. The featured entities are listed here and the case studies are in Attachment F.

- Costanzo Farm
- Cuyamaca College
- Jimbos...Naturally!
- Mount Miguel Covenant Village
- The Village at Rancho San Diego

**Case Study:**  
**COSTANZO FAMILY FARM**

**RESIDENTIAL FARM & ORCHARD**  
(NON-ORGANIC SOIL)

Located in the Elfin Forest, Tim Costanzo's 3.5 acre family farm is home to an assortment of animals and over 160 varieties of fruit trees.

Having grown up on an orchard in Escondido, stewarding the land has been one of Costanzo's core values since childhood. Composting is an essential part of the organic growing methods practiced on the farm since it began in the mid 1990s.

The Costanzo Family Farm proves that mid-scale composting can be easily accomplished in rural and agricultural settings. It also showcases numerous benefits, including improved soil health, water retention, and higher-quality crops.

**Practices Implemented**

- Windrow-style composting of farm-generated waste
- Water-efficient irrigation
- Runoff prevention

Owner Tim Costanzo and his landscaper/gardener create compost on site using a mixture of "greens" and "browns" which are all generated onsite. The resultant compost is used as a soil amendment for the farm's fruit trees, increasing flavor and yields while helping the soil retain water and nutrients.

The composting operation at Costanzo Family Farm consists of two windrows about 60' long, 14' wide and 6' tall. One windrow is designated as the "active" pile while the other is left to "cook" and finish its decomposition cycle. Feedstock in bedding and manure from the farm's animals, landscape trimmings, paper, cardboard, inedible fruit, and untreated scrap wood. Wood chips from tree trimming are added to maintain optimal conditions. The composting process takes from 7 months to a year depending on weather and feedstock variations.

Costanzo has developed innovative methods to optimize his composting operation. A perforated hose runs along the top of the piles and is used as needed to keep the piles moist. Repurposed treadmill belts serve to redirect water runoff. The site also features runoff capturing berms.

Enough compost is made on the farm to amend the soil for all the fruit trees and for the family's vegetable garden. The Costanzo Farm's composting operation supports the farm's bottom line by reducing disposal costs and the cost to purchase fertilizers.

## SECTION 3: OVERVIEW OF CURRENT COUNTY SYSTEM

Understanding of the current diversion and materials management conditions of the County's internal operations and the unincorporated areas is essential to building a strong foundation for the Strategic Plan and selecting future programs and policies that will move the County towards its Diversion Targets. This Section presents an overview of the County's materials management system including generator options and regulations, collection system arrangements, the non-exclusive franchise hauler system, as well as an inventory of recycling, composting, transfer, and landfill disposal facilities. It also presents a brief overview of the County's current diversion programs and policies for the unincorporated areas and internal operations. Lastly, demographic information and waste characterization data are presented. Attachments G and H provide supplemental information.

### 3.1 Generator Options and Regulatory Obligations

Residents and businesses may arrange collection services through one of the County's non-exclusive franchise haulers or a recyclables hauler. Alternatively, residents and businesses may self-haul their materials to processing facilities, transfer stations, drop-off recycling centers, and/or landfills of their choice. Non-exclusive haulers transport 78% of all solid waste disposed. The self-hauled solid waste disposed has averaged 22% of the total solid waste disposed for 2013 through 2015.<sup>7</sup> This includes materials transported by residential, commercial, and industrial generators.

The County's Solid Waste Ordinance was amended in 1991 to establish mandatory diversion requirements for residents and businesses in the unincorporated areas of the County and amended in 2010 and 2013 to provide additional details. More specifically, County Ordinance 68.571 requires that residents and businesses separate recyclables from solid waste for collection and diversion by haulers or by self-hauling recyclables to a recycling facility. The ordinance prohibits disposal of a defined list of recyclables, which includes: newspaper and mixed paper, cardboard, glass bottles and jars, rigid plastics, plastic bottles, jugs and jars, aluminum, tin and steel cans, large appliances, and, for residents, also includes yard trimmings. Two recent State regulations place additional recycling requirements on businesses, multi-family complexes, and public entities. AB 341, which became effective July 1, 2012, requires recycling; and, AB 1826, which targets these same sectors and became effective April 1, 2016, requires diversion of organics including food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper, with the exception that multi-family properties do not need to divert food scraps and food-soiled paper.

Effective April 21, 2007, debris from covered C&D projects must be diverted away from landfill disposal in the unincorporated areas pursuant to the County's C&D Debris Deposit Ordinance. The ordinance requires that 90% of inerts and 70% of all other materials must be recycled from construction, demolition, and renovation projects that are 40,000 square feet or larger, either individually or in aggregate. To comply, contractors must submit a Debris Management Plan and a fully-refundable performance guarantee prior to building permit issuance (Sections 68.508 through 68.518 of the County Code of Regulatory Ordinances). Effective January 1, 2017, the CALGreen Buildings Standards Code requires at least 65% diversion of C&D for new construction and demolition projects, additions, and alterations with some exemptions.

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<sup>7</sup> The County calculates the annual solid waste tonnage delivered by self-haulers to landfills by subtracting the tonnage delivered by the franchise haulers from the total tonnage disposed overall.

### 3.2 Collection System Overview

Residential and commercial materials generated in the unincorporated areas are transported to landfills, transfer stations, recyclables processing facilities, drop-off centers, and other processing facilities by various parties as summarized below.

- **Non-Exclusive Haulers.** Through issuance of non-exclusive solid waste management agreements (SWMAs), the County grants hauling companies non-exclusive rights to collect solid waste from residential, commercial, and industrial customers that subscribe to service. Haulers transport the materials collected to processing facilities, transfer stations, and/or landfills of their choice. Section 3.3 provides additional information on the non-exclusive haulers including tonnage collected and customer account information. Attachment I includes a list of non-exclusive haulers, and identifies the type of service (residential, commercial, and industrial) haulers provide by geographic area.
- **Recyclables and C&D Haulers.** Hauling companies that exclusively collect recyclable materials and C&D provide regular residential, commercial, and industrial collection services for these materials and transport the materials to processing facilities and/or transfer stations of their choice. These companies are not currently regulated by the County through any type of license, permit, or non-exclusive franchise system. Attachment I includes a list compiled by the County of recycling haulers. This list includes only companies that requested to be included; and, as a result, it is not necessarily comprehensive.
- **Self-Haulers.** Some residents and businesses transport the materials they generate directly to processing facilities, transfer stations, landfills, and drop-off recycling centers. In addition, various County departments and military units self-haul materials.
- **Contractors.** Contractors performing construction, renovation, and demolition work, landscaping services, and other types of contracted services for residents and businesses often transport the materials resulting from their services directly to processing facilities, transfer stations, landfills, and drop-off recycling centers.

The County tracks tonnage collected by non-exclusive franchise haulers; solid waste transported by self-haulers; solid waste transferred and disposed; and alternative daily cover (ADC) used at landfills. Summary tonnage information is included in Attachment H. Recyclables and C&D tonnage collected by recyclers and C&D haulers is not available, because these haulers are not regulated by the County nor required to report tonnage data to the County or State.

Materials generated by the County's internal operations are handled in a variety of ways. Some collection services are arranged by DGS through the County's solid waste, recycling, and organics collection services contract (referred to herein as "County Collection Contract"). Currently, the County Collection Contractor collects materials from nearly 150 collection sites. The contract has a term of one year, expiring June 30, 2017 with up to three additional one-year extensions (through May 30, 2020). It includes diversion-related requirements for the contractor such as provision of recycling, food waste composting, educational outreach and training for County staff, annual waste audits, and more. Data on the County Collection Contract collection volumes and diversion is provided in Section 3.5.2. Other County sites arrange for their collection service outside the County Collection Contract, self-haul, or rely on services arranged by the lessor (for leased sites). The County also has contracts that cover the

collection and recycling of specialty materials including confidential documents, batteries, bulbs, ballasts, sharps, medical waste, and e-waste.

### 3.3 Non-Exclusive Agreements and Hauling Services

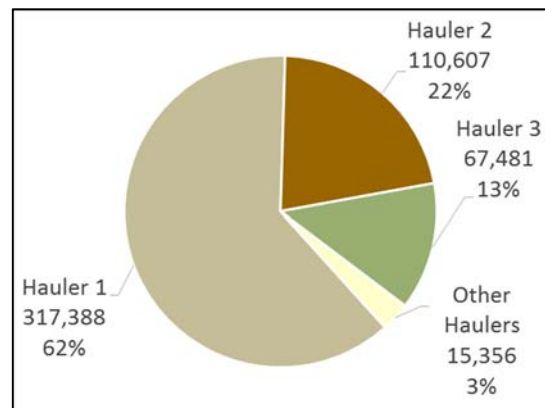
#### 3.3.1 Franchise Arrangements

For many years, private hauling companies provided collection services to residents and businesses in the unincorporated areas and the County provided collection services for internal operations using County crews and equipment. In 1997, the County established a non-exclusive franchise system in which franchise hauling companies compete for residential and commercial customers throughout the unincorporated areas. The County regulates the haulers that offer solid waste collection services by requiring that each company enters into a SWMA, with terms and conditions that are identical for all haulers. The term of each SWMA is 10 years with an automatic renewal at the end of each year, which continually maintains a 10-year term. (This type of arrangement is often called an “evergreen” agreement.) Annually, the County has the opportunity to negotiate changes with the haulers prior to the one-year renewal. The County has the right to terminate for convenience, at any time, subject to the completion of the 10-year term. Under the provisions of the SWMAs, these haulers may also collect recyclable and organic materials. The franchise haulers identify the various service areas in which they intend to provide collection services and compete with other companies in the majority of the service areas.

When the system was originally established, 29 permitted companies were providing solid waste collection services. The County granted each company a SWMA and capped the number of available SWMAs at 29. Since that time, some haulers have sold their SWMAs to others, which has resulted in consolidation of companies. As of September 2016, effectively 11 companies hold SWMAs, when accounting for affiliated and related-party relationships.

In 2015, four of the companies – EDCO, Daily Disposal, Republic Services (also known as Allied Waste), and Waste Management – collected 97% of the non-exclusive franchise tonnage. In September 2016, EDCO became owner of Daily Disposal, so effectively 3 haulers collect 97% of the franchise solid waste, recyclables, and yard trimmings tonnage as shown in Figure 3-1. Commercial customer account data reported by the three largest franchise haulers shows that the highest density service areas include Valley Center, Bonsall, Ramona, Barona, Lakeside, Alpine, Crest-Dehesa, Spring Valley, and Jamul-Dulzura. In these areas, two or three of the largest haulers provide solid waste, recycling, and yard trimmings cart and bin commercial collection services. In the other areas, one or two haulers provide cart and bin services. Collection of solid waste, recyclables, and yard trimmings using roll-off containers is performed by numerous non-exclusive haulers throughout the unincorporated areas.

**Figure 3-1: Annual Tonnage Collected by Non-Exclusive Franchise Haulers (2015)**



The franchise haulers submit tonnage reports to DPW Recycling documenting the quantities of recyclables, organics, and solid waste collected in the unincorporated areas. For the past 3 years, the

solid waste tonnage collected by the non-exclusive franchise haulers amounts to approximately 78% of the overall solid waste disposed of annually by the unincorporated area. The remainder of the waste disposed is self-hauled.

**Figure 3-2: Annual Tonnage Collected by Non-Exclusive Haulers by Material Type (2015)**

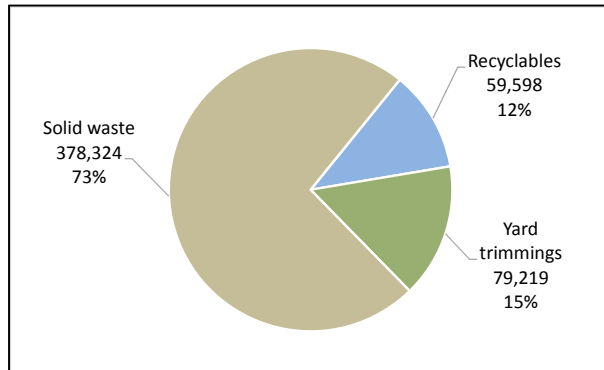


Figure 3-2 shows that a total of 517,141 tons of materials were collected in 2015 by the haulers, of which 12% were recyclables and 15% yard trimmings. This equates to an average hauler-controlled diversion rate of 27%. The hauler-controlled diversion rate varies by hauler, ranging from 15% to 56%. For the 3 largest haulers, the diversion rate ranges from 15% to 28%, with an average of 25%. The hauler-controlled diversion rate for the residential sector was at 44% in 2015; followed by the industrial sector at 27%; and the commercial sector at 7%. When looking at the commercial and industrial statistics, it is important to recognize that the diversion rate does not reflect

diversion by recyclers, C&D haulers, and self-haulers because this data is not available. Attachment H contains detailed tonnage data.

### 3.3.2 Collection Services Provided

As part of the assessment of current conditions, a questionnaire was developed to gather information from the franchise haulers to better understand the current collection services provided in the unincorporated areas. In total, eight haulers responded to the questionnaire. A brief overview of the collection services is provided below. Attachment J presents additional information.

#### Residential Collection Services

Of the 11 non-exclusive franchise haulers, 3 haulers provide the majority of regular residential cart collection services when accounting for affiliated and related-party entities, with 1 additional hauler servicing less than 50 residential customers. In total, these haulers reported for April 2016 that 91,990 households subscribe to collection service, receiving once-per-week curbside solid waste collection services. It is estimated that approximately 68% of single-family households in the unincorporated areas subscribe to collection service.<sup>8</sup> The haulers also reported that 71,258 solid waste carts are in service, which does not align with 91,990 reported accounts. Some or all of the difference may be explained by the fact that some residential accounts use one cubic yard bins, and those containers are reported with the commercial data. It appears that each account has recycling service because 77,865 recycling carts are in service (compared to 71,258 solid waste carts); and approximately 86% of the accounts have yard trimmings service (61,291 carts in service). Approximately 64% of the volume of service provided to residents is for collection and diversion of recyclables and yard trimmings, with the remainder for solid waste.

<sup>8</sup> The estimated 68% subscription rate is for single-family residences in the unincorporated areas. It does not include multi-family or mobile homes or reflect vacancies nor does it account for residents with bin service.



A two-container system for solid waste and recyclables collection is offered to all residential customers. In many areas, a three-container system is offered for solid waste, recyclables, and yard trimmings collection. The three residential haulers offer bulky item collection for appliances, large furniture, etc. One company offers curbside collection of motor oil in Ramona. None of the haulers offer curbside collection of motor oil filters or household batteries.

### Commercial Collection Services

Approximately 13,624 businesses subscribe to collection service and are serviced by 11 haulers, when accounting for affiliated- and related-party entities. Three of these haulers provide the majority of regular commercial cart and bin collection service; one additional hauler services less than 50 commercial accounts. All the cart and bin haulers offer solid waste and commingled recyclables collection in the service areas. Four haulers offer yard trimmings collection; and three haulers report offering food scraps collection in some service areas. Account data shows that approximately 11% of cart and bin service capacity is for collection and diversion of recyclables; and 0.1% for collection and diversion of yard trimmings. Bulky item (appliances, large furniture, etc.) collection services are offered by four haulers; and electronic waste and universal waste collection by one hauler.<sup>9</sup>

## 3.4 Facility Infrastructure

San Diego County has a complex network of facilities that support materials management and provide diversion opportunities to support the County's Diversion Targets. Facilities include recycling centers, composting facilities, mixed C&D and inert processing facilities, material recovery facilities, salvage facilities, reuse and repair facilities, and drop-off centers for recyclables, HHW, and other materials. Landfills offer disposal of waste and processing residue. Transfer stations accept materials for temporary storage and transfer into large-capacity vehicles for transport to processing and disposal facilities.

The County's "Non-Disposal Facility Element Update for the County Unincorporated Area Countywide Integrated Waste Management Plan", dated September 2013 (NDFE), provides detailed information on transfer stations, materials recovery facilities, resource recovery parks at landfills, organics processing facilities, C&D recovery facilities, and other recycling facilities. In addition to the NDFE information, an inventory of landfills, specialty recycling facilities, and reuse and repair facilities was compiled from inventories available through I Love a Clean San Diego, CalRecycle's Solid Waste Information System facility database (SWIS list), and CalRecycle's Facility Information Toolbox (FacIT). Figure 3-3 lists the number of facilities in the unincorporated and incorporated areas of San Diego County. Attachment K includes facility names, locations, permit status, and capacity information (if applicable). Figure 3-4 provides information on existing material recovery facilities, composting facilities, transfer stations, and landfills. Sections 3.4.1 through 3.4.6 provide more information on recycling, organics, C&D, transfer, and disposal facilities.

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<sup>9</sup> Electronic waste includes television sets, computer monitors, central processing units (CPUs), laptop computers, and peripherals (e.g., external computer hard drives, computer keyboards, computer mice, and computer printers) as defined under AB 939 (Section 42463 of California Public Resources Code). Universal waste includes batteries, fluorescent light bulbs, and other wastes defined by Title 22, Subsections 66273.1 through 66273.9 of the California Code of Regulations.

**Figure 3-3: Facility Inventory Overview**

	# of Facilities*		# of Facilities*
<b>TRANSFER AND DISPOSAL FACILITIES</b>		<b>SPECIALTY RECYCLING INFRASTRUCTURE</b>	
Landfills	6	Carpet Recycling	2
Transfer Stations	31	Tire Remanufacturing, Processing & Disposal	5
<b>TRADITIONAL RECYCLING INFRASTRUCTURE</b>		Used Oil Centers	260
Chipping & Grinding Facilities	11	Hazardous, Appliance, E-Waste	19
Beneficial Reuse	3	<b>REUSE, REPAIR INFRASTRUCTURE</b>	
Material Recovery Facilities	9	Architectural Salvage	7
Composting Facilities	11	Thrift Stores	120
C&D Disposal & Processing Facilities	34	Appliance Repair Centers	36
Buyback Centers	83	Computer & Phone Repair Centers	34
		Bicycle Repair	18
		Furniture Repair	30
		<b>TOTAL</b>	<b>719</b>

\* Includes facilities in unincorporated and incorporated areas of the county.

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**Figure 3-4: Processing, Transfer, and Disposal Facilities**

Facility	Operator/Owner	Location	
<b>Material Recovery Facilities</b>			
Allan Company MRF	Allan Company	San Diego	---
Amswede Recycling, Inc.	Amswede Recycling, Inc.	Chula Vista	---
EDCO Recycling	EDCO	Lemon Grove	---
EDCO Station	EDCO / City of La Mesa	La Mesa	---
Escondido Resource Recovery	Escondido Resource Recovery / Jemco Equipment Corporation	Escondido	---
Fallbrook Recycling & Transfer	Fallbrook Refuse Service / EDCO	Fallbrook	---
Ramona MRF & Transfer Station	JEMCO Equipment Corporation / Ramona Disposal Services	Ramona	---
SANCO Recycling	SANCO	Escondido	---
Universal Refuse Removal Recycling & Transfer	Universal Refuse Removal / City of El Cajon	El Cajon	---
<b>Composting Facilities</b>			<b>Permitted Materials</b>
Agromin Oceanside Green Materials	Agromin OC-Oceanside Green Materials / Nagata Bros LLC	Fallbrook	Agricultural; green waste
El Corazon Compost Facility	Agri Service / City of Oceanside	Oceanside	Food waste; green waste (Oceanside material only)
Evergreen Nursery	Evergreen Distributors, Inc.	Oceanside	Green waste
Evergreen Nursery	Evergreen Distributors, Inc.	San Diego	Green waste
Hanson Aggregates A-1 Soils	Hanson Aggregates A-1 Soils/ Hanson Aggregates PSW	Lakeside	Agricultural, manure
Miramar Greenery	City of San Diego / U.S. Marine Corps	San Diego	Agricultural; food waste; green waste*
Otay Landfill Research Composting Operation	Otay Landfill, Inc.	Chula Vista	Food waste (Pilot project; limited volumes)
Otay Mesa Compost Facility	Agri Service Recycling, Inc. / International Industrial Park, Inc.	San Diego	Agricultural; green waste; manure
Plants Choice Compost Material Handling Operation	Plants Choice, Inc. / Otay Landfill, Inc.	Chula Vista	Green waste
San Pasqual Valley Soils	San Pasqual Valley Soils / City of San Diego	San Diego	Green waste; manure
San Pasqual Valley Soils Research	San Pasqual Valley Soils / City of San Diego	San Diego	Green waste; manure
<b>Large-Volume Transfer Stations</b>			<b>Permitted Tons/Day</b>
EDCO Recovery & Transfer	EDCO Disposal Corporation	San Diego	1,500
Escondido Resource Recovery	Escondido Resource Recovery	Escondido	2,500
EDCO Station	EDCO Disposal Corporation	La Mesa	1,000
Fallbrook Recycling & Transfer	Fallbrook Refuse Service	Fallbrook	500
Ramona MRF & Transfer	JEMCO Equipment Corporation	Ramona	370
Waste Management of North Co.	Waste Management of North County	Oceanside	4,500
Universal Refuse Removal	Universal Refuse Removal	El Cajon	1,000
Palomar Transfer Station, Inc.	Palomar Transfer Station, Inc.	Carlsbad	2,250
Total Maximum Permitted Throughput for Large-Volume Transfer Stations			<b>13,795</b>
<b>Landfills</b>			<b>Permitted Tons/Day</b>
Borrego Landfill	Borrego Landfill, Inc.	Borrego Springs	50
Otay Landfill	Republic Services, Inc.	Chula Vista	5,830
Las Pulgas Landfill	U.S. Marine Corps - Camp Pendleton	Camp Pendleton	400
Sycamore Landfill	Sycamore Landfill, Inc. (Republic Services)	San Diego	5,000
San Onofre Landfill	U.S. Marine Corps - Camp Pendleton	Camp Pendleton	100
West Miramar Sanitary Landfill	City of San Diego	San Diego	8,000
Total Permitted Throughput for Landfills			<b>19,380</b>

\* Organic materials accepted at the Miramar Greenery may be limited to materials generated in City of San Diego.

### 3.4.1 Materials Recovery Facilities

In the unincorporated areas, non-exclusive franchise haulers collect recyclable materials from residents and businesses as commingled recyclables (also known as single-stream recyclables), where many types of recyclables are mixed together by the generators and collected for processing. The majority of the commingled recyclables collected in the unincorporated areas are processed at the material recovery facilities listed in Figure 3-4. In some cases, each type of recyclable material is “source separated” and individually collected by non-exclusive franchise haulers or recyclables haulers, or self-hauled. These source separated recyclables are processed at numerous locations throughout the county, including the material recovery facilities listed in Figure 3-4. Buy-back centers also accept source separated recyclables, and are listed in Attachment K.

### 3.4.2 Organics Processing Facilities

In San Diego County the majority of organic processing is performed at chip and grind facilities and composting facilities. Eleven chip and grind facilities in San Diego County, listed in Attachment K, mechanically breakdown branches, wood, and clean lumber into mulch and other products.

Eleven facilities in San Diego County compost organic materials, and are listed in Figure 3-4. These facilities vary in size and in the feedstock they accept. While virtually all accept yard trimmings and other landscape debris, fewer can accept high-moisture feedstocks such as food waste and manure. Only three facilities can accept food waste, including one that is currently permitted as a research site at Otay Landfill. Mushroom farms and vermicomposting sites are also located in San Diego County and are used to compost organic materials.

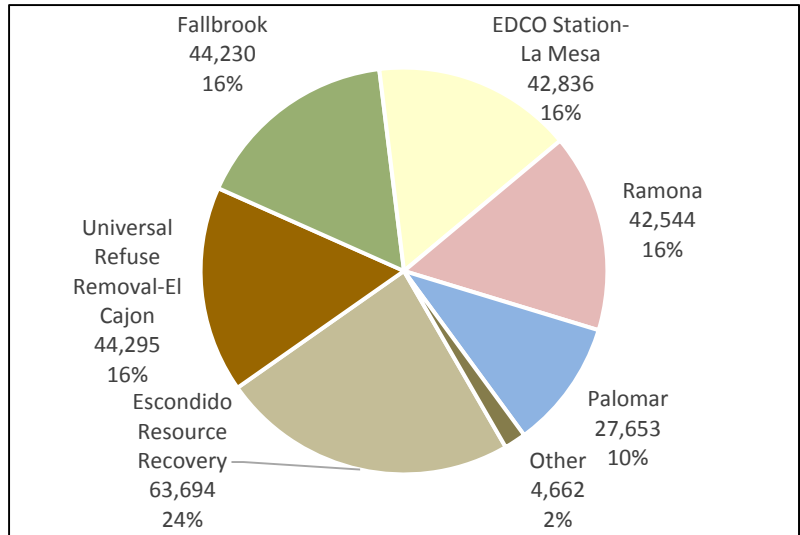
The organics processing infrastructure in the County is very limited, with little or no excess in-County capacity available. Without significant increases in organics processing capacity, the County will not be able to implement expanded organics collection programs. Annually, the County needs approximately 100,000 tons of additional organic materials processing capacity to meet 75% Diversion, which is inclusive of 37,000 tons of annual capacity to process yard trimmings that will no longer be used as landfill alternative daily cover. The incorporated cities in San Diego also have growing needs for organics diversion to support their diversion goals, to support their businesses in complying with AB 1826, and to handle their processed yard trimmings that are being used as landfill alternative daily cover. This places a high demand on organics processing infrastructure.

The hauling and processing industry are taking action to develop organics processing infrastructure. Republic Services has a permit for a pilot composting project at Otay landfill and has initiated a permitting process for a composting facility in the Fallbrook area for acceptance of 52,000 tons per year of agricultural waste and green waste. EDCO reports that it is working to develop composting capacity in San Diego County. CR&R recently developed an anaerobic digestion facility in Perris, California, which accepts mixed organics including food scraps and yard trimmings. Until in-county facilities are available, the CR&R anaerobic digestion facility may provide an opportunity, although the financial feasibility may be challenging as transportation costs will be high even from the northern unincorporated areas.

### 3.4.3 C&D Processing Facilities

Six medium and large scale facilities have solid waste facility permits for acceptance of C&D materials in San Diego County. Three are permitted processing facilities with a combined maximum annual tonnage limit of 470,706 tons. The remaining three facilities are permitted as inert debris engineered fill operations, which provide disposal services in addition to diverting materials for reuse and recycling. These facilities can accept an additional 709,086 tons per year. In addition to these facilities, there are several additional facilities that accept one or more types of source separated and mixed C&D materials for recycling and/or reuse. All of the C&D facilities, which are listed in Attachment K, are dispersed throughout the unincorporated and incorporated areas of San Diego County. This C&D processing infrastructure has considerable capacity, and is likely able to meet the future demands of the County’s diversion programs, at least in the Near-Term.

**Figure 3-5: Solid Waste Tonnage Delivered to Transfer Stations (2015)**



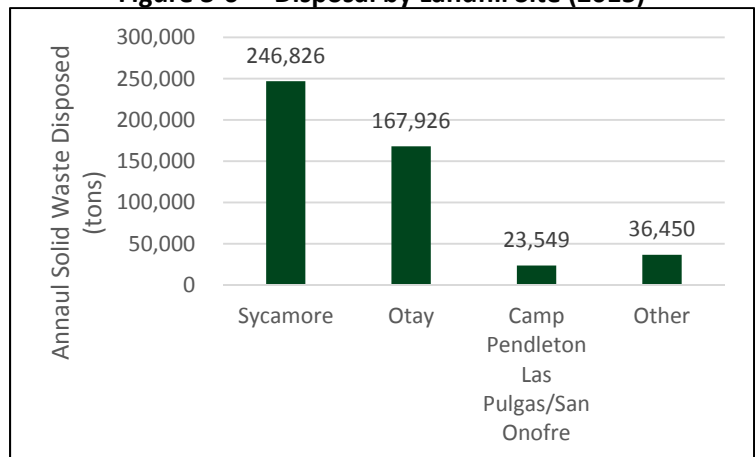
### 3.4.4 Transfer Stations

While Figure 3-3 lists 31 transfer stations, only 6 of these play a significant role in transferring solid waste and other materials collected by the non-exclusive franchise haulers. These large-volume facilities, presented in Figure 3-4, provide adequate capacity with no foreseeable concerns. From 2013 to 2015, an average of 56% of solid waste disposed was delivered to a transfer station and then hauled to a landfill. Figure 3-5 presents solid waste tonnages handled by the transfer stations for 2015, illustrating that six transfer stations handled 98% of the materials.

### 3.4.5 Landfills

Figure 3-4 identifies the six landfills located in San Diego County. Over the past three years, Sycamore and Otay Landfills received approximately 92% of the solid waste generated in the unincorporated areas and disposed. Other in-County landfill sites used for disposal of waste from the unincorporated areas include Miramar, Borrego, and Camp Pendleton Las Pulgas/San Onofre landfills. A very small percentage (1.4% in 2015) of solid waste is disposed in landfills outside of the County or outside of the State. For the past four years, 2012 through 2015, there has been little change in the disposal volumes, with 474,751 tons disposed in 2015. Figure 3-6 presents disposal tonnage by landfill for 2015.

**Figure 3-6 Disposal by Landfill Site (2015)**



The 2012 Five-Year Review Report of the San Diego County Integrated Waste Management Plan (CIWMP) included a forecast that the landfill infrastructure in San Diego County will have sufficient capacity through 2028 depending on many factors.<sup>10</sup> A regional Zero Waste focus by the County and the incorporated cities may extend local landfill capacity.

### **3.4.6 Future Infrastructure Needs**

The current infrastructure appears to have sufficient processing capacity in the near term for the County's recyclables, C&D, and solid waste. As the County works towards its Diversion Targets, additional processing capacity will be needed for recyclables, organics, and C&D. The largest and most immediate need is for organics processing infrastructure for yard trimmings, wood waste, food scraps, and food-soiled paper. Organics processing capacity is not only needed by the County, but also by the cities in the County as AB 1826 and SB 1383 are driving organics diversion and AB 1594 will disallow diversion credit for the use of processed yard trimmings as landfill alternative daily cover effective January 1, 2020.

## **3.5 Current Diversion Programs and Policies**

The County supports several programs and policies to encourage higher diversion within the unincorporated areas and its internal operations. These initiatives are briefly summarized below and presented in more detail in Attachments L and M.

### **3.5.1 Unincorporated Areas**

The County has been committed to increasing diversion in the unincorporated areas since AB 939 was passed in 1989. It has adopted recycling requirements in its Solid Waste Ordinance and C&D Debris Deposit Ordinance that require residents and businesses to recycle. DPW Recycling manages the non-exclusive franchise haulers through the SWMAs, which include requirements of the haulers to provide recycling services. DPW Recycling also supports diversion through a technical assistance program for businesses, multi-families, and schools; provision of composting bins and workshops for backyard composting; operation of a recycling and HHW hotline; development and distribution of numerous recycling brochures; provision of recycling and HHW information through its website; and more. DEH provides one permanent HHW drop-off facility (operated by a contractor) in Ramona; contracts with the cities of El Cajon and Chula Vista for a limited number of HHW drop-off appointments; and offers occasional mobile HHW drop off events throughout the unincorporated areas. The County was instrumental in creating the San Diego Reuse and Repair Network (SDRRN) and San Diego Food Systems Alliance and supports regional efforts of non-profit organizations related to reuse and recycling, food waste prevention, food donation, community composting, and more.

### **3.5.2 Internal Operations**

While the County has numerous programs and policies that support waste prevention and diversion of materials from internal operations, data is not readily available to fully quantify the diversion rate for internal operations. DGS reports that the County has approximately 1,100 properties, about 80% are owned by the County and 20% are leased by the County from others. The durations of the lease arrangements vary, with some leases having 10- to 15-year terms. Collection services are provided to approximately 150 collection sites under the County Collection Contract. The current contractor

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<sup>10</sup> An updated Five-Year Review Report of the CIWMP is anticipated to be completed in summer of 2017.

periodically estimates the tonnage of recyclables, organics, and solid waste collected from the internal operations and reported collecting 1,644 tons of recyclables in 2014. The service information shows that 29 locations do not have recycling service and that food scraps collection is very limited with only 3 sites using the service. Collection of yard trimmings and other materials that occurs on an on-call or temporary basis is not reflected in these figures as data is not readily available.

Some departments make arrangements for hauling services separate from the County Collection Contract or may self-haul materials to processing facilities or landfills. For leased properties, the lessor arranges hauling services. For these situations, the County does not have data on quantities of materials diverted or disposed.

In addition to the diversion programs provided under the County Collection Contract, other County programs and policies result in diversion. For example, DPW Roads recycled 13,753 tons of materials in 2015, 97% of which was inert materials (i.e., sand, road grindings, concrete) and the remainder was wood chips, tires, metals, and appliances. DPC receives tonnage data for the County contract for collection of batteries, bulbs, and ballasts for recycling, which shows 14 tons were collected in 2015. DGS manages construction contracts for County facilities and reports that 824 tons were diverted in 2015 from the Las Colinas Detention and Re-entry Facility and 78 tons from Alpine Library. In addition, DPC reports that 1,050 tons of confidential documents were collected in 2015 for shredding and recycling. In the last year, contracts for landscape maintenance of County facilities included requirements for landscapers to divert yard trimmings and to report on volumes recycled. Approximately 280 tons of green clippings are estimated to be mulched on-site at County parks in 2016, with an additional 40 tons estimated to be hauled off-site for recycling by the County Collection Contractor in 2016. DPR also has a recycling program for some of the County parks and reports 40 tons of diversion in 2015. Lastly, the Fire Authority's dying and diseased trees program resulted in removal and diversion of 420 trees in 2015. In some cases, the trees were chipped and ground on-site and used on-site as mulch material. In other cases, trees are diverted through off-site mulching, composting, and biomass use.

As part of the Round 1 internal stakeholder process, 40 departments completed a diversion questionnaire providing information on waste prevention, source reduction, and recycling practices of their department. Results are presented in Attachment D.

Attachment M provides additional details on the diversion programs and policies of the County's internal operations and enumeration of the diversion data compiled through the strategic planning process.

### 3.6 Demographic Information

Demographic data was compiled from San Diego Association of Governments (SANDAG) for the unincorporated areas. Figure 3-7 highlights population, housing, and job data. Detailed information is presented in Attachment G.

Upon review of demographic data, key factors were identified that will have an impact on the County’s strategies for achievement of its Diversion Targets. Figure 3-8 summarizes these observations. These changing demographic factors will not impact the Near-Term program and policy recommendations, but may influence the Mid-Term and Long-Term recommendations.

**Figure 3-7: Population, Housing, and Job Data for Unincorporated Areas**

Category	Highlights
<b>Population</b>	<ul style="list-style-type: none"> <li>• 504,330 in 2015</li> <li>• 24% projected growth by 2040</li> </ul>
<b>Housing</b>	<ul style="list-style-type: none"> <li>• 173,246 units in 2015</li> <li>• 78% single-family, 14% multi-family units, 7% mobile homes</li> </ul>
<b>Civilian Jobs</b>	<ul style="list-style-type: none"> <li>• 116,238 civilian jobs in 2012</li> <li>• 30% projected increase by 2040</li> <li>• 30% are government jobs</li> </ul>

**Figure 3-8: Demographic Considerations for Future Programs and Policies**

Demographic Factor	Observation	Takeaway for Future Diversion Programs and Policies
Age of Population	<ul style="list-style-type: none"> <li>• 27% of the population is below 20 years of age</li> <li>• 52% of the population is between 20 and 60 years of age</li> </ul>	<ul style="list-style-type: none"> <li>• School outreach and programs</li> <li>• Outreach through social media</li> <li>• Workplace outreach and participation</li> <li>• Partnerships with business organizations and chambers of commerce</li> </ul>
Ethnicity of Population	<ul style="list-style-type: none"> <li>• Significant increase in the proportion of Hispanics over time</li> </ul>	<ul style="list-style-type: none"> <li>• Outreach in other languages, particularly in Spanish</li> </ul>
Dwellings and Land Use	<ul style="list-style-type: none"> <li>• Single-family is largest dwelling type</li> <li>• Residential land use will see a large gain</li> </ul>	<ul style="list-style-type: none"> <li>• Emphasis on service, cost, and convenience of recycling and diversion programs for single-family customers</li> </ul>
Jobs	<ul style="list-style-type: none"> <li>• Government, professional, and business services to see high growth followed by education and healthcare</li> </ul>	<ul style="list-style-type: none"> <li>• Programs and outreach to government, businesses, and professional organizations</li> <li>• Programs for medical waste collection</li> <li>• Programs for schools, universities, and medical facilities</li> </ul>



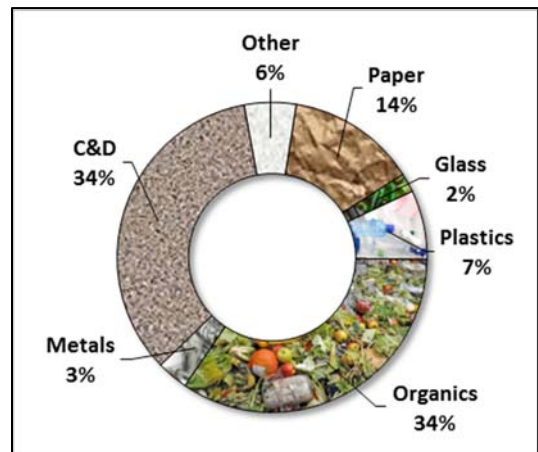
### 3.7 Waste Characterization Information

Examining the types and quantities of materials disposed in the landfill is an essential step in understanding current conditions. The data is used to identify target areas for improvements to current programs and for implementation of future programs and policies. Due to the considerable cost, the County has not conducted its own assessment of the waste characterization of solid waste disposed by the unincorporated areas or through internal County operations. In the absence of County-specific data, the City of San Diego’s waste characterization data was used. The County’s actual waste characterization differs for several reasons: its demographics; differences in residential, commercial, C&D, and self-haul sectors; scope and nature of diversion programs and policies; and, other factors. However, for the purposes of this study, the City of San Diego’s characterization was assumed to be generally applicable.

The City of San Diego waste characterization study was conducted by Cascadia Consulting Group in 2012 and 2013. It involved characterization of more than 1,500 waste samples generated in the City of San Diego (herein referred to as the “City of San Diego Characterization Study”). Using the waste composition percentages from the City of San Diego Characterization Study for residential, commercial, and self-haul sectors, a waste characterization was developed reflecting the average quantities of material disposed by the unincorporated areas from 2013 to 2015.<sup>11</sup> The sector profiles were used to compile an overall waste characterization for all of the unincorporated area tonnage disposed.

Attachment H provides a detailed waste characterization breakout for the County overall as well as residential, commercial, and self-haul characterizations. Using the waste characterization data, the volume of materials disposed were calculated in seven materials classes, which are presented in Figure 3-9.

**Figure 3-9: Overall Characterization of Waste Disposed by Unincorporated Areas**

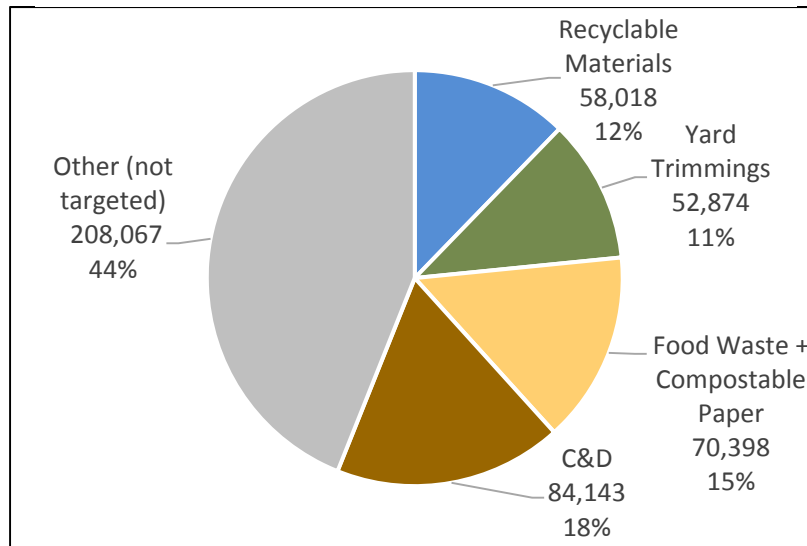


The top ten most prevalent material types, which account for 55% of the solid waste disposed, include food; leaves and grass; palms, succulents, and coral trees; compostable/soiled paper; other wood waste; uncoated corrugated cardboard; carpet and carpet padding; remainder/composite C&D; prunings and trimmings; and textiles (listed in order based on quantities from highest to lowest). Of these top ten materials types disposed, the strategic planning process targeted all of these materials for 75% Diversion except for three material types that are not currently readily recoverable including: palm, succulent, and coral trees; other wood waste (includes treated wood); and remainder/composite C&D. To achieve Zero Waste, these materials will need to be addressed.

<sup>11</sup> Waste characterization data was not compiled for the military waste stream because separate disposal tonnage data was not readily available for Camp Pendleton.

As shown in Figure 3-10, the waste characterization data shows that 50% of all material disposed falls into four categories: 1) traditional recyclable materials that are accepted by recyclables processing facilities and through hauler collection programs; 2) yard trimmings; 3) food scraps; and, 4) select types of C&D materials that are commonly recovered at C&D processing facilities. These four material categories are key focus areas for reaching 75% Diversion. Detailed information is provided in Attachment H.

**Figure 3-10: Target Materials for Diversion, Annual Overall Tons Disposed**



## SECTION 4: PROGRAM AND POLICY ANALYSIS

The strategic planning process involved a robust program and policy analysis that included identification of program and policy options; preliminary assessment of options and short-listing; and then extensive analysis of costs, diversion potential, cost-per-diverted ton, staffing needs, greenhouse gas (GHG) emissions reductions, and job creation potential. The steps of the process are presented in Figure 4-1. The process was followed separately for consideration of programs and policies for the unincorporated areas and for the County’s internal operations. This Section describes the process, identifies key assumptions made in the analysis, and presents the results.

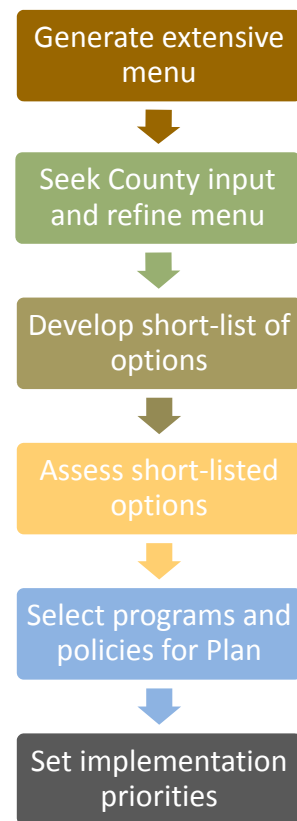
### 4.1 Extensive Menu of Program and Policy Options

For the unincorporated areas, a menu of options was developed that included approximately 150 programs and policies. To develop the menu, the 100 programs and policies listed in “EPA’s *Managing and Transforming Waste Streams: A Tool for Communities*” was used as a starting point and expanded to include options that built off existing County programs as well as new programs and policies identified by the County and HF&H.<sup>12</sup> After completing Round 1 of the stakeholder input process and receiving input from County staff, additional programs/policies were added and program/policy descriptions were revised to better reflect local conditions and diversion opportunities supported by the public and industry stakeholders.

The completed menu includes and identifies programs that address key types of generators and a wide range of material types. The options address all aspects of the Zero Waste framework including waste reduction, reuse and repair, recycling, composting, and education. For each program/policy, numerous characteristics were identified to assist in prioritizing the menu options. The EPA’s program characteristics served as a starting point and were augmented, resulting in nearly 50 characteristics that can be used to sort and prioritize options. Characteristics included target sectors, relative costs, relative diversion potential, potential for community support, staff knowledge, program category, and more. Attachment N provides the menu of options for the unincorporated areas. It includes a brief description of each program, as well as the sectors served and materials targeted.

For the internal operations, a list of potential program and policy options was prepared based on input received from staff during Round 1 of the stakeholder input process (which involved several internal stakeholder meetings) and from department responses to a diversion program questionnaire. This menu includes approximately 85 program and policy suggestions and is presented in Attachment O.

**Figure 4-1: Strategic Planning Process**



<sup>12</sup> <https://www.epa.gov/transforming-waste-tool>

## 4.2 Short Listing of Options

A detailed analysis of the full menu of program and policy options was not practical. For this reason, a short-listing of programs and policy options was necessary to narrow the number of options that were further analyzed. A preliminary short-list of programs/policies was developed separately for the unincorporated areas and the internal operations, with a focus on identifying programs to reach 75% Diversion. The short-lists include logical priorities based on the inventory of current collection and diversion programs, relatively high diversion potential, reasonable ease and practicality of implementation for staff, and overall community and political acceptability. The two short-lists were presented to stakeholders during the Round 2 stakeholder input process. Attachment C includes the short-listed options presented during the public and internal stakeholder process (with items suggested by stakeholders in Round 1 presented in blue font). Generally, stakeholders were supportive of the short-listed options; therefore, only minimal changes were made to the list of options.

The short-listed programs are presented in Figures 4-2 and 4-3 (at the end of this Section) for the unincorporated areas and internal operations. Brief program descriptions are included in Attachment P.

## 4.3 Analysis of Short-Listed Options

For each of the short-listed program and policy options for the unincorporated areas, the analysis included estimation of the following: diversion potential; capital costs; one-time implementation and ongoing costs; County staffing needs; cost-per-diverted ton; GHG emissions reduction potential; and job creation potential.<sup>13</sup> For the internal operations, the analysis concentrated on the cost and staffing analysis only. Diversion potential was not estimated for each internal program option, because the availability of baseline data was limited. Without diversion estimates for internal operations, the cost-per-diverted ton, GHG emissions reductions, and job creation potential calculations could not be performed.

### Diversion Analysis

The incremental additional diversion (in tons per year) that may result from the implementation of each short-listed program and policy was estimated. In many cases, the diversion estimates were based on realistic estimates derived from current program performance, baseline tonnage and account data, and waste characterization data. In other cases, benchmarks were used from other communities, research studies, and industry knowledge to calculate the diversion estimates. The baseline tonnage data and waste characterization analysis presented in Section 3 and Attachment H were a foundation for much of the analysis. The diversion analysis examined the potential of new diversion efforts, and does not include diversion estimates for the current diversion programs.

The actual performance of the diversion programs will differ depending on the manner in which the programs are implemented, the level of participation from the residents and businesses in the programs, the ongoing commitment of the County to the programs, as well as external factors such as the economy, actual composition of the waste stream, growth in the residential sector and changes in demographic conditions, number and types of new businesses, product design and packaging, collection and processing technology, changes in federal and State legislation and regulations, and more. To address some of the variability, “low diversion” and “high diversion” estimates were provided to show a

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<sup>13</sup> Job creation potential considers jobs created for the private sector associated with handling, processing, and end uses of recyclables, organics, C&D, and other materials diverted.

range of potential diversion results. The range reflects: (i) estimated variability in program results related to program participation, program maturation, and other factors; (ii) differences in diversion related to the level of effort dedicated by the County to the ongoing program operations; or (iii) a combination of both factors.

Diversion potential was not estimated for internal operations, because baseline data is limited.

### **Cost and Staffing Analysis**

The cost estimates presented in the Strategic Plan provide a reasonable basis for understanding the potential cost impacts and how costs between programs compare to one another; however, it is important to recognize that the estimates are very rough in nature. They are based on readily available County-specific cost information, readily available benchmarks for other agencies, and industry knowledge. The staffing estimates forecast the level of effort the County will need to devote to program and policy planning and implementation, and ongoing management and monitoring. It may be that existing staff can take on some of new diversion programs and policies with additional staff needed for full implementation of the recommended options.

### **Unincorporated Program and Policy Costs and Staffing**

The cost and staffing analysis for the short-listed programs for the unincorporated areas is presented in Figure 4-2 (at the end of this Section). It provides the County's annual cost, annual costs of other parties, total estimated annual costs, and the cost per-diverted ton (cost-benefit) for each of the programs along with the diversion potential. Figure 4-2 also presents estimated staffing needs for the County to plan, implement, and manage the programs and policies. The programs are listed from those with the highest to lowest estimated annual diversion. Two programs – "Enhance zoning ordinance to support organics processing" (Program 1) and "Supporting organics facility development" (Program 2) – do not have diversion or cost-per-diverted ton estimates because tonnage was not assigned to these programs. The diverted organics tonnage is included in the collection program line items to avoid double counting. In addition, the two HHW programs (Programs 19 and 20) do not include diversion or cost-per-diverted ton estimates because the tonnage diverted is minimal.

One-time implementation costs, which are annualized and added to the annual ongoing costs, include, but are not limited to, the following:

- County costs for staff time and employee benefits to plan and implement programs except in cases where existing staff are anticipated to be able to take on the additional efforts;
- Consultant support in the planning and implementation phase for: (i) establishing a new HHW facility in North County; (ii) enhancing the zoning ordinance to support organics processing facilities; and, (iii) modifying the non-exclusive franchise system and SWMAs; and,
- Cost incurred by other parties for equipment such as carts and bins for expanded diversion services; small-scale on-site composting systems for organics; and education and outreach materials for program implementation.

Ongoing annual costs include, but are not limited to, the following:

- County costs for staff time, technical assistance contractors, printing and distributing education and outreach materials, and procuring a contractor for operation of the new HHW programs;

- Grant funding that the County plans to disperse to support on-site community, commercial, and farm composting projects and multi-family and commercial recycling programs;
- Consultant costs for food waste prevention and social/behavior change marketing programs;
- Costs incurred by other parties for ongoing program efforts;
- Estimated costs for businesses to separate food for composting purposes;
- Hauler costs for collection and processing of additional tonnage diverted as well as consideration of avoided solid waste collection and disposal costs; and,
- Education and outreach costs.

In understanding the cost estimates, it is also important to recognize what types of costs are not included. The following highlights key cost exclusions:

- HHW site acquisition and development costs, as the estimate assumes the County will partner with industry for a site that can be used at no or little cost (similar to current arrangements for its HHW facility in Ramona); if actual site costs are significant, the County can provide additional mobile HHW drop-off events instead of a permanent site (Program 19);
- Costs to implement new funding methods presented in the funding strategy in Section 7;
- Costs related to compliance with the California Environmental Quality Act (CEQA) for any programs or projects that must comply with CEQA review with the exception that costs are included for CEQA review for zoning ordinance changes to support organics processing;
- Organics processing facility development costs by private companies; however, these costs are effectively reflected in per-ton organics processing fees (gate rates) that are included in ongoing cost estimates;
- Potential costs for a food donation program, which, if selected for implementation, would be covered by the County's Food System Initiative;
- In-kind services that result in no cost to programs (e.g., County staff time that may be performed by employees at no additional cost);
- Costs for current diversion programs and current staff;
- Costs for businesses and farms to manage on-site composting programs if the level of effort has a material impact;
- Additional staff time and costs for businesses, schools, and multi-family premises and C&D contractors that may be incurred to separate recyclables and organics; although, such costs may be offset by reductions in solid waste collection costs; and,
- Savings customers may realize if they reduce their solid waste service levels as a result of their diversion efforts.

### **Internal Operations Program and Policy Costs and Staffing**

For the internal operations cost analysis, HF&H prepared an initial estimate of one-time and ongoing costs for the short-listed programs and policies (which are in addition to current costs). The County then reviewed and revised the estimated costs to more closely align with the manner in which the County

conducts its internal operations. Figure 4-3 presents a summary of estimated one-time staffing, ongoing annual staffing, one-time costs, and ongoing annual costs for the short-listed programs. Additional detail is provided in Attachment Q.

In estimating staffing and costs for the internal operations programs and policies, one-time implementation costs include, but are not limited to, the following:

- County costs for staff time and employee benefits to plan and implement programs;
- Consultant support in the planning and implementation phase for three programs: (i) preparing a feasibility study for partnering with Sherriff's inmate re-entry services to consider training program for repair; (ii) expanding the recycled products purchasing policy to an EP3 policy; and, (iii) evaluating opportunities for food donation from County cafeterias and food donation plan development; and,
- One-time equipment costs for food storage and collection containers and on-site food waste composting system(s).

Ongoing annual costs include, but are not limited to, the following:

- County costs for staff time and employee benefits for ongoing program support;
- Increased janitorial staff time for additional recycling program support and cafeteria staff time at leased sites for food donation and food waste collection programs, which would be incurred after the County amends, renews, or executes new service contracts and/or leases to incorporate the diversion program requirements;
- Hauler costs for collection and processing of additional tonnage diverted as well as consideration of avoided solid waste collection and disposal costs; and,
- Printing of education and outreach costs.

The following list highlights the key costs that are not included in the program cost estimates:

- Reductions in costs that may be realized as programs mature over time;
- Increased costs, if any, for purchasing materials in compliance with the EP3 policy;
- In-kind services that result in no cost to programs (e.g., County staff time that may be performed by employees at no additional cost);
- Costs for current diversion programs and current staff;
- Extra staff for separation of recyclables, yard trimmings, and/or C&D materials for diversion programs with the exception of staff time estimated for food donation and food waste collection programs;
- Increased costs, if any, related to increasing C&D diversion requirements of Policy G-15 (Design Standards for County facilities and Property) particularly related to C&D diversion from renovation projects (which is currently not required) and prioritized use of recyclable materials in road construction projects;
- Extra costs, if any, for leased facilities to comply with diversion requirements and reporting, although the lessors may reduce their solid waste collection costs through diversion; and,

- Savings the County may realize if they reduce their solid waste service levels as a result of recyclables and yard trimmings diversion efforts.

## GHG Emissions Reductions

GHG emissions reductions associated with the implementation of the Strategic Plan were estimated using two different approaches. The first approach focuses on direct emissions reductions using a method that provides consistency with the County's Climate Action Plan (CAP). It was prepared by Ascent Environmental, the County's CAP consultant. The second approach considers the life-cycle impacts of materials and was prepared by HF&H.

Each method and the resulting GHG emissions reductions estimates are provided below. Note that the estimates reflect the impacts of new diversion efforts and do not include estimates of GHG emissions reductions for the current diversion programs in the unincorporated areas. Actual GHG emissions reductions from the 75% and Zero Waste diversion programs and policies will vary annually depending on several factors, such as: the timing and extent to which the County implements diversion programs and policies; the level of participation in and actual results of programs and policies; changing characterization of materials; technology changes impacting materials generated, processing, and diversion potential; regulatory changes; demographic and economic conditions; and, the accuracy of the GHG models used in the analysis.

For the 75% Diversion Target, potential GHG emissions reductions were calculated for each unincorporated area program and policy based on the high diversion estimates and are presented in Figure 4-2 (at the end of this Section). For the Zero Waste scenario, calculations were based on the overall County-wide Zero Waste diversion estimate and not on separate, program-specific diversion calculations.

### Approach 1: Direct (Scope 1) Emissions Only

The County is currently developing a CAP that includes a GHG emissions inventory for the unincorporated areas. The CAP considers "direct" or "Scope 1" emissions emitted by sources generated directly by waste generation (i.e., methane emissions from decomposition of waste) based on U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (ICLEI 2012). It does not consider ICLEI "Scope 2" and "Scope 3" emissions associated with electricity consumption and all other activities within the lifecycle of waste, including manufacturing, waste transport, and recycling activities. To provide consistency with the CAP GHG estimates, Ascent Environmental estimated net GHG emissions reductions for the unincorporated areas' diversion efforts of 51,094 MTCO<sub>2</sub>e annually for 75% Diversion and 153,715 MTCO<sub>2</sub>e annually for Zero Waste.

Ascent Environmental describes that the estimated GHG reductions for Approach 1 only include avoided emissions from the decomposition of biodegradable material by applying the percent reduction in biodegradable waste under the proposed waste diversion scenarios to the GHG emissions from solid waste generated in 2014. These "biodegradable materials" are defined as materials that will eventually decompose and include food waste, lumber, paper, and yard waste. Methane emissions from waste are primarily from decomposition; therefore, it is assumed that the percent reduction of biodegradable material in landfills would result in a proportional percent reduction in GHG emissions from the solid waste category. The baseline annual GHG emissions from solid waste were estimated based on national averages for municipal solid waste composition and related emission factors from ICLEI. Based on the waste diversion programs and targets and the average biodegradable content in the County's current



waste stream, the 75% diversion and Zero Waste efforts are estimated to reduce both the biodegradable content in the County's current waste stream and baseline GHG emissions.

### **Approach 2: Life-Cycle Assessment**

The second approach provides an expanded perspective on the impact that the implementation of the Strategic Plan might have on the overall GHG emissions throughout the lifecycle of waste from the fabrication or harvest to disposal in landfills, composting, and recycling. For this approach, HF&H developed a hybrid GHG calculation method that relied on EPA's Waste Reduction Model (WARM model version 14, released March 2016) for estimating GHG emissions reductions for non-organic materials and California's Air Resources Board (CARB) method (revised March 2016) for estimating emissions reductions from the diversion of organic waste (food waste, compostable food-soiled paper, and yard trimmings) from landfills to compost facilities.<sup>14</sup> HF&H used GHG emissions factors reflecting San Diego County landfill conditions and factors for specific material types impacted by each of the diversion programs comprising the 75% Diversion scenario. HF&H estimated the net annual GHG emissions reductions for the unincorporated areas' 75% Diversion and Zero Waste scenarios would be 211,873 MTCO<sub>2</sub>e and 515,925 MTCO<sub>2</sub>e, respectively. These GHG emissions reductions estimates are higher than the estimates using the first approach because the life-cycle benefits are considered.

### **Job Creation Potential**

Processing recyclables, organics, C&D, and HHW requires more labor on a per-ton basis than landfilling these materials. As a result, the County's diversion of the materials to processing facilities will result in a net increase in the number of jobs at materials management facilities. To estimate the job creation potential for each of the unincorporated area programs and policies, benchmarks from the EPA and the Institute for Local Self Reliance were used. Figure 4-2 presents the net job creation estimates, which account for new job creation less job reduction at the landfills due to additional diversion above the current diversion level. In total, approximately 130 jobs may be created if the 75% Diversion Target is achieved and the processing infrastructure requires the staffing levels reflected in the benchmark estimates. Fewer jobs may result if actual diversion is lower or facilities process materials more efficiently than reflected in the benchmark job statistics.

As part of the cost analysis, the County staff time for implementation and ongoing program management was estimated and is presented as full-time equivalents (FTEs) in Figure 4-2 for the unincorporated area programs and Figure 4-3 for internal operations. The staff time is in addition to the current staff time that supports existing diversion programs and policies.

## **4.4 Evaluation Summary**

### **Unincorporated Area Programs and Policies**

The high-end estimate shows that the short-listed programs are projected to reach just above the diversion target of 164,000 tons per year (as described in Section 1.4) for 75% Diversion. If programs perform at the low end of the diversion estimates for any reason, the 75% Diversion Target will not be met and additional effort will need to be put into the programs and/or additional programs will need to be implemented. The five programs with the highest diversion estimates are collection programs

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<sup>14</sup> <http://www.arb.ca.gov/cc/waste/cerffinal.pdf>

focusing on recycling, yard trimmings, food scraps, and C&D and a program that proposes modification of the C&D ordinance project threshold.

The cost estimate projects annual costs for the County's efforts to be \$1.8 to \$3.5 million for the new programs and policies, which are in addition to the County's costs and staffing levels for current diversion programs and policies. This estimate annualizes the one-time implementation costs over three to five years. Some of the programs will be phased in, which will allow for up front coverage of the annualized costs. County staffing estimates range from 3.9 to 10.2 full-time equivalents. Actual costs and staffing needs will vary depending on the extent to which the County's existing staff can absorb program efforts into their current job duties. Furthermore, actual costs and staffing needs will vary depending on the level of effort and the final scope of the programs. As programs mature, ongoing program costs may decrease, creating opportunities to focus on new diversion efforts. Section 7 presents a strategy for program funding.

A significant portion of the other costs estimated will be borne by the non-exclusive haulers and recovered through the rates haulers charge residential and commercial customers. Other costs will be incurred by businesses and will be part of their cost of doing business. Increased costs to residents and businesses may be offset partially or fully by reductions in their solid waste collection costs if their diversion efforts allow them to reduce their solid waste service level.

The cost-per-diverted ton ranges from \$0 to \$290. Generally, these programs can be grouped into two distinct categories (with a few outliers): 1) programs under \$100 per ton; and, 2) programs between \$100 and \$300 per ton. The programs that are less than \$100 per-ton diverted are the collection-focused programs. In the \$100 to \$300 per-ton range are education programs including technical assistance programs, social marketing campaigns, and food waste prevention programs.

The GHG emissions reductions analysis estimates a net reduction of 51,094 MTCO<sub>2</sub>E through implementation of the short-listed programs for the unincorporated area.<sup>15</sup> This GHG benefit is based on achievement of the 75% Diversion Target. The job analysis for the 75% Diversion Target forecasts that as many as 130 jobs may be created through managing and processing the diverted recyclables, food, yard trimmings, C&D, and HHW.

Figure 4-2 provides a summary of key analytics calculated for each program for the unincorporated areas. As described above, actual results will be different than estimated. Examples of factors that will impact the final outcome include, but are not limited to, the manner in which programs are implemented, the level of participation from the residents and businesses in the programs, the ongoing commitment to the programs, as well as external factors such as the economy, actual composition of the waste stream, and more.

### **Internal Operations Programs and Policies**

Figure 4-3 presents a summary of the estimated staff time and annual costs for implementation of the short-listed programs and policies for internal operations. It shows an estimated staffing level of approximately 2.8 full-time equivalent during the one-time implementation period. This staff time may be spread out over the first two- or three-years of the Near-Term Phase. On an ongoing basis,

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<sup>15</sup> The GHG emissions reductions calculations were prepared by Ascent Environmental, the consultant for the County's Climate Action Plan.

approximately 4.9 full-time equivalent staff are anticipated. Attachment Q provides additional details on the staffing needs for the key departments involved in the implementation of the internal programs and policies. Other costs are included when contractors and/or consultants are anticipated to be involved. Actual costs and staffing will vary depending on the extent to which the County's existing staff can integrate program efforts into their current job duties, as well as the level of effort and the final scope of the programs and policies.

**Figure 4-2: Summary Analysis of Programs and Policies for the Unincorporated Areas**

	Program/Policy	Diversion Estimate (tons/year)		Estimated Cost / Diverted Ton		Estimated Annual Cost - County Only		Estimated Annual Cost - Other Parties		Estimated Annual Cost - Total		FTE County Staff	FTE County Staff	GHG Estimate (MTCO <sub>2</sub> E) (e)	Estimated Job Creation (FTE)
		Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	High	High
1	Enhance zoning ordinance to support organics processing (a)	---	---	---	---	\$94,000	\$225,000	\$0	\$0	\$94,000	\$225,000	0.12	0.21	---	---
2	Support organics processing facility development (a) (b)	---	---	---	---	\$0	\$0	\$0	\$0	\$0	\$0	---	---	---	---
3	Implement commercial food scraps collection (c)	22,000	34,000	\$90	\$90	\$28,000	\$38,000	\$1,901,000	\$2,735,000	\$1,929,000	\$2,773,000	0.12	0.17	(15,559)	29.8
4	Regulate C&D haulers with minimum diversion requirements	16,700	29,500	\$22	\$22	\$9,000	\$18,000	\$354,000	\$621,000	\$363,000	\$639,000	0.08	0.16	(2,798)	24.9
5	Enhance single-family collection with consistent hauler requirements	12,400	24,700	\$64	\$53	\$86,000	\$143,000	\$712,000	\$1,179,000	\$798,000	\$1,322,000	0.00	0.00	(9,075)	21.3
6	Enhance commercial collection with minimum recycling level requirements	19,000	21,000	\$36	\$42	\$16,000	\$25,000	\$662,000	\$843,000	\$678,000	\$868,000	0.12	0.17	(7,824)	17.8
7	Enhance C&D diversion with ordinance amendment to lower project threshold	5,600	10,300	\$86	\$111	\$173,000	\$581,000	\$306,000	\$566,000	\$479,000	\$1,147,000	1.37	4.60	(963)	8.7
8	Expand social/behavior change marketing program	7,400	9,200	\$103	\$104	\$300,000	\$418,000	\$465,000	\$535,000	\$765,000	\$953,000	0.08	0.23	(4,023)	7.9
9	Support on-site community/commercial/farm composting	1,300	7,500	\$100	\$23	\$126,000	\$341,000	\$7,000	(\$169,000)	\$133,000	\$172,000	0.63	1.85	(2,445)	(1.2)
10	Expand technical assistance for multi-family, businesses, schools	1,500	6,000	\$184	\$102	\$229,000	\$438,000	\$47,000	\$174,000	\$276,000	\$612,000	0.82	1.63	(1,594)	5.1
11	Support efforts for reuse of textiles and State EPR for mattresses and carpet/padding	2,400	5,300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00	0.00	0	4.5
12	Collect food waste from single-family premises (c)	1,200	4,200	\$110	\$40	\$6,000	\$11,000	\$127,000	\$174,000	\$133,000	\$185,000	0.05	0.10	(1,481)	3.6
13	Enhance hauler performance standards, including minimum diversion goals	2,600	3,900	\$272	\$287	\$12,000	\$25,000	\$698,000	\$1,100,000	\$710,000	\$1,125,000	0.11	0.21	(1,594)	3.4
14	Improve diversion, tracking and oversight of haulers	1,300	2,600	\$31	\$43	\$35,000	\$101,000	\$6,000	\$11,000	\$41,000	\$112,000	0.13	0.29	(957)	2.3
15	Promote food waste prevention	1,700	2,500	\$182	\$166	\$404,000	\$553,000	(\$94,000)	(\$138,000)	\$310,000	\$415,000	0.13	0.27	(1,152)	(0.4)
16	Support food donation through County Food System Initiative (d)	1,000	1,600	---	---	---	---	---	---	---	---	---	---	(737)	(0.2)
17	Establish additional hauler-provided drop-off facilities	400	1,500	\$64	\$93	\$0	\$0	\$24,000	\$140,000	\$24,000	\$140,000	0.00	0.00	(367)	1.3
18	Provide regular education on County and State recycling requirements	700	1,400	\$194	\$196	\$98,000	\$199,000	\$42,000	\$81,000	\$140,000	\$280,000	0.02	0.06	(525)	1.2
19	Collaborate with industry to establish an HHW facility in North County unincorporated areas	---	---	---	---	\$106,000	\$259,000	\$0	\$0	\$106,000	\$259,000	0.10	0.23	---	0.1
20	Provide additional HHW mobile drop-off events	---	---	---	---	\$39,000	\$124,000	\$0	\$0	\$39,000	\$124,000	0.02	0.02	---	0.1
<b>Total</b>		<b>97,200</b>	<b>165,200</b>	<b>\$72</b>	<b>\$69</b>	<b>\$1,761,000</b>	<b>\$3,499,000</b>	<b>\$5,257,000</b>	<b>\$7,852,000</b>	<b>\$7,018,000</b>	<b>\$11,351,000</b>	<b>3.89</b>	<b>10.20</b>	<b>(51,094)</b>	<b>130.3</b>
<b>Annual Disposal Tonnage to be Diverted to Reach 75% (c)</b>		<b>164,000</b>	<b>164,000</b>												
<b>Surplus in Diversion Estimated (Shortfall in Diversion Estimate)</b>		<b>(66,800)</b>	<b>1,200</b>												

- (a) Diversion is not listed for "Enhance Zoning Ordinance" and "Support Organics Processing Facility Development" because the organics diversion is included in other programs.
- (b) For "Support Organics Processing Facility Development", no costs or staff time are shown as program efforts are primarily addressed through changes to hauler requirements included in other programs.
- (c) Food scraps collection implementation is dependent on availability of organics processing facilities; food scraps collection programs to be implemented as soon as possible.
- (d) Food donation diversion is dependent on implementation of the County's Food System Initiative. Staffing and costs will be covered by the Initiative, and are not in the Strategic Plan.
- (e) GHG emissions reductions calculations were prepared by Ascent Environmental, the consultant for the County's Climate Action Plan.

**Figure 4-3: Summary Analysis of Programs and Policies for Internal Operations**

	Program/Policy	One-Time Staffing (FTE)	Ongoing Staffing (FTE/Yr)	One-Time Staff Costs (\$)	One-Time Other Costs (\$)	Total One-Time Costs (\$)	Ongoing Staff Costs (\$/Yr)	Ongoing Other Costs (\$/Yr)	Total Ongoing Costs (\$/Yr)
<b>2017 / 2018 Timeframe</b>									
1	Establish High Diversion/Zero Waste policy and organization (a)	0.23	0.37	\$25,173	\$0	\$25,173	\$40,404	\$0	\$40,404
2	Establish measurement and reporting process and baseline	0.15	0.14	\$26,654	\$0	\$26,654	\$15,231	\$0	\$15,231
3	Increase use of County's existing reutilization process	0.11	0.06	\$12,058	\$0	\$12,058	\$6,769	\$0	\$6,769
4	Expand the B-67 Recycled Products Purchasing Policy into an Environmentally Preferable Purchasing Policy (EP3)	0.19	0.08	\$21,154	\$50,000	\$71,154	\$8,462	\$0	\$8,462
5	Incorporate Zero Waste objectives into County procurements	0.04	0.15	\$4,654	\$0	\$4,654	\$16,923	\$0	\$16,923
6	Enhance diversion requirements in waste collection contracts	0.08	0.10	\$9,138	\$0	\$9,138	\$10,662	\$0	\$10,662
7	Ensure optimal recycling at facilities owned and/or leased by County	0.04	0.19	\$4,442	\$0	\$4,442	\$20,731	\$4,912	\$25,643
8	Increase diversion of yard/wood /food waste generated by County	0.43	1.97	\$47,808	\$106,800	\$154,608	\$216,999	\$84,930	\$301,929
9	Provide waste reduction and recycling training to employees	0.21	0.11	\$23,269	\$0	\$23,269	\$12,058	\$3,000	\$15,058
10	Require regular training of janitorial staff including contractors	0.03	0.02	\$3,385	\$0	\$3,385	\$2,538	\$16,800	\$19,338
<b>Subtotal</b>		<b>1.53</b>	<b>3.19</b>	<b>\$177,735</b>	<b>\$156,800</b>	<b>\$334,535</b>	<b>\$350,776</b>	<b>\$109,642</b>	<b>\$460,418</b>
<b>2019 / 2020 Timeframe</b>									
11	Revise G-15 Design Standards to include renovations of facilities	0.05	0.04	\$5,394	\$0	\$5,394	\$4,654	\$0	\$4,654
12	Prioritize use of recycled materials in road construction	0.24	0.07	\$26,865	\$0	\$26,865	\$8,038	\$0	\$8,038
13	Partner with non-profit organization to provide reuse collections or drop-off boxes at County facilities for employees	0.18	0.11	\$20,096	\$0	\$20,096	\$12,481	\$0	\$12,481
14	Partner with Sheriff's Inmate Re-entry Services to consider training program on repair	0.10	0.00	\$11,423	\$50,000	\$61,423	\$0	\$0	\$0
15	Create capability for collection of used pallets from County facilities (b)	---	---	---	---	---	---	---	---
16	Require recycling and composting for County-sponsored events (b)	---	---	---	---	---	---	---	---
17	Support food waste reduction/food donation at County operations	0.50	1.28	\$54,577	\$130,000	\$184,577	\$141,281	\$56,368	\$197,649
18	Increase use of locally-produced mulch/compost at County facilities	0.12	0.05	\$13,115	\$0	\$13,115	\$5,712	(\$13,000)	(\$7,288)
19	Support waste reduction and recycling by department through technical assistance	0.03	0.14	\$3,808	\$0	\$3,808	\$15,442	\$0	\$15,442
20	Consider expanding partnerships with artists to create displays from repurposed material (b)	---	---	---	---	---	---	---	---
<b>Subtotal</b>		<b>1.23</b>	<b>1.71</b>	<b>\$135,279</b>	<b>\$180,000</b>	<b>\$315,279</b>	<b>\$187,608</b>	<b>\$43,368</b>	<b>\$230,976</b>
<b>Total</b>		<b>2.76</b>	<b>4.89</b>	<b>\$313,013</b>	<b>\$336,800</b>	<b>\$649,813</b>	<b>\$538,384</b>	<b>\$153,010</b>	<b>\$691,394</b>

(a) Establishment of a High Diversion/Zero Waste policy (Program 1) is anticipated to occur after a baseline of current conditions is developed (Program 2).

(b) Staff time and costs were not estimated for this program.

## SECTION 5: RECOMMENDATIONS FOR UNINCORPORATED AREAS

This Section presents the program and policy recommendations for the unincorporated county areas to achieve the County's Diversion Targets. The recommended programs are organized into three implementation phases: Near-Term (2017 – 2020), Mid-Term (2021 – 2030), and Long-Term (2031 – 2040) Phases.

### 5.1 Near-Term Phase (2017 – 2020)

#### 5.1.1 Recommended Programs

Based on the analysis presented in Section 4, HF&H recommends that the County implement all short-listed programs in the Near-Term Phase. To achieve 75% Diversion, these programs, which are listed in Figure 5-1, must be implemented quickly and effectively, along with continued support and enhancement of current programs. Implementation of the supplemental programs listed in Figure 5-2, several of which were supported by the stakeholders, will provide a contingency if the diversion from the 20 programs and policies presented in Figure 5-1 does not result in achievement of 75% Diversion. While a separate cost-benefit analysis was not prepared for these programs, the costs associated with these supplemental programs are anticipated to be minimal.

The program and policy analysis presented in Section 4 summarized County costs for implementation and ongoing support of the recommended programs (see Figure 4-2). Based on HF&H's understanding of the County's current operations, HF&H believes that some of the recommended programs may potentially be accomplished within the County's existing budget. In Figure 5-1, these programs are identified. Given that programs will be led by various departments (including DPW, DGS, DPC, and DEH), and each department has different funding sources and funding constraints as well as other strategic initiatives, the County will need to make a final determination on what can be accomplished with its existing resources as each program is implemented. Section 7 presents a funding strategy for generating additional funds to support implementation and ongoing program efforts.

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**Figure 5-1: Recommended Near-Term Priorities (2017 – 2020) for Unincorporated Areas**

	Program/Policy	Estimated Diversion (d) (tons/year)	2017 / 2018 Priorities	2019 / 2020 Priorities	Potentially Accomplish within Existing Budget
1	Enhance zoning ordinance to support organics processing (a)	---	✓		
2	Support organics processing facility development (a)	---	✓		
3	Implement commercial food scraps collection (b)	34,000	✓		
4	Regulate C&D haulers with minimum diversion requirements	29,500	✓		
5	Enhance single-family collection with consistent hauler requirements	24,700	✓		✓
6	Enhance commercial collection with minimum recycling level requirements	21,000	✓		✓
7	Enhance C&D diversion with ordinance amendment to lower project threshold	10,300	✓		
8	Expand social/behavior change marketing program	9,200		✓	
9	Support on-site community/commercial/farm composting	7,500	✓		
10	Expand technical assistance for multi-family, businesses, schools	6,000		✓	
11	Support efforts for reuse of textiles and State Extended Producer Responsibility (EPR) for mattresses, carpet/padding, paint	5,300		✓	✓
12	Collect food waste from single-family premises (b)	4,200	✓		
13	Enhance hauler performance standards, including minimum diversion goals	3,900	✓		
14	Improve diversion, tracking and oversight of haulers	2,600	✓		
15	Promote food waste prevention	2,500	✓		
16	Support food donation through County Food System Initiative (c)	1,600	✓		
17	Establish additional hauler-provided drop-off facilities	1,500	✓		✓
18	Provide regular education on County and State recycling requirements	1,400		✓	✓
19	Collaborate with industry to establish an HHW facility in North County unincorporated area	---		✓	
20	Provide additional HHW mobile drop-off events	---	✓		
	<b>Total</b>	<b>165,200</b>			

- (a) Diversion is not listed for "Enhance Zoning Ordinance" and "Support Organics Processing Facility Development" because the organics diversion is included in other programs.
- (b) Food scraps collection implementation is dependent on availability of organics processing facilities; implement collection as soon as possible.
- (c) Food donation diversion is dependent on implementation of the County's Food System Initiative. Staffing and costs will be covered by the Initiative, and are not in the High Diversion/Zero Waste Strategic Plan.
- (d) Estimated diversion shows the high end of estimates provided in the High Diversion/Zero Waste Strategic Plan. Actual results may be less.

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**Figure 5-2: Supplemental Near-Term Priorities (2017 – 2020) for Unincorporated Areas**

	Program/Policy
21	Support animal manure collection and diversion (e.g., horse manure)
22	Partner to expand drop-off facility network. Possibilities include: (i) transfer station/landfills operators offering residents “diversion dump coupons”; or, (ii) non-profit or other organizations establishing locations to various materials
23	Continue periodic drop-off events for agricultural plastics with goal to create regularly scheduled events
24	Continue to support/expand regional campaign efforts and on-line resources (including consistent signage for recycling and reuse, repair, equipment rental opportunities, sharing sites, HHW drop-offs, and hard-to-handle materials) by working with other agencies and non-profit organizations (e.g., I Love a Clean San Diego, San Diego Repair and Reuse Network, Solana Center, and others)
25	Support programs to integrate trainings on plantings, pruning, grass cycling, yard trimming recycling, and on-site composting; offer incentives to attend training; partner with retailers to provide information
26	Create education program and engage and train others to educate the community (through volunteer network or partnerships with and/or funding efforts of community group(s) or local colleges)
27	Develop Zero Waste neighborhood leader program to promote best practices

Note: A cost and diversion analysis was not conducted for these programs.

### 5.1.2 Near-Term Implementation Overview

The County’s Diversion Targets include two milestones: 75% Diversion by 2020 and Zero Waste by 2040. This implementation strategy focuses on achievement of the first milestone. As the analysis presented in Section 4 shows, the County has the potential of reaching 75% by 2020 if all the recommended programs are put in place and diversion results are on the high end of the diversion estimate.

If the Board of Supervisors’ approves this Strategic Plan in early 2017, the County will have approximately 3.5 years to achieve 75% Diversion (from mid-2017 to 2020). Several recommended programs require as much as one to two years of planning and implementation time; and, more time will be needed for organics processing facility design, permitting, and construction. In some cases, programs call for bringing on outside/contracted support or may necessitate hiring new County staff, both of which are processes that can add six months to the timeline. Lastly, the County may need to identify funding sources and build the program costs into its budgeting process. The timing of the budgeting process may delay the start of some program efforts, leaving less than 3.5 years to implement the programs and develop participation and success. Given these factors, reaching 75% by 2020 will require that immediate action and dedication of staff resources by all the departments involved in program and policy planning and implementation.

It may be more pragmatic for the County to consider a longer planning horizon for achieving 75% diversion to allow more time to implement programs and policies and to allow the programs to mature into high performing diversion programs. It should be noted that regardless of the County’s diversion goal or desired timeframe for achievement, the County will need to move ahead with several of the programs and policies analyzed as part of this Strategic Plan to meet current State regulations, including those with phased implementation requirements as well as those in the process of being finalized.



Estimates of the diversion potential, implementation and ongoing costs, and County staff needs are provided for these programs.

Sections 5.1.3 and 5.1.4 present an implementation strategy for the Near-Term programs, identifying 2017/2018 and 2019/2020 priorities, respectively. The 2017/2018 priorities are critical to setting up a foundation for the achievement of the 75% Diversion Target. The 2019/2020 priorities, which are also essential to reaching 75% Diversion, can then receive the focus of the County's staff. The Strategic Plan anticipates that DPW Recycling will be designated as the lead department for the oversight and monitoring of the unincorporated areas' progress towards its Diversion Targets.

### 5.1.3 2017/2018 Priorities

Several of the recommended programs and policies can be grouped into three key areas: (i) organics diversion programs; (ii) changes to the non-exclusive hauler system and SWMAs to increase residential and commercial diversion and to manage C&D haulers; and, (iii) amendments to the C&D ordinance to expand the C&D recycling requirements to cover more C&D projects. The attention on these three areas must be immediate and intensive as they are critical to provide the infrastructure and framework that support implementation of most of the programs needed to reach the 75% Diversion.

#### **Organics Diversion Programs (Programs 1, 2, 3, 9, 12, 13, 15, and 16)**

The recommended organics processing and diversion-related programs include:

- Enhance zoning ordinance to support organics processing (Program 1);
- Support development of large-scale facilities (Program 2);
- Implement commercial food scraps collection (Program 3);
- Support on-site community/commercial/farm composting projects (Program 9);
- Implement single-family food scraps collection (Program 12);
- Redirect yard trimmings to processing rather than use as landfill alternative daily cover (Program 13);
- Promote food waste prevention (Program 15); and,
- Support food donation through County Food System Initiative (Program 16).

Organics diversion processing needs account for approximately 40% (64,000 tons per year) of the estimated diversion needed to reach 75%; and, an additional 37,000 tons per year of processed yard trimmings used as ADC need to be processed to support the 75% Diversion Target. The organics processing infrastructure in the County is very limited, with little or no in-County capacity available to accommodate composting or anaerobic digestion of additional yard trimmings, food scraps, and food-soiled compostable paper. Without significantly more organics processing capacity, the achievement of 75% by 2020 is not realistic. In fact, the recommended organics collection programs (Programs 3 and 12) cannot be cost-effectively implemented until in-County processing capacity is available.

Not only is organics processing capacity needed to support implementation of the recommended programs/policies, but it is also necessary to comply with the following State legislation:

- AB 1826 (2014) – Requires businesses and multi-family premises to divert organic materials with some compliance requirements effective now and others ramping up through 2020;
- AB 1594 (2014) – Disallows recycling credit in 2020 for processed yard trimmings used as alternative daily cover at landfills;
- AB 876 (2015) – Requires each county or regional agency to identify, in its annual report to CalRecycle, commencing August 1, 2017, a 15-year estimate of organics processing generation, additional processing capacity needed to process this material, and identification of areas for new or expanded processing capacity for the unincorporated areas and cities within the county; and,
- SB 1383 (2016) – Requires State-wide reduction of organic disposal volumes by 50% by 2020 and 75% by 2025 and recovery of 20% of edible food by 2025.

The cities in San Diego County also have a growing demand for additional organics processing capacity to meet State requirements and their own diversion goals. With several cities and tribal governments within the county looking towards Zero Waste, including the cities of San Diego, Oceanside, and El Cajon, there will be significant need for and development of organics processing capacity. These regional needs offer an opportunity for the County to work with one or more of the cities to support and encourage shared or regional infrastructure. Given the large geographic area of the county, having access to several facilities throughout San Diego County will reduce the transportation costs for organic materials. With a regional approach, a system of five to ten 70,000 to 100,000 ton-per-year facilities could be supported providing convenient access throughout San Diego County. The regional approach is more practical than the County supporting development of a single organics processing facility with a capacity of 100,000 tons per year (sized to meet the County's overall needs), that will require higher transportation costs to move all organics to the single location.

Given the County's organics processing needs and State requirements, supporting the development of organics processing capacity is critical. If the Board of Supervisors approves the Strategic Plan, efforts on this program would need to begin immediately to achieve the 75% Diversion Target by 2020. Successfully stimulating the development of large-scale organics processing facility(ies) will be essential and will take at least two or three years (if not longer) as the facility(ies) will require review under the California Environmental Quality Act (CEQA); design; permitting; and, construction. HF&H understands that there are infrastructure projects under consideration by both public and private entities within San Diego County to develop and expand organics processing infrastructure. It is likely that one or more of these projects would benefit from additional economies of scale. If the County can engage cooperatively and provide support early in the development process for other facilities, it is possible that some capacity could become available sooner.

To initiate implementation of these programs, HF&H recommends quickly bringing on two consultants: one to assist in amending the zoning and permitting ordinances for organics processing facilities, and the other to assist with modification to the SWMAs and County ordinance to include changes to the non-exclusive franchise system and new organics diversion requirements for haulers.

#### Enhance Zoning Ordinance to Support Organics Processing (Program 1)

Both the California Legislature and CalRecycle recently took significant steps to enable the growth of small-scale and distributed composting operations as part of the State's goal to dramatically increase organic recycling by 2020. CalRecycle adopted regulations that reduced barriers to small-scale

composting. Section 17855(a)(4) of Chapter 3.1 (Compostable Materials Handling Operations and Facilities Regulatory Requirements) of Division 7 of Title 14 of the California Code of Regulations now exempts the following activity from registration and permitting requirements: “Composting green material, agricultural material, food material, and vegetative food material, alone or in combination, is an excluded activity if the total amount of feedstock and compost on-site at any one time does not exceed 100 cubic yards and 750 square feet.” This exemption applies regardless of whether the feedstock is generated on-site or obtained off-site.

HF&H recommends that the County review its zoning ordinance and permitting requirements and make modifications that will clarify and support the start-up of on-site community, commercial, and farm composting projects, as well as large-scale facilities. Amendments should focus on defining these different types of composting operations and clarifying conditions under which each type of composting operation can operate including specification of permitting, operating, and reporting requirements (as applicable) for such operations. A tiered-permitting approach should be considered for composting, particularly to allow agricultural sites that pose low potential for impact to accept organic materials to produce soil amendments. As part of this effort, the County could also potentially reduce the timeline for each large-scale organics processing facility by adopting a programmatic Environmental Impact Report (EIR) for composting and anaerobic digestion facilities within the unincorporated areas. The County’s efforts should give consideration to the different types of organic materials to support diversion of a wide range of organics, including green material, agricultural material, food material, food-soiled compostable paper, vegetative food material, and animal manure. It should also encourage farms to use compost as soil amendments, which will help to divert these materials, conserve water, increase crop yields, and sequester carbon dioxide from the atmosphere in the soil.

#### Support Organics Processing Facility Development (Program 2)

Large-scale organics processing facilities are required for implementation of residential and commercial food scraps and food-soiled compostable paper collection (Programs 3 and 12) and to support increased yard trimmings collection program participation (Programs 4, 5, 7, 8, 10, 13, and 18), and for finding an alternative to the use of processed yard trimmings as ADC. HF&H recommends that the County take an active role in stimulating and supporting development of organics processing infrastructure. HF&H recommends that the County include increased performance standards in the SWMAs for franchise haulers to achieve diversion targets for organic and other recyclable materials, including penalties of liquidated damages and default provisions for non-compliance. Adding additional performance standards specifically targeting organic materials is likely to stimulate infrastructure development for processing facilities as haulers will need processing capacity to comply with the SWMA requirements. This is similar to the expansion of the recyclables processing infrastructure that was stimulated in the region after the State passed AB 939 and the County later adopted recycling ordinances requiring separation of recyclables from waste and separate collection of recyclable materials.

In addition, the County can support organics processing facility development by providing input to regulatory agencies (e.g., the Regional Water Quality Control Board, Air Resources Board, etc.) during development of regulations for organics processing facility siting and organics facility expansion. The County’s efforts should support regulations that reduce barriers for new and/or expanded facilities and that address processing of various organics including green material, agricultural material, food material, food-soiled compostable paper, vegetative food material, and animal manure.

To support organics processing capacity development, it is recommended that the County include requirements in the SWMAs for implementation of residential and commercial food scraps and food-

soiled compostable papers (Programs 3 and 12) (with some recognition that time may be required until processing capacity is available) and redirection of processed yard trimmings from landfill alternative daily cover to processing. Residential and commercial food scraps collection programs have been widely implemented in the San Francisco Bay Area, where organics processing infrastructure is already in place. These programs are supporting agency diversion goals as well as providing businesses with an organics collection program to comply with AB 1826. As more organics processing options have become available in Southern California, agencies are implementing food scraps collection programs. Examples in Southern California include the cities of San Diego, Chula Vista (pilot program), Huntington Park, Dana Point, Aliso Viejo, Englewood, and San Clemente.

#### Support On-Site Community/Commercial/Farm Composting Projects (Program 9)

The on-site community/business/farm composting program is estimated to account for 4.5% of the diversion needed to reach 75% and may play a larger role when reaching beyond 75% to Zero Waste. In addition to the diversion benefits, community composting acts as an “important community outreach and engagement tool with a strong compost education component for the public.” (New York City Community Composting Report, 2014). Furthermore, the community compost programs keep materials local compared to the use of large-scale facilities, which often require long-distance transport of organic materials to the processing sites and compost products to end users. Community-based composting is distinct from typical organics collection programs as these enterprise- and cooperative-based community composting projects offer customized solutions to small- and medium-sized generators.

The recommendation is to support the development of on-site composting projects working with food-based businesses, farms, schools, and community gardens. Goals for this program can include providing on-site diversion and processing options for plant materials, food scraps, food-soiled compostable paper, agricultural organics, and animal manure. On-site composting provides additional options that do not require significant transportation, which makes them particularly useful for rural residents and businesses. Revisions to the County’s Solid Waste Ordinance and SWMAs are recommended to clarify that parties (in addition to non-exclusive haulers) may engage in the transportation of organic materials for delivery to community- and farm-based composting operations. The County will need to define under what conditions other parties can transport organic materials, which may include defining the amount of materials that can be transported on a daily or weekly basis, the size of the composting operation receiving the organic materials, whether the compost will be used on-site or for non-commercial purposes, and/or other criteria.

#### Promote Food Waste Prevention (Program 15)

With food waste making up 11% of the overall waste disposed in the unincorporated areas, food waste prevention will be an important tool to support the County’s Diversion Targets. To reach the 75% Diversion Target, food waste prevention is estimated to yield 1.5% of the diversion needed. Recommended tasks include the following:

- Developing a food waste prevention plan targeted at residents and businesses throughout the unincorporated areas;
- Retaining a social marketing/behavior change consulting firm to develop a multi-year campaign on food waste prevention targeted at residents, grocery stores, restaurants, school, institutional, and commercial-based cafeterias, and other food service vendors with a focus on opportunities and practices to prevent food waste;

- Collaborating with other agencies and organizations to use and/or share resources and tools, to reduce duplication of efforts, and to potentially pool funding;
- Including recognition of businesses with food waste prevention success stories in outreach efforts; and,
- Training DEH staff to provide education on food waste prevention to businesses during DEH inspections/visits.

Resources are available for this effort. For example, the EPA recently rolled out “Food: Too Good to Waste Implementation Guide and Toolkit”, which provides collateral materials for use by local governments in promoting food waste prevention. In 2016, the National Resources and Defense Council Defense Council (NRDC) launched a national media “Save the Food” campaign, which may be a resource with its wide array of outreach modes.

#### Support Food Donation through County Food System Initiative (Program 16)

The County’s promotion of food donation activities is estimated to yield 1.0% of the diversion needed to reach the 75% Diversion Target. The estimated donation quantities have the potential to provide over 1 million meals annually to feed the hungry. The County’s Food System Initiative will include a focus on food donation. These efforts will be led by the County’s Food System Initiative Coordinator.<sup>16</sup> The development of a food donation plan will be the first step in implementation of this program and will provide a comprehensive road map for the County’s role in food donation.

If selected for implementation, the program is likely to pursue the following types of tasks:

- Developing a Food Donation Plan;
- Promoting and supporting food donation activities through businesses education and outreach to encourage donation of pre-consumer, edible food from food service vendors to food banks or soup kitchens;
- Encouraging farm and garden donation programs through the support of gleaning groups to harvest surplus crops and distribute to food banks;
- Focusing on reducing liability of farmers working with gleaners, providing resources, and educating farmers on this subject;
- Evaluating the establishment of a grant funding program to offer grants to organizations involved in food rescue to purchase vehicles, food storage equipment, and technology needed for recovery and distribution; and offering grants to non-profits engaged in food donation efforts;
- Supporting local organizations that are working on food donation programs (e.g., San Diego Food System Alliance's Food Recovery Working Group, North County Food Policy Council, etc.);
- Training DEH staff to provide education on food donation to businesses during DEH food facility inspections/visits;
- Recognizing businesses with successful food donation stories in outreach efforts; and,

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<sup>16</sup> The Food System Initiative Coordinator is a new County position, staffed in the fall of 2016.

- Updating the SWMAs to document that parties (in addition to non-exclusive haulers) may transport food to food donation and rescue organizations.

Diversion from the food donation program is dependent on implementation of the County’s Food System Initiative. Staffing and costs, which will be covered by the Initiative, are not included in the Strategic Plan.

**Modifications to the Non-Exclusive Hauling System (Programs 3, 4, 5, 6, 12, 13, 14, and 17)**

Eight recommended programs, shown in Figure 5-3, involve making changes to the requirements of the SWMAs, and account for 73% of the diversion needed to reach the 75% Diversion Target (including some of the organics diversion discussed above). These programs (Programs 3, 4, 5, 6, 12, 13, 14, and 17) have objectives of boosting residential and commercial diversion through the collection services provided by the non-exclusive haulers by adding new service requirements, establishing minimum diversion requirements, expanding education obligations, augmenting reporting requirements, and including additional performance standards. One program (Program 4) involves managing C&D haulers through the non-exclusive hauling system.

**Figure 5-3: Recommended Programs Reliant on SWMA Changes**

	Program/Policy	Diversion Estimate (tons/year)	
		Low	High
3	Commercial food scraps collection	22,000	34,000
4	Regulate C&D haulers with minimum diversion requirements	16,700	29,500
5	Single-family collection with consistent hauler requirements	12,400	24,700
6	Commercial collection with minimum recycling level requirements	19,000	21,000
12	Single-family food scraps collection	1,200	4,200
13	Enhance hauler performance standards, including minimum diversion goal	2,600	3,900
14	Improve diversion, tracking and oversight of haulers	1,300	2,600
17	Establish additional hauler-provided drop-off facilities	400	1,500
<b>Total</b>		<b>75,600</b>	<b>121,400</b>
<b>Total Estimated Diversion for All Programs/Policies</b>		<b>97,200</b>	<b>165,200</b>
<b>Programs related to SWMA (% of Total Estimated Diversion)</b>		<b>78%</b>	<b>73%</b>

The recommended SWMA changes include not only service and diversion-related changes for the various recommended programs, but also include modifications to other terms and conditions of the

SWMAs. Recommended modifications are summarized below. Additional details related to these modifications will need to be addressed by the County, potentially with support of a consultant, during implementation of these changes.

- 1. Create Tiered-Hauler Requirements.** Several of the recommended programs include enhancements to the collection services and outreach and education efforts provided by the non-exclusive haulers. The majority of these requirements are focused on the haulers that provide cart and bin collection services. For this reason, HF&H recommends that additional services, public education requirements, and performance standards be structured as obligations for only those haulers that provide regular cart and bin collection services (“Full Service” haulers). Currently, there are three “Full Service” haulers, which collect 97% of the annual tonnage collected through the SWMA system (including materials from their cart, bin, and roll-off services). The requirements for these haulers will include, but are not limited to, the following: three-cart system in densely-populated areas for residents; minimum recycling and yard trimming cart capacities; pay-as-you-throw rate incentive requirements; minimum recycling service ratios for commercial customers; food scraps collection service; drop-off facility(ies) for customers including those in rural areas; increased education and outreach obligations; minimum overall diversion requirements; contamination and/or residue standards; performance standards; and, expanded reporting requirements.

**Full Service Hauler Requirements**

- Three-cart system in densely-populated areas for residents
- Minimum recycling and yard trimming cart capacities
- Pay-as-you-throw rate requirements
- Minimum recycling service ratios for commercial customers
- Food scraps collection service
- Drop-off facility(ies) for customers
- Increased education and outreach obligations
- Minimum overall diversion requirements
- Residue standards
- Expanded reporting requirements
- Enhanced performance standards

Other haulers that only offer roll-off collection services can be excluded from these “Full Service” requirements. New requirements for roll-off haulers will not be as extensive as the Full Service hauler requirements, but will include, at a minimum, minimum diversion requirements, contamination and/or residue standards, performance standards, and expanded reporting. Furthermore, HF&H recommends that C&D only roll-off haulers be required to secure non-exclusive SWMAs to allow the County to establish minimum C&D diversion requirements, monitor C&D collection activities, receive reporting, and assess SWMA franchise fees. With this approach, the County can structure the SWMA requirements around a tiered-hauler classification system based on the type of service provided (i.e., Full Service SWMAs for haulers that provide cart, bin, and roll-off services, and Roll-Off SWMAs that include all roll-off collection services and C&D only roll-off collection service).

As part of the implementation process, the County will need to evaluate its options more fully and define the structure of the tiered-hauler system and the detailed hauler requirements. For example, the County will need to consider the continuation or elimination of the cap of 29 haulers; establishment of a cap, if any, on the number of C&D haulers; the criteria for granting Full Service vs Roll-off SWMAs; separate requirements for C&D only roll-off haulers; the types of material covered by the SWMAs; the boundaries of the densely-populated service areas where more requirements will be in effect; administrative fees for each tiered-hauler class, etc. When the County is designing and implementing the tiered-hauler system, HF&H recommends that a

public input process be planned to engage the hauling companies and C&D industry. The input process should provide these stakeholders multiple opportunities to learn more about the County's goals and plans and several occasions to provide their input on the detailed hauler requirements.

2. **Establish Diversion Requirements and Enhance Performance Standards.** In order to achieve greater diversion of materials disposed, including recyclables and organic materials, the County will need to require enhanced performance standards for franchise haulers to achieve diversion targets and diversion program requirements. In addition to these requirements, penalties for non-achievement will need to be added to the franchise agreements, including liquidated damages and default provisions. In the event that franchise haulers do not achieve the necessary diversion targets by the end of the Near-Term Phase, the achievement of the County's Diversion Targets will require the County to consider a more active approach in the Mid-Term Phase, as described in Section 5.2.

The following sections describe the recommended diversion and performance standards for inclusion in the SWMAs slated for the 2017/2018 timeframe.

- a. Minimum Diversion Requirements. Program 13 recommends establishment of a minimum diversion requirement for the non-exclusive haulers. This diversion requirement may be defined differently for the tiered-hauler classifications and for C&D. Furthermore, it may be appropriate to phase the diversion requirements in over a period of several years in incremental steps to provide haulers time to change their collection practices, increase customer participation in diversion programs, and/or secure processing capacity. For example, haulers could be required to increase their diversion rate 5% per year for 10 years to move from the average hauler diversion rate of 27% in 2015 to 75% in 2025. Consideration of the differences in the abilities of Full Service haulers to meet diversion goals compared to Roll-Off haulers will be needed, and may result in different goals and timeframes for the different hauler classifications.
- b. Enhanced Program and Service Requirements. As part of the SWMA amendment process, HF&H recommends that all program, service, and education enhancements identified for Programs 5, 6, 13, and 17 (further described in Attachment P) be incorporated. In addition, HF&H proposes that the residential and commercial food scraps collection requirements for Programs 3 and 12 be integrated with a commencement date that recognizes time may be required until processing capacity is available. These enhancements are summarized below.
  - Single-family services
    - 3-container system for recyclables, yard trimmings, and solid waste in densely-populated areas to increase subscription for recycling and organics service;
    - Minimum weekly capacity of 64 gallons each for recycling and organics (exceptions for space constraints, disabled customers, or customers who have for on-site composting, hardscapes or xeriscapes);
    - Pay-as-you-throw rate structure, potentially with a County-defined minimum rate differential for solid waste cart sizes;
    - Rate discounts for at-home composting;
    - Expanded list of recyclables over time as processing/markets are viable (e.g., plastic bags, e-waste peripherals, rigid plastics, hard cover books, scrap metal/aluminum under 40 pounds, and textiles);



- Bulky item and re-use collection events specifying minimum program requirements such as number of events per year, minimum material types to be collected, minimum diversion requirements through reuse or recycling, minimum volume to be collected per household, etc.); and,
- Collection of food scraps and food-soiled compostable paper with yard trimmings.
- Commercial
  - Establishment of minimum recycling service ratio or container size to be provided by haulers to commercial or multi-family premises; and,
  - Collection of food scraps and food-soiled compostable paper.
- Drop-off facilities – Requirement that Full Service haulers provide drop-off facilities for recyclables, used oil and filters, cell phones, batteries, and potentially other materials for the convenience of their customers.
- Other
  - Consistent color scheme for containers and signage;
  - Increased public education requirements (e.g., annual service guide, twice annual newsletters, direct mailer to multi-family units); and,
  - Ongoing education, outreach, and monitoring to comply with the requirements of State AB 341 and AB 1826 and the County mandatory recycling requirements.

HF&H recommends that some of the new collection program requirements be specified for only the more densely-populated areas, where reasonable economies of scale can be achieved in the collection operations. For example, it may be prudent to require weekly recyclables collection service in the densely-populated areas, but not in the less densely-populated areas where every other week recyclables collection services may be more suitable from a cost-of-service perspective.

- c. Enhance Performance Standards and Consequences for Failure to Achieve Standards. The SWMA identifies several major conditions that qualify as “events of default” under which the County may terminate the agreement. However, the SWMA does not contain specific performance standards and accompanying liquidated damages for enforcing day-to-day performance under the agreement related to fulfillment of diversion-related services. HF&H recommends that such standards, liquidated damages, and additional specific default provisions be included in the SWMAs to serve as a tool for managing the haulers’ diversion program performance. Example diversion-related performance standards include compliance with the following requirements: minimum diversion rate; three-cart requirement in densely-populated areas; pay-as-you-throw requirements; minimum commercial recycling level ratios; diversion of organic materials; maximum residue levels for processing recyclables, yard trimmings, food scraps, and C&D; prohibition on use of organics as landfill alternative daily cover; consistent container color and signage; education and outreach efforts; reporting; and more.

The inclusion of liquidated damages is valuable in that it provides the County the option of assessing liquidated damages to hold the haulers accountable to their diversion performance obligations. Liquidated damages would only be assessed at the County’s option. If such provisions were in place, the County and haulers could work cooperatively

to resolve performance-related matters, and the liquidated damage option can serve to provide pressure to resolve the service deficiencies.

3. **Modify the SWMA Franchise Fee Calculation Method.** As described more fully in Section 7 (Funding Strategy), HF&H recommends that the County change the manner in which the SWMA franchise fees paid to the County by haulers are calculated. These fees are currently \$2.35 per ton disposed. The recommendation is to require a franchise fee as a percentage of the gross rate receipts generated by the franchise haulers from rates charged to customers. If the County prefers to continue with a per-ton franchise fee, the fee should be assessed on all tons collected and subject to an annual inflation adjustment factor and periodic review. Note that by bringing the C&D haulers into the SWMA system, the C&D haulers will also pay franchise fees. This fee modification is a critical component of the sustainable funding plan presented in Section 7.
4. **Establish an Administration Fee.** HF&H recommends inclusion of a separate administration fee in the SWMAs as further described in Section 7.
5. **Require Processing of Yard Trimmings by January 1, 2020.** HF&H recommends that the SWMAs be amended effective January 1, 2020 to: (i) require haulers to arrange for all yard trimmings collected from residents and businesses to be processed for diversion; and, (ii) to prohibit use of yard trimmings as ADC (in recognition of AB 1594's limitation on counting ADC as diversion).
6. **Include Expanded Reporting Requirements.** HF&H recommends the following reporting enhancements:
  - a. Detailed Customer Information. The County currently does not have sufficient customer account information to determine the number of residential and commercial customers voluntarily subscribing to collection services and those self-hauling materials. For this reason, HF&H recommends that the SWMA reporting requirements be expanded to include annual submittal of detailed single-family, multi-family, and commercial account information including solid waste, recyclables, and organics service levels and customer service addresses.
  - b. Semi-annual Customer Subscription Data. In addition, HF&H recommends semi-annual submittal of summarized subscription data reporting the number of accounts; the number of customers subscribing to each cart, bin, or roll-off service level listed separately for single-family, multi-family, and commercial and separately for solid waste, recyclables, and organics service; and the number of bulky item collections performed. Having access to this data will allow the County to assess changes in the subscription levels and diversion capacity with diversion program implementation and to analyze the customer subscription levels (which will be useful in the Mid-Term Phase, when the County considers implementation of a universal collection ordinance).
  - c. Education and Outreach Report. For Full Service SWMAs, require a semi-annual status report of activities completed compared to the annual public education plan.
  - d. Franchise Fee Report. If franchise fees are collected based on gross receipts, require a quarterly statement that summarizes monthly gross receipts from all operations provided pursuant to the SWMA and monthly franchise fee payment amounts for the past 12 months. If franchise fees are collected based on tonnage collected, require a quarterly statement that summarizes the tonnage collected from all operations listed separately by material type by month and the monthly franchise fee payment amounts for the past 12 months.

- e. Pilot and New Programs Report (if applicable). For each pilot diversion and/or new diversion program, provide activity-related and narrative reports, at a frequency agreed-upon by the County, on goals, milestones, tonnage changes, customer subscription changes, and accomplishments.
7. **Exceptions to the Scope**. Revisions to the SWMAs are desired to specify that parties (in addition to non-exclusive haulers) may engage in the transportation of food scraps and yard trimmings for delivery to community- and farm-based composting operations and to food donation and animal feed programs and facilities.

The SWMAs go through an annual renewal process that typically begins in July with the County's consideration and drafting of modifications to the contract requirements. The County presents proposed modifications to the haulers in the fall for review and comment; and, the process wraps up with a January 1 renewal of the SWMAs. With the hauler-related diversion programs accounting for as much as 78% of the diversion needed to reach the 75% Diversion Target, HF&H recommends that the County integrate the changes described above as soon as practical. Some changes can be included in SWMA modifications developed in the summer of 2017 to become effective on January 1, 2018; however, other changes will require more time for analysis, engagement with stakeholders, and implementation through changes in the County's Solid Waste Ordinance and SWMAs. The haulers may need six months to implement some of the changes to diversion-related services, and may need more time to implement food scraps collection programs as they secure organics processing facility capacity. It will also be necessary to allow adequate time for customer participation in the programs to mature to levels that reach the high end of the diversion estimates. Updates to the County's solid waste ordinance will need to be made concurrently, and such a process will take several months, considering public hearing time required.

### **Amendments to the C&D Ordinance (Program 7)**

The County's C&D ordinance requires that "covered" projects, which are 40,000 square feet or larger, recycle 90% diversion of inert materials and 70% diversion of all other C&D materials. In order to comply with the ordinance, applicants must submit: (1) a Construction and Demolition Debris Management Plan and a fully refundable performance guarantee prior to building permit issuance; and, (2) documentation of compliance at the end of the project. DPW administers the program. Given that diversion of C&D accounts for as much as 6.2% of the diversion needed to reach the 75% Diversion Target, HF&H recommends an amendment to the C&D ordinance to lower the covered project threshold to capture more projections under the County's C&D recycling program (Program 6). HF&H reviewed 3 years of historical permit data provided by the County and recommends that the project threshold for covered projects be revised to capture all projects of 5,000 square feet or more and all projects with total job value of \$100,000 or more. Estimates anticipate that an additional 115 to 400 C&D projects will be covered C&D projects (at a median project size of 7,000 square feet).

Implementation steps will involve stakeholder input, amendment of the C&D ordinance, and education of the C&D contractors. On an ongoing basis, HF&H estimates indicate that an allocation of 1.4 to 4.6 additional full-time equivalent (FTE) DPW Recycling staff time will be necessary to manage and administer the increased number of covered C&D projects and oversee the County's C&D Debris Management Plan, performance guarantee, and review process.

For projects of 5,000 square feet or more or total job value of \$100,000 or more, the County may require 90% diversion of inert materials and 70% diversion of all other C&D materials, which is

consistent with the County's current standards for covered projects. Alternatively, the County may set a lower threshold of 65% diversion of all C&D, which conforms to California Green Building Standards Code (CALGreen) requirements that became effective January 1, 2017. Note that projects falling below the proposed covered project thresholds will be subject to CALGreen C&D recycling requirements, which requires 65% C&D recycling for many project types; however, these projects will not be required to comply with the County's Debris Management Plan, performance guarantee, and review process.

As part of the C&D ordinance amendment, HF&H recommends that the County include a C&D permit fee for the management and administration of each Debris Management Plan as further discussed in Section 7 (Funding Strategy).

#### **5.1.4 2019/2020 Priorities**

The recommended 2019/2020 programs, which are identified in Figure 5-1, need to be implemented in 2019/2020 to reach the 75% Diversion Target, if the County is focused on meeting its 2020 target. Program 19, the development of a new HHW facility in collaboration with private industry, is an exception as this is not focused on diversion, but rather on providing residents access to a permanent HHW facility in the North County. Alternatively, the County can continue providing occasional mobile HHW collection events to this unincorporated area to meet State AB 939 requirements for safe collection and disposal of HHW generated by residents.

#### **Social Marketing/Behavior Change Marketing Program (Program 8)**

HF&H recommends that the County conduct robust outreach campaigns that are focused on one or two key messages (e.g., putting recyclables in the right container, putting food scraps in the green container, or donation of clothing). To be effective, these types of campaigns need to be sustained over a few years to change the behavior of people. The campaign would rely on a wide range of outreach tools such as: TV, Facebook, Pandora/Spotify, mobile online ads, newspaper/print, radio promotions, blurbs in hauler materials, local banners/materials in libraries, and street sign flags. Messaging would use a flighted schedule throughout the year, with a blitz in November/December for the holiday season. This program is slated to commence in 2019. HF&H recommends that the County initiate an RFP process in mid-2018 to select a communications firm that will develop and implement the campaign. By bringing on the communications firm by the end of 2018, the County will be in a position to initiate the planning efforts on January 1, 2019 and start the campaign in mid-2019. This timing is critical as behavior change campaigns will require time to see results in diversion programs.

These types of behavior change campaigns are tools that agencies with high diversion or zero waste goals use including: Alameda County (StopWaste.Org), Marin County, San Francisco, and Palo Alto.

#### **Expanded Technical Assistance Program (Program 10)**

The County currently manages technical assistance programs for multi-family properties, businesses, and schools, using contractors to provide the services. The technical assistance programs, which served approximately 160 properties in FY 2015/16, include waste assessments, recycling and diversion program recommendations, and implementation support. HF&H recommends that DPW Recycling expand this technical assistance program to triple the number of properties reached, and to include a business and multi-family recognition program to periodically acknowledge those with successful diversion programs. This program anticipates providing grants to multi-family property managers, businesses, and schools for the purchase of containers and signage and/or to modify container storage

enclosures. Funding may also be used for the County's purchase of containers and signage for distribution to multi-family property managers, businesses, and schools.

### **Reuse of Textiles; State EPR Programs for Mattresses, Carpet/Padding, Paint (Program 11)**

HF&H recommends that the County promote local thrift programs for clothing and textile reuse and the State's EPR mattress, carpet/padding, and paint recycling programs. This promotion program is a no cost program to the County, because HF&H recommends that the promotion of reuse and recycling alternatives be integrated into the County's existing education and outreach activities or into new education activities contemplated in other programs. In addition, the County can partner with others, including the haulers and local water agencies and utilities to collaboratively promote these options. Supporting State EPR programs for carpet, mattresses, and paint is advantageous since these programs shift the recycling costs of these materials to industry rather than to the County or the end user. Some of the partnerships identified include:

- Reuse of Textiles - The thrift community has the capacity to accept more textiles, which account for 3% of the waste disposed;
- Carpet/Padding Recycling - The State passed the Carpet Stewardship Law (AB 2398) to set carpet recycling standards. Through this program, more opportunities for carpet/padding recycling are becoming available. Since carpet/padding is one of the top 10 materials disposed in the unincorporated area (6.1% of total; 29,143 tons per year), the County should promote recycling opportunities and monitor Carpet America Recovery Effort's (CARE) efforts to ensure sufficient carpet recycling capacity is available in the County;
- Mattress Recycling – The State passed the California Used Mattress Recovery and Recycling Act (SB 254), which established an industry-run, State-wide program for mattress recovery and recycling. Similar to carpet recycling, the County should promote recycling opportunities and monitor the Mattress Recycling Council's efforts to ensure sufficient mattress recycling options are available in the County; and,
- Paint and Other Materials – The County should promote other State EPR programs such as use of paint collection sites through California's Paint Stewardship Program, PaintCare.

### **Regular Education on Recycling Requirements (Program 18)**

The program is focused on providing regular education to all residents, businesses, and institutions on the County's recycling requirements for residents and businesses as defined in the County's solid waste ordinance, and the State's AB 341 and AB 1826 requirements for businesses and multi-family properties. The education needs to reach not only customers that subscribe to collection services, but also the residents and businesses that self-haul. While haulers can provide their customers with information on the County and State recycling requirements, the County needs to provide its own regular education, reaching all property owners (e.g., mailing to all postal addresses) once or twice per year. In addition to conducting its own education efforts, the County can look to partner with others such as local water and utility agencies that also deliver education materials to property owners with the goal of integrating the County's messaging on the mandatory recycling requirements.

### **Collaborate with Industry to Establish an HHW Facility in North County (Program 19)**

During the stakeholder process and through the residential questionnaire, residents requested increased access to HHW collection programs, particularly in the northern part of the county. This

program was considered in response to this request and anticipates development of an HHW facility in the North County unincorporated area by collaborating with industry. The program costs and diversion estimates for the facility are based on the County's existing HHW programs using information provided by DEH in terms of equipment needs, operating hours, operating costs, and diversion. The facility itself is envisioned to consist of an office trailer, HHW storage lockers, spill deck, storage containers, pallets, and a few other pieces of equipment. The cost estimate anticipates that the facility would be operational two to four days per month.

The cost analysis makes a significant assumption that the County can identify a no-cost site for the HHW facility by co-locating the facility with another existing County facility or partnering with industry to locate it at a hauling company's yard or at a materials management facility (similar to the arrangements for the County's Ramona and El Cajon HHW facilities). If a no cost or low cost location cannot be identified through collaboration with hauling, processing, or disposal company(ies), HF&H does not recommend developing a permanent HHW in the northern part of the county in the Near-Term Phase. In such case, HF&H recommends providing additional periodic mobile drop-off events, which are discussed below.

### **Additional HHW Mobile Drop-Off Events (Program 20)**

In the past three years, the County has conducted two to five one-day HHW drop-off events per year. These events are mobile events in that they are set up in different locations in the unincorporated areas. DEH has a contractor that operates the HHW drop-off events, each of which can serve hundreds of residents. This is a simple method of increasing the opportunities for residents to properly dispose of their HHW, which residents requested during the stakeholder process. With additional funding, DEH can add more events into their calendar year. HF&H's cost estimate reflects two to four additional events per year.

### **Implementation of Additional Program Recommendations**

Figure 5-2 presents seven additional program recommendations that the County can phase in during the Near-Term. While the cost and diversion potential for the efforts were not part of the Strategic Plan evaluation process, HF&H recommends implementation of these program as the resulting diversion will be beneficial in achieving the 75% Diversion Target. This diversion will provide a contingency in the event the recommended short-listed programs and policies in Figure 5-1 do not achieve the high-end diversion estimate.

### **Implementation of a Sustainable Funding Strategies**

As part of its 2017/2017 efforts, HF&H recommends that the County implement a sustainable funding strategy as further discussed in Section 7.

## **5.2 Mid-Term Phase (2021 – 2030)**

HF&H identified a set of programs for consideration in the Mid-Term Phase. These programs and policies were identified during this strategic planning effort, but were not short listed for a variety of reasons. In general, HF&H found that immediate implementation of these programs may not be essential to achieve the 75% Diversion Target by 2020. Most of these programs involve policy mandates, rather than voluntary participation and compliance, which are more typical of the County's approach to recycling programs. Implementation of these programs and policies are logical next steps to move the County closer to Zero Waste. In fact, many agencies with high diversion and Zero Waste goals have

implemented these types of programs upon realization that voluntary participation would not be sufficient. The Mid-Term programs are summarized in Figure 5-4 and described below the table.

Over the next four years, conditions will change in response to the implementation of this Strategic Plan and as a result of external factors like the global economy. For these reasons, HF&H recommends that the Mid-Term programs and policies be evaluated prior to, or at the commencement of, the Mid-Term Phase and implemented, unless conditions change in such a way that obviates the need for the program. Other program and policy options not listed here, may gain traction in the next few years and warrant consideration as well.

**Figure 5-4: Mid-Term (2021 – 2030) Programs and Policies for the Unincorporated Areas**

	Category	Program/Policy*
1	Policy	Evaluation of the achievement of the franchise collection system diversion targets; and, if warranted, evaluation of other options that may improve hauler diversion levels
2	Collection	Expanded hauler diversion requirements
3	Policy	If warranted, evaluation of a universal collection ordinance, and adoption of an ordinance
4	Policy	Enforcement of County and State mandatory diversion requirements
5	Policy	Amendment of the C&D ordinance to increase diversion
6	Policy	Landfill bans on selected materials
7	Policy	Producer responsibility ordinances
8	Policy	Product or packaging bans
9	Collection	More convenient organics collection service
10	Processing	Mixed materials processing

\* The Mid-Term program and policy options presented here shall be evaluated prior to or at the commencement of the Mid-Term Phase and implemented, if warranted.

1. **Evaluation of the Achievement of Franchise Collection System Diversion Targets, and, if Warranted, Evaluation of Other Options.** During 2021, HF&H recommends assessing progress against this Strategic Plan, including whether the non-exclusive hauling system has achieved diversion targets or if it is a barrier to achievement of the County’s Diversion Targets. If the non-exclusive system has significantly improved diversion performance and the haulers have been effective partners in achieving the County’s Diversion Targets, no changes may be required to the franchise collection system and the term of the SWMAs can be extended. However, if the County determines that the non-exclusive system is a barrier to reaching its Diversion Targets, HF&H recommends that the County evaluate other options, such as: increased diversion incentives for franchise haulers; changes to the franchise system structure that may include some type of exclusive franchise system; public-private partnerships to stimulate organics processing facility development; and/or, other methods to support increased diversion.
2. **Expanded Hauler Diversion Requirements.** Assess options for expanding hauler requirements, particularly for Full Service Haulers or exclusive franchise haulers beyond the diversion requirements implemented during the Near-Term Phase. Consider increasing the hauler-controlled diversion rate target, as well as collection and diversion of additional materials (such as, but not limited to, textiles, e-scrap, compact fluorescent bulbs, cooking oil, motor oil, oil filters, and other materials) as well as provision of kitchen food scraps pails for residents.

3. **Evaluation of a Universal Collection Ordinance, and Adoption of Ordinance, if Warranted.** Evaluate the option of adopting a universal collection ordinance for residents and business to subscribe to collection services, with limited exceptions for vacant and undeveloped properties and for documented self-hauling of materials. The purpose of this program is to increase the number of customers that have weekly recycling and organics collection services, which is anticipated to increase diversion of these materials. The need for this program can be better assessed toward the end of the Near-Term Phase, when the County obtains residential and commercial subscription level data from the non-exclusive haulers and can accurately determine to what extent residents and businesses voluntarily subscribe to collection services. If warranted, the County can implement some type of universal collection ordinance. Santa Cruz County is an example of an agency that recently implemented a universal collection ordinance in the densely-populated areas of the County.
4. **Enforcement of the County and State Diversion Requirements.** Implement an enforcement program for residents and businesses that are not compliant with the recycling requirements in the County's solid waste ordinance, AB 341 (Mandatory Recycling), and AB 1826 (Mandatory Organics Recycling). The extent to which the residential and commercial customers increase diversion through the implementation of Near-Term programs will indicate the need and level of effort for the enforcement program. In the past few years, Alameda County Waste Management Authority (StopWaste.Org) has developed and managed an active enforcement program for the mandatory recycling ordinances adopted by 15 of its member agencies. The enforcement program initially involved issuance of warnings to non-compliant properties and then shifted to issuance of citations.
5. **Amendment of C&D Ordinance to Increase Diversion.** Evaluate C&D recycling that has resulted from Near-Term changes to the County's C&D ordinance and examine options to increase C&D diversion levels. For example, diversion standards can be increased for specific types of C&D materials and/or specific construction and demolition project types and sizes.
6. **Landfill Bans on Materials.** Consider adopting an ordinance banning disposal of various types of divertible materials (e.g., recyclables, yard trimmings, cardboard, tires) if the State has not already taken such action. Sonoma County is an example of an agency that has adopted an ordinance prohibiting disposal of several types of recyclable materials (e.g., yard debris, recyclable wood waste, cardboard, and scrap metal) at its disposal sites. Alternatively, the County can advocate for the State to enact such legislation.
7. **Producer Responsibility Ordinances.** Consider adopting ordinances to require producers to manage the recovery programs and incur the costs associated with products that are hazardous to public health and/or create public nuisance. For example, local ordinances have been passed by Alameda County, Los Angeles County, and San Francisco for the management of pharmaceuticals. In fact, Alameda County's ordinance was challenged and appealed all the way to the U.S. Supreme Court and has been upheld, establishing a nation-wide precedent. Similar ordinances addressing sharps management have been adopted by Santa Cruz County, San Luis Obispo County, Tulare County, City of Sacramento, and others.
8. **Product or packaging bans.** Consider adopting ordinances that limit or ban sales of toxic or hard-to-recover products and product packaging. Common examples of this type of ban are single-use bag ordinances, which have been adopted by over 150 agencies throughout the State, including Del Mar, Encinitas, Glendale, City and County of Los Angeles, Oceanside, Pasadena,



and the City of San Diego, and the State's 2016 voter-approved single-use carryout bag ban law.<sup>17</sup> Other examples include approximately 65 ordinances in the State that prohibit use of expanded polystyrene by restaurants including those ordinances adopted by Calabasas, Dana Point, Del Ray Oaks, Hermosa Beach, Malibu, Newport Beach, Oakland, San Francisco, San Jose, Santa Cruz County, and Santa Monica.<sup>18</sup>

9. **More Convenient Organics Collection Service.** Evaluate reducing the frequency of solid waste collection service so that the convenience (frequency) of organics collection is greater.<sup>19</sup> For residential customers, evaluate implementation of every other week solid waste collection. Portland, Oregon has implemented every other week solid waste collection (with weekly organic collection). In California, Mountain View and the Castro Valley Sanitary District are conducting pilot programs for every other week residential solid waste collection. For commercial customers, evaluate reducing the number of days solid waste collection is available for businesses (e.g., reduce from 6 days per week to 3 or 4 days per week) and increasing the number of days organics collection is available (e.g., up to 6 days per week). This approach results in: 1) increased food scraps collection by making organics collection more convenient than garbage collection; and, 2) reduced collection costs for customers. Implement the less frequent solid waste collection service through modifications to the SWMAs, if warranted.
10. **Mixed Materials Processing.** Explore options for processing mixed materials to divert recyclables and organics and implement, if advantageous to the County. This type of processing opens up doors to alternative collection methods such as a two-stream collection (for organics and for other "dry" materials) and processing of materials from premises that are not in compliance with the diversion requirements of the County's solid waste ordinance and State laws. Although this type of processing capacity is currently not available in the County and can be costly, processing technologies are advancing rapidly. As this happens, technology and financing risks may decline and system performance may improve. Several agencies, including Anaheim, Los Angeles County, and San Jose, use mixed waste processing to divert materials from some or all the solid waste collected from residents and businesses.

At the commencement of the Mid-Term Phase in 2021, HF&H recommends that the County concentrate on evaluation of the achievement of diversion targets by franchise haulers or options for restructuring the franchise system, evaluation of a universal collection ordinance, and consideration of landfill bans on selected materials, and implementation of these programs, if warranted. The County's focus can then shift to consideration of producer responsibility ordinances and product or packaging bans in 2025 through 2030. In this later portion of the Mid-Term Phase, the County can also explore cooperative regional efforts to develop mixed materials processing or implement mixed materials processing programs if capacity is available. HF&H recommends that the enforcement of County and State mandatory diversion requirements for recycling and organics diversion be conducted throughout the entire Mid-Term Phase with the level of effort adjusted as needed to increase residential and commercial diversion.

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<sup>17</sup> [www.cawrecycles.org/list-of-local-bag-bans](http://www.cawrecycles.org/list-of-local-bag-bans)

<sup>18</sup> [www.surfrider.org/pages/polystyrene-ordinances](http://www.surfrider.org/pages/polystyrene-ordinances)

<sup>19</sup> The State requires removal of "refuse" (including food waste) from premises at least once every seven days pursuant to California Code of Regulations, Title 14, Natural Resources--Division 7, CIWMB, Section 17331. Agencies in California are currently exploring compliance of this requirement through at least weekly collection of putrescible materials with non-putrescible solid waste collection every other week.

The Mid-Term implementation approach will need to be flexible to allow for adjustments based on actual diversion results of programs and current conditions, including new regulatory requirements, technology and infrastructure options, economic conditions, and political support. In 2019, to plan for the Mid-Term Phase, HF&H recommends that the County reexamine its existing programs and identify opportunities for improvements that can be accomplished within their existing budget or for minimal incremental additional costs. After that, the County can focus on evaluating the menu of program and policy options provided in this Section 5.2 and develop an implementation strategy and timeline for each program. A similar reevaluation process is advantageous at the end of the Mid-Term Phase to plan for the Long-Term Phase.

Figure 5-5 summarizes the timing for implementation of both Near-Term and Mid-Term programs and policies. It presents the timeframe during which intensive planning and implementation activities will be conducted. The figure does not illustrate the ongoing program management and monitoring activities of the programs and policies, which will occur on an ongoing basis after implementation.

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**Figure 5-5: Planning and Implementation Timeline for Near-Term and Mid-Term Phases**

	Program/Policy (a)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
<b>Near-Term Programs</b>														
1	Enhance zoning ordinance to support organics processing													
2	Support organics processing facility development													
3	Implement commercial food scraps collection (b)													
4	Regulate C&D haulers with minimum diversion requirements													
5	Enhance single-family collection with consistent hauler requirements													
6	Enhance commercial collection with minimum recycling level requirements													
7	Enhance C&D diversion by lower project compliance threshold													
8	Expand social/behavior change marketing program													
9	Support on-site community/commercial/farm composting													
10	Expand technical assistance for multi-family, businesses, schools													
11	Support reuse of textiles and State EPR for mattresses, carpet/padding, paint													
12	Collect food waste from single-family premises (b)													
13	Enhance hauler performance standards, including minimum diversion goals													
14	Improve diversion, tracking and oversight of haulers													
15	Promote food waste prevention													
16	Support food donation through County Food System Initiative (c)													
17	Establish additional hauler-provided drop-off facilities													
18	Provide regular education on County and State recycling requirements													
19	Collaborate with industry to establish an HHW facility in North County													
20	Provide additional HHW mobile drop-off events													
<b>Mid-Term Programs (d)</b>														
1	Evaluation of the achievement of the franchise collection system diversion targets; and, if warranted, evaluation of other options that may improve hauler diversion levels													
2	Expanded hauler diversion requirements													
3	Evaluation of universal collection ordinance, and adoption if warranted													
4	Enforcement of County and State mandatory diversion requirements													
5	Amendment of C&D ordinance to increase diversion													
6	Landfill bans on selected materials													
7	Producer responsibility ordinances													
8	Product or packaging bans													
9	More convenient organics collection service													
10	Mixed materials processing													

(a) Planning and implementation phases are illustrated. Ongoing program management/monitoring is not; it will continue annually after implementation.

(b) Food scraps collection implementation is dependent on availability of organics processing facilities; collection programs to be implemented as soon as possible.

(c) Food donation diversion is dependent on implementation of the County's Food System Initiative. Staffing and costs will be covered by the Initiative, and are not in the Strategic Plan.

(d) Mid-Term program and policy options shall be evaluated prior to or at the commencement of the Mid-Term Phase and implemented, if warranted.

### 5.3 Long-Term Phase (2031 – 2040)

It is possible that the implementation of Near- and Mid-Term programs, coupled with continued State and private-sector efforts, will result in the achievement of the Zero Waste Target. If such success is not achieved, the County will progress into the Long-Term Phase, which is defined as the final phase from 2031 to 2040, ending with achievement of Zero Waste. By 2040, the unincorporated areas are projected to experience a 25% growth in population and a 31% increase in the developed acreage. Technological, legislative, economic, political, global marketplace, and cultural changes between now and then will impact waste generation, the characterization of materials discarded, and the future of the materials management industry. Given these dynamics, the Strategic Plan does not present recommended programs for the Long-Term Phase as all reasonably cost-effective and currently known options will have been implemented in the Near- and Mid-Term Phases. Furthermore, given the highly dynamic nature of the industry and State legislation on this subject, it is not practical to forecast conditions or the range of program and policy options available at that time. If the implementation of Near- and Mid-Term recommendations do not achieve Zero Waste, it will be critical to prepare a new Zero Waste strategic plan during the Mid-Term Phase to assess then-current conditions and identify how to reach the County's Zero Waste Target within that context.

As the County moves into this phase, programs and policies are more likely to be focused on waste prevention both at the residential, commercial, and industrial levels. For example, restructuring production and distribution systems to prevent waste from being manufactured may be pushed further by corporate stewardship efforts, technology enablers, regulatory standards, and/or mandates. More packaging policies, including take-back programs, reusability and recyclability requirements, and higher recycled-content standards may be implemented to reduce the use of resources, reduce waste, and improve recyclability of discarded packaging. In addition, more emphasis is likely to be placed on extending the useful life of products and improving the recyclability of products at the end of useful life.

More behavior change campaigns may need to be targeted at residents and businesses to further promote waste prevention and to motivate increased participation in diversion programs. The behavior change campaigns can be conducted on their own or can be coupled with adoption of additional regulations that require enhanced waste reduction and diversion program participation. In the Long-Term Phase, it may be that the availability of new processing technologies will create new opportunities for down-stream handling and processing of discarded materials and residues.

In the U.S. and world-wide, many governmental organizations, businesses, and non-profits are already moving ahead with the development and implementation of these types of high diversion/Zero Waste programs and policies. The experiences of others in the Zero Waste community, including success stories and lessons learned, can help the County shape its own unique path towards Zero Waste. In addition, future State and federal legislation is more likely than not to support new diversion-related programs, standards, or requirements. Furthermore, climate change concerns and GHG emissions reduction objectives and plans will reinforce continued action toward Zero Waste.

## SECTION 6: RECOMMENDATIONS FOR INTERNAL OPERATIONS

The County's goals for this Strategic Plan include an assessment of what it will take for the County's internal operations to reach the Diversion Targets. As described in Section 4, the County's current data collection procedures do not include a reporting framework that allows for compilation of comprehensive baseline waste generation, diversion, and disposal data. Without a definitive baseline assessment, making significant long-term commitments of staff time and costs for program and policy implementation does not seem prudent; therefore, the recommendations presented for the internal operations focus only on the Near-Term Phase (2017 – 2020).

Some of the materials generated by the County's internal operations currently are diverted and the remaining materials are disposed. The disposal volumes from the County operations are likely a small portion of the disposal volume that contributes to the County's overall 62% diversion rate for 2015 (as calculated using State reporting method). Although the County operations may have a small influence on the County-wide diversion rate, the County is interested in taking actions to play its part in supporting the Diversion Targets, just like it is looking for residents and businesses to do. For this reason, the Strategic Plan includes recommendations for internal operations. Section 6.1 presents the Near-Term Phase program and policy recommendations and an implementation plan is provided in Section 6.2.

### 6.1 Program and Policy Recommendations

HF&H recommends that several of the short-listed program and policy options be implemented in the first two years of the Near-Term Phase (2017/2018). The recommended 2017/2018 programs include programs and policies that: 1) will lay the foundation for the County's progress towards its Diversion Targets for internal operations; 2) can be implemented within the County's existing budget; and/or, 3) are advantageous to implement now as County contracts for purchasing and materials management services are rebid or because the programs will effect behavior change. The remaining short-listed program and policy options are slated as 2019/2020 priorities for implementation in the later portion of the Near-Term Phase, and are subject to reconsideration when more baseline data becomes available.

Figure 6-1 presents the recommended programs and policies and the timeframe for implementation. Following assessment of the baseline conditions in 2017/2018, the County can reassess the programs identified herein for 2019/2020 and adjust the implementation timeline based on the baseline conditions and cost effectiveness of the recommended programs. Once implemented, the programs and policies shall be managed and monitored on an ongoing basis to maximize diversion over time.

Recommendations for the Mid-Term Phase (2021 – 2030) are not presented because formulation of program and policy recommendations without a strong baseline assessment of current conditions was not practical. Furthermore, HF&H did not include recommendations for the Long-Term Phase (2031 – 2040) for the same reasons described in Section 5.3 for the unincorporated areas.

**Figure 6-1: Recommended Near-Term Programs and Policies for Internal Operations**

Program/Policy	
<b>2017 / 2018 Timeframe</b>	
1	Establish High Diversion/Zero Waste policy and organization (a)
2	Establish measurement and reporting process and baseline
3	Increase use of County's existing reutilization process
4	Expand the B-67 Recycled Products Purchasing Policy into an Environmentally Preferable Purchasing Policy (EP3)
5	Incorporate Zero Waste objectives into County procurements
6	Enhance diversion requirements in waste collection contracts (b)
7	Ensure optimal recycling at facilities owned and/or leased by County (b)
8	Increase diversion of yard/wood /food waste generated by County (b)
9	Provide waste reduction and recycling training to employees
10	Require regular training of janitorial staff including contractors
<b>2019 / 2020 Timeframe</b>	
11	Revise G-15 Design Standards to include renovations of facilities
12	Prioritize use of recycled materials in road construction
13	Partner with non-profit organization to provide reuse collections or drop-off boxes at County facilities for employees
14	Partner with Sheriff's Inmate Re-entry Services to consider training program on repair
15	Create capability for collection of used pallets from County facilities
16	Require recycling and composting for County-sponsored events
17	Support food waste reduction and food donation at County operations (b)
18	Increase use of locally-produced mulch/compost at County facilities
19	Support waste reduction and recycling by departments through technical assistance (b)
20	Consider expanding partnerships with artists to create displays from repurposed material

(a) Establishment of a High Diversion/Zero Waste policy (Program 1) is anticipated to occur after a baseline of current conditions is developed (Program 2).

(b) Program implementation for leased facilities may be delayed until lease renewal or amendment.

## 6.2 Implementation Strategy

### 6.2.1 2017/2018 Priorities

#### Establish High Diversion/Zero Waste Policy and Organization (Program 1)

The first recommendation is for the Board of Supervisors to formally adopt high diversion/Zero Waste goals and policies for internal operations. Departments can integrate the goals into their Department Excellence Goals. The ability to integrate the Diversion Targets into the Departmental Initiatives is a key strategy for gaining the attention and dedication of resources needed to be successful. Achieving the Diversion Targets, both in the unincorporated areas and internal operations, will require cooperation

and integration of programs and policies across numerous departments; therefore, the integration of the Diversion Targets into the County's Department Excellence Goals will provide the direction needed. However, because the County does not have a clear understanding of baseline conditions (as described in Section 3.5.2), defining the scope and specific goals of a High Diversion/Zero Waste policy is challenging. For this reason, the County may decide to hold off on adoption of a policy for a year or two until the baseline conditions are evaluated. Adoption of the policy should occur as soon as practical as increasing the County's diversion rate and implementing the programs and policies in this Strategic Plan intersect with several other County goals and planning efforts including the Climate Action Plan, Strategic Energy Plan, Food System Initiative, and others. The various departments should work together to support the related goals and programs in order to maximize the efficiency and effectiveness of County efforts and support broader County goals.

The Strategic Plan anticipates that DGS will be the lead department for oversight and monitoring of the County's internal operations' progress towards its Diversion Targets. The success of the County's efforts to increase diversion of materials generated by the internal departments will be dependent on the engagement of all County departments in the process. To engage departments on an ongoing basis, HF&H recommends establishing a requirement that each department designate a Waste Reduction Captain with defined roles and responsibilities. The Captains can serve as the liaisons between the lead department and their respective departments. Captains can be assigned the responsibility of collecting baseline data and ongoing reporting of waste generated, diverted, and disposed. In addition, Captains can be responsible for reporting on programs and policies implemented by their department or impacting their department, and Captains can relay information to personnel in their department as needed.

### **Establish Measurement and Reporting Process and Calculate Baseline (Program 2)**

Getting a more complete understanding of the waste prevention and materials management practices across the County and by department is a key 2017/2018 program. HF&H recommends that the following actions be taken by the County.

- Establish an ongoing diversion measurement and reporting process;
- Calculate or estimate baseline diversion and set diversion goals for overall County operations and by department;
- Require waste reduction and recycling reporting by departments if this data is not already reported through County Collection Contract;
- Track and report annual progress for internal operations overall for the County and by department;
- Track percentage of common supplies purchased from recycled-content list or environmental preferable materials list (using vendor reports); and,
- Identify DGS as the lead department that will develop a measurement and reporting methodology, prepare a baseline assessment with input from other departments, gather reports from departments on a regular basis, and track diversion performance on an ongoing basis.

To manage the staff time and level of effort associated with the baseline analysis and ongoing tracking process, the County should focus its assessment on programs and policies with the largest impact on diversion of materials from internal operations and that lend themselves to tracking and reporting of

diversion and disposal results. The Waste Reduction Captains should support this effort by identifying and reporting waste prevention, diversion, and disposal data for their departments, if such quantities are significant and data can be captured now or in the future. For example, data should be collected not only for diversion and disposal through the County Collection Contract, but also from: the surplus property program; landscaping activities; mulching and composting at County facilities; park maintenance activities; new building projects; road projects; dying and diseased tree program; and, specialty material recycling contracts (e.g., paper shredding, batteries, bulbs, ballasts, toner cartridges, lead, grease, medical waste, e-waste, other u-waste, etc.). In addition, reporting of materials diverted and disposed should be obtained from facilities/departments that do not use the County Collection Contract, but do generate substantial quantities of materials or employ a significant number of staff. These facilities/departments may be identified by reviewing DGS' data on approximately 1,100 County sites and applying some qualifying criteria and by working with the Waste Reduction Captains. Lastly, reporting on waste prevention efforts and use of recycled-content materials in road projects and through product purchases would be useful in defining baseline conditions, setting goals, and monitoring on an ongoing basis.

### **Increase Reuse through Reutilization Process (Program 3)**

Surplus County property is handled in accordance with the Board of Supervisors' Disposal of Personal Property Policy (A-94), which focuses on the sale of scrap or surplus property, including lost or abandoned personal property ("surplus property"). The surplus property is sold through electronic commerce (online), live auctions, and bid processes. Currently, DPC manages a contract for reutilization of its surplus property, which includes an auction process for the County's surplus property. Prior to moving materials to the contractor's warehouse, County departments post surplus property on a website to give other County departments the ability to acquire surplus items. The items are listed for a five-day period and then the surplus property is moved at an expense to the department to the warehouse. At the internal stakeholder meeting, feedback was received that the five-day period was too short and that the reutilization website was not well promoted. In addition, the current contract does not require reporting of estimated tonnages or cubic yards of surplus property auctioned, donated, or disposed, nor is data reported on the quantity of surplus property exchanged between departments. For this reason, HF&H recommends that the upcoming surplus property auction contract language be amended to make several changes (listed below) as well as other changes that can improve the reutilization process.

- Amend Policy A-94 and related sections of the County's Administrative Code to support improved reuse of surplus property. Include consideration of additional opportunities to donate to non-profits (e.g., donate lost or abandoned clothing or personal property, equipment with value less than a defined amount, etc.), which might be framed in a manner similar to the donation of electronics to San Diego Futures Foundation.
- Amend the reutilization contract to incorporate the following requirements, at a minimum:
  - Offer incentives and recognition to departments that acquire property through the reutilization program;
  - Track and report the volume or weight of materials reused, sold, or disposed categorized into various material types (e.g., furniture, electronics, appliances, etc.); and,
  - Reserve the County's right to donate surplus property to charitable organizations (faith organizations, schools, etc.) limited to defined materials or value of surplus property, and reserve the County's right to establish a "Craigslist" type sharing platform for use by its



employees and departments, both of which may result in less quantities of materials being handled through the reutilization contractor.

- Promote the reutilization website to employees through the Waste Reduction Captains, the County's online employee news center (*Insite*), and other internal communications. Extend the duration of time for which items are listed on the website for County to acquire surplus property and track quantities of materials reused through this mechanism.
- Offer incentives and recognition to departments that acquire surplus property through the reutilization program.

### **Expand Policy B-67 (Recycled Products Purchasing) into an Environmentally-Preferable Purchasing Policy (EP3) (Program 4)**

The County's B-67 Recycled Products Purchasing Policy focuses on increasing the recycled content of products purchased and used by the County of San Diego, its contractors, and its grantees. As part of the 2017/2018 priorities, HF&H recommends that the policy be updated to provide a comprehensive Environmentally Preferable Purchasing Policy (EP3 policy) or "Green Purchasing" policy that focuses on choosing environmentally-friendly products and services more broadly. EP3 policies typically establish guidelines for a wide variety of products. A few examples include: 1) selecting janitorial cleaning products that are less harmful to the environment and janitorial paper supplies with recycled-content materials; 2) purchasing products for playground equipment, park surfaces, and park furniture made with recycled-content materials; and, 3) purchasing a variety of traffic control products made with recycled-content materials (e.g., traffic cones, traffic barricades, parking stops, sound barriers, object markers, etc.). As part of this effort, the County should reexamine its current pricing threshold for environmentally-preferable products and consider increasing it to support increased purchasing of environmentally-preferable products. For the development of the EP3 policy, the County may want to retain a consultant to assist in the effort or the County can adapt an EP3 policy from another agency like the City of San Diego to meet the County's needs and objectives.

Additional tasks for this program include amending the County's Administrative Codes as needed to support an EP3 policy.

### **Incorporate High Diversion/Zero Waste Objectives into County Procurements (Program 5)**

Because the County is procuring services on an ongoing basis, HF&H recommends, as a 2017/2018 priority, that the County's procurement process be updated to include diversion-related objectives and requirements in the County's RFPs and resulting contracts for product purchases and service providers (such as food service providers, janitorial services, maintenance services, landscaping, etc.). It is not necessary to include these types of provisions in RFPs and contracts for professional services (such as engineers, architects, attorneys, consultants, etc.). To accomplish this, HF&H recommends that the County evaluate the terms and conditions of the County's existing purchasing contracts to identify opportunities for improvement and amend the contracts for the next re-bid process. The updates to the County's procurement process should be consistent with the County's EP3 policy. Examples of the types of conditions that can be integrated into the County's procurement processes and contracts include the following:

- Avoid purchase of disposable materials when practical;
- Consider reparability and life-cycle analysis of products when making purchasing decisions;

- Work with suppliers to:
  - Offer products that minimize waste in product and packaging design;
  - Require take-back or pick-up of products by suppliers for materials that are hard-to-recycle;
  - Prioritize environmentally preferable products; and,
  - Promote minimal or recyclable packaging in vending machine contracts.
- Report percentage of common office supplies purchased from recycled-content list or environmentally-preferable list by department through the County's purchasing system;
- Require diversion services such as diversion of specific material types such as, but not limited to, recyclables, C&D, yard trimmings, food scraps, and more;
- Require recycling containers and collection in public spaces at County buildings, libraries, and parks; and,
- Require reporting of materials generated, diverted, and disposed.

For example, the next time DPC issues an RFP for food, related preparation supplies, services, and equipment, the statement of work can include specific requirements related to waste prevention, procurement of supplies with recycled-content materials, donation of edible food remaining after events, composting of non-edible food scraps and food-soiled paper, and reporting on these requirements.

### **Enhance Requirements in Waste Collection Contracts (Program 6)**

Improvements will need to be made to the diversion services provided through the County Collection Contract to achieve a high diversion rate; therefore, this program is identified as a 2017/2018 priority. HF&H recommends several enhancements, listed below, to the County Collection Contract focused on supporting diversion. This contract expires June 30, 2017 or can be renewed by the County for up to three additional years (ending May 30, 2020). Given this, HF&H recommends that the County negotiate modifications with the current provider if it chooses to extend the contract, or integrate these changes into the next County Collection Contract commencing no later than January 1, 2018.

- Set minimum diversion rate requirements in the contract and add incentives or disincentives to motivate the hauler, such as contract extensions tied to diversion compliance;
- Specify reporting format including:
  - Weekly service volume totals for solid waste, recyclables, yard trimmings, and food scrap collected;
  - Estimated tonnage for solid waste, recyclables, yard trimmings, and food scraps collected and provision of detailed supporting documentation (quarterly) on the allocation methodology, including service levels of other non-County customers serviced on the same routes as County facilities or periodic waste audit analysis to determine volume-to-weight conversion factors;
  - Identification of each location separately with columns presenting the solid waste, recycling, yard trimmings, and food waste service level, weekly volume of each material collected, diversion percentage (on a volume basis) and estimated weight-based diversion rate (using pound per cubic yard conversion factors) for each location;

- Total number of facility locations served; total weekly volume of each material collected; and County-wide diversion percentage (on a volume basis); number of facilities with and without recycling, yard trimmings, and food scraps service; and,
- Site visits and technical assistance conducted, listing the facility and contact person.
- Define standards for uniform container sizes, colors, and interior/exterior signage;
- Integrate provision and servicing of recycling containers in public spaces including County buildings, libraries, and parks; and,
- Reserve right for the County to change service levels (e.g., material type, container size, frequency of collection) at any facility, which may result in less compensation to contractor and require contractor to implement requested changes within seven working days. Structure the pricing schedule to include a monthly rate sheet for each service level and define how the monthly price per location is adjusted for changes in service levels, which may occur at any time at the request of the County.

### **Ensure Optimal Recycling at Facilities Owned or Leased by County (Program 7)**

Increasing the collection of recyclables at all County facilities is a primary focus area for the 2017/2018 efforts. For County-owned facilities, this effort should include working with the County Collection Contractor, which is required to provide waste assessments and a diversion plan, to increase the current recycling service volumes. In addition, HF&H recommends the following tasks, which were suggestions from internal stakeholders.

- Conduct waste assessments for departments and tailor programs based on this information. This task can be performed by 1) the County Collection Contractor as part of the County Collection Contract requirements; 2) DPW Recycling staff or technical assistance consultants, particularly in the case of leased facilities serviced by other haulers; or 3) haulers or technical assistance consultants for cities where County facilities are located to the extent the city's hauler or technical assistance contractor is required to provide waste assessments;
- Post recycling "how-to" signs by internal collection containers to remind employees on proper materials separation to increase recycling and reduce the level of contamination in the recycling containers. This is also a task that can be performed by the County Collection Contractor or janitorial staff as part of their contract requirements;
- Have janitorial staff trained by their supervisors on proper recycling practices;
- Require that each internal trash bin is accompanied by a recycling bin of at least equal size (twinning);
- For facilities accessed by the public including County buildings, libraries, and parks, pair recycling containers with waste containers in the public areas; and,
- Upon lease renewal or amendment and execution of new leases, require leased facilities to meet minimum diversion requirements and report data. Given that some leases have 10- to 15-year terms, the County may be delayed in incorporating diversion requirements and reporting described in this Section. In the interim, it is important to recognize that lessors are businesses that need to comply with AB 1826, AB 341, and mandatory recycling requirements of the jurisdiction where the site is located. The County can direct its efforts on informing the lessors of

their diversion obligations and verifying their compliance with State and local recycling requirements.

### **Increase Diversion of Yard, Wood, and Food Waste (Program 8)**

HF&H recommends that the County focus attention on increasing diversion of yard, wood, food waste, and compostable paper by requiring diversion of organic materials in its various service contracts. In addition, recommendations also include exploring options for on-site composting at County facilities, including composting at community gardens, parks, and open spaces. This organics diversion program will be needed for the County to comply with the mandatory organics diversion requirements of AB 1826.

- Require that departments generating yard trimmings, which are not mulched or otherwise used on-site or at other County sites, to divert the materials through the County Collection Contract or other approved contracting process;
- Specify diversion of yard trimmings in landscaping contracts and require reporting of where materials were processed and the tonnages diverted by the landscapers; and,
- Explore options for on-site composting at County facilities, including detention facilities, community gardens, parks, and open spaces.

### **Provide Waste Reduction and Recycling Training to Employees (Program 9)**

Through the internal stakeholder input process, several suggestions were received from employees on strategies for educating the employees. HF&H recommends that the County implements these strategies to encourage behavior changes.

- Periodically provide reduction, reuse, and recycling educational materials to employees;
- Implement an annual training module in LMS on waste prevention and diversion programs;
- Develop a recycling training specifically for DPR volunteers and part-time DPR employees for the purposes of educating park visitors;
- Include environmentally-preferable purchasing policy (EP3) education in the purchasing card training program (P-card training); and,
- Disseminate a departmental waste reduction report to employees annually.

### **Require Regular Training of Janitorial Staff including Contractors (Program 10)**

Janitors play an important role in the management of recyclables, organics, and solid waste separated for collection. In some cases, janitors separate the materials; and, in other cases they consolidate materials separated by employees into larger containers for collection. It is critical that the janitorial staff is regularly trained on the nuances of the diversion programs so they can properly manage the materials; help in removing contamination from recycling and organics containers; provide notification of routinely contaminated containers; and assist in maintaining proper signage of containers. Inclusion of training requirements will need to be incorporated into agreements for janitorial services at County-owned facilities and lease agreements for leased facilities. As a result, the training requirements will be phased in over time as contracts are renewed or re-bid and leases are amended or renewed.

### **6.2.2 2019/2020 Priorities**

Programs 11 through 20 in Figure 6-1 are recommended for 2019/2020. Descriptions can be found in Attachment P. These programs can be implemented in any order depending on the available resources of the County department that is responsible for the program. Furthermore, the implementation time frame may be adjusted after the diversion baseline analysis is complete as the findings of the baseline analysis may justify different program and policy priorities.

## SECTION 7: SUSTAINABLE FUNDING STRATEGY

A sound funding strategy is essential to support current programs and policies, to move forward with the Strategic Plan, and to fully implement all proposed programs and policies. The County’s current franchise fee funding method is not generating sufficient revenue to cover the costs of current diversion programs and reserve funds cannot sustain programs going forward. For this reason, this Section presents an approach to fund not only the current DPW Recycling programs and DEH HHW programs, but also the recommended programs and policies for 75% Diversion for the unincorporated areas. Funding for the recommended diversion programs and policies for internal operations is not addressed in detail in the Strategic Plan. After a diversion baseline has been established, programs and policy costs included in the Strategic Plan for the internal operations will be reevaluated. It is anticipated that funding for one-time costs would be requested through appropriations from the Board and ongoing costs would be funded through increased internal service funds or general agreements paid by departments.

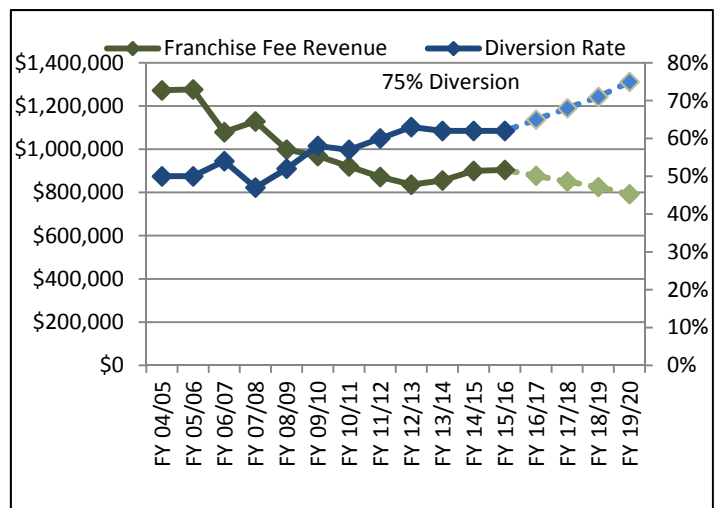
Historically, the County has funded the majority of its diversion-related activities for the unincorporated areas through a \$2.35-per-ton SWMA franchise fee on all tonnage landfilled by non-exclusive haulers. DPW Recycling receives \$1.25 per ton and DEH HHW receives \$1.10 per ton. Figure 7-1 identifies the last five years’ franchise fee revenues received for DPW Recycling and DEH HHW programs. Additional funding sources include a \$0.02-per-ton County-wide solid waste planning fee assessed on tonnage landfilled in San Diego County or generated in San Diego County and hauled to out-of-County landfills; C&D deposit forfeitures; grants; and other periodic funding opportunities. Supplemental information on DPW Recycling’s sources and uses of funds is presented in Attachment R.

Since the establishment of the franchise fee and County-wide solid waste planning fee in 1997 almost 20 years ago, the amounts of the per-ton fees have not changed. During the same period of time, tonnage has fluctuated with a decline of about 30% since 2007. The net result of these factors is that costs have increased (both inflationary and on an as-needed basis) and revenues to support those costs have declined. The

**Figure 7-1: Historical Franchise Fees Received from Non-Exclusive Haulers**

Year	DPW Recycling	DEH HHW	Total
2010/2011	\$ 489,580	\$ 430,830	\$ 920,411
2011/2012	\$ 463,762	\$ 408,111	\$ 871,873
2012/2013	\$ 444,931	\$ 391,539	\$ 836,470
2013/2014	\$ 454,924	\$ 400,334	\$ 855,258
2014/2015	\$ 478,476	\$ 421,059	\$ 899,536
<b>Average</b>	<b>\$ 466,335</b>	<b>\$ 410,375</b>	<b>\$ 876,709</b>

**Figure 7-2: Franchise Fee Funding Decline as Diversion Rate Increases**



existing funding approach and cost structure results in a structural deficit. As the County plans for the policies, programs, and facilities that will help it achieve even higher levels of landfill diversion, the disposal-based funding to support those very programs will decline at the same time as the cost to the County for providing services increases (see Figure 7-2 for an illustration of this dynamic). It is essential that the County aligns its funding methods and amounts to provide sustainable funding as solid waste tonnage decreases so that it can support its current diversion programs and policies as well as those recommended for achievement of the County's Diversion Targets.

## 7.1 Evaluation of Sustainable Funding Options

A survey of recycling and solid waste funding approaches from other communities throughout California was conducted, as well as a survey of funding approaches approved through legislation. It resulted in identification of the following list of potential funding options that the County can employ as alternatives to the current funding methods. A description of each funding option is included in Attachment R. HF&H identified many other funding approaches and opportunities that are not presented here because they do not fit the County's conditions and/or may exacerbate the shortcomings of the current disposal-based funding methods.

- Customer Rates
- Franchise Fees (Gross Receipts)
- Franchise Fees (Container Volume)
- Franchise Fees (All Tons)
- Franchise Fees (Disposal Tons)
- AB 939 Fees
- AB 341 Fees
- AB 1826 Fees
- HHW Fees
- Administration Fees
- Parcel Fees
- C&D Permit Fees
- State-wide Producer Responsibility Legislation
- County Producer Responsibility Ordinances

## 7.2 Funding Strategies Proposal

HF&H recommends that the County proceed with implementation of the funding methods summarized in Figure 7-3 below to support the current DPW Recycling and DEH HHW programs and the programs and policies recommended for 75% Diversion.<sup>20</sup> The funding strategies are likely to be similar for achievement of Zero Waste, although the amounts of the various fees will probably be adjusted and additional funding mechanisms may be needed. Each funding strategy is discussed in Sections 7.2.1 through 7.2.5.

Local government funding in California is limited by a series of State-wide voter initiatives (e.g., Propositions 13, 26, and 218). The funding strategies suggested below are in use in other California jurisdictions, and HF&H understands that they can be structured and adopted in ways that are consistent with State law and judicial interpretation. However, there may be local ordinances and/or policies that govern funding approaches, which HF&H is not aware of and may have an impact on one or more of the suggested approaches. Prior to implementation of any funding approach, County Counsel should review the logic of the nexus and the specific adopting documents for each to ensure that the fees are legally compliant with both State- and local-level policies.

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<sup>20</sup> The proposed funding strategy does not include funding for supporting food donation through the County's Food System Initiative as the County plans to fund this program through other means.

**Figure 7-3: Summary of Recommended Funding Methods and Estimated Fees**

Funding Method	Estimated Annual Funding Needed (\$/yr)		Estimated Amount		Basis
	Low	High	Low	High	
SWMA Franchise Fees (a)	\$2,342,000	\$3,346,000	3.6%	4.3%	% of hauler's gross rate receipts
SWMA Hauler Administration Fees (b)	\$137,000	\$225,000	\$8,000	\$12,000	\$ per year per hauler
C&D Permit Fees	\$232,000	\$640,000	\$750	\$3,000	\$ per permit
HHW Fees	\$833,361	\$1,071,361	\$5.10	\$6.50	\$ per year per occupied dwelling unit
Customer Rates (c)	\$6,384,000	\$9,267,000	9.9%	11.9%	average rate increase including franchise fee

- (a) Estimated SWMA franchise fees include DPW Recycling costs for current programs and DPW Recycling and other department costs for recommended Near-Term programs and policies. Estimated franchise fees exclude current and recommended costs covered by proposed Hauler Administration Fees, C&D Permit Fees, and HHW Fees.
- (b) Estimated hauler administration fees likely will be lower for roll-off haulers than for full-service haulers.
- (c) Estimated customer rate impacts include estimated hauler-related cost for Near-Term programs and estimated increased franchise fees, and exclude funding for programs covered through the Hauler Administration Fee, C&D Permit Fees, and HHW Fees.

If the County chooses not to implement one or more of the funding methods presented in Figure 7-3 and continues to use franchise fees to generate the funding needed for all programs, alternative franchise fee scenarios are presented in Figure 7-4. This figure presents franchise fees on a gross rates receipts basis as well as on a cost-per-ton basis, which are calculated based on all solid waste, recycling, and organics tons collected by non-exclusive haulers in 2015. This per-ton method is an alternative to the gross rate receipts basis and is further discussed in Section 7.2.1.

**Figure 7-4: Alternative Funding Methods and Estimated Fees**

Alternative Funding Method	Estimated Annual Funding Needed (\$/yr) (a)		Estimated Amount (a)	
	Low	High	Low	High
Franchise Fees: % of Haulers' Gross Rate Receipts			% of Gross Rate Receipts	
SWMA Franchise Fee	\$2,342,000	\$3,346,000	3.6%	4.3%
SWMA Hauler Administration Fee	\$137,000	\$225,000	0.2%	0.3%
HHW Fees	\$833,361	\$1,071,361	1.3%	1.4%
SWMA Franchise Fee + Hauler Admin. Fees + HHW Fees	\$3,312,361	\$4,642,361	5.1%	6.0%
Franchise Fees: \$ per Gross Ton Collected			\$ per Gross Ton Collected (b)	
SWMA Franchise Fee	\$2,342,000	\$3,346,000	\$4.50	\$6.50
SWMA Hauler Administration Fee	\$137,000	\$225,000	\$0.30	\$0.40
HHW Program Fees	\$833,361	\$1,071,361	\$1.60	\$2.00
SWMA Franchise Fee + Hauler Admin. Fees + HHW Fees	\$3,312,361	\$4,642,361	\$6.40	\$8.90

- (a) Estimated SWMA franchise fees include DPW Recycling costs for current programs and DPW Recycling and other department costs for recommended Near-Term programs and policies. Estimated franchise fees exclude current and recommended costs covered by proposed Hauler Administration Fees, C&D Permit Fees, and HHW Fees.
- (b) The current franchise fee is \$2.35 per ton; the amounts shown here are inclusive of this. The per-ton estimates are based on 517,640 tons per year of solid waste, recyclables, and organics collected by non-exclusive haulers, which is the amount of the annual 2015 tonnage collected by non-exclusive haulers.



## 7.2.1 Modify SWMA Franchise Fee Methodology

### Franchise Fees based on Gross Receipts

HF&H recommends that the County work with the non-exclusive haulers to negotiate a standard modification of the current SWMAs to collect franchise fees as a percentage of the gross receipts generated by the haulers from rates charged to customers for all materials collected by franchise haulers (and eliminate the per-ton franchise fee currently paid on solid waste disposal). HF&H further recommends establishing the same type of franchise fee structure for any new classes of non-exclusive haulers (e.g., roll-off, C&D haulers) created in response to this Strategic Plan. This is the most common approach to collecting franchise fees throughout California and typically results in lower administrative burden on the public agency to track and audit than other approaches that can be more easily manipulated by haulers. It is a percentage-based fee; therefore, it tracks with inflation over time (due to growth, price increases, etc.) without the County taking specific action to adjust the funding amount. In addition, collecting County fees based on gross receipts for all materials should reduce the volatility of the annual franchise fee revenues and ensure a continuing revenue stream as customers shift from solid waste collection to recycling and organics collection.

Due to the non-exclusive nature of the system, the County and the non-exclusive haulers will need to agree on a system that allows the County access to haulers' records in order to audit gross receipts without making proprietary pricing information subject to public information requests.

HF&H recommends that the County use the franchise fee revenue to fund all of the County's direct and indirect costs within DPW Recycling associated with both the continuation and enhancement of current diversion programs and implementation of the new programs recommended under this Strategic Plan.

Over the past 5 years, DPW Recycling's share of the SWMA franchise fee revenues has been \$466,335 per year. Based on the 5-year average franchise fee payments and HF&H's benchmarks for the cost of hauling and disposal in the region (including a 10% profit margin), HF&H estimates that DPW Recycling's share of current franchise fees is approximately the equivalent of 0.6% to 0.7% of the cumulative non-exclusive haulers' costs of service. DPW Recycling projects costs of \$955,000 annually for current programs to be funded through the franchise fees (excluding County hauler administration costs). In order to effectively implement the Strategic Plan, \$1,387,000 to \$2,381,000 will be necessary annually for the recommended programs for total annual funding of \$2,342,000 to \$3,346,000. The estimated funding requirements do not include current and new program and policy costs for hauler administration, C&D permit review, and HHW programs. In order to generate this revenue, HF&H estimates that the County will need to set the franchise fee amount at 3.6% to 4.3% of gross receipts. To put this in context, the average franchise fee is approximately 12% for residential collection for 15 cities in San Diego County (and many of these cities have additional AB 939 and/or administrative fees).

HF&H recommends setting the franchise fee at 4.3% of gross receipts in the first year and reserving the County's right to modify the fee in following years. HF&H further recommends implementing a robust audit program during the first year to monitor and ensure the accuracy of fee payments from each non-exclusive hauler. This allows the County an opportunity to gain experience with the revised fee basis and to more precisely understand the resulting franchise fee revenues. Based on the actual funding from the franchise fees in the first year and the actual funding needs for the implementation of the Strategic Plan, the County should review and adjust the fee to ensure that there is a reasonable alignment between the revenues generated and the funding needs. This review and adjustment process should continue on a periodic basis (every three to five years).

If the County chooses to fund SWMA administrative costs and/or HHW program costs through franchise fees on gross receipts, the franchise fee impacts are presented in Figure 7-4.

Assessment of a franchise fee on source separated recycled inert materials (concrete, asphalt, sand, dirt) is advised only when all C&D haulers are franchised under the County's non-exclusive hauler system. The purpose of this recommendation is to maintain a level playing field for the non-exclusive haulers, which haul C&D, until such time other C&D haulers operate under the same franchise fee requirements through the tiered, non-exclusive hauler system.

### **Franchise Fees based on Tonnage Collected**

If the County chooses to continue with assessment of franchise fees on a per-ton basis, HF&H recommends that the per-ton franchise fee be assessed on all tons collected by the haulers (rather than the current method that collects fees on solid waste tons only). HF&H recommends that the per-ton franchise fee amount be adjusted annually by an inflation factor. Furthermore, the amount of the fee should be periodically reviewed and adjusted to ensure that there is a reasonable alignment between the revenues generated and the funding needs. The per-ton franchise fee amount is estimated to be \$4.50 to \$6.50 per ton, excluding funding for SWMA hauler administration, C&D permit review, and HHW programs. Given the various factors that will impact franchise fee revenues, the County may want to start at \$6.50 per-ton, and review and adjust the fee based on actual funding.

The per-ton franchise fees are estimated based on assessment of fees on 517,640 tons per year of solid waste, recyclable materials, and organic materials collected by non-exclusive haulers, which is the amount of the annual 2015 tonnage collected and reported. The actual amount of annual franchise fee revenues will vary based on actual tonnage collected by non-exclusive haulers. As described above, HF&H recommends that the County hold off on assessing franchise fees on source separated recycled inert materials (concrete, asphalt, sand, dirt) until all C&D haulers are franchised under the County's non-exclusive hauler system.

On an ongoing basis, the County will need to focus audits on the allocations and accuracy of tonnage reported, which will be more challenging for diverted tonnage than for solid waste tonnage because reporting protocols are not well established and haulers often rely on a multitude of facilities for diversion.

If the County chooses to fund SWMA administrative costs and/or HHW program costs through per-ton franchise fees, the franchise fee impacts are presented in Figure 7-4.

### **7.2.2 Establish SWMA Administration Fee**

HF&H recommends establishing an annual SWMA hauler administration fee for all non-exclusive haulers in the form of an annual fee per hauler. HF&H further recommends establishing the administration fees for any new classes of haulers (e.g., C&D haulers) created in response to this Strategic Plan. This approach is recommended in order to fairly align the County's costs of administration to the amounts paid by the haulers. The County's labor efforts to administer, enforce, and audit haulers is a function of the additional number and extent of the performance requirements and reporting obligations prescribed in the SWMAs. For the tiered SWMA system recommended in Section 5.1.3, it is appropriate to establish a higher annual fee for Full Service SWMA haulers that provide cart, bin, and roll-off service than for Roll-Off SWMA haulers because a higher level of staff effort will be required for the more detailed Full Service SWMAs.

HF&H recommends that the County use the administration fee to fund all of the County's direct and indirect costs associated with the administration, monitoring, enforcement, and auditing of the non-exclusive haulers. HF&H estimates that the County will incur \$137,000 to \$225,000 per year, plus inflation, for the current level of franchise administration and the additional effort to improve hauler regulation. While there is a cap of 29 SWMAs, some haulers hold multiple franchises (generally resulting from acquisitions), so there are effectively 11 haulers. It is reasonable to assume that many of the haulers held by related-party entities and affiliates would be consolidated under a tiered franchise system. Inclusion of C&D haulers needs to be considered as well. HF&H estimated an additional 5 to 10 C&D haulers may become part of the SWMA system. As such, HF&H estimated the administration fee based on having 16 to 21 haulers in the system. Using this estimate, the average fee would need to be set between \$8,000 and \$12,000 per hauler per year. HF&H recommends that the SWMA administrative fee be less for Roll-Off Haulers than for Full Service Haulers because the administrative efforts will be less. For example, the estimated administrative fee for Roll-Off Haulers (including C&D haulers) could be set at approximately \$8,000 and for Full Service Haulers at \$15,000. The final fee amounts can be refined prior to implementation to more accurately reflect the number and type of haulers that are anticipated to participate in the tiered-hauler system.

Initially, the County may want to set the administrative fees 25% to 30% higher than the estimates provided here to generate additional funding to cover the increased management and audit efforts that are likely in the first year or two of the new system. It will also allow the County some time to fully understand the ongoing resource requirements for managing the system. Annually for the first two years and periodically thereafter, the County should reassess and adjust the amount of the administration fee to ensure that the revenues received are reasonably aligned with the County's costs. The administration fee should be structured to specify an annual inflation adjustment during periods when the County does not reassess the amount of the fee.

### **7.2.3 Establish C&D Permit Fees**

In past years, the County funded the review of C&D project compliance with the County's C&D ordinance through unclaimed performance deposits from previous C&D projects. However the availability of this funding has declined as compliance levels have increased, resulting in fewer unclaimed performance deposits. To provide a more sustainable funding method, HF&H recommends establishing a permit fee on all C&D projects that are required to comply with the County's C&D ordinance. This fee should be established: 1) in a manner consistent with other fees and data tracked by the County's building permit process; and, 2) with a reasonable nexus between the amount of the fee and the cost incurred by the County to administer and enforce the requirements of the ordinance relative to that project (e.g., percentage of project valuation, dollars per square foot, etc.).

HF&H recommends that the County use the C&D permit fees to fund all of the County's direct and indirect costs associated with the review and evaluation of initial Debris Management Plans for covered C&D projects; periodic assessment of each project's progress against those plans; and, final review of each project's performance against the plan and ordinance requirements. Any costs related to enforcement activities for non-compliant projects should be paid by penalties/fines established in the ordinance and/or through forfeitures of C&D performance guarantee deposits.

HF&H estimates that the County will incur between \$232,000 and \$640,000 per year, plus inflation, in total costs to manage and monitor C&D permit recycling activities including current and new program costs. This cost range relates to the number of covered projects with 150 projects per year assumed at the low end of the range and 440 projects per year assumed at the high end of the range. Using these costs and assumed number of projects, the permit fee would need to be approximately \$1,500 per C&D

permit, on average. A mechanism for annual or periodic review and adjustment of these fees should be defined to reflect changes in County costs for administration and inflationary changes.

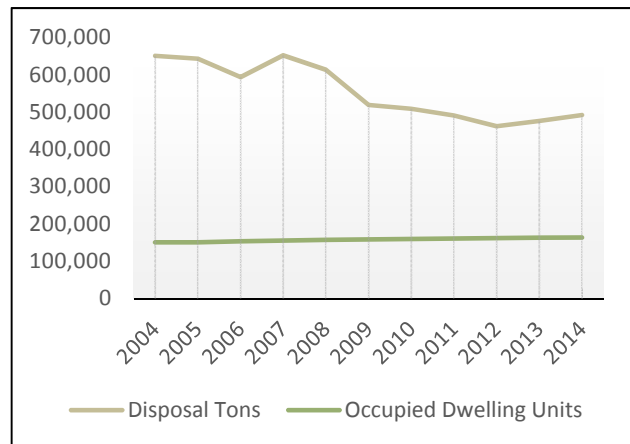
HF&H recommends that DPW Recycling and the Department of Planning and Development Services cooperate in the analysis required to determine an appropriate scaling of the fee at various project sizes to reflect the greater levels of effort associated with larger projects. For example, a fee of \$750 per permit may be more appropriate for smaller projects, with larger projects paying \$3,000; although more analysis is warranted to finalize these amounts.

### 7.2.4 Establish HHW Fee through Proposition 218 Assessment

HF&H recommends that the County establish an HHW fee on all occupied residential dwelling units in the unincorporated County, using a Proposition 218 assessment process. Under the current funding approach, every customer subscribing to non-exclusive hauling services in the County is paying for the HHW program because the franchise fees paid by the haulers supports the HHW program. An assessment on each occupied dwelling unit provides greater equity by aligning those who benefit from the services (each and every resident in the County) with those who pay for them (each and every occupied residential unit in the County).

This funding approach provides significantly greater funding stability and predictability, as illustrated in Figure 7-4. While annual disposal tons declined 24% from 2004 through 2014 (with significant year-to-year volatility), the number of occupied dwelling units have steadily increased by 9% over the same period. Furthermore, HF&H recommends that the HHW fee be established with some type of inflation or cost adjustment mechanism so that as the County’s costs increase (due to economic factors, expansion of the HHW program in order to provide a higher level of service, handling of additional materials, or compliance with future regulations) the HHW fee is adjusted to cover actual costs.

**Figure 7-5: Comparison of Current vs. Proposed HHW Fee Collection Basis**



HF&H recommends that the County use the HHW fee revenue to fund all of DEH’s direct and indirect costs associated with the continuation of current HHW programs and implementation of the new HHW programs recommended under this Strategic Plan.

Over the period from FY 2010/11 to FY 2014/15, the SWMA franchise fee generated an average of \$410,000 per year in revenue to fund the DEH HHW operations; however, DEH HHW projects current program costs of approximately \$688,000 per year. HF&H estimates that the County will incur between \$145,000 and \$383,000 in additional costs each year for the new HHW operations. This results in a total funding requirement between \$833,000 and \$1,071,000 per year. Data and projections published by the California Department of Finance estimate that there are 164,828 occupied dwelling units in the unincorporated County areas. Using these costs and estimated number of units, the HHW fee will need to be between \$5.10 and \$6.50 per dwelling unit per year. HHW fee implementation costs incurred by the County would be in addition to the estimated per-dwelling unit fee.

HF&H recommends that DEH, County Counsel, and the County Assessor’s Office cooperate to: 1) agree on the exact funding requirement, based on selected programs; 2) establish the number of dwelling

units on each residential parcel in the County; 3) revise the estimated assessment amount per dwelling unit, based on the results of 1 and 2; and, 4) develop the specific assessment mechanisms, timing, and ordinance language required to implement this fee.<sup>21</sup>

### **7.2.5 Anticipate Customer Rate Increases**

Many of the programs included in this Strategic Plan will be implemented and performed through the SWMA hauling system. As a result, the funding for the direct capital and operational costs of these programs will be borne by the haulers and passed on to their customers in the form of higher rates. Due to the non-exclusive, competitive nature of the SWMA system, pricing to customers is dynamic and varies, likely significantly, among haulers, service levels, and geographic areas. As such, the impacts to different customers and customer types will vary and, without rate regulation, will not be fully understood or controlled by the County. However, in the unregulated competitive market, there will likely be competitive pressure to minimize the impacts on customers, as price increase notices are the most common trigger for customers to shop their alternatives.

HF&H estimates that annual costs overall to the non-exclusive haulers, and therefore, to their customers, will increase between \$6,384,000 and \$9,267,000 including County costs for current and new programs and policies that will be recovered through the franchise fee. Using HF&H's estimate of the total annual hauler costs, it is likely that average customer rates will increase between 9.9% and 11.9% to fund the costs of the new programs recommended in the Strategic Plan, and actual current DPW Recycling program costs (which are greater than the costs funded by the current franchise fee). The estimated rate increase for the new hauler-related programs and policies (net of other programs and policies funded through the franchise fee) is approximately 7.0% to 8.2%. In most cases, the monthly cost increases will be greater for businesses (whose bills typically range from \$70 to \$1,500 per month) and less for residents (whose bills typically range from \$15 to \$50 per month). For a residential customer paying an average rate comparable to the cities in San Diego County, the rate increase may be \$2.05 to \$2.50 per month; however, some residents in the unincorporated areas may be paying considerably more than the average rate in the cities and may experience rate increases in the range of \$4.00 to \$6.00 per month.<sup>22</sup> For businesses (whose bills typically range from \$70 to \$1,500 per month), the monthly rate impacts will vary significantly.

It is important to recognize that the actual rate impacts will vary because these estimated rate increases do not reflect the manner in which the haulers will adjust their rates to customers and do not take into account roll-off accounts that will share some of the costs. The County anticipates requiring haulers to structure rate incentives to encourage residents and businesses to participate in recycling and organics programs. For example, the County may specify that haulers structure residential rates with tiered pricing so rates for smaller solid waste carts are less than rates for larger carts.

### **7.2.6 Benefit from Producer Responsibility Funding**

The County will benefit from existing and future State-level producer responsibility legislation for covered products. The State's funding of these programs will enable the County to divert materials that may not have been cost efficient to manage on the County level. The County should monitor the progress of current producer responsibility programs, advocate for their effective regulation and

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<sup>21</sup> The costs and staffing needs associated with establishing an HHW fee are not included in the program and policy estimates for the unincorporated areas in Section 4.

<sup>22</sup> The estimated rate increase was calculated based on the average 2015 residential rate from a rate survey of 17 cities prepared by the SANDAG Integrated Waste Management Technical Advisory Committee.

implementation, and work with stewardship organizations to ensure that they are establishing convenient access for unincorporated County residents and businesses. The County should also advocate for the State's expansion of producer responsibility programs into other toxic and hard-to-manage product areas and oppose attempts to shift these costs back to local governments.

As the County implements its Mid-Term plan, it may be appropriate to adopt local producer responsibility ordinances for products or portions of the waste stream that have a significant impact on the County's Diversion Targets, but do not yet have State-level legislation. The County may have other policy reasons (e.g., public health and safety issues surrounding safe disposal of medicines and sharps) to adopt local ordinances sooner than the Mid-Term Phase.

# Attachment A: Visioning Workshop Memorandum San Diego County Strategic Plan to Reduce Waste



Managing Tomorrow's Resources Today

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## MEMORANDUM

**Date:** June 22, 2016  
**To:** Michael Wonsidler, County of San Diego  
**From:** Tracy Swanborn, HF&H  
**Subject:** High Diversion/Zero Waste Visioning Workshop – Graphic Map, Mission, Goals, Objectives (Deliverables 6.4 and 6.7)

As part of the High Diversion/Zero Waste Planning project, HF&H facilitated a Visioning Workshop shortly after commencement the project to prepare two graphic maps that reflect the context for the High Diversion/Zero Waste Strategic Plan and the County's mission, goals, and objectives. The purpose of the Visioning Workshop was to develop an understanding of the County's perspective and vision to inform the development of the High Diversion/Zero Waste Strategic Plan. The Visioning Workshop was held on April 26, 2016 for four hours at the County Operation Center. In total, 17 individuals participated, representing 13 County departments. This memorandum identifies the participants and provides a brief summary of the Visioning process. Attached are the graphic maps that resulted from the process. This deliverable fulfills the requirements of Deliverables 6.4 and 6.7. These graphic "maps" can be used to brief others regarding the Strategic Plan and to serve as a reference throughout the development of the Strategic Plan.

### Workshop Participants

To ensure that diverse perspectives reflecting different interests of the County was heard during the Visioning Workshop, the County pulled together representatives from 13 departments, that are directly or indirectly involved in generating large quantities of materials, managing purchasing of County products and equipment, overseeing waste and recycling collection activities and/or contracts; implementing programs and policies; and/or monitoring and managing County initiatives. The list below identifies the departments that participated and their representatives. HF&H facilitators included Tracy Swanborn and Rob Hilton.

- |                                  |               |
|----------------------------------|---------------|
| 1. APCD (Air Pollution Control)  | Angela Ortega |
| 2. AW&M (Ag, Weights & Measures) | Karen Melvin  |
| 3. County Communications         | Alex Bell     |
| 4. County Counsel                | Tom Bosworth  |

# Attachment A: Visioning Workshop Memorandum San Diego County Strategic Plan to Reduce Waste



Managing Tomorrow's Resources Today

Mr. Michael Wonsidler  
June 22, 2016  
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5. DEH (Environmental Health)	Karilyn Merlos, Ricardo Serrano
6. DGS (General Services)	Charley Marchesano
7. DPC (Purchasing)	Allen Hunsberger, Melanie Caramat
8. DPR (Park & Rec)	Dave Knopp
9. DPW (Public Works)	Ramin Abidi, Robert Laudy, Mike Wonsidler
10. HHSA (Health & Human Services)	Naomi Billups
11. LUEG (Land Use & Environment)	Megan Jones
12. PDS (Planning)	Laurel Lees
13. Sherriff	Cheryl Shirley

## Overview of the Visioning Process

The County's RFP for the High Diversion/Zero Waste Plan called for a graphic depiction of the Plan's mission, vision, values, goals, and objectives and a graphic map of local factors that influence the planning process and ability to reach the high diversion and zero waste goals. To accomplish this, HF&H used a graphic meeting facilitation method developed by The Grove Consultants International (The Grove). We facilitated the meeting using two of The Groves' wall-sized (4' x 8') graphic charts: the "Context Map" and "Journey Vision". The attachments to this memo present the graphics developed during the workshop as well as digital versions of the graphics that were compiled after the meeting.

### Context Map

Using the framework of the "Context Map", we worked through and documented local conditions and context for the Strategic Plan. The participants shared external factors that would influence and impact the direction of the Strategic Plan. The external factors addressed several topic areas: social, legal, and regulatory trends, technological trends, political and economic climate, stakeholder needs, and uncertainties.

### Journey Vision

The "Journey Vision" graphic was used to develop and present the mission, vision, values, goals and objectives of the Strategic Plan. Prior to the Visioning Workshop, HF&H discussed, with the Core Team overseeing the development of the Strategic Plan, the Journey Vision process and the group agreed to use the County's Mission statement, Strategic Initiatives, and Values from the 2016-2021 Strategic Plan for portions of the Journey Vision graphic. Prior to the Visioning Workshop, HF&H recorded these items on the Journey Vision graphic as the Mission, Guiding Principles, and Guiding Values.



## Attachment A: Visioning Workshop Memorandum San Diego County Strategic Plan to Reduce Waste



Managing Tomorrow's Resources Today

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During the workshop, we focused the facilitation on development of the Vision. The core vision reflects the Board of Supervisor's direction to prepare a Strategic Plan that describes what it would take to "reach 75% diversion by 2020 and 90% (Zero Waste) by 2040". HF&H organized four breakout groups to brainstorm about the vision and identify supporting goals to achieve the overall Vision. Each breakout group selected its top three to five goals and reported out to the group using large post-its to present their ideas on the graphic chart. HF&H then worked with the group to organize and consolidate the ideas into common categories. The results of this efforts was identification of seven goals that support the overall Vision, which are reflected in the circles outside of the core Vision in graphic.

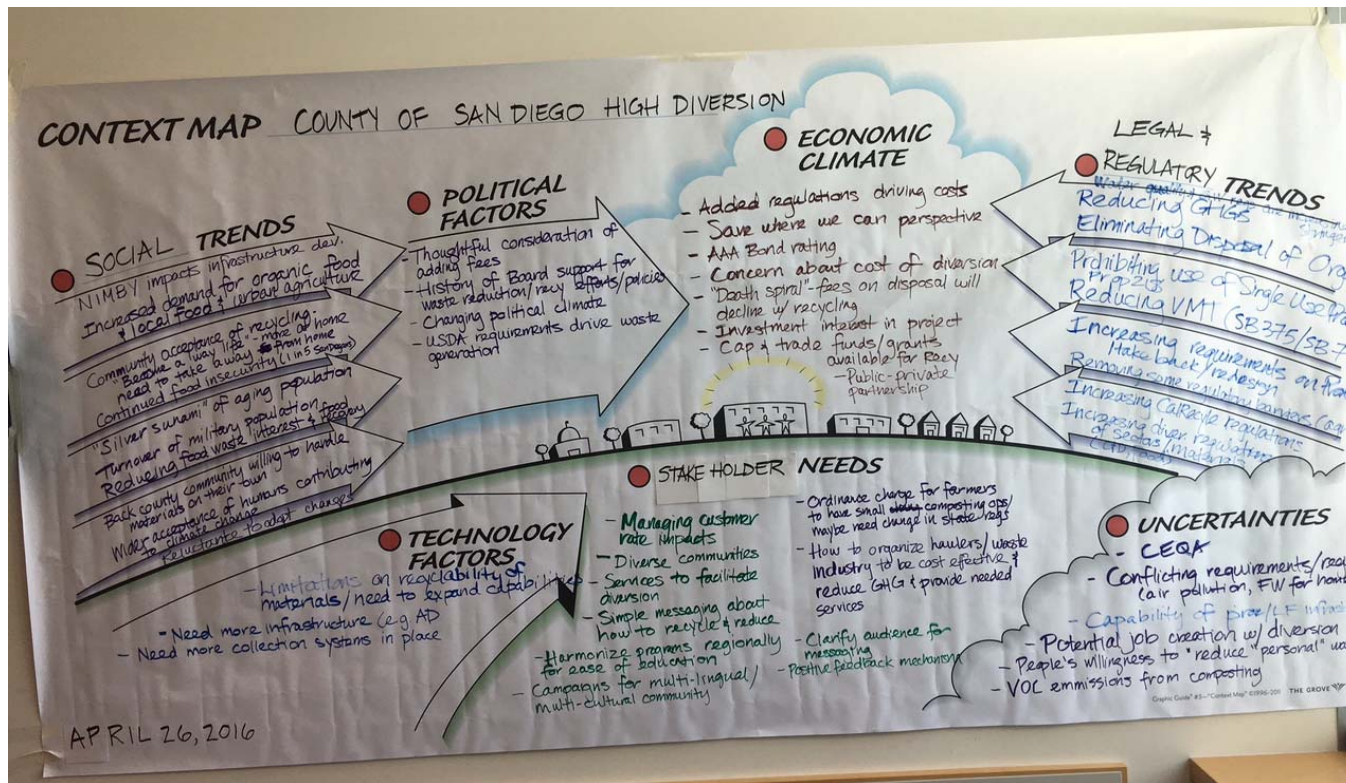
The seven goals reflect the following ideas, which were presented by the breakout groups. The post-its shown in the attached photos illustrate the input received.

1. Comprehensive Environmental Purchasing & Procurement Policy (EPPP)
  - a. Sustainable environments perspective for new contractors/vendors
  - b. Get rid vending machines
  - c. Percentage decrease in County purchases of disposables while showing cost savings
  - d. County policy for facilities & sustainable products
2. Sustainable Funding
3. Incentivize infrastructure
4. Culture of Personal Responsibility
  - a. Take it with you in Parks and Recs
5. Create a food recovery plan. Set goal to reduce food waste by 50%
6. Streamline collection services to reduce costs
  - a. Provide incentives to haulers and processors
  - b. Consider alternative collection methods (EOW, split body trucks)
7. Coordinated regional approach to regulations, facilities, programs and messaging
  - a. Develop partnerships with NGO's to implement waste projects

Time was not available during the Visioning Workshop to complete the Journey Vision graphic elements on the County's history, competencies, organizational structure, and future challenges. During a Core Team meeting on May 17, 2016, Rob Hilton (HF&H) facilitated a discussion that resulted in completion of the history, core competencies, and organizational portions of the Journey Vision. Subsequent to that meeting, HF&H used the Context Map information to populate the environment, critical issues, and future challenges portions of the Journey Vision graphic.

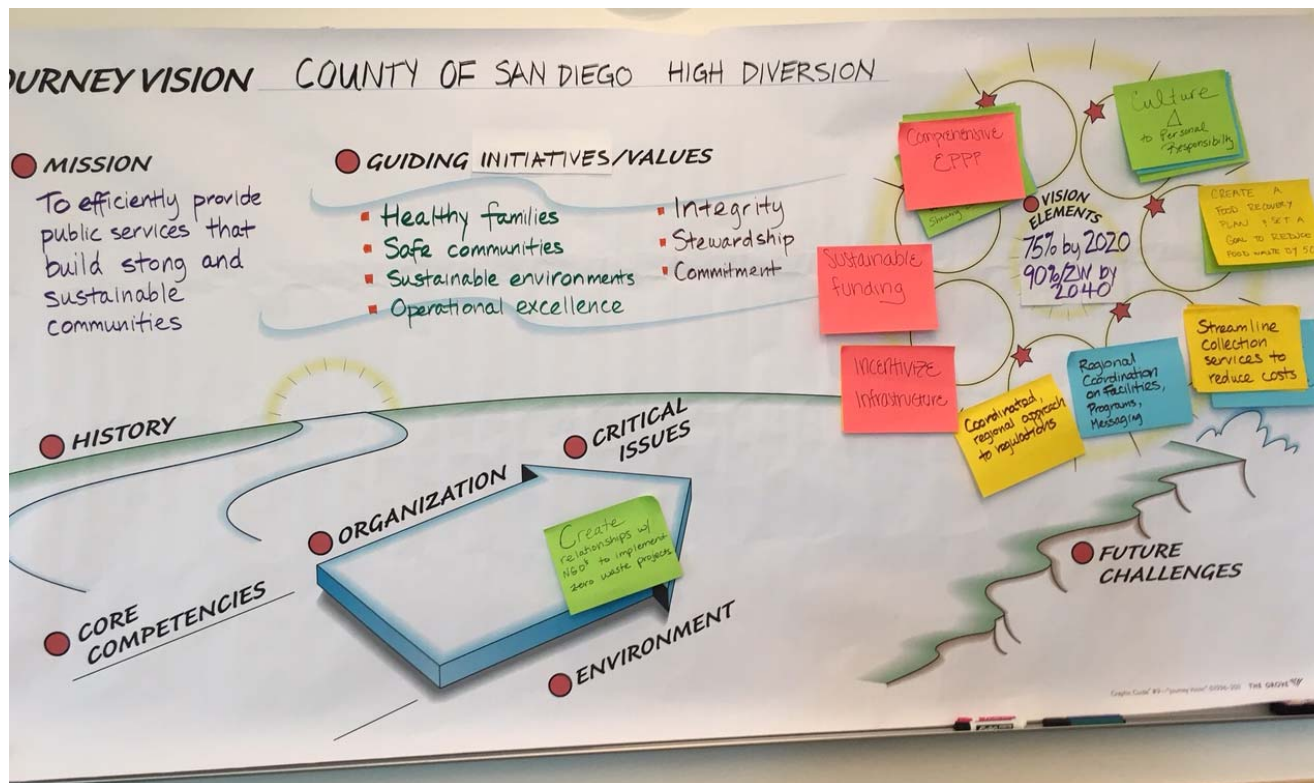
**Attachment A: Visioning Workshop Memorandum  
San Diego County Strategic Plan to Reduce Waste**

**PHOTOS OF GRAPHIC MAPS  
FROM APRIL 26, 2016 VISIONING WORKSHOP**



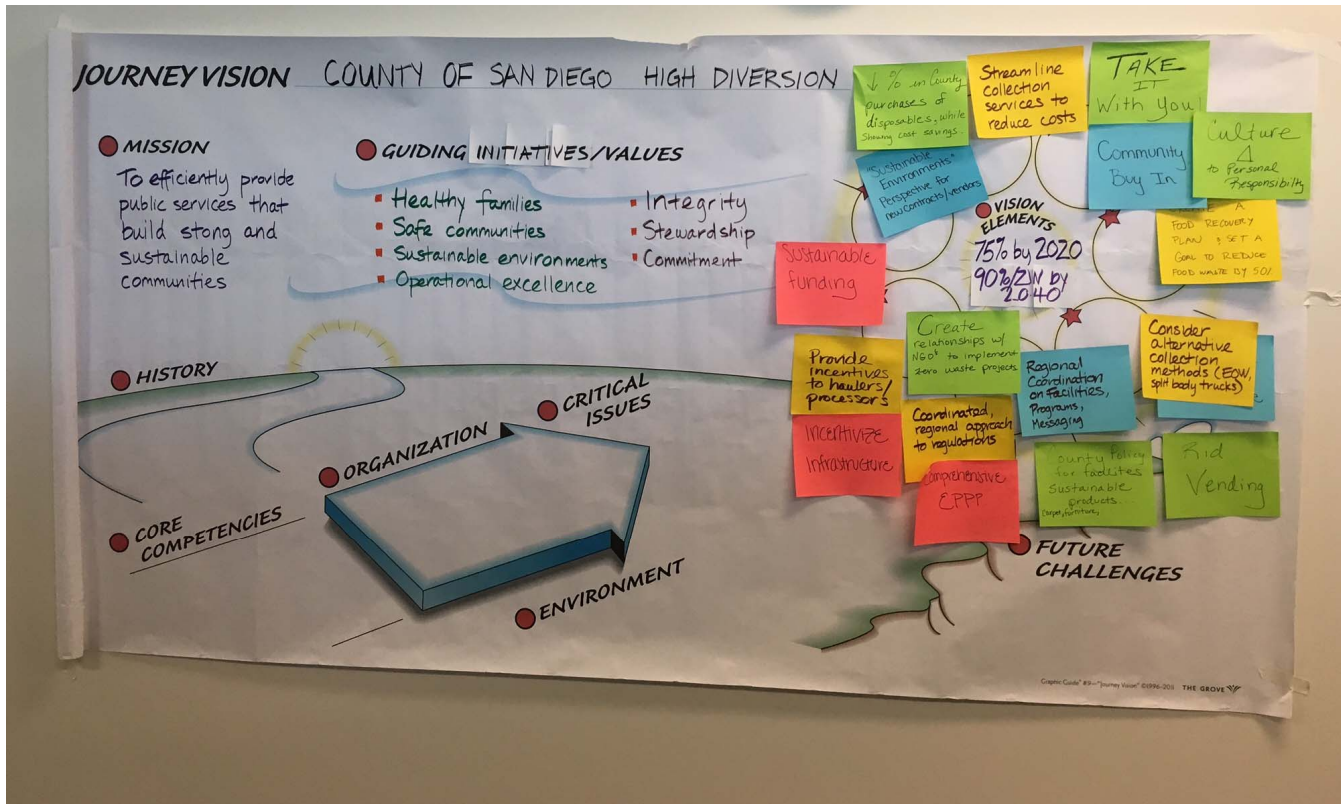
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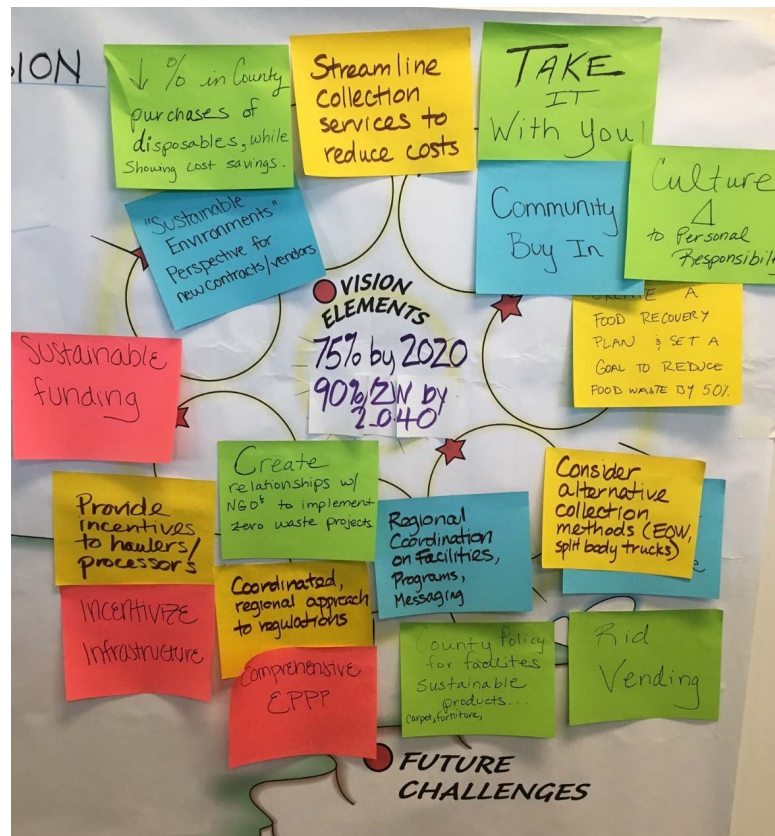
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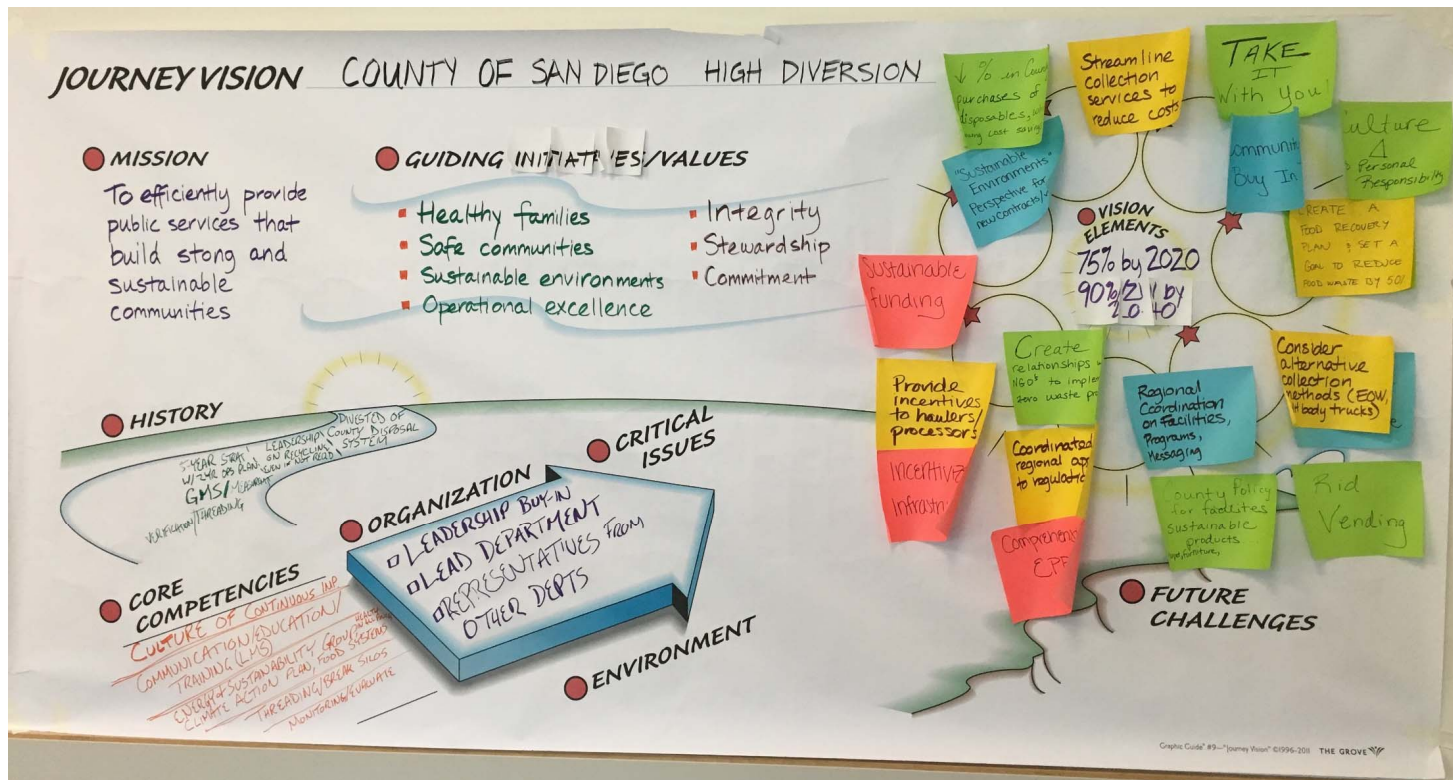
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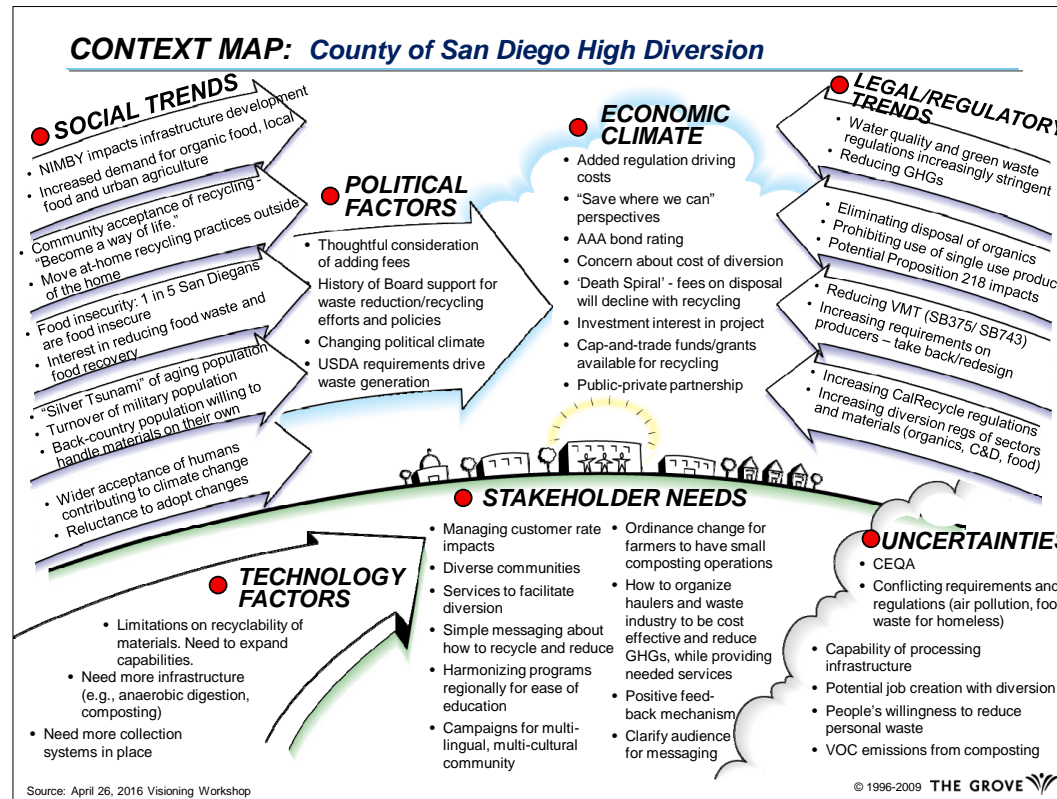
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San Diego County Strategic Plan to Reduce Waste**

**PHOTOS OF JOURNEY VISION GRAPHIC MAPS  
FROM MAY 17, 2016 CORE TEAM MEETING**



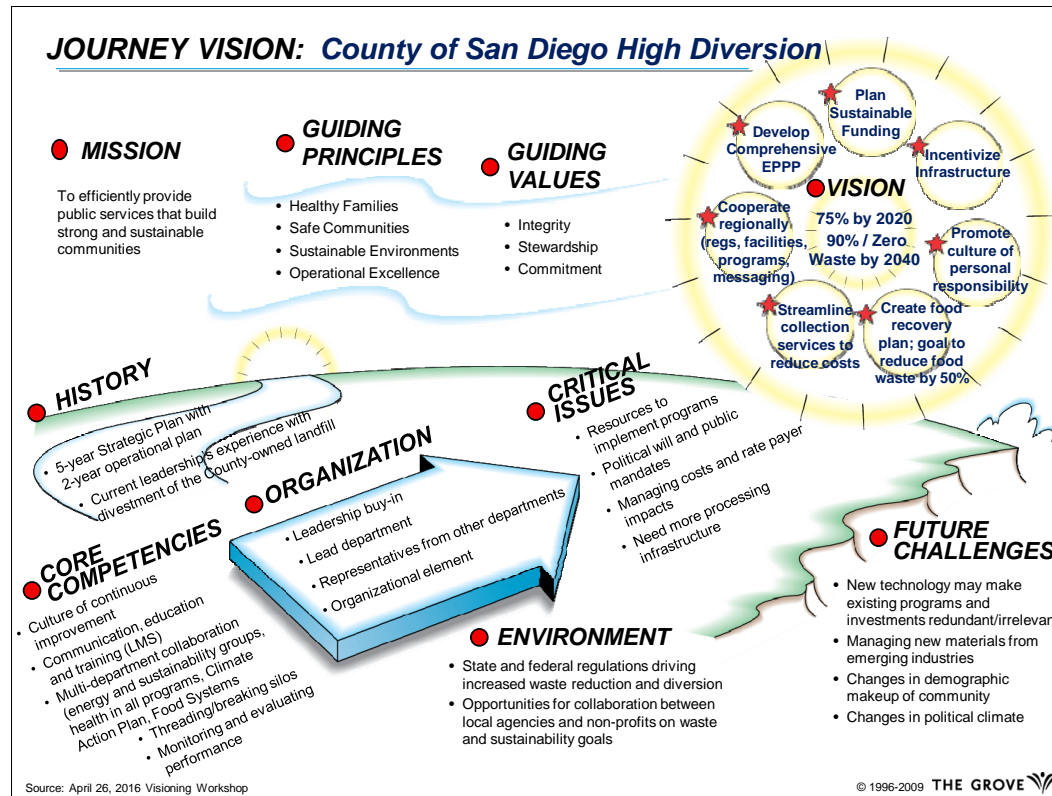
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San Diego County Strategic Plan to Reduce Waste**

**DIGITAL GRAPHIC MAPS  
DOCUMENTING VISIONING PROCESS**



**Attachment A: Visioning Workshop Memorandum  
San Diego County Strategic Plan to Reduce Waste**

**DIGITAL GRAPHIC MAPS  
DOCUMENTING VISIONING PROCESS**





**Attachment B: Stakeholder Participation and Outreach Strategy  
San Diego County Strategic Plan to Reduce Waste**



# STAKEHOLDER PARTICIPATION & OUTREACH STRATEGY

## COUNTY OF SAN DIEGO - HIGH DIVERSION PLAN



HF&H Consultants, LLC | Inika Small Earth Inc. | Stakeholder Presentation County of San Diego | April 20, 2016 | Page 1

## GOALS OF STAKEHOLDER OUTREACH

- ❖ Engage a relevant mix of stakeholders to provide input on the MENU of programs & policies
- ❖ Leverage upon their interests/capacity to play a long-term role in the Plan implementation
- ❖ Build broad public support for the Plan
- ❖ Set the stage for a financially-viable and operationally-efficient implementation



## GUIDING PRINCIPLES

- ❖ Hierarchy of solutions – Reduce, Reuse, Repurpose, Recycle
- ❖ “Educate” and “Engage and Innovate” phases
- ❖ Co-design of menu options
- ❖ Data-driven decision making
- ❖ Solutions that provide economic, educational and community incentives to engage in diversion behavior



# Internal Stakeholder Process

---

LEARN ABOUT CURRENT PRACTICES | IDENTIFY OPPORTUNITIES FOR  
HIGHER DIVERSION | SET THE STAGE TO WALK THE TALK



# PROPOSED APPROACH

	<b>EDUCATE</b>	<b>ENGAGE &amp; INNOVATE</b>
<b>HOW</b>	1 Multi-Department Meetings (2 hrs) & 4 Individual Department Meetings (1 hr each)	1 Multi-Department Meeting (2 hrs)
<b>WHERE</b>	County Offices (e.g., County Operations Center, County Administration Center)	
<b>WHEN</b>	May 16-17, 2016	June 27, 2016
<b>COUNTY ASSISTANCE</b>	<ul style="list-style-type: none"> <li>• Distribute request for information to departments and obtain data</li> <li>• Review data from various departments; validate and quantify information (where needed/appropriate)</li> <li>• Determine responsible parties/champions in each department for implementing the solutions (Engage &amp; Innovate phase)</li> <li>• Guiding body to assist in providing feedback to consultant on relevance, applicability and feasibility of recommended high diversion policies, programs, and approaches</li> <li>• Schedule meetings</li> </ul>	



# INVOLVED V/S INFORMED

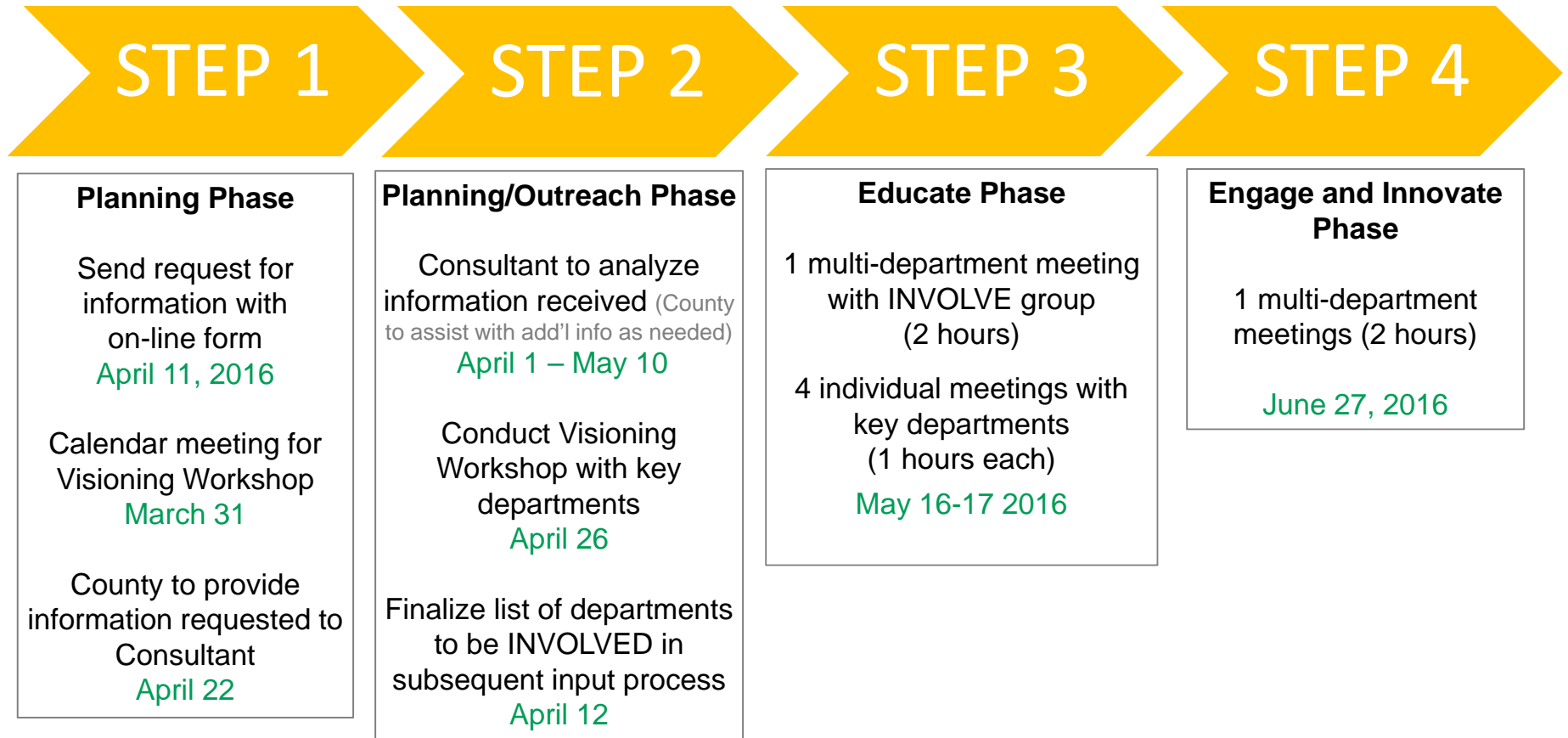
Identify departments that need to be **INVOLVED**

- Departments that are large generators
- Departments who have policies that impact diversion in the community
- Departments who have outreach programs with key external stakeholder groups
- Departments that will monitor/enforce implementation of programs and policies

All other departments need to stay **INFORMED**



## INTERNAL STAKEHOLDER ENGAGEMENT PROCESS



## CONTENT OF PRESENTATIONS

### EDUCATE

- Provide background information
- Present preliminary menu
- Receive input and solicit ideas
- Discuss barriers

### ENGAGE & INNOVATE

- Present findings from Educate Phase
- Present revised menu
- Solicit input and support





# External Stakeholder Process

---

SEEK DIVERSION PERSPECTIVES | BUILD LONG-TERM COMMITMENT  
| CREATE ECONOMIC & COMMUNITY INCENTIVES | ENGAGE AND  
EMPOWER



# EXTERNAL STAKEHOLDERS

## PRIMARY CLIENTS

### Residents

Single, Multi, Mobile

### Businesses

Retail, Commercial, Industrial,  
Hospitality, Agricultural,

### Public Entities

## SYSTEM PARTNERS

### Haulers

Transfer/Processing Facility Operators

### Recyclers

Repair/Reuse Businesses

## COMMUNITY PARTNERS

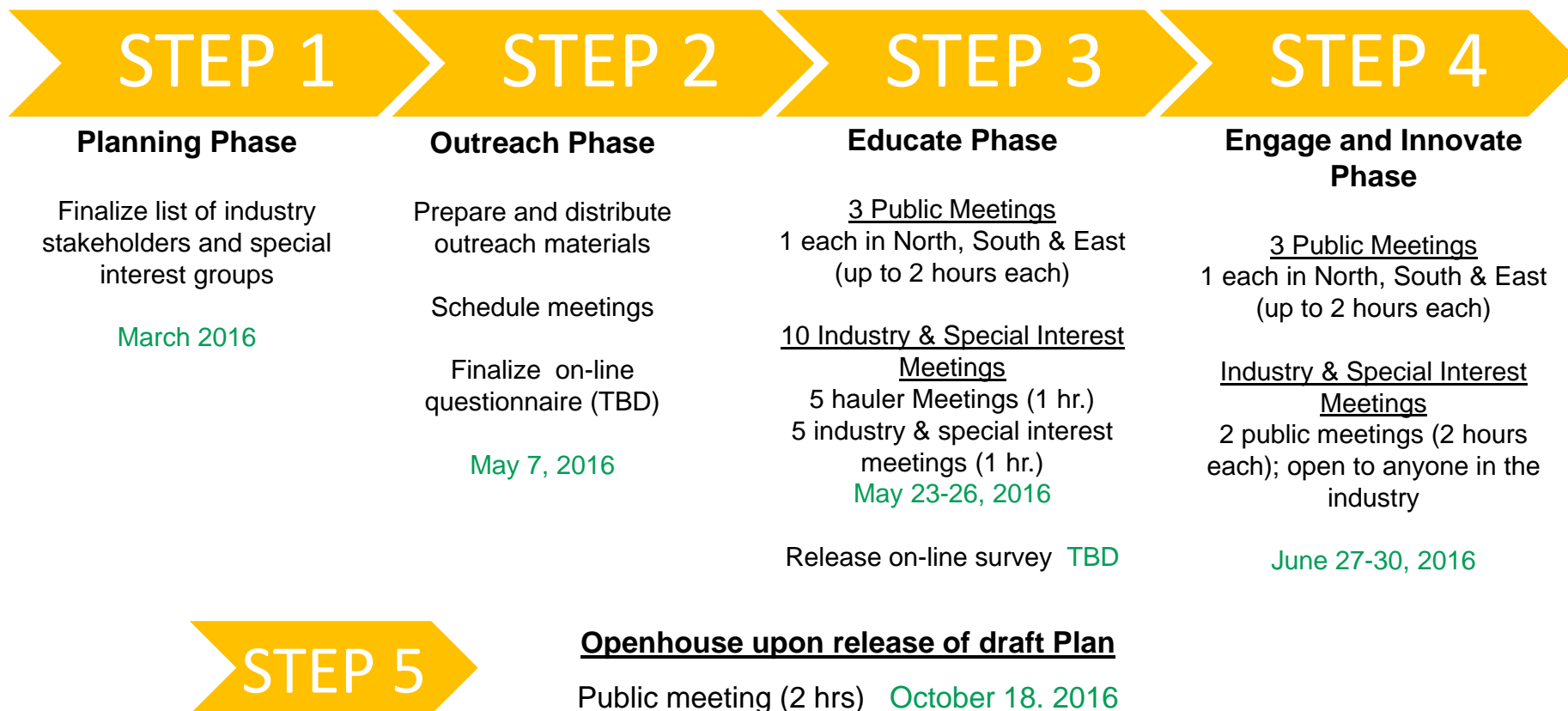
### Other Cities

Non-Profits Organizations

Community Groups



## EXTERNAL STAKEHOLDER ENGAGEMENT PROCESS



**Attachment B: Stakeholder Participation and Outreach Strategy  
San Diego County Strategic Plan to Reduce Waste**

## PUBLIC MEETINGS

### Locations

1 each in North, South & East during  
Educate Phase and Engage and  
Innovate Phase

North – District 5, 3

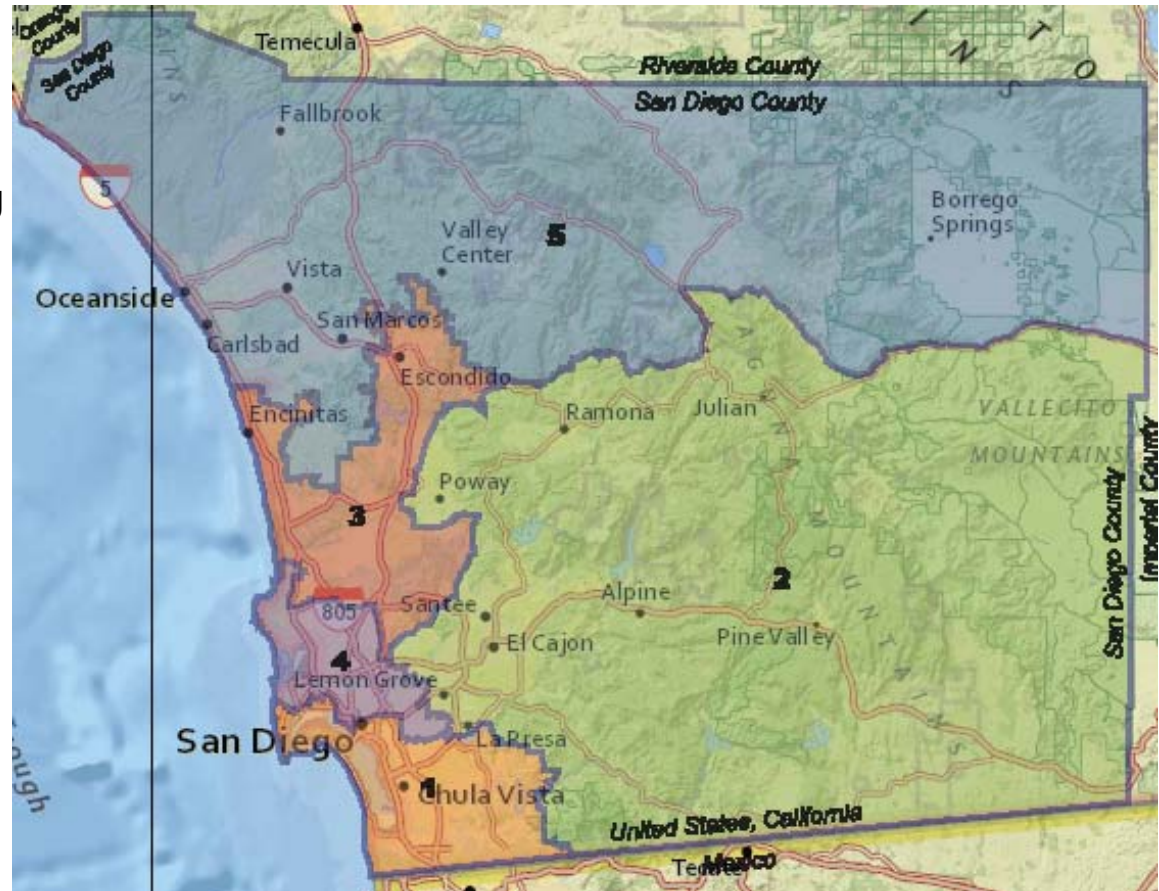
South – Districts 1,2 (partial)

East – District 2

### Format

1st hour - Businesses

2nd hour - Residents



# CONTENT OF PRESENTATIONS

## EDUCATE

Provide regulatory, political, and  
infrastructural context

Present preliminary menu

Discuss barriers

Receive input and solicit ideas

## ENGAGE & INNOVATE

Present findings from Educate Phase

Present revised menu

Solicit comments, solutions and support



# Stakeholder Outreach Details & Tentative Calendar

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**Attachment B: Stakeholder Participation and Outreach Strategy  
San Diego County Strategic Plan to Reduce Waste**

**INTERNAL STAKEHOLDER ENGAGEMENT STRATEGY  
DETAILS & TENTATIVE SCHEDULE**

**FIRST ROUND - EDUCATE**

					<b>Suggested County Depts.</b>	<b>HF&amp;H</b>
RFI Responses due		27-Apr-16			Various	
Visioning Workshop	County Offices	26-Apr-16	1-5p.m.		Various	Rob, Tracy S, Sarah, Tracy K
Multi-Department Meeting	County Offices	16-May-16	9-11 a.m.		Involve Group	Rob, Sarah, Susan
Individual Department Meeting						
Parks & Recreation	County Offices	16-May-16	1-2 p.m.		DPW, DPR	Rob, Sarah, Susan
Purchasing	County Offices	17-May-16	9-10 a.m.		DPW, DPC	Rob, Sarah, Susan
Planning & Development Serv.	County Offices	17-May-16	11-12 noon		DPW, PDS	Rob, Sarah, Susan
					DPW, DGS,	
General Services & Sheriff	County Offices	17-May-16	1-2 p.m.		Sherriff	Rob, Sarah, Susan

**SECOND ROUND - ENGAGE & INNOVATE**

Multi-Department Meeting	County Offices	27-Jun-16	9-11 a.m.		Involve Group	Sarah, Susan
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Note: Internal and external stakeholder meetings will be attended by two or more consultant team members as stated for each meeting date.

Rob Hilton, HF&H

Tracy Swanborn, HF&H

Sarah Boltwala-Mesina, Inika Small Earth, Inc.

Susan Chambers, Inika Small Earth, Inc.

Tracy Keough, O'Rorke, Inc.

**Attachment B: Stakeholder Participation and Outreach Strategy  
San Diego County Strategic Plan to Reduce Waste**

EXTERNAL STAKEHOLDER ENGAGEMENT STRATEGY DETAILS & TENTATIVE SCHEDULE						
FIRST ROUND - EDUCATE Release announcements on or about May 6th, 2016						
					Suggested County Depts.	HF&H
<b>Public Meetings</b>						
Public meeting - Business	North - Fallbrook	23-May-16	4-5 p.m.	DPW, DEH	Rob, Sarah, Susan	
Public meeting - Resident	North - Fallbrook	23-May-16	6-7 p.m.	DPW, DEH	Rob, Sarah, Susan	
Public meeting - Business	East - Ramona	25-May-16	4-5 p.m.	DPW, DEH	Sarah, Susan	
Public meeting - Resident	East - Ramona	25-May-16	6-7 p.m.	DPW, DEH	Sarah, Susan	
Public meeting - Business	South - Bonita	26-May-16	4-5 p.m.	DPW, DEH	Sarah, Susan	
Public meeting - Resident	South - Bonita	26-May-16	6-7 p.m.	DPW, DEH	Sarah, Susan	
<b>System Partner Meetings</b>						
Group Hauler meeting	County Office	23-May-16	9:30-10:30 a.m.	DPW, DEH	Rob, Sarah, Susan	
Meeting with EDCO	County Office	23-May-16	11-12:30	DPW, DEH, DGS	Rob, Sarah, Susan	
Meeting with Allied/ Republic	County Office	24-May-16	9-10 a.m.	DPW, DEH	Rob, Sarah, Susan	
Meeting with Daily Disposal	County Office	24-May-16	10:30-11:30 a.m.	DPW, DEH	Rob, Sarah, Susan	
Meeting with Waste Management	County Office	24-May-16	1-2 p.m.	DPW, DEH	Rob, Sarah, Susan	
Internal Team Monthly Meeting	County office	24-May-16	2-4 p.m.	DPW, DEH, DGS, LUEG	Rob, Sarah	
<b>Other Industry-Based Stakeholders</b>						
Group meeting of reuse, repair, & repurpose businesses & organizations	County Office	25-May-16	9-10 a.m.	DPW	Sarah, Susan	
Group meeting of recycling businesses including operators of MRFs, compost facilities, landfills, etc.	County Office	25-May-16	11-12 noon	DPW, DEH	Sarah, Susan	
Group meeting with farm and ranch owners	County Office	26-May-16	9-10 a.m.	DPW, DEH (UCCE, AWM)	Sarah, Susan	
Group meeting with large non-farm organic generators such as food service industries, food donation orgs, grocery stores	County Office	26-May-16	11-12 noon	DPW, DEH	Sarah, Susan	
Group meeting with non-profits & institutions engaged in zero waste education and recyclables collection such as Urban Corp, ILACSD, Solana Center, ZWSD, TAC, CAC	County Office	26-May-16	1-2 p.m.	DPW, DEH	Sarah, Susan	
<b>Online Questionnaire - Tentative (TBD by County)</b>						
Residential and commercial questionnaire	Online	Release 6-May-2016 +/- Responses Due 10-June-2016				



**Attachment B: Stakeholder Participation and Outreach Strategy  
San Diego County Strategic Plan to Reduce Waste**

**EXTERNAL STAKEHOLDER ENGAGEMENT STRATEGY  
DETAILS & TENTATIVE SCHEDULE**

**SECOND ROUND - ENGAGE & INNOVATE**

Release announcements on or about June 10, 2016

					<b>Recommended County Depts.</b>	<b>HF&amp;H</b>
<b>Public</b>						
Public meeting - Business	North - Fallbrook	27-Jun-16	4:30 -5:30 p.m.	DPW, DEH		Rob, Sarah, Susan
Public meeting - Resident	North - Fallbrook	27-Jun-16	6:30 -7:30 p.m.	DPW, DEH		Rob, Sarah, Susan
Public meeting - Business	East - Ramona	29-Jun-16	4-5 p.m.	DPW, DEH		Sarah, Susan
Public meeting - Resident	East - Ramona	29-Jun-16	6-7 p.m.	DPW, DEH		Sarah, Susan
Public meeting - Business	South - Bonita	30-Jun-16	4-5 p.m.	DPW, DEH		Sarah, Susan
Public meeting - Resident	South - Bonita	30-Jun-16	6-7 p.m.	DPW, DEH		Sarah, Susan
<b>System Partner &amp; Industry Stakeholders</b>						
Meeting open to all industry stakeholders	County Office	27-Jun-16	1-3 p.m.	DPW, DEH		Rob, Sarah, Susan
Meeting open to all industry stakeholders	County Office	28-Jun-16	9-11 a.m.	DPW, DEH		Rob, Sarah, Susan
Internal team monthly meeting	County office	28-Jun-16	1-4 p.m.	DPW, DEH, DGS, LUEG		Rob, Sarah
<b>THIRD ROUND - PUBLIC DRAFT</b>						
Release announcements on or about September 30, 2016						
Open house for all stakeholders	County office	18-Oct-16	4:30 - 6:30 p.m.	DPW, DEH, DGS, LUEG		Rob, Sarah
Internal team monthly meeting	County office	18-Oct-16	9-12 noon	DPW, DEH, DGS, LUEG		Rob, Sarah

**Attachment B: Stakeholder Participation and Outreach Strategy  
San Diego County Strategic Plan to Reduce Waste**

EXTERNAL STAKEHOLDER ENGAGEMENT STRATEGY POTENTIAL PARTNERS AND OUTLETS FOR INFORMATION		
Groups	Lead Contact within Planning Team	How can they help/ What we want them to do
<b>GATEWAYS TO THE COMMUNITY</b>		
1	Community Planning Groups	County
2	San Diego Community Garden Network	Inika
3	Chambers of Commerce	County
4	Schools - Peachjar	Inika
5	Schools - PTA	Inika
6	Schools - Roots & Shoots	Inika
7	Schools - Girl & Boy Scouts	Inika
8	San Diego Foundation	Inika
9	Craigslist	Inika
10	SDFreecycle	Inika
11	Nextdoor	O'Rorke
12	Meetups	Inika
13	Media - UT, KPBS	County/ O'Rorke
14	Libraries	County
15	Other County Departments	County
<b>SUSTAINABILITY RELATED ORGANIZATIONS AND GROUPS</b>		
1	350.org	Inika
2	USGBC	Inika
3	ZW San Diego	Inika
4	ILACSD	Inika
5	Solana Center	Inika
6	Inika	Inika
7	Reuse-Repair Network	Inika
8	North County Eco Alliance	Inika
9	Food System Alliance	Inika
10	Association of General Contractors (AGC)	Inika
11	Building Industry Association (BIA)	Inika
12	Keep Fallbrook Clean and Green	Inika
<b>LARGE GENERATORS</b>		
1	Multi-family recycling program	County
2	Commercial recycling program	County
3	Schools recycling program	County
4	Organics recycling program	County

**Attachment B: Stakeholder Participation and Outreach Strategy  
San Diego County Strategic Plan to Reduce Waste**

**CHRONOLOGICAL SCHEDULE OF MEETINGS**

<b>Date</b>	<b>Time</b>	<b>Meeting Description/Location</b>
27-Apr-16	---	RFI Responses due
26-Apr-16	1-5p.m.	Visioning Workshop County Offices
16-May-16	9-11 a.m.	Multi-Department Meeting County Offices
16-May-16	1-2 p.m.	Parks & Recreation County Offices
17-May-16	9-10 a.m.	Purchasing County Offices
17-May-16	11-12 noon	Planning & Development Serv. County Offices
17-May-16	1-2 p.m.	General Services & Sheriff County Offices
23-May-16	9:30-10:30 a.m.	Group Hauler meeting County Office
23-May-16	11-12:30	Meeting with EDCCO County Office
23-May-16	4-5 p.m.	Public meeting - Business North - Fallbrook
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27-Jun-16	1-3 p.m.	Meeting open to all industry stakeholders County Office
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30-Jun-16	4-5 p.m.	Public meeting - Business South - Bonita
30-Jun-16	6-7 p.m.	Public meeting - Resident South - Bonita
18-Oct-16	9-12 noon	Internal team monthly meeting County office
18-Oct-16	4:30 - 6:30 p.m.	Open house for all stakeholders County office

**Attachment B: Stakeholder Participation and Outreach Strategy  
San Diego County Strategic Plan to Reduce Waste**

**Involve vs. Inform Departments**

Department	Involve	Inform
<a href="#">Agriculture, Weights and Measures</a>	X	
<a href="#">Air Pollution Control District</a>	X	
<a href="#">Aging &amp; Independence Services</a>		X
<a href="#">Animal Services</a>		X
<a href="#">Assessor/Recorder/County Clerk</a>		X
<a href="#">Auditor/Controller</a>		X
<a href="#">Behavioral Health Services</a>		X
<a href="#">Chief Administrative Office</a>		X
<a href="#">Child Support Services</a>		X
<a href="#">Child Welfare Services</a>		X
<a href="#">Citizens' Law Enforcement Review Board</a>		X
<a href="#">Civil Service Commission</a>		X
<a href="#">Clerk of the Board of Supervisors</a>		X
<a href="#">Communications Office</a>	X	
<a href="#">Community Services Group</a>		X
<a href="#">County Counsel</a>		X
<a href="#">District Attorney</a>		X
<a href="#">Emergency Services</a>		X
<a href="#">Environmental Health</a>	X	
<a href="#">Ethics and Compliance</a>		X
<a href="#">UCCE</a>	X	
<a href="#">Finance and General Government Group</a>		X
<a href="#">Fire Authority</a>	X	
<a href="#">General Services</a>	X	
<a href="#">Grand Jury</a>		X
<a href="#">Health &amp; Human Services Agency</a>	X	
<a href="#">Housing and Community Development</a>		X
<a href="#">Human Resources</a>		X
<a href="#">Land Use and Environment Group</a>	X	
<a href="#">Library</a>	X	
<a href="#">Medical Examiner</a>		X
<a href="#">Parks and Recreation</a>	X	
<a href="#">Planning &amp; Development Services</a>	X	

**Criteria for Involved and Inform Groups**

**Departments to be "Involved" in High**

- Large generators of waste, compostable and/or recyclable materials
- Have policies that impact waste diversion
- Have outreach programs with key external stakeholder groups
- Will monitor/enforce implementation of programs and policies

**Other Depts will be "Informed"**

**Attachment B: Stakeholder Participation and Outreach Strategy  
San Diego County Strategic Plan to Reduce Waste**

**Involve vs. Inform Departments**

Department	Involve	Inform
<a href="#">Probation</a>	X	
<a href="#">Public Administrator, Guardian, and Conservator</a>		X
<a href="#">Public Defender</a>		X
<a href="#">Public Health</a>		X
<a href="#">Public Safety Group</a>		X
<a href="#">Public Works</a>	X	
<a href="#">Purchasing and Contracting</a>	X	
<a href="#">Registrar of Voters</a>		X
<a href="#">Retirement Association (SDCERA)</a>		X
<a href="#">SanGIS (Maps)</a>		X
<a href="#">Sheriff</a>	X	
<a href="#">Strategy and Intergovernmental Affairs</a>	X	
<a href="#">Technology Office</a>		X
<a href="#">Treasurer/Tax Collector</a>		X



# STRATEGIC PLAN TO REDUCE WASTE

## Public Stakeholder Meetings – Round 2

<b>June 27</b>	<b>June 29</b>	<b>June 30</b>
County Ops Center	4S Ranch Library	Rancho San Diego Library



Managing Tomorrow's Resources Today



## BACKGROUND

**AB 939**  
1989  
50% diversion by 2000

**AB 341**  
2011  
Goal of 75% diversion by 2020

**AB 1826**  
2014  
Mandatory Organics Recycling

**2015**  
62%  
Overall Diversion

Sector Rates  
Residential 44%  
Commercial 7%  
Industrial 27%

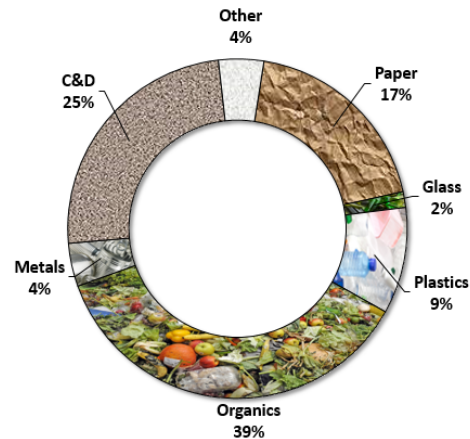
COUNTY OF SAN DIEGO | HF&H | Inika Small Earth

Recycle@sdcounty.ca.gov

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## GOLDMINE GOING TO LANDFILL

- Annual disposal volume:  
**454,000 tons**
- Materials disposed that could be recycled: **76%**
- Value: ~ **\$20 million**
- Organics: **39%**
- Food Waste: **15%**



## BOARD OF SUPERVISORS' DIRECTION

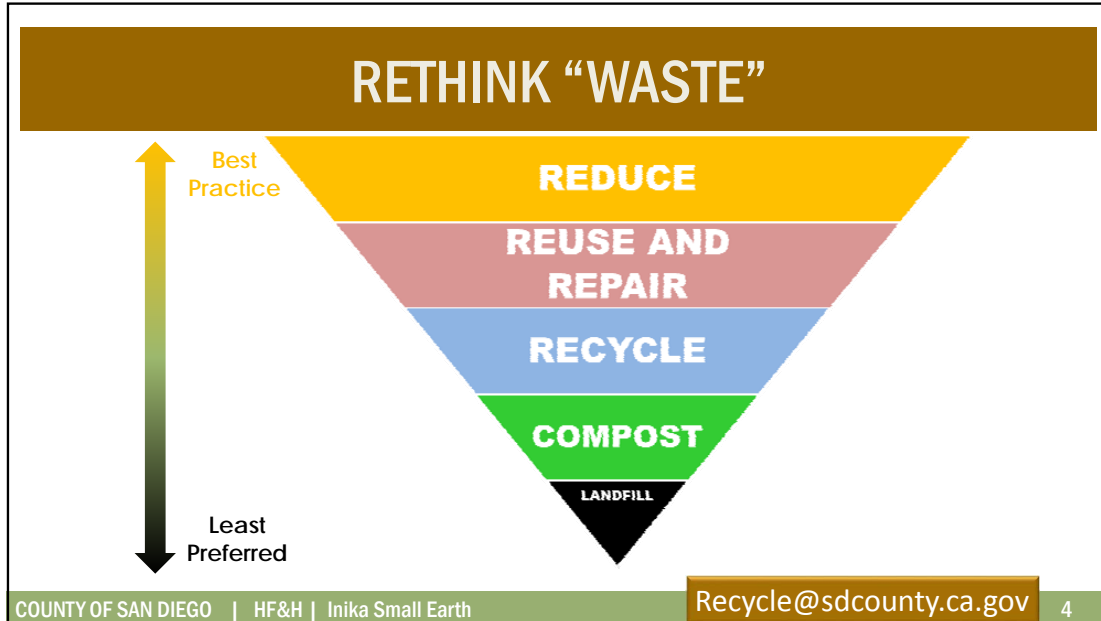
Identify what it will take to achieve  
**75% diversion by 2020**

&

**Zero Waste (90% diversion) by 2040**  
for **County Operations & our**  
**Unincorporated Communities**

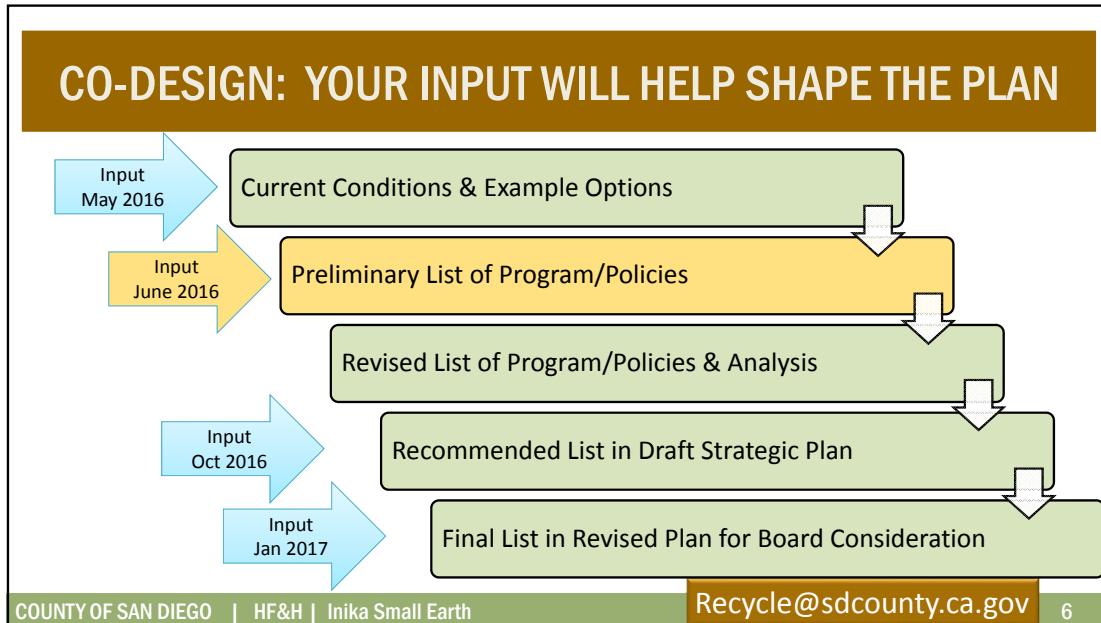






<b>OPPORTUNITIES TO WEIGH IN</b>	
<p align="center"><b>EDUCATE</b> Learn about opportunities, solutions &amp; barriers</p>	<b>May 23 - 26</b>
<p align="center"><b>ENGAGE &amp; INNOVATE</b> Assess support for a preliminary menu of strategies</p>	<b>June 27 - 30</b>
<p align="center"><b>COMMENT ON DRAFT PLAN</b> Open house</p>	<b>October 18</b>
<p align="center"><b>PLAN FOR BOARD OF SUPERVISORS' CONSIDERATION</b></p>	<b>2017</b>

COUNTY OF SAN DIEGO | HF&H | Inika Small Earth Recycle@sdcounty.ca.gov 5



## REDUCE, REUSE, REPAIR : PRELIMINARY LIST

1. **Continue to support San Diego County Repair and Reuse Network** with focus on education for repair and reuse options and provision of Fix-It Clinics
2. **Promote and support food waste prevention and donation activities**
  - A. Support San Diego Food System Alliance's Food Recovery Working Group and North County Food Policy Council
  - B. Create a Food Recovery Action Plan, which may potentially include formalizing partnerships with recovery organizations
  - C. Support donation and gleanings from farms and community gardens



## COLLECTION | SINGLE-FAMILY : PRELIMINARY LIST

1. **Provide regular education** on existing recycling and yard trimmings separation requirements
2. **Establish consistent requirements for all haulers**
  - A. 3-container system for recyclables, yard trimmings, and solid waste in densely-populated areas
  - B. Minimum weekly capacity of 64 gallons each for recycling and organics (exceptions for space constraints or disabled)
  - C. Exemptions for on-site composting, hardscapes, xeriscaping
  - D. **Pay-as-you-throw rate structure**
3. **Require bulky item curbside collection** in densely-populated areas with minimum standards
4. **Support animal manure collection**, particularly horse manure, and use as soil amendments

*Note: Add food scraps collection when processing capacity is available.*



## COLLECTION | MULTI-FAMILY AND COMMERCIAL : PRELIMINARY LIST

1. **Continue education** on existing recycling, yard trimmings, and food scraps diversion requirements, and **enhance compliance program**
2. **Establish minimum recycling service level requirements**
3. **Require bulky item collection** in densely-populated areas
4. **Support animal manure collection**, particularly horse manure, and use as soil amendments

*Note: Expand commercial food scraps collection to support business compliance with AB 1826 when processing capacity is available.*



## DROP-OFF SERVICES : PRELIMINARY LIST

1. **HHW:** Evaluate establishing new HHW drop-off location in North County area and/or expanding schedule of periodic mobile drop-off events
2. **Ag plastics:** Continue periodic drop-off events for agricultural plastics with objective to regularly schedule such events on a recurring basis
3. **Hard-to-manage materials:** Promote drop-off sites for materials covered by State product stewardship legislation/regulation (paint, mattresses, other)



## PROCESSING SERVICES | ORGANICS : PRELIMINARY LIST

1. **Enhance Zoning Ordinance:** Consider amendments to facilitate organics processing
2. **Large-scale facility(ies):** Support development or expansion of composting and/or anaerobic digestion facilities
3. **Community/commercial/farm composting:** Support on-site composting through education and hands-on training
4. **Individual residential efforts:** Continue education on backyard composting and include **additional methods** (e.g., animal feeding, Bokashi, etc.); continue offering discounted compost bins
5. **Animal Manure:** Support development of infrastructure for processing animal manures into soil amendments



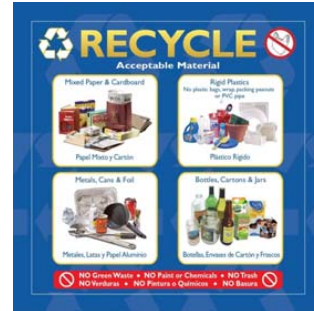
## EDUCATION AND OUTREACH : PRELIMINARY LIST

1. **Regional Campaign Efforts:** Continue to support and expand regional campaign efforts and on-line resources, including consistent signage for recycling, reuse, repair, equipment rental, sharing sites, recycling, HHW, hard-to-handle materials by working with other agencies and non-profit organizations
2. **Sustainable Landscapers Training:** Support programs and workshops to integrate trainings on appropriate plantings, pruning, grass cycling, yard trimming recycling, and on-site composting; offer incentives to attend training; partner with retailers to provide training and information
3. **Continue technical assistance program** for multi-family, businesses, and schools



## EDUCATION AND OUTREACH : PRELIMINARY LIST (CONT.)

4. Provide **regular education to community members** on existing recycling and organics diversion requirements, including individual multi-family tenant units
5. **Create training program and engage others:** County to create education and training program and engage with others to use County program
  - A. Partner with and/or fund efforts of community group(s) or local college(s) to provide education and training
  - B. Develop zero waste neighborhood leader program to provide education and promote best practices
  - C. Organize volunteers to provide education and training
6. Expand County's existing social marketing/behavior change marketing program to motivate people to reduce, reuse, recycle and compost
7. Recognize successes through local, state and national recognition programs and certification programs



## POLICIES : PRELIMINARY LIST

1. Adopt High Diversion/Zero Waste Goal and Strategic Plan
2. Improve Diversion, Tracking and Oversight of Haulers
3. Enhance Construction and Demolition (C&D) Diversion by amending C&D Ordinance



## THANK YOU – PLEASE STAY INVOLVED

### Attend Future Meeting

- October 18
- Details at [www.sandiegocounty.gov/dpw/recycling/plan/](http://www.sandiegocounty.gov/dpw/recycling/plan/)

### Take a Brief Survey


- <https://www.surveymonkey.com/r/sandiegoco>

### Learn More

- [www.sandiegocounty.gov/dpw/recycling/plan/](http://www.sandiegocounty.gov/dpw/recycling/plan/)

### Contact the County


- [Recycle@sdcounty.ca.gov](mailto:Recycle@sdcounty.ca.gov)




# STRATEGIC PLAN TO REDUCE WASTE

Internal Stakeholder Meeting – Round 2

June 27, 2016

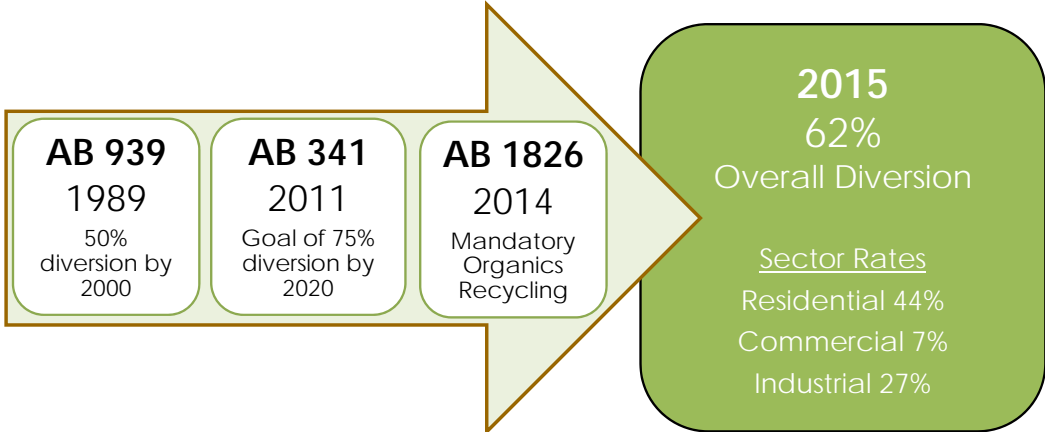


Managing Tomorrow's Resources Today



sustainability through inquiry, innovation and enterprise

## BACKGROUND



Year	Legislation	Key Provision
1989	AB 939	50% diversion by 2000
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2014	AB 1826	Mandatory Organics Recycling
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Overall Diversion

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Industrial 27%

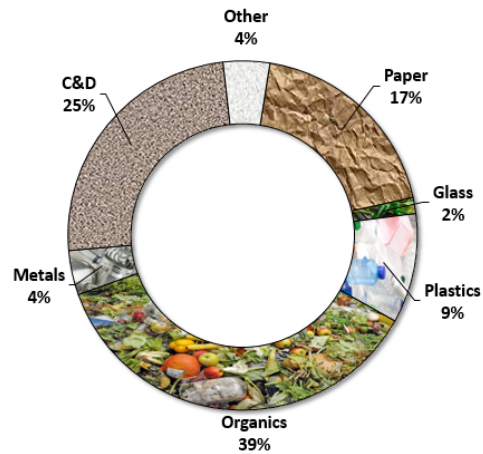
COUNTY OF SAN DIEGO | HF&H Consultants | Inika Small Earth

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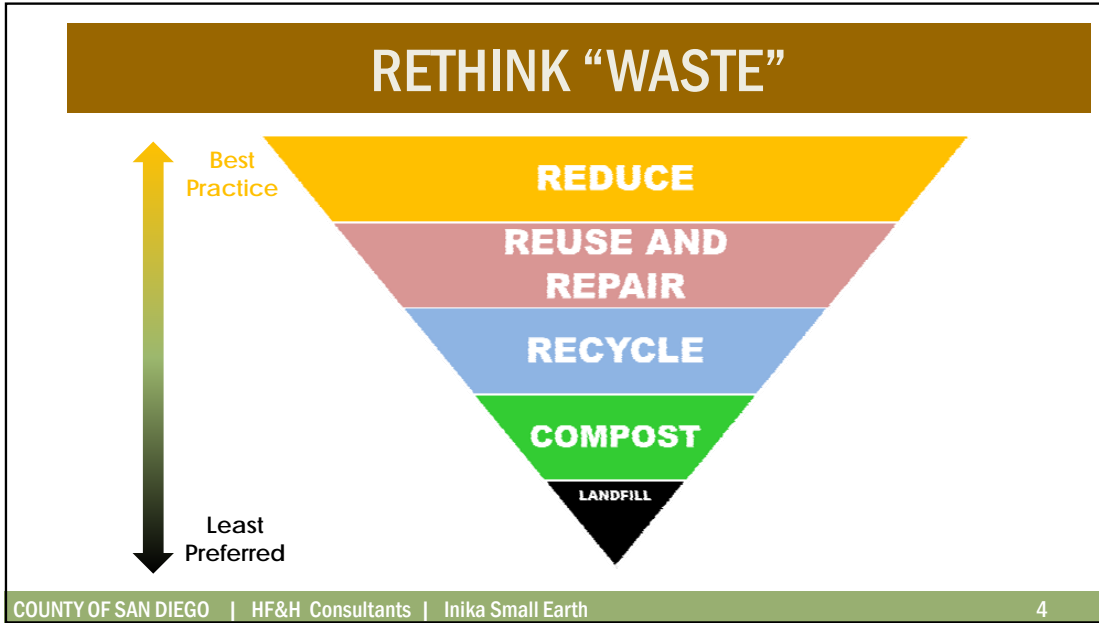
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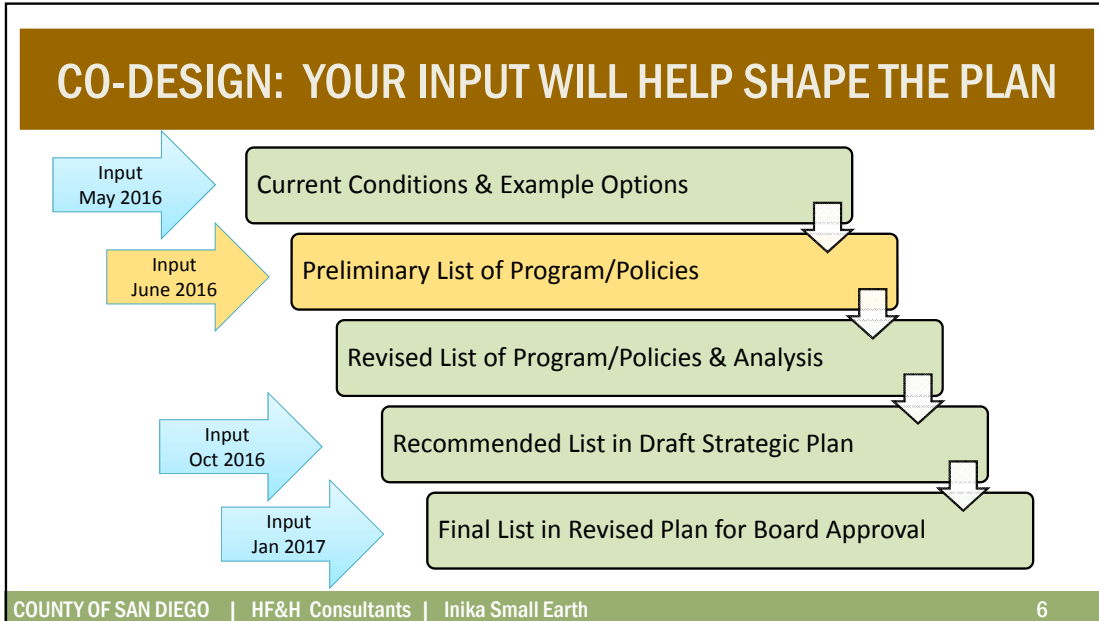
Identify what it will take to achieve  
**75% diversion by 2020**

&

**Zero Waste (90% diversion) by 2040**  
for **County Operations & our**  
**Unincorporated Communities**







## POLICIES : PRELIMINARY LIST

1. Set diversion goal for County & adopt policy to support achieving goal
  - a. Designate department responsible for oversight & monitoring of progress
  - b. Require departments involvement in initiatives
  - c. Identify Waste Reduction Captain for each department & define roles/responsibilities
  - d. Create waste diversion operational excellence goals for County operations/departments annually
2. Enhance C&D recycling for County projects
  - a. Revise G-15 Design Standards for County facilities to include renovations
  - b. Prioritize use of recycled materials in road construction

## REDUCE, REUSE, REPAIR : PRELIMINARY LIST

### Reduce

1. Evaluate County Operations to offer & encourage use of reusable items
  - a. [Water-filling stations for reusable water bottles](#)
  - b. Reusable mugs, to-go containers & bulk condiment dispensers in county cafes
  - c. Refillable pens & pencils
  - d. Rechargeable batteries
2. [Consider return to use of reusable trays in detention facilities](#)
3. Set goal for reduction of paper use by department
  - a. Expand electronic review & e-sign approval of documents
  - b. [Limit use of individual printers or require departmental pre-approval](#)
  - c. [Prioritize on-line subscriptions to periodicals & references](#)

## REDUCE, REUSE, REPAIR : PRELIMINARY LIST (CONT.)

### Reuse

1. Increase use of County's existing reutilization process
  - a. Evaluate A-94 Disposal of Personal Property for improvements
  - b. Promote reutilization website
  - c. Offer incentives/recognition to departments that purchase through reutilization
  - d. Track & report volume or weight of materials reused/sold/disposed
2. Partner with non-profit organization to provide reuse collections or drop-off boxes at County facilities for employees

### Repair

Partner with Sheriff's Inmate Re-entry Services to consider training program on repair

## PURCHASING : PRELIMINARY LIST

1. Expand the B-67 Recycled Products Purchasing Policy into an Environmentally Preferable Purchasing Policy (EP3)
2. Incorporate Zero Waste objectives into County procurements
  - a. Avoid purchase of disposable materials when practical
  - b. Consider reparability & life-cycle analysis of products when making purchasing decisions
  - c. Work with suppliers to:
    - Offer products that minimize waste in product & packaging design
    - Take back or pick-up products that are hard to recycle
    - Prioritize environmentally preferable products
    - Promote minimal or recyclable packaging in vending machine contracts
    - Report percentage of common supplies purchased from recycled-content list or environmentally preferable list by department.

## COLLECTION : PRELIMINARY LIST

1. Enhance diversion requirements in waste collection contracts
  - a. Set minimum diversion requirements in agreement(s) & add incentives/disincentives
  - b. Enhance diversion reporting requirements to track progress at each County facility
  - c. [Set standards for uniform container colors & container signage](#)
2. Ensure optimal recycling at facilities owned and/or leased by County
  - a. [Conduct waste assessments for departments](#) & tailor programs based on this information\*
  - b. Post recycling "how-to" signs by containers\*
  - c. [Train janitorial staff on proper recycling practices\\*](#)
  - d. Require that each trash bin is accompanied by a recycling bin (twinning)\*
  - e. Require that leased facilities meet minimum recycling requirements & report data
3. [Create capability for collection of used pallets from County facilities](#)
4. Require recycling & composting for County-sponsored events\*

\* *Can be included as contract requirements for haulers and/or janitorial contractors. For County events, composting service is expanding, but currently limited to select areas. Confirm availability annually with DGS.*

## FOOD WASTE & COMPOSTING: PRELIMINARY LIST

1. Support food waste reduction & donation at County operations
  - a. **Implement** a food waste reduction/donation policy & composting program\* & provide reporting
  - b. Provide surplus food from large County events to attendees or food relief organizations
2. Increase diversion of yard/wood /food waste generated by County
  - a. Require diversion of organic materials
  - b. Explore options for on-site composting at County facilities, including [community gardens at parks & open spaces](#)
3. Increase use of locally-produced mulch/compost at County facilities

\* *Composting service expanding, but currently limited to select areas. Confirm availability annually with DGS.*

## EDUCATION & OUTREACH : PRELIMINARY LIST

1. Provide waste reduction & recycling training to employees
  - a. Provide reduction, reuse, & recycling educational materials
  - b. Implement an annual LMS training module
  - c. Develop a recycling training specifically for DPR volunteers & part-time employees
  - d. Disseminate a departmental waste reduction report to employees annually
  - e. Include environmentally preferable purchasing education in P-card training
2. Support waste reduction & recycling by department
  - a. Showcase model programs implemented by departments
  - b. Conduct waste assessments & provide technical assistance to departments on recycling & Environmentally Preferable Purchasing
  - c. Set up incentive & County award programs for departments
  - d. Encourage applications for awards or certifications for diversion programs
3. Require regular training of janitorial staff including contractors
4. Consider expanding partnerships with artists to create displays from repurposed material

## MEASUREMENT & REPORTING : PRELIMINARY LIST

1. Establish on-going diversion measurement & reporting process
  - a. Establish baseline diversion estimate for County operations & by department
  - b. Require waste reduction & recycling reporting by department (if data is not reported through County hauling agreements)
  - c. Track & report annual progress for County operations by department
2. Track percentage of common supplies purchased from recycled-content list or environmental preferable materials list (using vendor reports)

## THANK YOU – PLEASE STAY INVOLVED

### Comments on Draft Strategic Plan

- October/Early November

### Take Survey if Resident of Unincorporated

- [www.surveymonkey.com/r/sandiegoco](http://www.surveymonkey.com/r/sandiegoco)

### Share More Ideas

- [Michael.Wonsidler@sdcounty.ca.gov](mailto:Michael.Wonsidler@sdcounty.ca.gov)

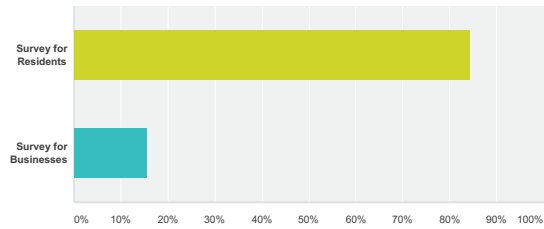


# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q1 Take me to

Answered: 166 Skipped: 1



Answer Choices	Responses	
Survey for Residents	84.34%	140
Survey for Businesses	15.66%	26
<b>Total</b>		<b>166</b>

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q2 I confirm that I a resident of the unincorporated area of San Diego County with a zip code of

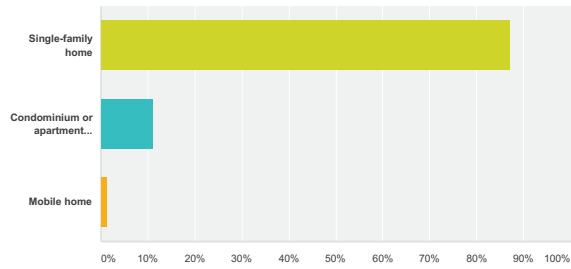
Answered: 141 Skipped: 26

# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q3 What type of housing do you live in?

Answered: 141 Skipped: 26

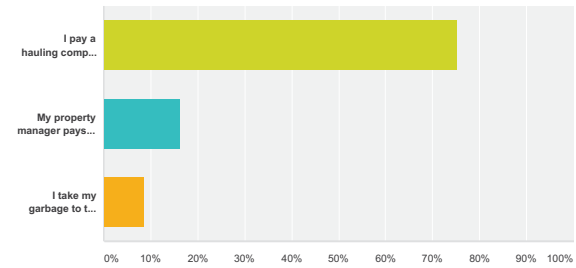


Answer Choices	Responses	Count
Single-family home	87.23%	123
Condominium or apartment complex	11.35%	16
Mobile home	1.42%	2
<b>Total</b>		<b>141</b>

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q4 How do you usually dispose of your garbage (trash)?

Answered: 141 Skipped: 26



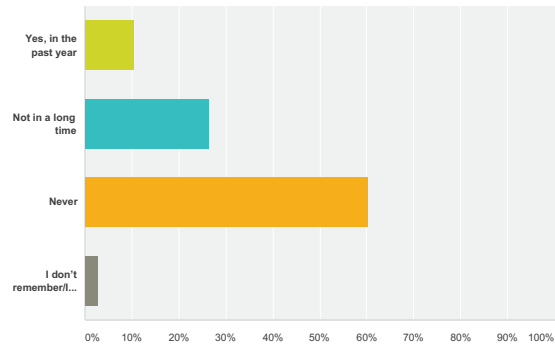
Answer Choices	Responses	Count
I pay a hauling company (garbage company) to pick it up.	75.18%	106
My property manager pays a hauling company (garbage company) to pick it up.	16.31%	23
I take my garbage to the landfill, dump, transfer station or elsewhere.	8.51%	12
<b>Total</b>		<b>141</b>

# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

## Q5 Have you ever changed your hauler?

Answered: 106 Skipped: 61



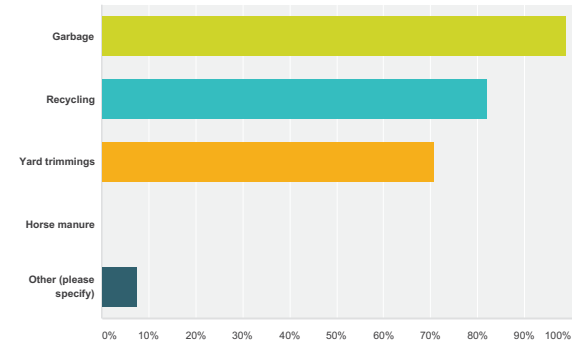
Answer Choices	Responses	
Yes, in the past year	10.38%	11
Not in a long time	26.42%	28
Never	60.38%	64
I don't remember/I don't know	2.83%	3
<b>Total</b>		<b>106</b>

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Survey for San Diego County Residents and Businesses in Unincorporated County Areas

## Q6 What type of collection services do you currently receive from your hauling company?

Answered: 106 Skipped: 61



Answer Choices	Responses	
Garbage	99.06%	105
Recycling	82.08%	87
Yard trimmings	70.75%	75
Horse manure	0.00%	0
Other (please specify)	7.55%	8
<b>Total Respondents: 106</b>		

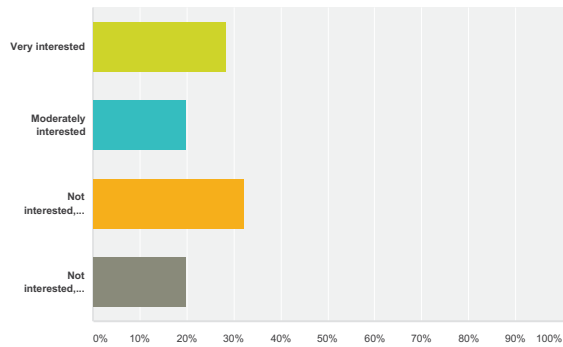
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# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q7 If your hauling company offered to collect food scraps for composting, how interested would you be in this collection service?

Answered: 106 Skipped: 61



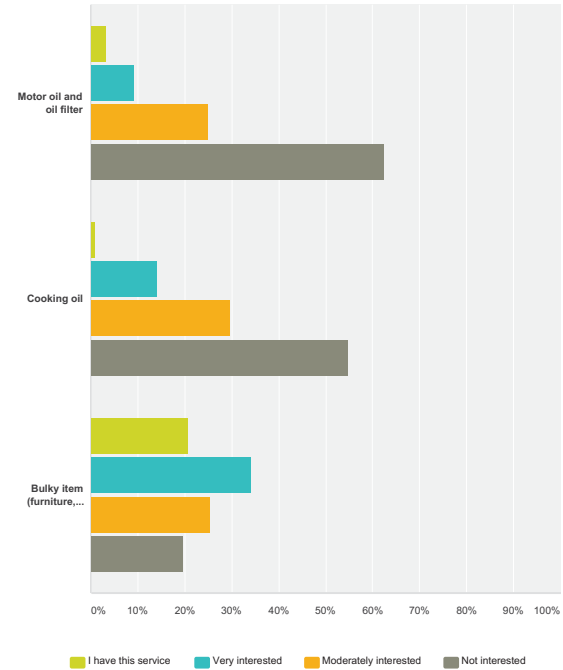
Answer Choices	Responses
Very interested	28.30% 30
Moderately interested	19.81% 21
Not interested, because I compost my food scraps in my backyard	32.08% 34
Not interested, because I don't want to sort/separate my food scraps	19.81% 21
<b>Total</b>	<b>106</b>

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Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q8 What additional collection services would you like your hauler to provide for a fee?

Answered: 104 Skipped: 63



	I have this service	Very interested	Moderately interested	Not interested	Total
Motor oil and oil filter	3.41% 3	9.09% 8	25.00% 22	62.50% 55	88
Cooking oil	1.10% 1	14.29% 13	29.67% 27	54.95% 50	91
Bulky Item (furniture, mattresses, wood waste, etc.)	20.59% 21	34.31% 35	25.49% 26	19.61% 20	102

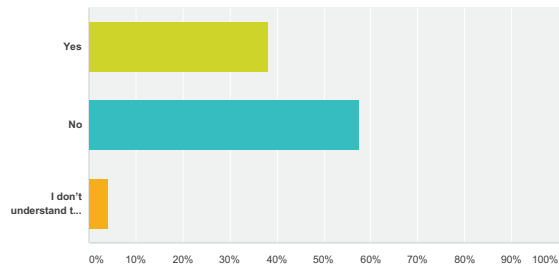
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# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

**Q9 Did you know you can choose a garbage and recycling hauler from a list of different hauling companies approved by the County?**

Answered: 118 Skipped: 49

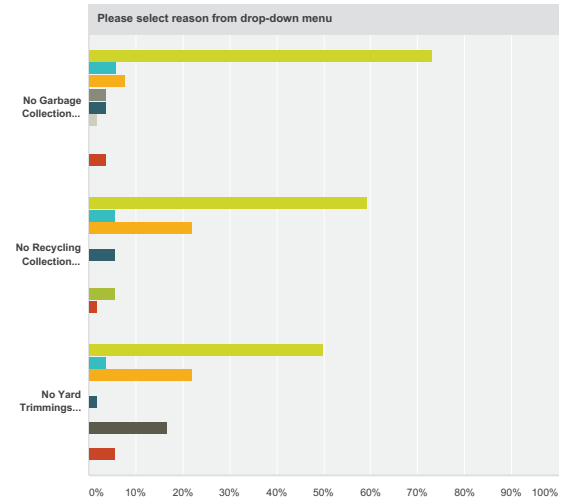


Answer Choices	Responses	Count
Yes	38.14%	45
No	57.63%	68
I don't understand the question	4.24%	5
<b>Total</b>		<b>118</b>

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

**Q10 Please share the most important reason why you do not have one or more of the following collection services:**

Answered: 57 Skipped: 110



- Not applicable; I have this service
- Too expensive
- Service not offered in my area
- Not pleased with the service provided by hauling company(ies)
- Don't want to bring my containers down my driveway to street for collection
- Inconvenient or time consuming
- Compost my yard trimmings/food scraps
- Bring my recyclables to a recycling center
- Don't have much of this material (garbage, recyclables, yard trimmings or food waste)

Please select reason from drop-down menu									
Not applicable; I have this service	Too expensive	Service not offered in my area	Not pleased with the service provided by hauling company(ies)	Don't want to bring my containers down my driveway to street for collection	Inconvenient or time consuming	Compost my yard trimmings/food scraps	Bring my recyclables to a recycling center	Don't have much of this material (garbage, recyclables, yard trimmings or food waste)	Total

## Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

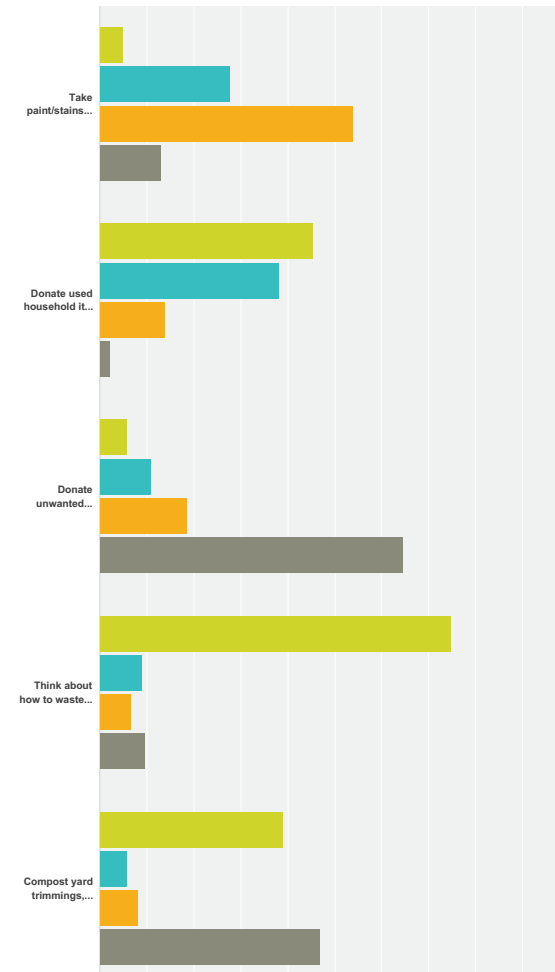
Survey for San Diego County Residents and Businesses in Unincorporated County Areas

No Garbage Collection Service	73.08% 38	5.77% 3	7.69% 4	3.85% 2	3.85% 2	1.92% 1	0.00% 0	0.00% 0	3.85% 2	52
No Recycling Collection Service	59.26% 32	5.56% 3	22.22% 12	0.00% 0	5.56% 3	0.00% 0	0.00% 0	5.56% 3	1.85% 1	54
No Yard Trimmings Collection Service	50.00% 27	3.70% 2	22.22% 12	0.00% 0	1.85% 1	0.00% 0	16.67% 9	0.00% 0	5.56% 3	54

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

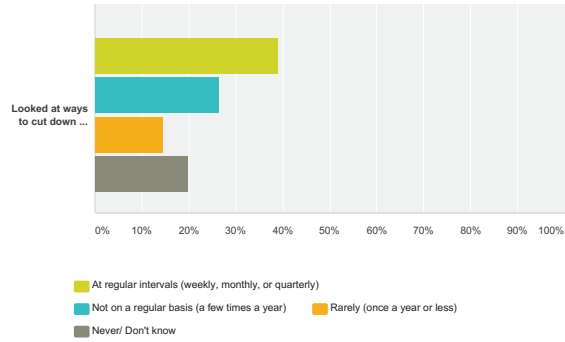
### Q11 Identify how often you take the following actions:

Answered: 137 Skipped: 30



# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas



Survey for San Diego County Residents and Businesses in Unincorporated County Areas

**Q12 I confirm that I am the owner or manager of a business located in the unincorporated area of San Diego County with a zip code of**

Answered: 26 Skipped: 141

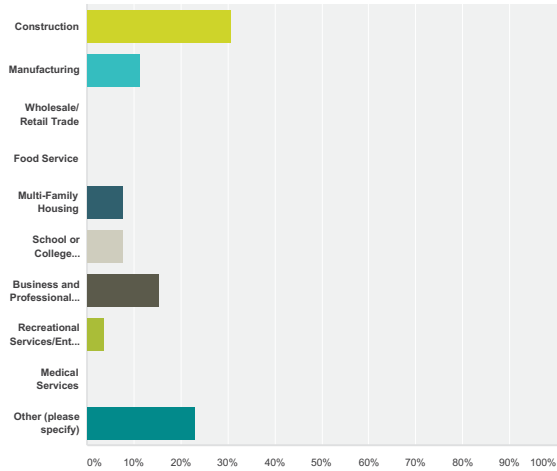
	At regular intervals (weekly, monthly, or quarterly)	Not on a regular basis (a few times a year)	Rarely (once a year or less)	Never/Don't know	Total
Take paint/stains, household cleaners, pesticides, batteries, fertilizer, propane, solvents, oil, CFLs, etc. to a household hazardous waste facility	5.11% 7	27.74% 38	54.01% 74	13.14% 18	137
Donate used household items or clothing to a thrift store	45.59% 62	38.24% 52	13.97% 19	2.21% 3	136
Donate unwanted fruit/vegetables from your backyard to a shelter, food bank, church, etc.	5.93% 8	11.11% 15	18.52% 25	64.44% 87	135
Think about how to waste less food, use up leftovers or preserve food	74.81% 101	8.89% 12	6.67% 9	9.63% 13	135
Compost yard trimmings, vegetable and fruit peelings in your backyard	38.97% 53	5.88% 8	8.09% 11	47.06% 64	136
Looked at ways to cut down on the junk mail you receive	38.97% 53	26.47% 36	14.71% 20	19.85% 27	136

# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q13 For which type of business facility are you answering this survey?

Answered: 26 Skipped: 141



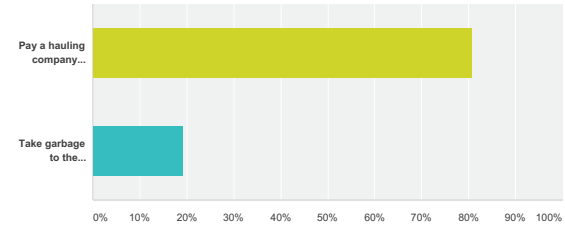
Answer Choices	Responses
Construction	30.77% 8
Manufacturing	11.54% 3
Wholesale/ Retail Trade	0.00% 0
Food Service	0.00% 0
Multi-Family Housing	7.69% 2
School or College (Public/ Private)	7.69% 2
Business and Professional Services	15.38% 4
Recreational Services/Entertainment Facility	3.85% 1
Medical Services	0.00% 0
Other (please specify)	23.08% 6
<b>Total</b>	<b>26</b>

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Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q14 How does your business usually dispose of your garbage (trash)?

Answered: 26 Skipped: 141



Answer Choices	Responses
Pay a hauling company (garbage company) to pick it up.	80.77% 21
Take garbage to the landfill, dump, transfer station, or elsewhere	19.23% 5
<b>Total</b>	<b>26</b>

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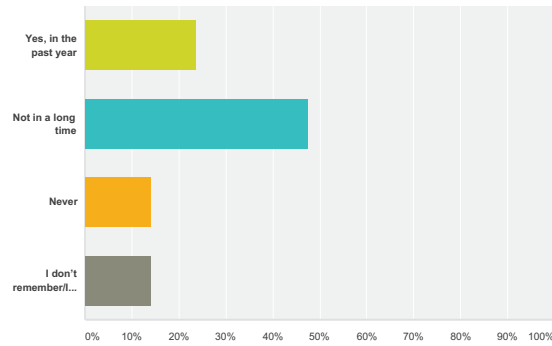


# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q15 Have you ever changed hauling companies?

Answered: 21 Skipped: 146



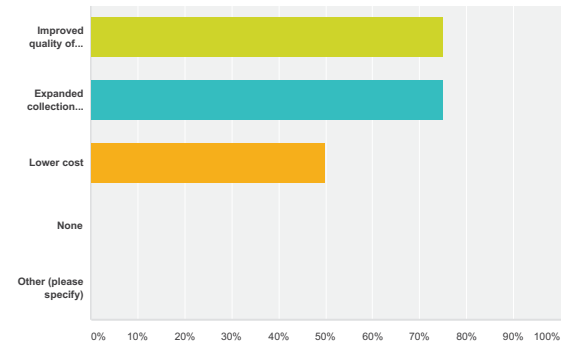
Answer Choices	Responses	Count
Yes, in the past year	23.81%	5
Not in a long time	47.62%	10
Never	14.29%	3
I don't remember/I don't know	14.29%	3
<b>Total</b>		<b>21</b>

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Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q16 After changing hauling companies, what benefit(s) did you experience?

Answered: 4 Skipped: 163



Answer Choices	Responses	Count
Improved quality of customer service	75.00%	3
Expanded collection services (e.g. recycling, yard trimmings and food scraps pickup)	75.00%	3
Lower cost	50.00%	2
None	0.00%	0
Other (please specify)	0.00%	0
<b>Total Respondents: 4</b>		

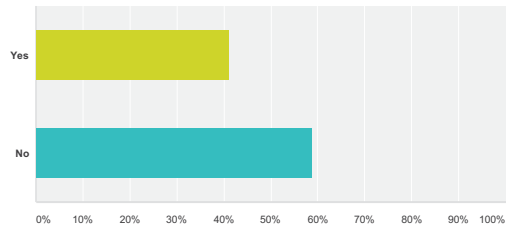
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# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q17 Do you use more than one hauling company to collect your materials?

Answered: 17 Skipped: 150

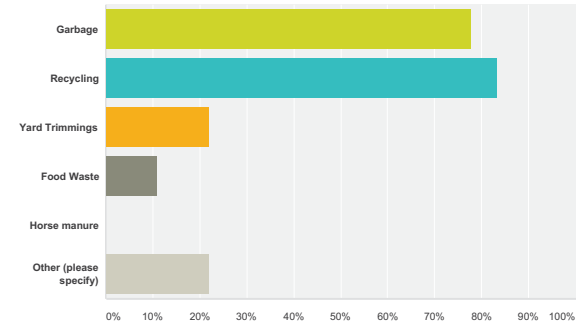


Answer Choices	Responses
Yes	41.18% 7
No	58.82% 10
<b>Total</b>	<b>17</b>

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q18 What type of collection services do you currently subscribe to? {Check all that apply.}

Answered: 18 Skipped: 149



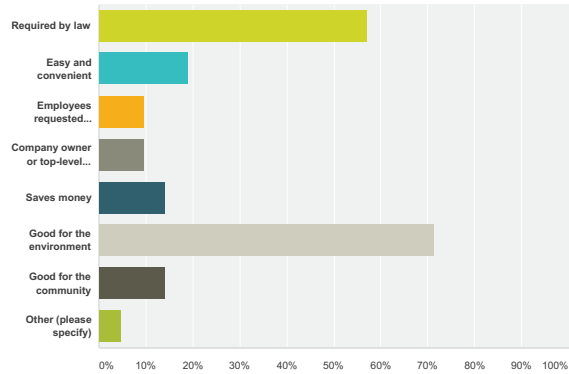
Answer Choices	Responses
Garbage	77.78% 14
Recycling	83.33% 15
Yard Trimmings	22.22% 4
Food Waste	11.11% 2
Horse manure	0.00% 0
Other (please specify)	22.22% 4
<b>Total Respondents: 18</b>	

# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

**Q19 What are the top two reasons for your business to subscribe to recycling service?  
Choose only two responses.**

Answered: 21 Skipped: 146

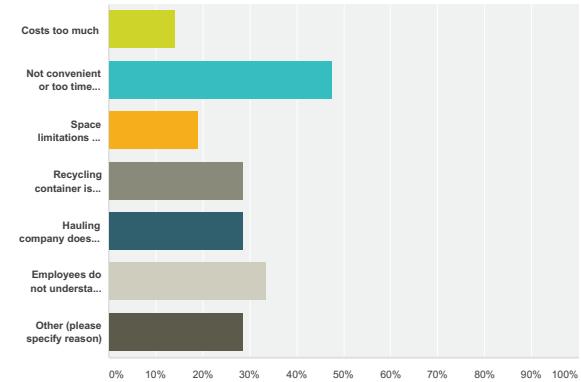


Answer Choices	Responses
Required by law	57.14% 12
Easy and convenient	19.05% 4
Employees requested recycling	9.52% 2
Company owner or top-level management requested recycling	9.52% 2
Saves money	14.29% 3
Good for the environment	71.43% 15
Good for the community	14.29% 3
Other (please specify)	4.76% 1
<b>Total Respondents: 21</b>	

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

**Q20 What are your business's two biggest obstacles to recycling more? (Choose two of your top obstacles)**

Answered: 21 Skipped: 146



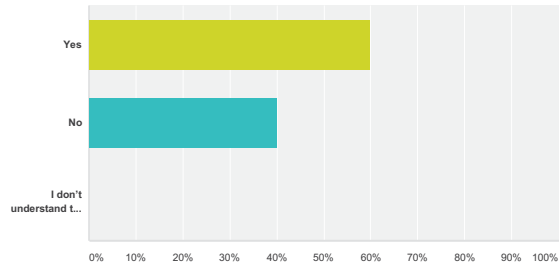
Answer Choices	Responses
Costs too much	14.29% 3
Not convenient or too time consuming	47.62% 10
Space limitations for recycling containers	19.05% 4
Recycling container is too small	28.57% 6
Hauling company does not offer service we need	28.57% 6
Employees do not understand how to use recycling program	33.33% 7
Other (please specify reason)	28.57% 6
<b>Total Respondents: 21</b>	

# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q21 Did you know you can choose a garbage and recycling hauler from a list of different hauling companies approved by the County?

Answered: 20 Skipped: 147

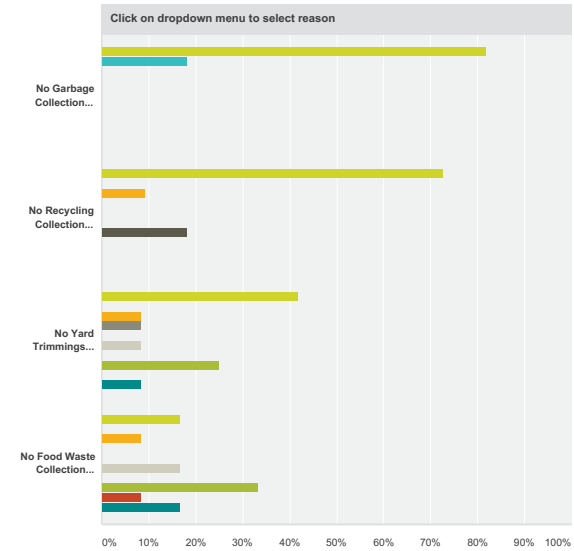


Answer Choices	Responses
Yes	60.00% 12
No	40.00% 8
I don't understand the question	0.00% 0
<b>Total</b>	<b>20</b>

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q22 Please share the most important reason why you do not have one or more of the following collection services:

Answered: 13 Skipped: 154



- Not applicable/ I have this service
- Too expensive
- Hauling company does not offer service we need
- Not happy with the service provided by hauling company
- Inconvenient or time consuming
- Not enough space for containers
- Take my recyclables to a drop-off/buy-back center
- Compost onsite
- Don't have much of this material (garbage, recyclables, yard trimmings or food waste)
- Don't know how to arrange for this type of collection service

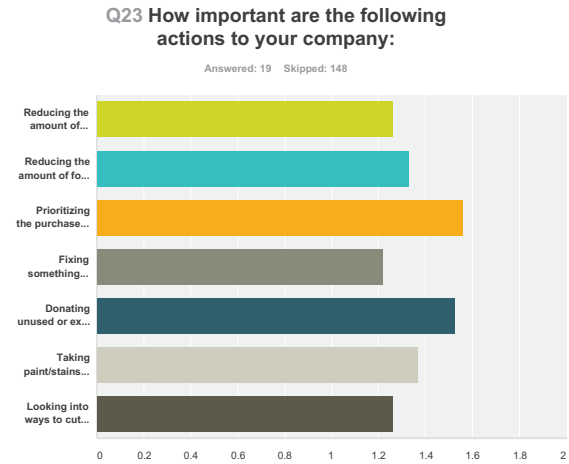
Click on dropdown menu to select reason

# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

	Not applicable/ I have this service	Too expensive	Hauling company does not offer service we need	Not happy with the service provided by hauling company	Inconvenient or time consuming	Not enough space for containers	Take my recyclables to a drop-off/buy-back center	Compost onsite	Don't have much of this material (garbage, recyclables, yard trimmings or food waste)	Don't know how to arrange for this type of collection service	Total
No Garbage Collection Service	81.82% 9	18.18% 2	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	11
No Recycling Collection Service	72.73% 8	0.00% 0	9.09% 1	0.00% 0	0.00% 0	0.00% 0	18.18% 2	0.00% 0	0.00% 0	0.00% 0	11
No Yard Trimmings Collection Service	41.67% 5	0.00% 0	8.33% 1	8.33% 1	0.00% 0	8.33% 1	0.00% 0	25.00% 3	0.00% 0	8.33% 1	12
No Food Waste Collection Service	16.67% 2	0.00% 0	8.33% 1	0.00% 0	0.00% 0	16.67% 2	0.00% 0	33.33% 4	8.33% 1	16.67% 2	12

Survey for San Diego County Residents and Businesses in Unincorporated County Areas



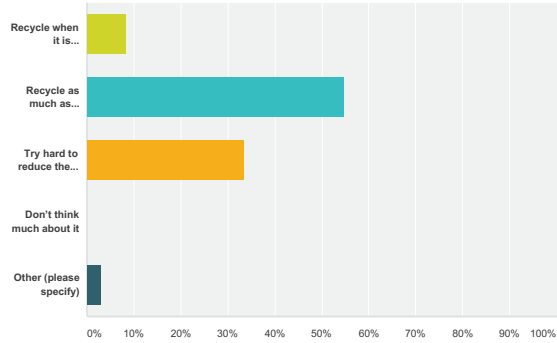
	Very Important	Somewhat Important	Not Important	Total	Weighted Average
Reducing the amount of overall waste produced	73.68% 14	26.32% 5	0.00% 0	19	1.26
Reducing the amount of food waste produced	72.22% 13	22.22% 4	5.56% 1	18	1.33
Prioritizing the purchase of recycled or reused products	55.56% 10	33.33% 6	11.11% 2	18	1.56
Fixing something rather than buying a new replacement	77.78% 14	22.22% 4	0.00% 0	18	1.22
Donating unused or extra food to a shelter, food bank, church, etc.	64.71% 11	17.65% 3	17.65% 3	17	1.53
Taking paint/stains, household cleaners, pesticides, batteries, fertilizer, propane, solvents, oil, CFLs, etc. to a hazardous waste facility	73.68% 14	15.79% 3	10.53% 2	19	1.37
Looking into ways to cut down on the junk mail received	78.95% 15	15.79% 3	5.26% 1	19	1.26

# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q24 What is your attitude toward the materials you produce, recycle, and/or dispose?

Answered: 155 Skipped: 12

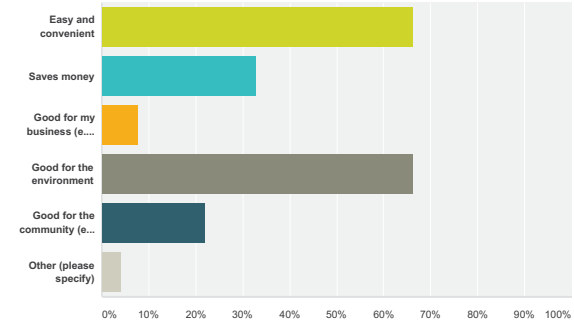


Answer Choices	Responses
Recycle when it is convenient or when money can be made from recyclables	8.39% 13
Recycle as much as possible	54.84% 85
Try hard to reduce the amount of waste produced and recycle and compost as much as possible	33.55% 52
Don't think much about it	0.00% 0
Other (please specify)	3.23% 5
<b>Total</b>	<b>155</b>

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q25 Identify the top two reasons that would motivate you to reduce waste and recycle more:

Answered: 167 Skipped: 0



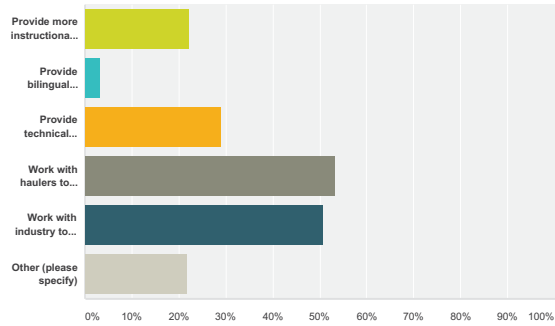
Answer Choices	Responses
Easy and convenient	66.47% 111
Saves money	32.93% 55
Good for my business (e.g. customers expect it or its good for branding and marketing)	7.78% 13
Good for the environment	66.47% 111
Good for the community (e.g. creates jobs)	22.16% 37
Other (please specify)	4.19% 7
<b>Total Respondents: 167</b>	

# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q26 In what ways can the County assist you in your efforts to reduce waste, reuse materials, and recycle more?

Answered: 152 Skipped: 15

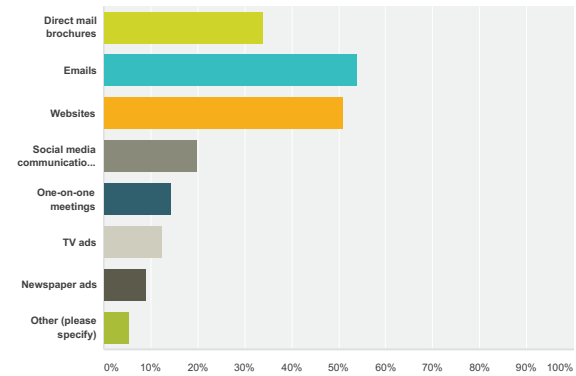


Answer Choices	Responses
Provide more instructional materials	22.37% 34
Provide bilingual instructional material (specify language in comment box below)	3.29% 5
Provide technical assistance in helping us plan and implement waste reduction and recycling strategies	28.95% 44
Work with haulers to enhance ease and convenience of recycling	53.29% 81
Work with industry to expand recycling, yard trimmings, and/or food scraps collection services	50.66% 77
Other (please specify)	21.71% 33
<b>Total Respondents: 152</b>	

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

### Q27 If the County were to provide more information on ways to reduce waste, reuse and repair materials, and recycle and compost more, which two communication methods would you prefer?

Answered: 167 Skipped: 0



Answer Choices	Responses
Direct mail brochures	34.13% 57
Emails	53.89% 90
Websites	50.90% 85
Social media communications (Facebook, Twitter, Nextdoor, etc.)	19.76% 33
One-on-one meetings	14.37% 24
TV ads	12.57% 21
Newspaper ads	8.98% 15
Other (please specify)	5.39% 9
<b>Total Respondents: 167</b>	

# Attachment D Part 1: Results from Questionnaire for Residents and Businesses San Diego County Strategic Plan to Reduce Waste

Survey for San Diego County Residents and Businesses in Unincorporated County Areas

**Q28 I would like to receive information on the County's strategic planning process for waste reduction and recycling. Please add me to your email distribution list.**

Answered: 87 Skipped: 80

Answer Choices	Responses	
Name	0.00%	0
Company	0.00%	0
Address	0.00%	0
Address 2	0.00%	0
City/Town	0.00%	0
State/Province	0.00%	0
ZIP/Postal Code	0.00%	0
Country	0.00%	0
Email Address	100.00%	87
Phone Number	0.00%	0



## Attachment D Part 2: Results from Questionnaire for County Departments San Diego County Strategic Plan to Reduce Waste

### COUNTY OF SAN DIEGO

#### WASTE REDUCTION QUESTIONNAIRE

Waste reduction includes conserving resources through waste prevention, recycling, and composting; and takes into consideration how resources flow from purchase through end of product life.

The Board of Supervisors directed the Chief Administrative Officer ([Minute Order #9](#)), to evaluate the County's efforts to reduce waste and to develop a plan that would assist the County in achieving a goal of 75% diversion by 2020 and Zero Waste by 2040.

The County of San Diego reduces waste from our internal operations through numerous programs and policies. We need your help with preparing a summary of current waste diversion efforts within County operations by completing this survey for your department.

Thank you for your participation!

**Responses are due by Friday 4/22/16.**

Select **Not Applicable** only if a policy or practice does not apply to your department.

1. Does your department have any facilities or operations in the unincorporated areas of the County?

Yes       No

2a. Which materials does your department recycle, dispose as trash/landfill, does not produce (N/A), or is uncertain how it is managed

	Recycled	Trash/Landfilled	Not Applicable	Don't Know
Newspaper, office paper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cardboard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plastic bottles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aluminum cans and/or scrap Aluminum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metal cans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ferrous scrap metal (contain iron, are	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

magnetic, etc.)				
Non-ferrous scrap metal (brass, copper, tin)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yard trimmings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Food scraps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wood waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sand and/or dirt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asphalt and/or concrete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mixed construction and demolition debris	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manure and/or bedding material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Batteries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appliances (refrigerators, washing machine, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mattresses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electronics (computers, phones, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Toner cartridges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2b. If your department produces other materials in significant quantities, please list each material and note if the materials are recycled, disposed as trash/landfill, or don't know (uncertain how they are managed).

ADD MORE

3a. Does your Department do any of the following

	Yes	No
Use a contractor (rather than county staff) to collect recyclables and/or trash onsite?	<input type="checkbox"/>	<input type="checkbox"/>
Track the costs of contractors, vehicles, and/or staff time to recycle or dispose of materials?	<input type="checkbox"/>	<input type="checkbox"/>
Track the quantity of the materials recycled or disposed?	<input type="checkbox"/>	<input type="checkbox"/>

Please share any additional details regarding contractors, collection costs or quantity of waste/recycling

## Attachment D Part 2: Results from Questionnaire for County Departments San Diego County Strategic Plan to Reduce Waste

3b. How does your department arrange for hauling of materials to recycling, transfer, and landfill sites?

	We use the County's BPA waste and recycling contracts	We contract with other hauler(s)	We use County vehicles to haul materials	Not Applicable	Don't know
Trash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recyclables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Batteries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electronics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confidential document destruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yard Trimmings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please share any additional details regarding hauling of materials

#### 4a. POLICIES & PRACTICES TO REDUCE WASTE

	Yes	No	Not Applicable
Forms, bills and payments are completed and paid electronically to reduce paper use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Copiers and printers are defaulted to make two-sided documents.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Onsite cafeterias provide reusable plates, utensils and to-go containers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hand dryers are available in restrooms.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4b. Please share any additional details regarding your department's waste reduction practices.

#### 5a. POLICIES & PRACTICES TO PROMOTE REUSE

		Not
--	--	-----

Yes No Applicable

Breakroom is equipped with reusables rather than disposables (plates, cups, utensils etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rechargeable batteries are used in equipment rather than disposables.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A box for Good On One Side (GOOS) paper is available near printers and copiers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surplus food is offered to staff or donated to food banks/ pantries.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5b. Please share any additional details regarding your department's practices to promote reuse.

#### 6a. POLICIES & PRACTICES TO PROMOTE RECYCLING

	All	Sometimes	Never
Trash bins are paired with recycling bins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recycling bins are clearly marked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used batteries, electronics and universal waste are collected separately and managed for proper disposal using a county contract	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used office furniture, equipment and materials are sent to DGS Property Disposal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Food scraps and landscape waste are collected for composting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6b. Please share any additional details regarding your department's practices to promote recycling.

#### 7a. PURCHASING POLICY

	Typically	Sometimes	Never
Purchase products with recycled content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buy supplies in bulk or economy size packaging, and buy only what is needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prioritize purchase of reusable and refillable items and equipment (i.e. water filtration units, pallets, pens, pencils, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Select suppliers who provide minimal packaging options or inform	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Attachment D Part 2: Results from Questionnaire for County Departments San Diego County Strategic Plan to Reduce Waste

existing suppliers to reduce packaging.

7b. Please share any additional details regarding your department's waste diversion purchasing practices.

**8a. TRAINING AND EDUCATION FOR EMPLOYEES AND PUBLIC**

	Yes	No	Not Applicable
Employees are provided training on department's waste reduction policies & practices annually.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Department's sustainability/green team is always looking for ways to reduce department's waste footprint.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Department offers brochures and public education materials to increase recycling and waste diversion in the community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8b. Please share any additional details regarding your department's waste diversion education and training practices.

9. Which of the following County policies does your Department routinely use?

	Always	Sometimes	Never
AD5 - Recycled Paper Products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A94 - Disposal of County Surplus Property	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B67 - Recycled Products Procurement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G15 - Design for Facilities & Property	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction & Demolition Ordinance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Solid Waste Ordinance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. During the High Diversion (Zero Waste) Plan creation, we are considering outreach to various stakeholders. Please check sectors with which your department routinely interacts. We will follow-up with departments where there is the potential for synergy with our outreach program.

Yes

Single Family Residential Dwellers	<input type="checkbox"/>
Multi Family Residential Dwellers	<input type="checkbox"/>
Food Based Businesses	<input type="checkbox"/>
Farms	<input type="checkbox"/>
Schools	<input type="checkbox"/>
Commercial and Industrial Operations	<input type="checkbox"/>

11. Please share any barriers that prevent your department from doing more to reduce and recycle. Ideas for new programs or policies to increase waste reduction and recycling are also welcome.

12. Please provide a Point of Contact for your Department

Department:

Name:    
First Name Last Name

E-mail:  ex: myname@example.com

Phone Number:  -   
Area Code Phone Number

Submit

**Attachment D Part 2: Results from Questionnaire for County Departments  
San Diego County Strategic Plan to Reduce Waste**

Number of Departments		
<b>Waste Reduction Practices</b>		
Forms, bills and payments are completed and paid electronically	26	
Copiers and printers are defaulted to make two-sided documents	20	
Onsite cafeterias provide reusable plates, utensils and to-go containers	13	
Hand dryers are available in restrooms	12	
<b>Waste Reduction Practices</b>		
Breakroom is equipped with reusables rather than disposables	9	
Rechargeable batteries are used in equipment rather than disposable	6	
A box for Good-On-One-Side (GOOS) paper is available near printer	5	
Surplus food is offered to staff or donated to food banks/pantries	18	
<b>Waste Reduction Practices</b>		
Employees are provided training on department's waste reduction policies and practices annually	8	
Department's sustainability/green team is always looking for ways to reduce department's waste footprint.	9	
Department offers brochures and public education materials to increase recycling and waste diversion in the community	7	
<b>Recycling Practices</b>		
	<b>Always</b>	<b>Never</b>
Trash bins are paired with recycling bins	29	1
Recycling bins are clearly marked	36	0
Used batteries, electronics and universal waste are collected separately and managed for proper disposal using County BPA contractors	34	0
Used office furniture, equipment, and materials are sent to County surplus property disposal contractor	37	1
Food scraps and landscape waste are collected for composting	1	29

## **Attachment E: Summary of Stakeholder Engagement Process and Input Received San Diego County Strategic Plan to Reduce Waste**

### **Summary of Input Received from Stakeholders**

The following is a summary of comments received from the public and stakeholders on the Draft Strategic Plan to Reduce Waste (Plan). Comments are grouped by the primary subject area as practical to reduce redundancy; however, some comments cover multiple subject areas. The Plan was released on November 1, 2016 and a public meeting was held on November 7, 2016. Comments on the Plan were requested by December 5, 2016. One reviewer provided comments, but also mentioned that it would have been helpful to have additional time for review.

Multiple commenters offered general support for the draft Plan as well as for specific programs and policies as detailed below. It was recommended that the County incorporate the Plan measures in its Climate Action Plan. Reviewers also recommended that the County take a leadership role in waste reduction purchasing policies and that a goal of Zero Waste by 2040 be stated in the Plan. Others recommended that work plans and written policies be included in the final Plan.

The theme of the cities and County of San Diego sharing a common mission of waste reduction was emphasized and that it would be best accomplished through collaboration and unity among the various stakeholders. This would include the importance of using a common color scheme throughout San Diego for recycling and trash containers, particularly using blue as the color for all recycling bins, carts and dumpsters.

Increasing recycling at public facilities was recommended, particularly through increasing outreach at schools, ensuring adequate recycle bins on campus and for afterschool sports events, training custodians to recycle properly and ensuring separation and recycling of green waste. Others focused on public space recycling as a key public education component to support behavior change. Recycling away from home increases recycling at home and work, thus recycling bins at public spaces, parks, recreation centers, transit centers, and libraries should be fully implemented.

Increasing the amount of education and awareness-raising was suggested as well as the benefit of collaborating with water agencies and energy companies in this process. While one commenter felt that educational programs may be expensive and not effective, others thought that sending out specific information to homeowners on appropriate materials to put in the recycling/ trash and reporting recycling participation by neighborhoods and schools should be considered. Studies show that participation increases when metrics are recorded and reported to participants. The development of a recognition program to encourage diversion at local businesses, multi-family complexes, non-profits, neighborhoods, communities, education providers, policy groups, and County departments for their zero waste efforts was also recommended.

Food waste prevention and food donation was a topic of interest. Some noted that since 1 in 8 San Diegans are food insecure, advancing food recovery in our region should be prioritized. On this theme, it was recommended that the programs "Support Organics Processing Facility Development" and "Commercial and single family food scrap collection programs" be prioritized after implementing food waste prevention, reduction and donation efforts, which would reduce the amount of recoverable food to be processed at future large scale organic processing facilities. Accompanying this suggestion was that food waste reduction be promoted through the Natural Resources Defense Council's "Save the Food" campaign in coordination with the Food System Alliance in 2017-18 instead of the proposed 2018-2020 period. It was suggested that the County's Department of Environmental Health systematically promote the County's food donation guide during site visits with commercial entities. Another

## **Attachment E: Summary of Stakeholder Engagement Process and Input Received San Diego County Strategic Plan to Reduce Waste**

commenter suggested that businesses should be encouraged to not serve meat and residents to not consume meat one day a week to decrease food consumption and agricultural waste.

Others suggested specific methods to reduce organic waste, including the following: sharing more information on organics collection services; providing free or low cost composting bins; providing technical assistance, grants and education to help farmers and community gardens expand and improve composting; and, encouraging farms to use compost in soils to better retain water and nutrients for crops and sequester carbon dioxide from the atmosphere.

Expansion in organics processing infrastructure through zoning changes was recommended, including prioritizing the zoning enhancement and facilitating local small and medium scale composting systems. It was suggested that farmers and community gardens be enabled to accept organics generated off-site. Others suggested that the County take a leadership role in regional planning for organics processing infrastructure in collaboration with SANDAG as well as in promoting zoning revisions to assist other jurisdictions with review of their codes. To ensure expanded organics infrastructure, it was suggested that the County collaborate with other departments to reduce the amount of time and burden to establish new organics facilities and to participate in meetings and provide input to the Air Resources Board and Regional Water Quality Control Board to ensure that any proposed regulations are appropriate. Another recommended an approach to ban organics from the landfill to spur development of organic processing facilities.

Specific recommendations for organics facilities included: partnering to develop a hub and spoke drop-off facility network for specific areas with a high concentration of organics waste within a 5 or 10 mile radius; encouraging the use of aerated static pile systems to compost food scraps at landfills; and, providing grant funding (\$500K to \$1M) and/or sales tax exemptions, etc. for commercial food waste generators that use on-site technologies to process or divert their unavoidable food waste. As most facilities' grinders can't process fibrous palm fronds, others suggested that support is needed to expand processing capacity with the acquisition of a specialized grinder, as other cities and facilities have done. Support for additional large scale organics processing facility development, such as dehydration technology, at existing composting and mulch sites due to its much smaller footprint and scalability as well as at on-site community, commercial and farm composting pilot projects was suggested. This technology was suggested for use at the County's owned or leased facilities prior to bringing on any additional composting processing capacity.

The franchise hauling system of collection of waste and recyclable materials was an area of interest. Franchise hauler agreements were recommended to exclude edible food collection, animal feed, community-level composting, and similar collection routes to allow for highest and best use of these materials. Some suggested that the County hold waste haulers accountable for contract diversion requirements and implement fines for non-compliance, while others mentioned that the County's diversion goals would be best served by creating an exclusive franchise system. They recommended that the County immediately give notice to the haulers that it intends to implement an exclusive franchise agreement predicated on a study to be undertaken. It was suggested that the current system be replaced through competitive bidding with an exclusive license in each geographic area with standardized waste and recycling services and performance measurement requirements.

Some suggested alternative types of collection and frequencies for residents and businesses, including the consideration of bulky item collection requirements for non-densely-populated areas and weekly recycling and green waste collection (including food scraps). Others suggested that the County

## **Attachment E: Summary of Stakeholder Engagement Process and Input Received San Diego County Strategic Plan to Reduce Waste**

investigate every-other-week trash collection and monitor and evaluate pilot programs in other jurisdictions where yard trimming collection combined with food scraps are offered weekly and trash hauling is offered bi-weekly. If successful, the County should investigate the feasibility of conducting a similar pilot.

For backcountry communities such as Boulevard, Jacumba, Campo, etc., a suggestion was made that recycling centers be added as the Plan doesn't offer sufficient waste reduction solutions for these communities, which have had very limited recycling opportunities since the County-operated waste and recycling rural bin sites were removed.

More frequent Household Hazardous Waste (HHW) sites, collection days and greater information and programs were recommended, including increased promotion of the least expensive options for properly disposing of working appliances and household batteries. One commenter suggested that a free market, less bureaucratic system be offered to maximize recycling of large quantity agricultural oil without federal permitting and reporting. Another reviewer also requested more detailed planning and information on the location, costs and cost recovery of a North County HHW facility.

Some suggested that more attention be paid to materials self-hauled to landfills and transfer stations. On this topic, others suggested that mandatory source-separation of recyclables and compostables be provided at the landfill and that landfill operators should participate in culture change marketing to increase diversion. It was suggested that Resource Recovery Parks (multi-material drop off options, such as a reuse warehouse, center for hard to recycle materials, wood recycling facility, etc.) should be required at transfer stations and at the entrances to landfills, such as Miramar, Sycamore, and Otay landfills. This would service non-franchised haulers delivering waste in small vehicles, including homeowners, contractors, and businesses; and, those only dropping off recyclables could do so at no cost. Others suggested that materials like organics and reusables be banned from disposal, which would stimulate new infrastructure and set a new standard of cost based on actual operations and maintenance costs.

On the topic of construction and demolition (C&D) materials, suggestions included not requiring a higher recycling rate than what is available at local mixed C&D recycling facilities. Another commenter mentioned that mixed C&D facilities should be required to accept all C&D loads, as some will not accept materials for fear of lowering their overall recycling rate. Others suggested allowing C&D processing at transfer stations and landfills to expand options for these self-hauled materials.

Enforcement was another area of interest, including the importance of recognizing outreach education and the efforts of code officers as separate pieces of the solution in aiming towards Zero Waste. In an educational environment, people are generally appreciative of the information, and are most likely to change their behavior in positive ways. Some recommended that the County make it somewhat mandatory to recycle, while another shared that the Plan relies too heavily on penalizing people. Another thought that the County should begin enforcing AB 1826 requirements with food service operations and implement fines as necessary.

Comments were received regarding provision of various types of financial incentives to expand recycling efforts. Some comments addressed incentives more generally, suggesting financial incentives for recycling and for businesses with green practices. Other comments offered more specific suggestions, such as: providing financial incentives to encourage estate/garage sales clean-up services to recycle low value items; providing tax and other incentives for businesses that process recycle material to help them

## **Attachment E: Summary of Stakeholder Engagement Process and Input Received San Diego County Strategic Plan to Reduce Waste**

develop new facilities; and, providing immediate financing options to fund pilot programs for organics processing technologies and vet them. Another approach suggested implementing a fee-based source separation policy as an incentive for recycling and composting at disposal facilities and to include a residential rate structure incentivizing recycling and wasting less.

Those reviewing the funding aspects of the Plan requested data on how much tonnage the County anticipated would be produced and assessed franchise fees and suggested that solutions be presented prior putting a new franchise fee in place. One reviewer mentioned that increased costs would be borne by the taxpayers or those paying for trash services; those who can't afford the increased costs would end up illegally dumping their trash with these volumes increasing significantly. Another stated that their hauler already increases their fee 10-15% annually and suggested that the County target the programs and funding on those who are not recycling instead of the entire community. Others recommended that an increased franchise fee, potential sales tax exemptions and grant funding be used to fund infrastructure projects to accelerate organics processing to meet diversion goals. Another suggested that the Plan's recommendations to solve a Countywide problem (composting) should be funded by self-haulers and cities through a special fee on materials disposed at the landfill to help plan for new composting facilities.



## Case Study:

# COSTANZO FAMILY FARM



### RESIDENTIAL FARM & ORCHARD (NON-COMMERCIAL)

Located in the Elfin Forest, Tim Costanzo's 3.5 acre family farm is home to an assortment of animals and over 160 varieties of fruit trees.

Having grown up on an orchard in Encinitas, stewarding the land has been one of Costanzo's core values since childhood. Composting is an essential part of the organic growing methods practiced on the farm since it began in the mid 1990s.

The Costanzo Family Farm proves that mid-scale composting can be easily accomplished in rural and agricultural settings. It also showcases numerous benefits, including improved soil health, water retention, and higher-quality crops.



## Practices Implemented

- ➔ Windrow-style composting of farm-generated waste
- ➔ Water-efficient irrigation due to increased water retention of soil
- ➔ Runoff prevention through placement of berms around compost site

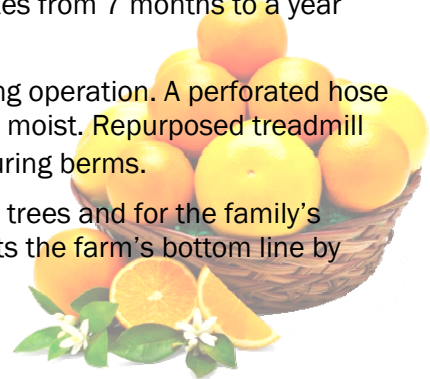
Owner Tim Costanzo and his landscaper/gardener create compost on-site using a mixture of "greens" and "browns" which are all generated onsite. The resultant compost is used as a soil amendment for the farm's fruit trees, increasing flavor and

yields while helping the soil retain water and nutrients.

The composting operation at Costanzo Family Farm consists of two windrows about 60 feet long, 14 feet wide and 6 feet tall. One windrow is designated as the "active" pile while the other is left to "cook" and finish its decomposition cycle. Feedstock is bedding and manure from the farm's animals, landscape trimmings, paper, cardboard, inedible fruit, and untreated scrap wood. Wood chips from tree trimming are added to maintain optimal conditions. The composting process takes from 7 months to a year depending on weather and feedstock variations.

Costanzo has developed innovative methods to optimize his composting operation. A perforated hose runs along the top of the piles and is used as needed to keep the piles moist. Repurposed treadmill belts serve to redirect water runoff. The site also features runoff capturing berms.

Enough compost is made on the farm to amend the soil for all the fruit trees and for the family's vegetable garden. The Costanzo Farm's composting operation supports the farm's bottom line by reducing disposal costs and the cost to purchase fertilizers.



**Attachment F: Case Studies of Businesses with High Diversion Programs  
San Diego County Strategic Plan to Reduce Waste**

<b>Challenge</b>	<b>Practice Implemented</b>
Management of farm-generated organic materials	Mid-scale windrow composting to manage materials generated on site
Time and labor intensiveness of composting (e.g. aerating and moving piles of organic material)	Employment of small tractor and assistance from gardener/landscaper to perform heavy labor
Maintenance of optimum moisture content of windrows in lieu of state-wide mandates to restrict water use	Installation of sophisticated and highly-efficient automated irrigation equipment to reduce overall water consumption. For every 1 percent of compost added, soil can hold 16,500 gallons of plant-available water per acre of soil down to 1 foot deep.

**The Bottom Line**

- ➔ Savings in hauling costs from self-managing farm waste
- ➔ Savings from forgoing commercial fertilizers for crop production

“Composting is simple — just keep your pile moist and turn it regularly. With these basic rules, your finished compost will allow the soil to produce the best food. My vegetable garden is on pure compost thirty inches deep and it gives me unbelievable yields. Compost is truly black gold. Instead of continually extracting from the soil, composting returns nutrients to the soil, resulting in robust plants and healthier, tastier food.”

**Tim Costanzo**  
Owner, Costanzo Family Farm



The farm was featured in an educational video produced by the County of San Diego in partnership with television cooking personality, “Sam the Cooking Guy.”

Watch the video at [www.sandiegocounty.gov/dpw/recycling/composting.html](http://www.sandiegocounty.gov/dpw/recycling/composting.html)

The County of San Diego conducts free on-site visits to help organics generators (agricultural, commercial, and residential) comply with the State’s mandatory recycling and organics recycling requirements. Contact county staff or your solid waste hauler to request assistance. Email: [Recycle@sdcounty.ca.gov](mailto:Recycle@sdcounty.ca.gov) or visit: [www.R1earth.org](http://www.R1earth.org)



The County also maintains a recycling database available online and toll-free hotline: Visit [www.WasteFreeSD.org](http://www.WasteFreeSD.org) or call 1-877-R-1-EARTH (1-877-713-2784)

## Case Study: CUYAMACA COLLEGE



CUYAMACA  
COLLEGE

### EDUCATIONAL INSTITUTION

5,200 Full Time Equivalent Students

149 Full Time Equivalent Employees

Situated on 165 rolling acres in scenic Rancho San Diego, Cuyamaca College has an employee cafeteria and a child development center which serves breakfast, lunch and snacks to 75 students every day. Prior to August 2013, the college disposed food waste in the trash.

Recognizing that participating in the County of San Diego's recycling assistance program for businesses would help them fulfill the objectives of their Sustainability Strategic Plan adopted in 2013, they began the process of looking at their waste generation, options to reduce waste and methods to sustainably manage the remaining materials.

The college has now incorporated composting into their campus and added this component to the Child Development Center Farm to Preschool Curriculum.



## Recycling Practices Prior to Intervention

- ➔ Food disposed as waste.
- ➔ Desire to fulfill food waste diversion goals outlined in Sustainability Strategic Plan

Prior to August 2013, Cuyamaca College was disposing food waste in a small, infrequently serviced trash compactor and had not yet started the composting program that was outlined in their Sustainability Strategic Plan.

## Recommendations Implemented

- ➔ Installed a 4 bin compost system and began a composting program
- ➔ Revision of preschool menu options to reduce food waste

Staff at two food service sites on campus, the Coyote Café and the Child Development Center (CDC), were trained to source separate and collect pre-consumer kitchen scraps for composting. CDC also began to compost post-consumer plate scraps as well as enlisted a new food vendor to offer smaller portions of healthier, fresher and more diverse food choices that appealed to the children, further reducing plate waste. Daily composting tasks are facilitated by cooperative efforts between a student intern, CDC staff, and garden volunteers.



**Attachment F: Case Studies of Businesses with High Diversion Programs  
San Diego County Strategic Plan to Reduce Waste**

<b>Challenge</b>	<b>Practice Implemented</b>
Insufficient infrastructure to manage college's food waste sustainably	Development of a practical food waste collection and processing protocol for pre consumer and post consumer food waste. Revised preschool menu options to reduce plate waste
Continuous and ongoing participation, despite changes in leadership	Top-down support of College management through the sustainability committee and Sustainability Strategic Plan  Staff training coupled with routine follow-up and troubleshooting assistance through the County's technical assistance program
Inconsistency in tracking food waste diversion due to staff time constraints	Continued training and feedback from County consultants and CDC Coordinator  Simplification of the monitoring and tracking forms

**The Bottom Line**

- ➔ 14 percent reduction in food waste
- ➔ Overall diversion of 5,200 pounds annually of pre and post consumer food waste
- ➔ Improved and better portioned menu options for preschool program
- ➔ Enriched preschool program through incorporation of composting tasks



“Children are learning about composting, and at 3, 4 and 5 years old, already know what they’re doing is helping the garden grow and producing the food they eat. [...] At this age, the benefits of composting are ingrained in them, and the practice becomes integral to how they view the entire food system.”

Denise Blaha  
Coordinator, Child Development Center

The County of San Diego conducts free on-site visits to help businesses comply with the State’s mandatory commercial recycling and organics recycling requirements. Contact county staff or your solid waste hauler to request assistance.  
Email: [Recycle@sdcounty.ca.gov](mailto:Recycle@sdcounty.ca.gov) or visit: [www.R1earth.org](http://www.R1earth.org)



The County also maintains a recycling database available online and toll-free hotline: Visit [www.WasteFreeSD.org](http://www.WasteFreeSD.org) or call 1-877-R-1-EARTH (1-877-713-2784)

## Case Study: **JIMBO'S... NATURALLY!**



# JIMBO'S

*...Naturally!*

### GROCER

4S Ranch Location

40 Staff Members

6000+ Weekly Customers

Jimbo's...Naturally! opened its first store in North Park in 1984 and has since grown to five locations throughout San Diego, including 4S Ranch, a community in unincorporated San Diego County.

Social and environmental responsibility are part of the Jimbo's values. These values, combined with a desire from management to manage waste as resourcefully as possible, led to a waste diversion and composting program at Jimbo's 4S Ranch.



## Practices Implemented

- ➔ Food scrap composting (off-site)
- ➔ Food donation
- ➔ Improved recycling
- ➔ Increased employee education and training

Prior to 2014, Jimbo's 4S Ranch store focused its waste reduction efforts on recycling of traditional recyclables such as cardboard and plastic. The store was also donating easily-recoverable edible food to a local food bank.

In late 2014, under direction from management, Jimbo's enhanced its waste reduction efforts through participation in a food scrap composting program. They requested a dumpster from their hauling company and received training from the compost program specialists on proper food waste separation and collection. This process increased interest within the managerial team to identify additional opportunities for waste reduction.

The store increased the number of recycling bins within each department. Trash bins were paired with recycling bins encouraging employee participation. The store also began separating and baling an estimated 500-700 pounds of film plastic per month.

Due to the new food waste separation program, Jimbo's was more easily able to identify additional donatable food, which is now frozen and delivered to a local food bank.



**Attachment F: Case Studies of Businesses with High Diversion Programs  
San Diego County Strategic Plan to Reduce Waste**

<b>Challenge</b>	<b>Practice Implemented</b>
High hauling costs associated with large amounts of food waste in trash	Participation in a composting program to increase diversion
Implementation of composting and recycling protocols store-wide	Clear and visible signage coupled with staff training from diversion experts  Increased number of recycling bins throughout the store to encourage participation
Occasional employee error regarding source separation practices for composting	Managerial checks of bins to ensure no contamination, coupled with reminders to staff when contamination does occur
Identification and separation of donatable food from non-donatable food prior to disposal	Implementation of streamlined organic waste separation protocols that facilitate the food donation process

## The Bottom Line

- ➔ 35,328 pounds of organic waste composted annually
- ➔ 7,200 pounds of shrink wrap and packaging materials recycled annually
- ➔ 2,000 pounds of food donated annually
- ➔ Reduction of trash-related hauling expenses

“Through composting we’ve become more mindful of our disposal practices overall. Not only have we optimized our trash and recycling disposal practices, but we have also increased the amount of edible food we donate. We’re also seeing significant savings in hauling costs!”

Marc Magaña,  
Store Manager, Jimbo’s 4S Ranch



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The County also maintains a recycling database available online and toll-free hotline: Visit [www.WasteFreeSD.org](http://www.WasteFreeSD.org) or call 1-877-R-1-EARTH (1-877-713-2784)

## Case Study: MT. MIGUEL COVENANT VILLAGE



**MULTI-FAMILY RESIDENTIAL**  
**250 Independent Living Units**  
**88 Bed Skilled Nursing Facility**  
**48 Bed Assisted Living Facility**

Located at the edge of Sweetwater reservoir in Spring Valley with a scenic view of the mountains, Mt. Miguel Covenant Village offers seniors independent living and on-site continuing care.

Mt. Miguel's staff and residents needed assistance in complying with the upcoming recycling mandates under AB 341, and sought out partnerships with their waste and recycling hauler and the County of San Diego.

The residents formed a Recycling Committee to guide the expansion of the recycling program to include residential living spaces, common areas and staff work spaces.

The goal of the partnership with the County was to help navigate concerns about expanding recycling efforts. Mt. Miguel also wanted to develop an enduring recycling program supported by all residents and staff.



### Recycling Practices Prior to Intervention

- ➔ Insufficient recycling in independent living quarters for residents
- ➔ No office recycling with the exception of cardboard

Although a program was already in place, Mt. Miguel's staff and residents felt that recycling efforts could be enhanced to better comply with upcoming diversion mandates.

### Recommendations Implemented

- ➔ Improved access to recycling in residential, common and staff areas through additional conveniently-located bins
- ➔ Recycling education for residents and staff

The County of San Diego's recycling assistance program provided Mt. Miguel the opportunity to build upon its existing recycling program. A variety of recycling containers were provided by the county for use in office, kitchen and common areas. These changes were accompanied by education and awareness-raising efforts such as town hall style "recycling fairs" as well as resident and staff trainings.



In addition to regularly updating signage pertaining to recycling, Mt. Miguel's resident-run Recycling Committee provides new residents a welcome package that includes a recycling tote bag as well as information on the recycling program. The committee has begun looking at other ways to increase their sustainability, including recommending a phase-out of non recyclable to-go containers in the dining halls.

**Attachment F: Case Studies of Businesses with High Diversion Programs  
San Diego County Strategic Plan to Reduce Waste**

Challenge	Practice Implemented
Inconsistent recycling behavior of residents in independent living quarters	Collaboration with resident Recycling Committee on education and awareness efforts, including “recycling fairs” and distribution of recycling tote bags
Limited or no recycling in kitchen and office areas (with the exception of cardboard) due to competing staff duties and the perception that recycling is time consuming	Strategic placement of additional recycling containers coupled with regular check-ins and training from County consultants
Increase in the use and expense of plastic liners from additional recycling bins	Re-use of liners by custodial staff

**The Bottom Line**

- ➔ Increased recycling by 10 percent in the first year
- ➔ Current recycling rate is 50 percent



“We needed guidance to ensure our recycling program was in compliance with the state’s recycling mandates. Our partnership with the County of San Diego allowed us to strengthen our existing recycling efforts and created greater awareness to reduce waste. Our culinary staff and resident-led Recycling Committee worked together to conserve and minimize waste. We now offer alternative recyclable take out food containers through our dining program and continue investigating into ways to expand our waste reduction efforts.”

Richard Miller  
Executive Director, Mount Miguel Covenant Village

The County of San Diego conducts free on-site visits to help multifamily complexes comply with the State’s mandatory recycling and organics recycling requirements. Contact county staff or your solid waste hauler to request assistance. Email: [Recycle@sdcounty.ca.gov](mailto:Recycle@sdcounty.ca.gov) or visit: [www.R1earth.org](http://www.R1earth.org)



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## Case Study: The VILLAGE at RANCHO SAN DIEGO



### THE VILLAGE AT RANCHO SAN DIEGO

#### MULTI-FAMILY RESIDENTIAL

90 Units

Serving 125 Seniors

5,200 Full Time Equivalent Students

As a retirement community for active seniors, The Village at Rancho San Diego is situated to allow residents to embrace the walkability of their community and neighborhood.

The Village at Rancho San Diego was eager to start an effective recycling program that would allow them to streamline their waste management process and provide residents with an easier way to collect and dispose of recyclable materials.

Strategically planning the placement of recycling dumpsters throughout the complex increased participation by residents who found the new bin placements and signage to be easier to navigate.



### Recycling Practices Prior to Intervention

- ➔ Low participation in recycling program due to lack of convenience and awareness
- ➔ High contamination rates in interior recycling bins

The Village at Rancho San Diego worked with their hauler to add recycling to their complex but found that the recycling program wasn't working. Interior recycling bins were heavily contaminated, and many recyclables were ending up in trash dumpsters.

### Recommendations Implemented

- ➔ Replacement of three trash dumpsters with two split dumpsters and one recycling-only dumpster
- ➔ Replacement of mixed recycling bins with paper-only bins near mail room
- ➔ Providing recycling tote bags to residents

The County of San Diego recommended distributing recycling dumpsters among different enclosures throughout the property to increase convenience and facilitate participation for residents with reduced mobility.

A community-wide presentation introduced the improved recycling program to residents who see it as an opportunity to engage in a community based effort. Management now includes information about the recycling program in their new resident welcome packet, including a recycling tote bag, location of the dumpsters and information on what is recyclable.



**Attachment F: Case Studies of Businesses with High Diversion Programs  
San Diego County Strategic Plan to Reduce Waste**

<b>Challenge</b>	<b>Practice Implemented</b>
High contamination rates in interior recycling bins	Distribution of recycling tote bags to each residence, with each bag clearly marked with what is recyclable to encourage proper sorting of materials  Recycling presentation from County consultants
Recyclables in trash dumpsters	Replacement of trash-only dumpsters with split recycling & trash dumpsters to increase number of recycling locations and encourage proper placement of materials
Accumulation of loose-leaf papers and flyers from direct mailings in the resident mail area	Replacement of mixed recycling bins with paper only bins in mail room
High rates of packaging and moving materials (e.g. cardboard boxes, etc.) in trash dumpsters during resident move-in and move-out	Replacement of trash dumpsters with split dumpsters  Help from maintenance staff in breaking down and transporting recyclable materials to proper receptacles

## The Bottom Line

- ➔ 86,736 pounds of recyclable material is diverted from landfills annually
- ➔ 62 percent reduction of trash by volume
- ➔ Reduction of maintenance workload (e.g. sorting trash from recycling and cleaning mail room)
- ➔ Improvements in clarity and ease of recycling for residents
- ➔ Increase in resident participation and satisfaction



“Before receiving help from the County, our recycling was inaccessible for many residents, and there was not a clear process in place. Now, with the addition of the large recycling containers as well as the multi-family collection bags provided by the County, it is very simple for our residents to recycle.”

Barbara Brooke  
Resident Manager, Village at Rancho San Diego

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## Attachment G: Demographic Information San Diego County Strategic Plan to Reduce Waste

### UNINCORPORATED AREAS

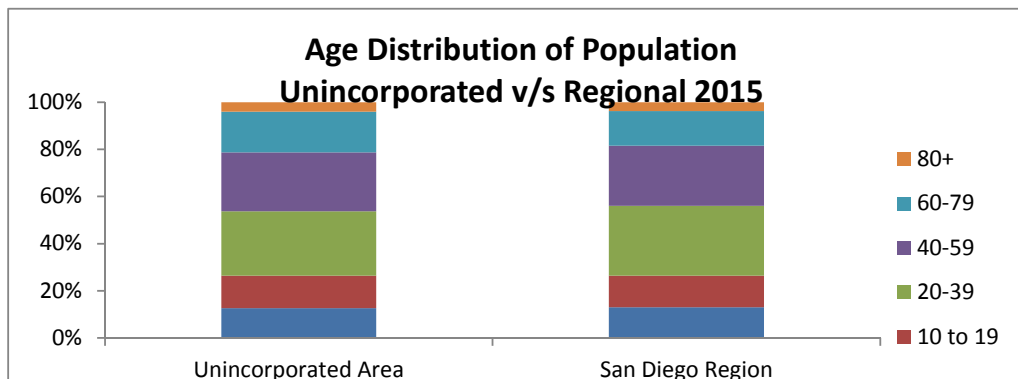
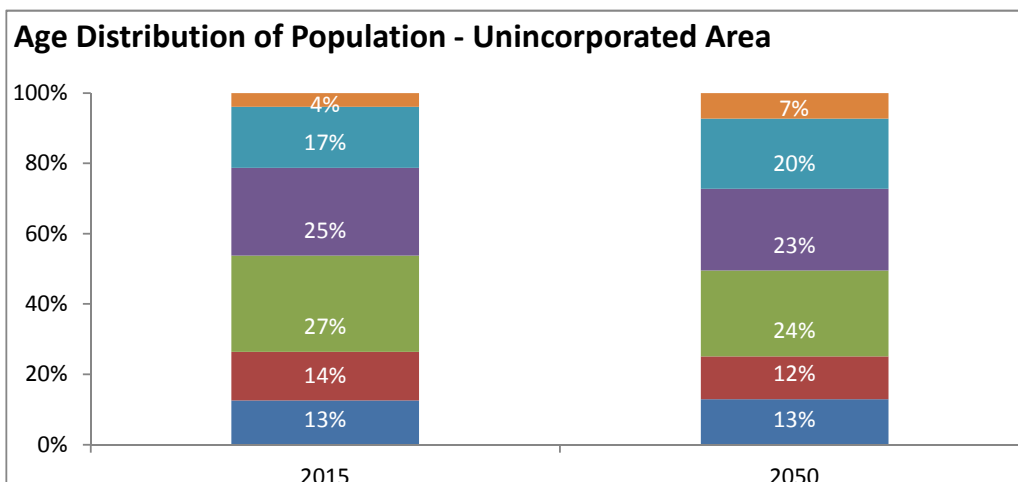
		Total						
		Population	Under 10	10 to 19	20-39	40-59	60-79	80+
2015	(1)	504,330	63,494	69,541	138,278	125,573	87,377	20,067
2020	(2)	543,426	73,191	68,371	146,763	128,307	107,678	19,116
2040	(2)	627,055	77,622	78,001	153,889	151,930	122,005	43,608
2050	(2)	647,233	83,836	78,891	157,880	150,336	128,871	47,419

### SAN DIEGO REGIONAL

		Total						
		Population	Under 10	10 to 19	20-39	40-59	60-79	80+
2015	(1)	3,227,496	419,803	432,551	957,066	823,078	474,103	120,895
2050	(2)	4,068,759	515,927	480,150	1,097,594	957,373	727,157	290,558

Source SANDAG <http://datasurfer.sandag.org>

- (1) Estimate 2015, San Diego County Unincorporated Areas
- (2) Forecast 2050, Series 13, San Diego County Unincorporated Areas
- (3) Forecast 2050 Series 13 San Diego Regional Growth Forecast



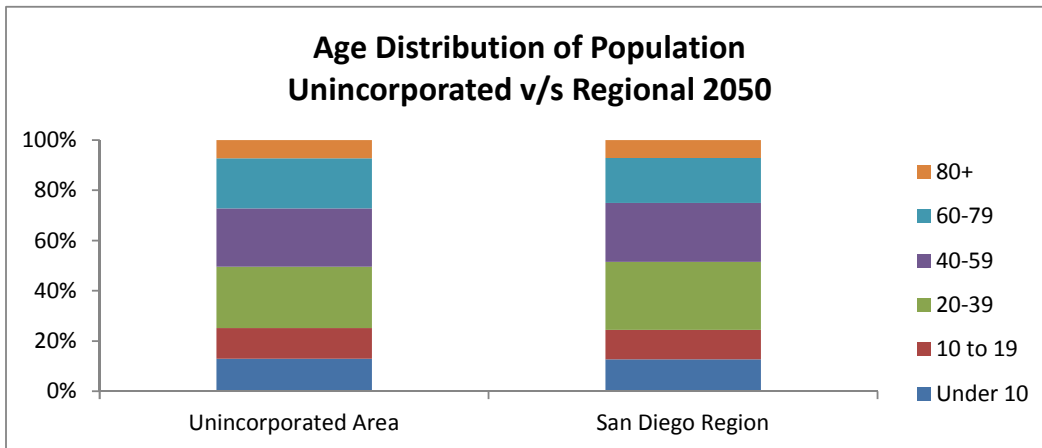
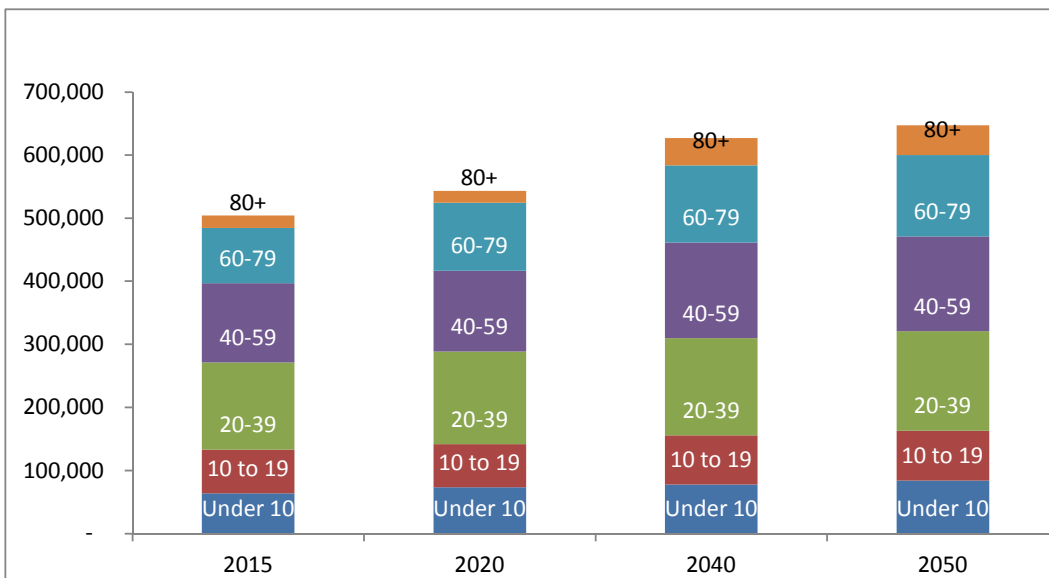
Unincorporated Area  
San Diego Region

## Attachment G: Demographic Information San Diego County Strategic Plan to Reduce Waste

### UNINCORPORATED AREAS

% Increase	Under 10	10 to 19	20-39	40-59	60-79	80+
	13%	14%	27%	25%	17%	4%
7.8%	13%	13%	27%	24%	20%	4%
15.4%	12%	12%	25%	24%	19%	7%
3.2%	13%	12%	24%	23%	20%	7%

24.3% increase 2020 to 2040



## Attachment G: Demographic Information San Diego County Strategic Plan to Reduce Waste

### UNINCORPORATED AREAS

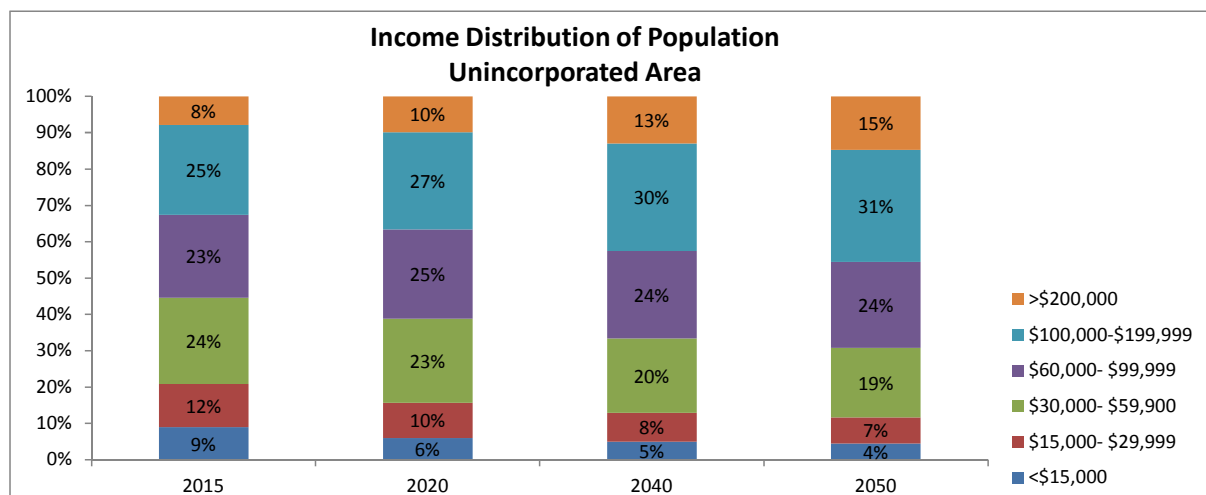
		<\$15,000	\$15,000- \$29,999	\$30,000- \$59,900	\$60,000- \$99,999	\$100,000- \$199,999	>\$200,000	Total
2015	(1)	9%	12%	24%	23%	25%	8%	101% difference due to rounding
2020	(2)	6%	10%	23%	25%	27%	10%	100%
2040	(2)	5%	8%	20%	24%	30%	13%	100%
2050	(2)	4%	7%	19%	24%	31%	15%	100%

### SAN DIEGO REGIONAL

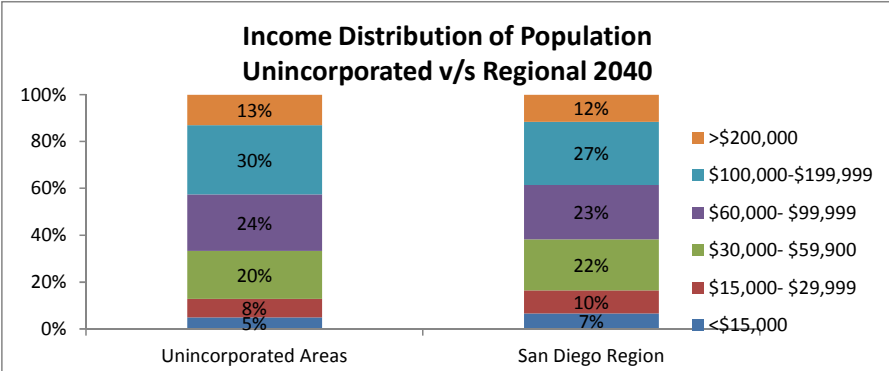
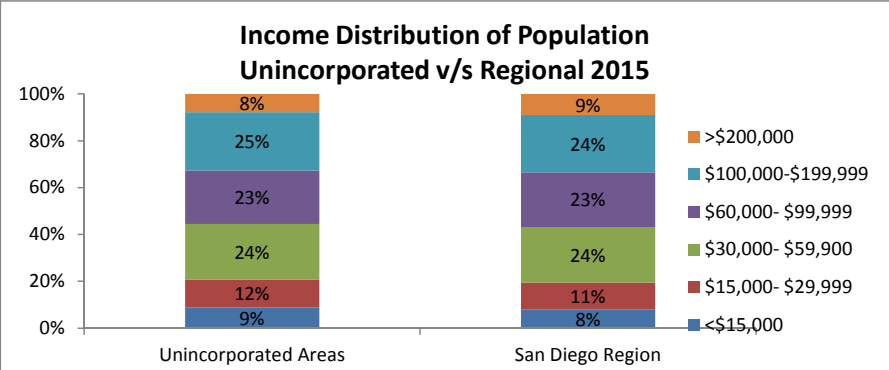
		<\$15,000	\$15,000- \$29,999	\$30,000- \$59,900	\$60,000- \$99,999	\$100,000- \$199,999	>\$200,000	Total
2015	(3)	8%	11%	24%	23%	24%	9%	100%
2040	(3)	7%	10%	22%	23%	27%	12%	100%

Source SANDAG <http://datasurfer.sandag.org>

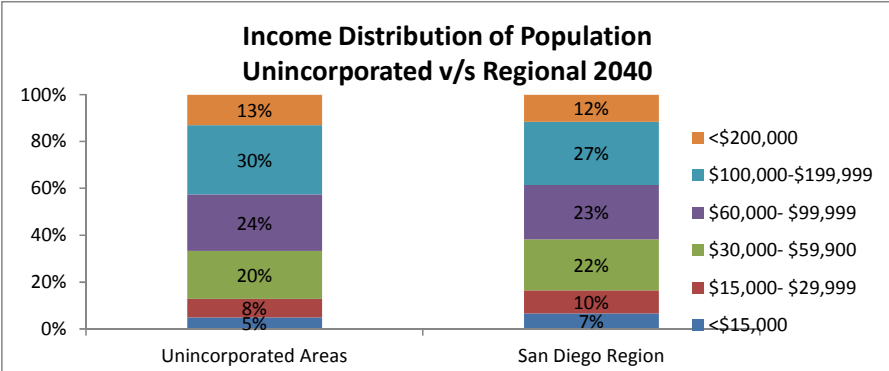
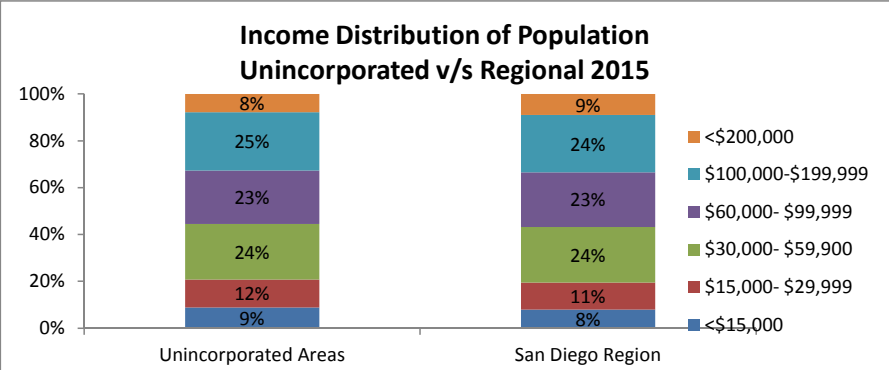
- (1) Estimate 2015, San Diego County Unincorporated Areas,
- (2) Forecast 2050, Series 13, San Diego County Unincorporated Areas
- (3) Forecast 2050 Series 13 San Diego Regional Growth Forecast



**Attachment G: Demographic Information  
San Diego County Strategic Plan to Reduce Waste**



**Attachment G: Demographic Information  
San Diego County Strategic Plan to Reduce Waste**

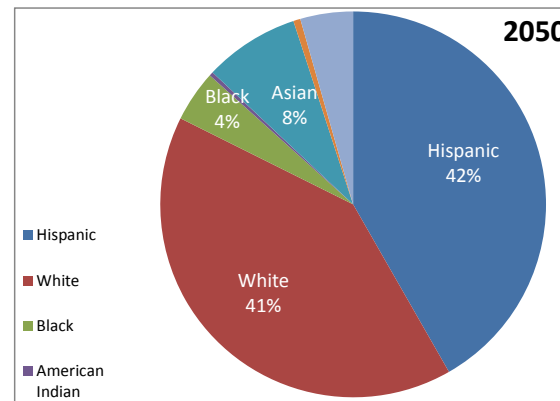
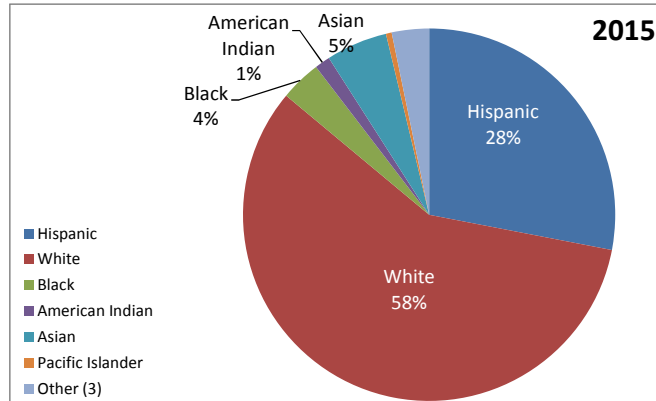


## Attachment G: Demographic Information San Diego County Strategic Plan to Reduce Waste

		Hispanic	White	Black	American Indian	Asian	Pacific Islander	Other (3)	Total	% Hispanic	% White	%Black	American Indian	Asian	Pacific Islander	Other (3)
2015	(1)	141,400	292,550	17,904	6,749	26,888	2,477	16,362	504,330	28.0%	58.0%	3.6%	1.3%	5.3%	0.5%	3.2%
2020	(2)	167,410	297,731	21,126	5,091	30,255	2,453	19,360	543,426	30.8%	54.8%	3.9%	0.9%	5.6%	0.5%	3.6%
2040	(2)	238,543	283,258	26,030	2,623	46,887	3,323	26,391	627,055	38.0%	45.2%	4.2%	0.4%	7.5%	0.5%	4.2%
2050	(2)	270,114	262,919	27,895	2,119	51,759	3,817	28,610	647,233	41.7%	40.6%	4.3%	0.3%	8.0%	0.6%	4.4%

Source SANDAG <http://datasurfer.sandag.org>

- (1) Estimate 2015, San Diego County Unincorporated Areas,
- (2) Series 13 Regional Growth Forecast, San Diego County Unincorporated Areas.
- (3) Other includes population with two or more ethnicities





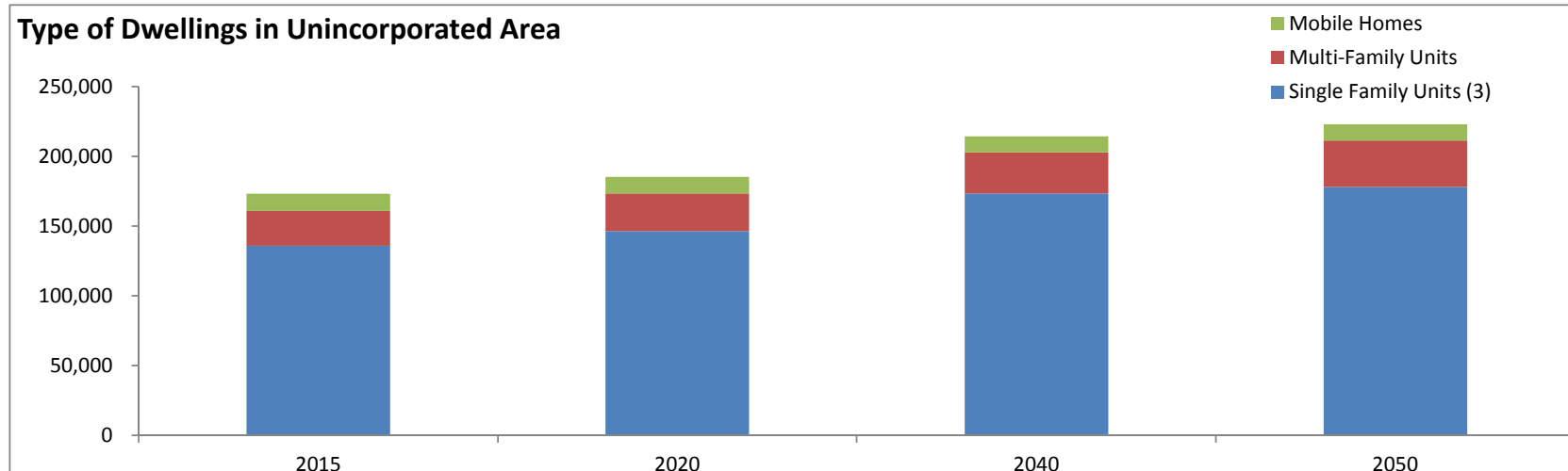
**Attachment G: Demographic Information  
San Diego County Strategic Plan to Reduce Waste**

		Single Family Units (3)	Multi-Family Units	Mobile Homes	Total	% Chg SFU	% Chg MFU	% Chg Mobile	% Change Overall
2015	(1)	135,800	25,047	12,399	173,246				
2020	(2)	146,436	26,851	11,966	185,253	8%	7%	-3%	7%
2040	(2)	173,480	29,257	11,668	214,405	18%	9%	-2%	16%
2050	(2)	178,110	33,218	11,604	222,932	3%	14%	-1%	4%

Source: SANDAG <http://datasurfer.sandag.org>

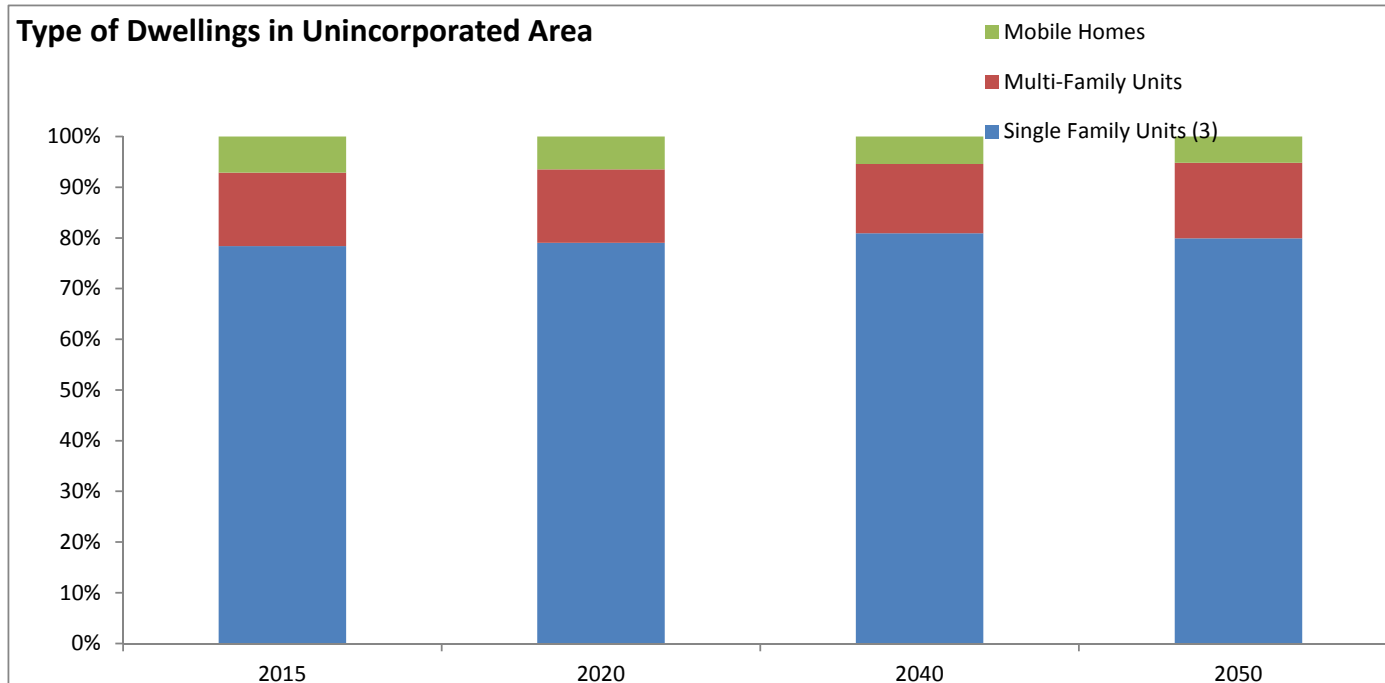
Notes:

- (1) Estimate 2015, San Diego County Unincorporated Areas
- (2) Series 13 Regional Growth Forecast, San Diego County Unincorporated Areas
- (3) Single family units for 2015 include single family detached and single family multiple units



**Attachment G: Demographic Information  
San Diego County Strategic Plan to Reduce Waste**

% SFU of Total	% MFU of Total	% Mobile Home of Total	% increase 2020 to 2040
78%	14%	7%	
79%	14%	6%	
81%	14%	5%	24%
80%	15%	5%	

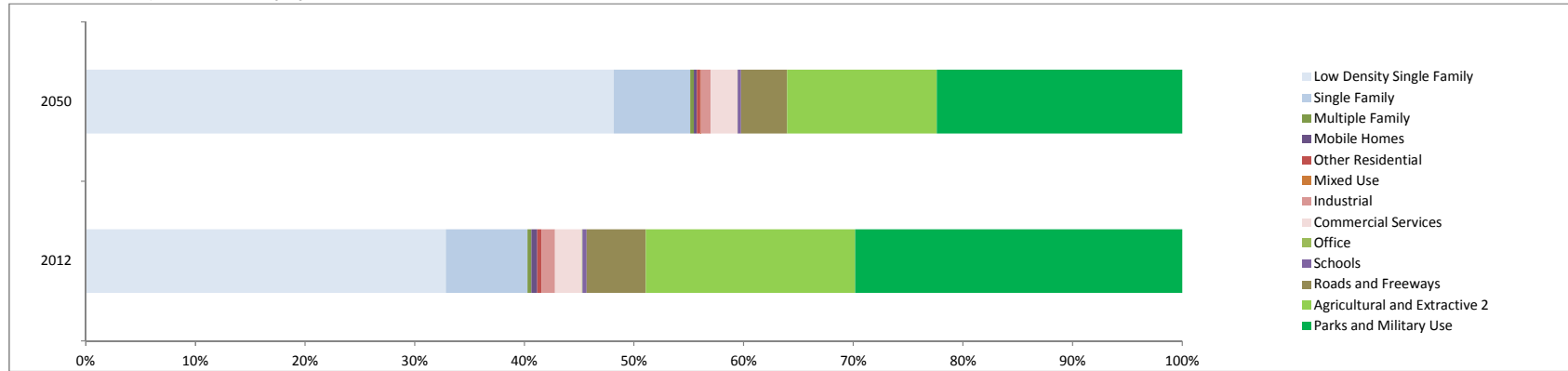


## Attachment G: Demographic Information San Diego County Strategic Plan to Reduce Waste

Developed Land Use Distribution for the Unincorporated Area (acres)

	Developed Acres	Low Density Single Family	Single Family	Multiple Family	Mobile Homes	Other Residential	Mixed Use	Industrial	Commercial Services	Office	Schools	Roads and Freeways	Agricultural and Extractive 2	Parks and Military Use
2012	512,703	168,390	38,189	1,761	2,717	2,026	-	6,289	12,701	173	2,011	27,677	97,892	152,879
2020	571,856	222,084	40,714	2,122	2,530	2,052	9	5,321	15,373	221	2,037	28,994	96,051	154,348
2035	658,567	304,164	45,741	2,155	2,055	2,041	40	5,722	15,744	252	2,063	28,994	94,944	154,652
2050	691,826	333,264	48,109	2,373	1,888	2,038	133	6,549	16,744	296	2,083	28,994	94,494	154,863

Source: Series 13 Regional Growth Forecast, San Diego County Unincorporated Areas.  
SANDAG <http://datasurfer.sandag.org>



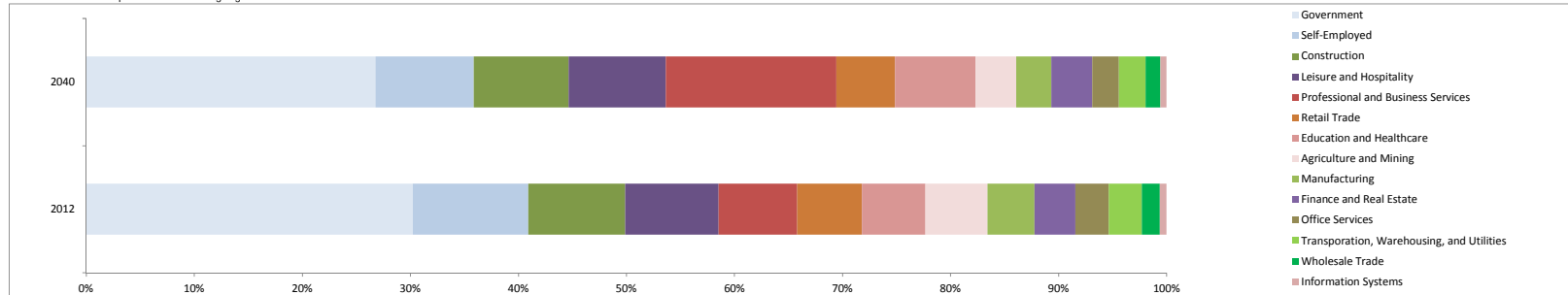
Source: Series 13 Regional Growth Forecast, San Diego County Unincorporated Areas.  
SANDAG <http://datasurfer.sandag.org>

## Attachment G: Demographic Information San Diego County Strategic Plan to Reduce Waste

### Total Civilian Jobs in the Unincorporated Areas

	Government	Self-Employed	Construction	Leisure and Hospitality	Professional and Business Services	Retail Trade	Education and Healthcare	Agriculture and Mining	Manufacturing	Finance and Real Estate	Office Services	Transportation, Warehousing, and Utilities	Wholesale Trade	Information Systems	Total
2012	35,158	12,400	10,432	10,037	8,481	6,945	6,834	6,679	5,056	4,414	3,577	3,577	1,932	716	116,238
2020	39,696	13,421	12,942	11,423	11,049	7,490	9,505	6,227	5,070	4,579	3,666	3,635	1,993	764	131,460
2040	40,367	13,720	13,249	13,584	23,773	8,196	11,269	5,646	4,916	5,699	3,741	3,709	2,075	857	150,801
2050	44,446	14,049	13,283	15,827	26,226	9,213	13,517	5,474	4,862	6,486	3,772	3,740	2,110	898	163,903
2012	30%	11%	9%	9%	7%	6%	6%	6%	4%	4%	3%	3%	2%	1%	
2020	30%	10%	10%	9%	8%	6%	7%	5%	4%	3%	3%	3%	2%	1%	
2040	27%	9%	9%	9%	16%	5%	7%	4%	3%	4%	2%	2%	1%	1%	
2050	27%	9%	8%	10%	16%	6%	8%	3%	3%	4%	2%	2%	1%	1%	

Source: Series 13 Regional Growth Forecast, San Diego County Unincorporated Areas.  
SANDAG <http://datasurfer.sandag.org>



Source: Series 13 Regional Growth Forecast, San Diego County Unincorporated Areas.  
SANDAG <http://datasurfer.sandag.org>

## Attachment H: Baseline Waste Characterization and Tonnage Data San Diego County Strategic Plan to Reduce Waste

### County of San Diego Unincorporated Tonnage Data

#### Landfill Disposal Information (Tons per Year)

	Miramar	Sycamore	Otay	Ramona	Borrego	Camp Pendleton Las Pulgas/ San Onofre	Out of County	Out of State	Total	Source Data	Disposal per Annual Report to CalRecycle*
2013	3,316	256,756	178,080	0	3,062	27,880	2,973	987	473,054	Tab TotalDisp2013, Row 38, UnincDispDiv2013	468,652
2014	5,422	255,666	164,014	0	1,872	24,499	1,141	894	453,509	Tab TotalDisp2014, Row 38, UnincDispDiv2014	477,155
2015	6,950	246,826	167,926	0	1,673	23,549	6,583	985	454,492	Tab TotalDisp2015, Row 42, UnincDispDiv2015	474,751
<b>% of Total</b>										Average (Rounded to nearest 1,000s)	474,000
2013	0.7%	54.3%	37.6%	0.0%	0.6%	5.9%	0.6%	0.2%	100.0%		
2014	1.2%	56.4%	36.2%	0.0%	0.4%	5.4%	0.3%	0.2%	100.0%		
2015	1.5%	54.3%	36.9%	0.0%	0.4%	5.2%	1.4%	0.2%	100.0%		

\* 2013 and 2014 reflect Tonnage  
Modification Reports submitted by County.

#### In-County Transfer Station Information (Tons per Year)

	Escondido Resource Recovery	Palomar	Fallbrook	Ramona	EDCO Station-La Mesa	EDCO (Dalbergia TS)	El Cajon	SANCO	EDCO - LG - MRF	EDCO - SM - CDI	Total	Source Data
2013	59,681	26,017	41,598	41,655	39,049	3,206	49,782	951	208	24	262,170	Tab TotalDisp2013, Row 38, UnincDispDiv2013
2014	58,144	26,107	41,775	41,654	41,331	3,324	41,757	1,438	76	0	255,607	Tab TotalDisp2014, Row 38, UnincDispDiv2014
2015	63,694	27,653	44,230	42,544	42,836	3,910	44,295	739	0	13	269,914	Tab TotalDisp2015, Row 42, UnincDispDiv2015
<b>% of Total</b>												
2013	22.8%	9.9%	15.9%	15.9%	14.9%	1.2%	19.0%	0.4%	0.1%	0.0%	100%	
2014	22.7%	10.2%	16.3%	16.3%	16.2%	1.3%	16.3%	0.6%	0.0%	0.0%	100%	
2015	23.6%	10.2%	16.4%	15.8%	15.9%	1.4%	16.4%	0.3%	0.0%	0.0%	100%	

#### Hauler Tonnage Overview (TPY)

	2013	2014	2015
Recyclables	63,943	57,475	59,598
Yard trimmings	66,560	71,671	79,219
Solid waste	357,244	375,655	378,324
Total collected	487,747	504,802	517,141
% divertable	26.8%	25.6%	26.8%

## Attachment H: Baseline Waste Characterization and Tonnage Data San Diego County Strategic Plan to Reduce Waste

### County of San Diego Unincorporated Tonnage Data

Hauler Collection Tonnage (TPY) Source File: UnincDispDiv2015; Tab: TotalDisp2015, Columns B, C, and D; County-provided data; summarized by HF&H

Hauler	Total Collected (TPY)			Diverted Recyclables/Org (TPY)			Solid Waste Disposed (TPY)			Diversion (% of Collected)			# of haulers	
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015		
Hauler 1	6,582	797	1,013	6,582	797	1,013	0	0	0	100.0%	100.0%	100.0%	x	
Hauler 2	33,288	30,291	29,070	10,656	9,215	8,642	22,632	21,077	20,428	32.0%	30.4%	29.7%	x	
Hauler 3	34,481	58,131	64,937	6,784	9,137	11,541	27,697	48,994	53,396	19.7%	15.7%	17.8%	x	
Hauler 4	4,640	5,888	6,194	1,551	2,068	2,364	3,090	3,820	3,830	33.4%	35.1%	38.2%	x	
Hauler 5	1,304	2,294	2,527	778	1,069	1,411	526	1,225	1,116	59.7%	46.6%	55.8%	x	
Hauler 6	1,711	1,687	1,947	294	299	353	1,417	1,388	1,594	17.2%	17.7%	18.1%	x	
Hauler 7	109,477	112,335	118,834	31,582	32,171	37,054	77,895	80,164	81,780	28.8%	28.6%	31.2%	x	
Hauler 8	87,473	83,292	90,676	26,533	25,443	28,798	60,940	57,849	61,877	30.3%	30.5%	31.8%	x	
Hauler 9	0	0	0	0	0	0	0	0	0	n.a.	n.a.	n.a.		
Hauler 10	0	0	0	0	0	0	0	0	0	n.a.	n.a.	n.a.		
Hauler 11	3,025	2,753	148	730	870	44	2,295	1,883	104	24.1%	31.6%	29.6%		
Hauler 12	0	0	0	0	0	0	0	0	0	n.a.	n.a.	n.a.	x	
Hauler 13	2,140	2,906	2,440	301	1,144	684	1,839	1,761	1,756	14.1%	39.4%	28.0%	x	
Hauler 14	62,710	63,194	64,761	16,643	16,503	18,373	46,067	46,690	46,388	26.5%	26.1%	28.4%	x	
Hauler 15	46,651	47,189	49,599	4,623	5,271	7,321	42,028	41,918	42,278	9.9%	11.2%	14.8%		
Hauler 16	0	2,354	329	0	1,213	89	0	1,141	240	n.a.	51.5%	27.0%	x	
Hauler 17	3,260	2,995	2,720	282	228	204	2,978	2,766	2,517	8.7%	7.6%	7.5%		
Hauler 18	41	203	318	6	18	47	35	185	271	14.6%	8.8%	14.8%	x	
Hauler 19	280	273	589	115	127	236	165	146	353	41.1%	46.5%	40.1%	x	
Hauler 20	11,860	11,990	11,325	910	616	593	10,950	11,374	10,733	7.7%	5.1%	5.2%		
Hauler 21	78,824	76,219	70,212	22,134	22,945	20,550	56,690	53,274	49,662	28.1%	30.1%	29.3%		
<b>Total</b>	<b>21 NEFAs</b>	<b>487,748</b>	<b>504,792</b>	<b>517,639</b>	<b>130,504</b>	<b>129,136</b>	<b>139,315</b>	<b>357,244</b>	<b>375,655</b>	<b>378,324</b>	<b>26.8%</b>	<b>25.6%</b>	<b>26.9%</b>	<b>13</b>

\* Many haulers are affiliated- and related-party entities.

Hauler	Total Collected (TPY)			Diverted Recyclables/Org (TPY)			Disposed (TPY)			Diversion (% of Collected)		
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
Hauler 1	246,626	245,570	259,257	63,468	63,756	73,217	183,158	181,814	186,040	25.7%	26.0%	28.2%
Hauler 2	123,972	118,500	110,607	33,700	32,777	29,784	90,272	85,724	80,823	27.2%	27.7%	26.9%
Hauler 3	65,970	66,188	67,481	16,925	16,732	18,577	49,045	49,457	48,904	25.7%	25.3%	27.5%
Hauler 4	34,481	58,131	64,937	6,784	9,137	11,541	27,697	48,994	53,396	19.7%	15.7%	17.8%
All Others	16,698	16,402	15,356	9,627	6,735	6,196	7,071	9,667	9,160	57.7%	41.1%	40.3%
<b>Total</b>	<b>487,748</b>	<b>504,792</b>	<b>517,639</b>	<b>130,504</b>	<b>129,136</b>	<b>139,315</b>	<b>357,244</b>	<b>375,655</b>	<b>378,324</b>	<b>26.8%</b>	<b>25.6%</b>	<b>26.9%</b>
Hauler 1	51%	49%	50%	49%	49%	53%	51%	48%	49%			
Hauler 2	25%	23%	21%	26%	25%	21%	25%	23%	21%			
Hauler 3	14%	13%	13%	13%	13%	13%	14%	13%	13%			
Hauler 4	7%	12%	13%	5%	7%	8%	8%	13%	14%			
All Others	3%	3%	3%	7%	5%	4%	2%	3%	2%			
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>			

## Attachment H: Baseline Waste Characterization and Tonnage Data San Diego County Strategic Plan to Reduce Waste

### County of San Diego Unincorporated Tonnage Data

\* Hauler numbering does not correlate to hauling numbering in prior table. Affiliates and related-party entities have been combined.

Haulers Listed from Largest to Smallest based on 2015 Tonnage

Hauler	Total Collected (TPY)			Diverted Recyclables and Organic			Solid Waste Disposed (TPY)			Diversion (% of Collected)			% of Tons	2015 Hauler Diversion Level Sorted Smallest to Largest
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015	2015	
Hauler 1	246,626	245,570	259,257	63,468	63,756	73,217	183,158	181,814	186,040	25.7%	26.0%	28.2%	50.1%	15%
Hauler 2	123,972	118,500	110,607	33,700	32,777	29,784	90,272	85,724	80,823	27.2%	27.7%	26.9%	21.4%	18%
Hauler 3	65,970	66,188	67,481	16,925	16,732	18,577	49,045	49,457	48,904	25.7%	25.3%	27.5%	13.0%	18%
Hauler 4	34,481	58,131	64,937	6,784	9,137	11,541	27,697	48,994	53,396	19.7%	15.7%	17.8%	12.5%	27%
Hauler 5	4,640	5,888	6,194	1,551	2,068	2,364	3,090	3,820	3,830	33.4%	35.1%	38.2%	1.2%	27%
Hauler 6	1,304	2,294	2,527	778	1,069	1,411	526	1,225	1,116	59.7%	46.6%	55.8%	0.5%	28%
Hauler 7	2,140	2,906	2,440	301	1,144	684	1,839	1,761	1,756	14.1%	39.4%	28.0%	0.5%	28%
Hauler 8	1,711	1,687	1,947	294	299	353	1,417	1,388	1,594	17.2%	17.7%	18.1%	0.4%	28%
Hauler 9	6,582	797	1,013	6,582	797	1,013	0	0	0	100.0%	100.0%	100.0%	0.2%	38%
Hauler 10	280	273	589	115	127	236	165	146	353	41.1%	46.5%	40.1%	0.1%	40%
Hauler 11	0	2,354	329	0	1,213	89	0	1,141	240	n.a.	51.5%	27.0%	0.1%	56%
Hauler 12	41	203	318	6	18	47	35	185	271	14.6%	8.8%	14.8%	0.1%	100%
Hauler 13	0	0	0	0	0	0	0	0	0	n.a.	n.a.	n.a.	0.0%	
Total or Average	13 haulers	487,748	504,792	517,639	130,504	129,136	139,315	357,244	375,655	378,324	26.8%	25.6%	26.9%	100.0%
Minimum (excluding Federal Disposal @ 0 TPY)		0	203	318	0	18	47	0	0	0	14.1%	8.8%	14.8%	
Maximum		246,626	245,570	259,257	63,468	63,756	73,217	183,158	181,814	186,040	100.0%	100.0%	100.0%	
	% Collected by 4 Largest Haulers		97%	97%										

Average for largest 4 companies in 2015  
25.1%

Haulers Listed from Largest to Smallest based on 2015 Tonnage, Percent of Total and Cumulative Percent of Total

Hauler	Collected	Percent of Total Tonnage			Cumulative Percent of Total		
		2015	2015	2015	2015	2015	2015
Hauler	2015	2015	2015	2015	2015	2015	2015
Hauler 1	259,257	50.1%	52.6%	49.2%	50.1%	52.6%	49.2%
Hauler 2	110,607	21.4%	21.4%	21.4%	71.5%	73.9%	70.5%
Hauler 3	67,481	13.0%	13.3%	12.9%	84.5%	87.3%	83.5%
Hauler 4	64,937	12.5%	8.3%	14.1%	97.0%	95.6%	97.6%
Hauler 5	6,194	1.2%	1.7%	1.0%	98.2%	97.2%	98.6%
Hauler 6	2,527	0.5%	1.0%	0.3%	98.7%	98.3%	98.9%
Hauler 7	2,440	0.5%	0.5%	0.5%	99.2%	98.8%	99.4%
Hauler 8	1,947	0.4%	0.3%	0.4%	99.6%	99.0%	99.8%
Hauler 9	1,013	0.2%	0.7%	0.0%	99.8%	99.7%	99.8%
Hauler 10	589	0.1%	0.2%	0.1%	99.9%	99.9%	99.9%
Hauler 11	329	0.1%	0.1%	0.1%	99.9%	100.0%	99.9%
Hauler 12	318	0.1%	0.0%	0.1%	100.0%	100.0%	100.0%
Hauler 13	0	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%
Total or Average	13 haulers	517,639	100.0%	100.0%	100.0%		

# Attachment H: Baseline Waste Characterization and Tonnage Data San Diego County Strategic Plan to Reduce Waste

## County of San Diego Unincorporated Tonnage Data

Hauler Tonnage Collected by Sector Source: SectorSummary Tab; County-provided data; summarized by HF&H

Recyclables Collected	Residential	Commercial	Industrial	Total
2013	30,374	14,454	19,115	63,943
2014	31,898	9,435	16,142	57,475
2015	31,396	12,034	16,167	59,598

Organics Collected	Residential	Commercial	Industrial	Total
2013	58,682	1,531	6,347	66,560
2014	57,100	3,561	11,011	71,671
2015	66,403	2,424	10,392	79,219

Solid Waste Collected	Residential	Commercial	Industrial	Total
2013	101,598	191,189	64,438	357,225
2014	108,872	203,019	63,755	375,646
2015	123,314	181,659	73,355	378,327
3-yr average	111,261	191,955	67,182	370,399

Total Collected	Residential	Commercial	Industrial	Total
2013	190,654	207,174	89,900	487,728
2014	197,870	216,014	90,908	504,792
2015	221,113	196,117	99,915	517,144

Hauler Diversion %*	Residential	Commercial	Industrial	Total
2013	47%	8%	28%	27%
2014	45%	6%	30%	26%
2015	44%	7%	27%	27%

\* Hauler Diversion % reflects recyclables and yard trimmings tonnage as a % of total tonnage collected.

### Self Haul Tonnage Calculations

	2013	2014	2015	Source
Total Disposed per Annual Reports	468,652	477,155	474,751	CalRecycle Annual Reports
Disposed by Haulers per County Reports	357,244	375,655	378,324	County UnincDispDiv spreadsheets
Disposed by Self-Haulers (calculated)	111,408	101,500	96,427	Calculated
Self-Haul % of Total Disposed	23.8%	21.3%	20.3%	Calculated

Self-Haul Waste Disposed, 3-Year average 2013 to 2015	103,112
Self-Haul Waste Disposed, 3-Year average 2013 to 2015	21.8%

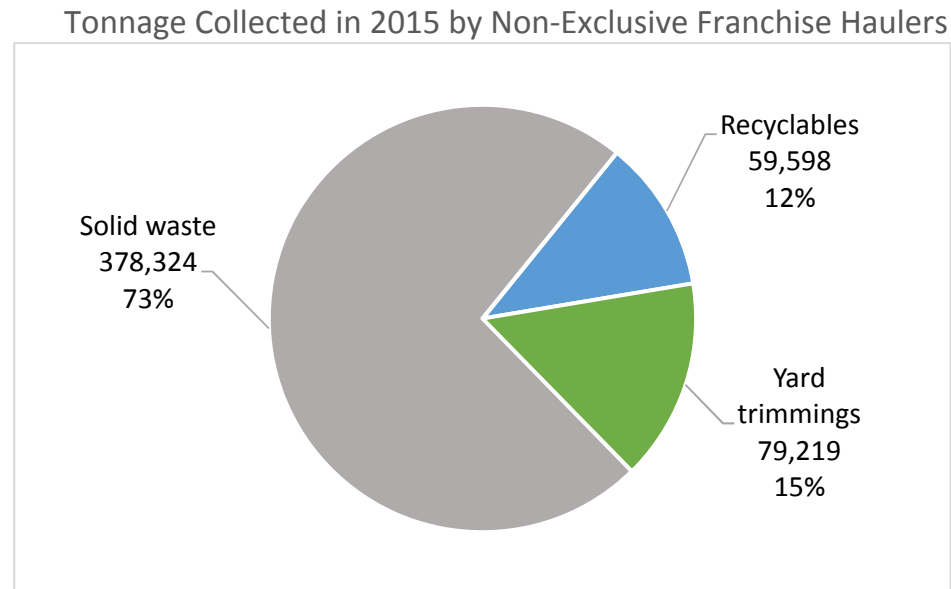
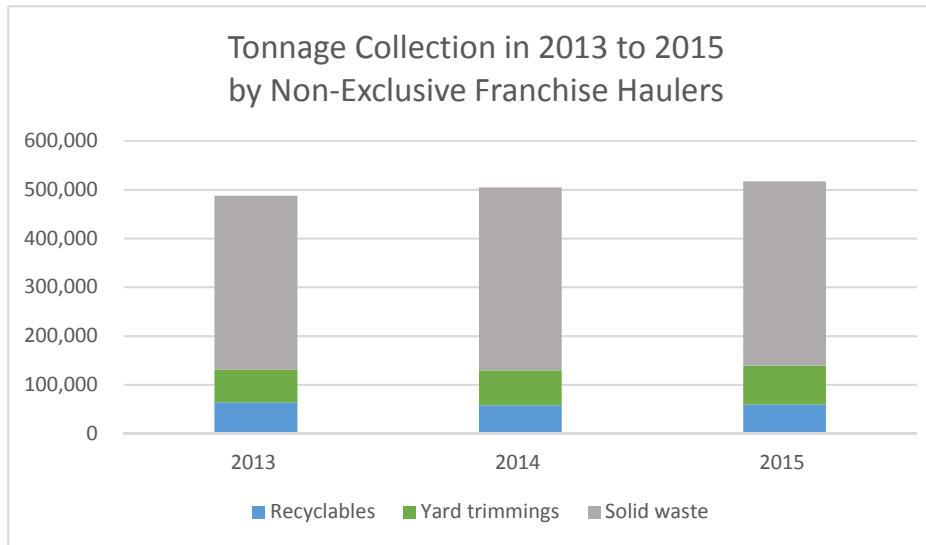
### Annual Disposal and ADC Tonnage per State Reporting

	Disposal (tons)	ADC (tons)
2000	453,099	15,888
2010	508,293	182,340
2011	490,627	97,694
2012	461,599	38,162
2013	468,652	35,004
2014	477,155	37,838
2015	474,751	37,918
3-yr Average	474,000	37,000

Source: CalRecycle Disposal Reporting System (DRS) except disposal for 2013, 2014, and 2015, which was obtained from the County's Tonnage Modification Form, and ADC for 2015, which was provided by Mike Wonsidler via 5/20/16 emails.

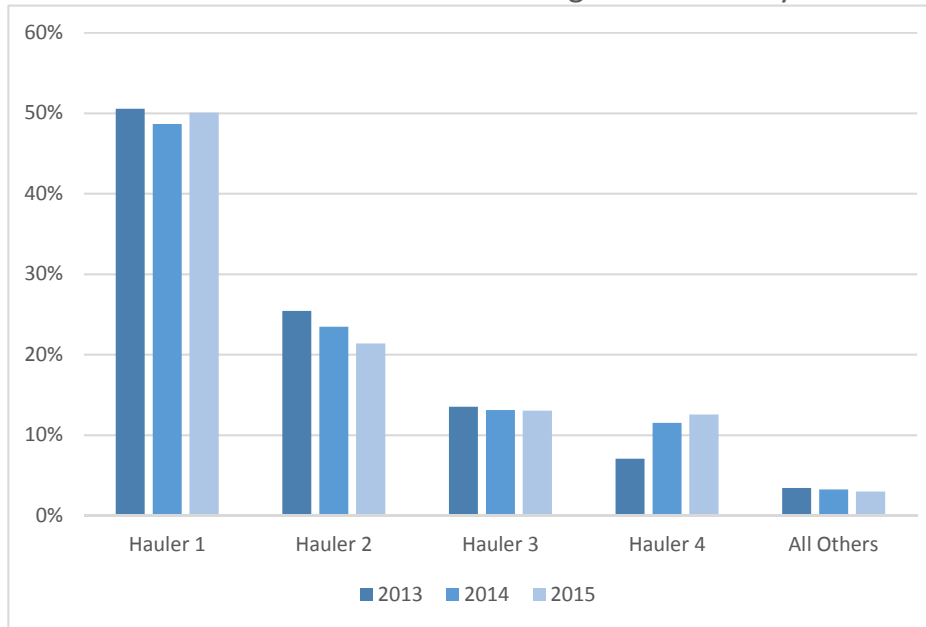


**Attachment H: Baseline Waste Characterization and Tonnage Data  
San Diego County Strategic Plan to Reduce Waste**

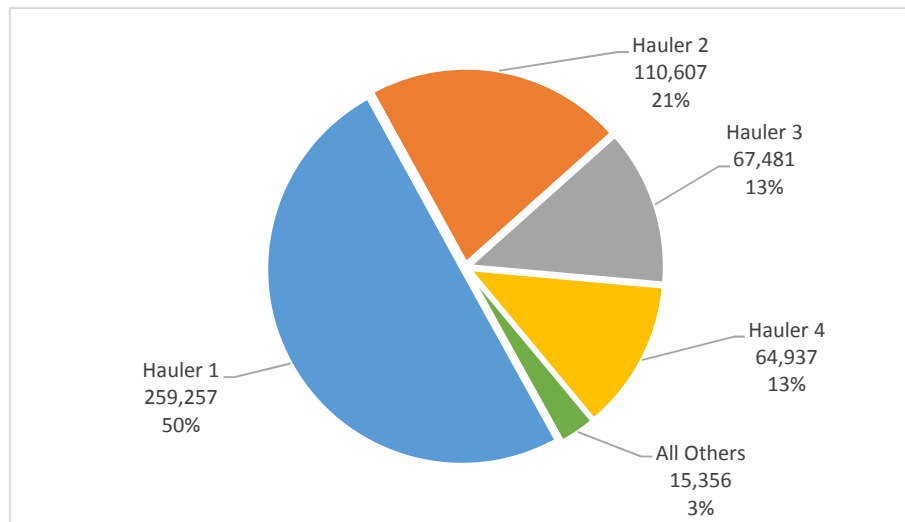


**Attachment H: Baseline Waste Characterization and Tonnage Data  
San Diego County Strategic Plan to Reduce Waste**

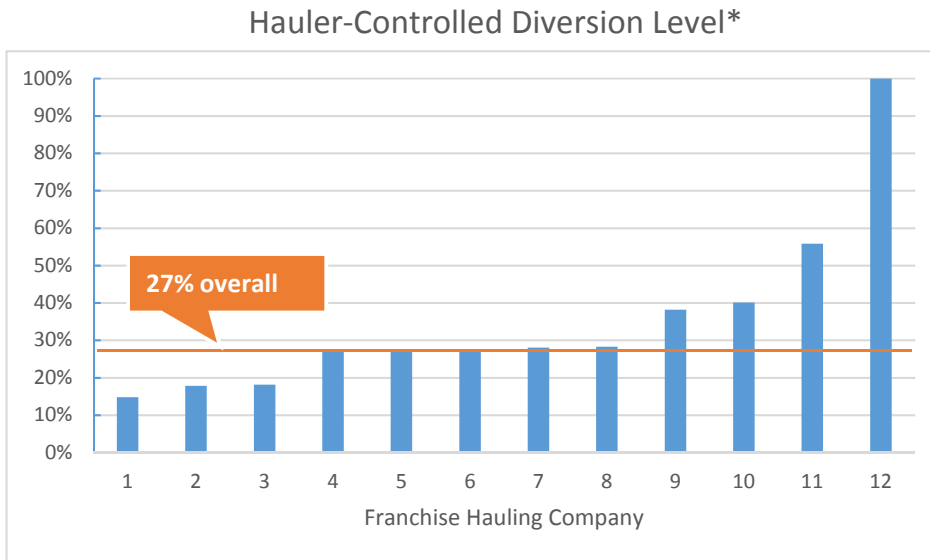
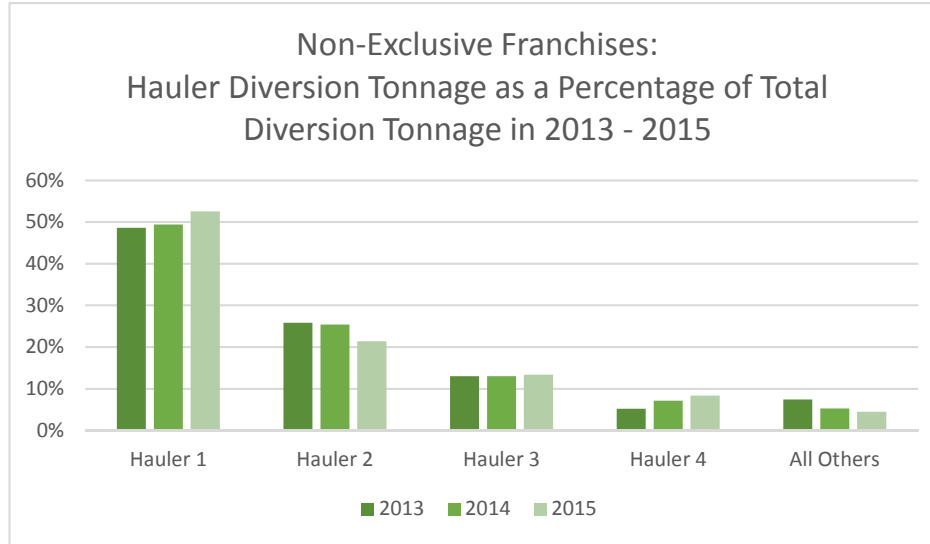
Non-Exclusive Franchises: Percentage Collection by Haulers



Non-Exclusive Franchises: Percentage Collected by Hauler for 2015

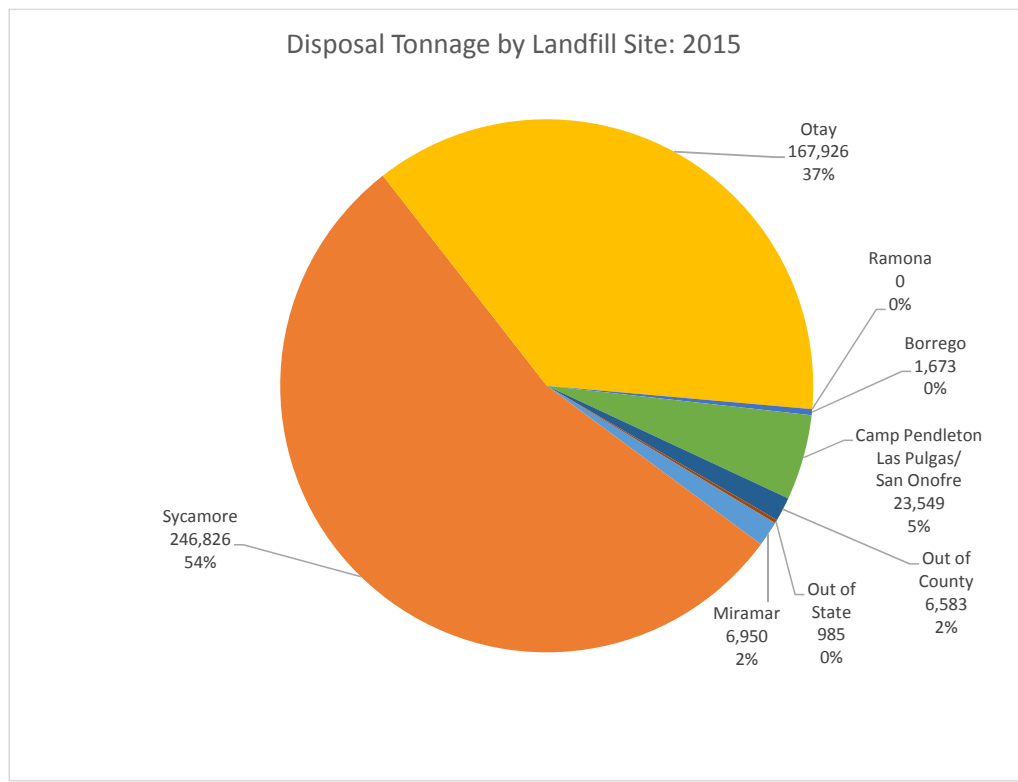
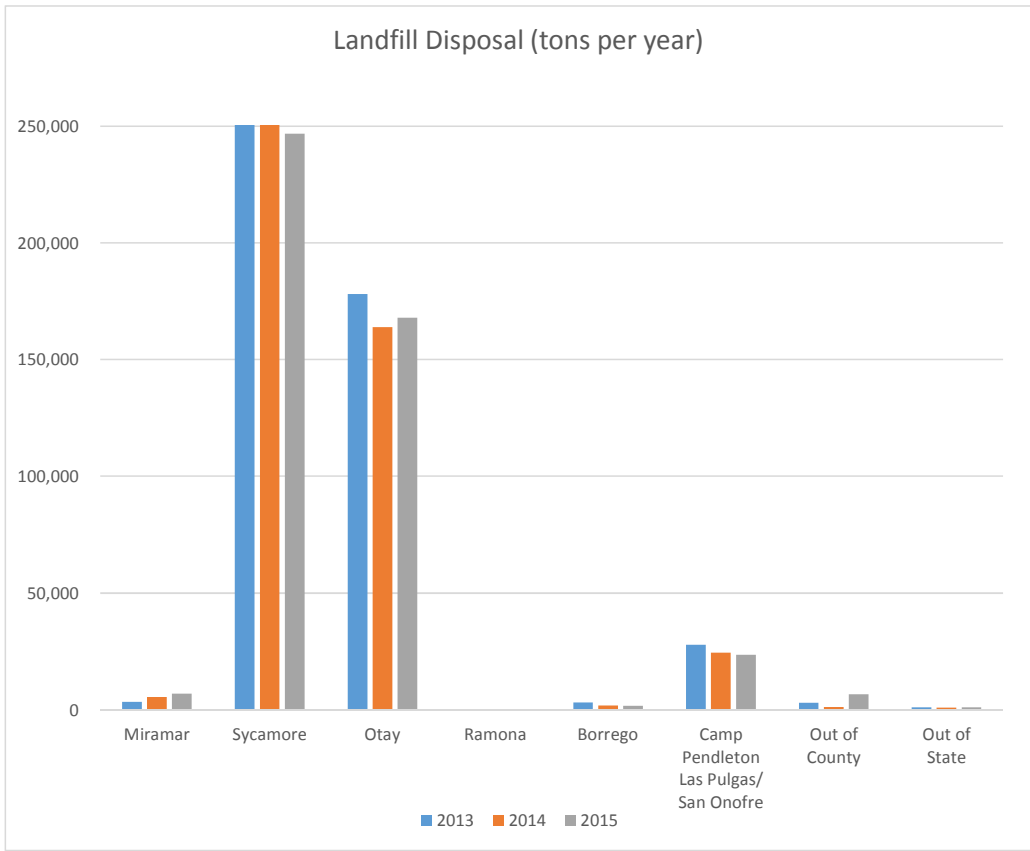


**Attachment H: Baseline Waste Characterization and Tonnage Data  
San Diego County Strategic Plan to Reduce Waste**

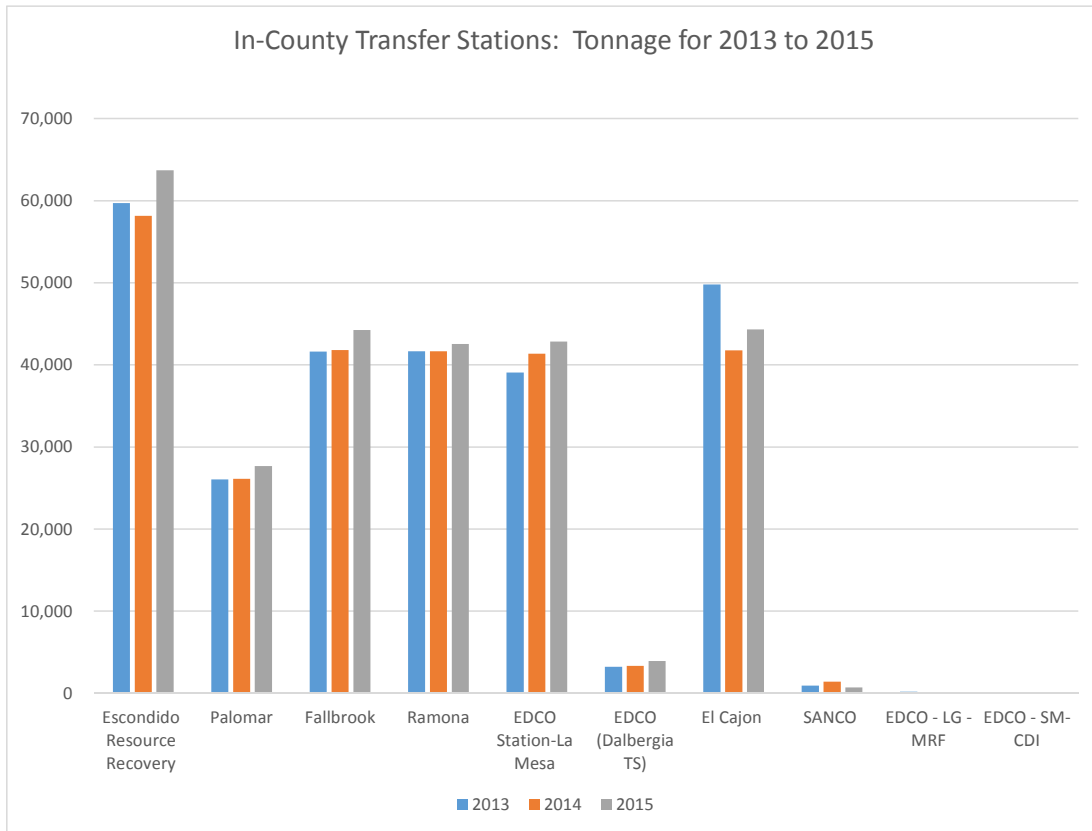


\* For confidentiality purposes, names of the hauling companies have not been presented.  
The hauler-controlled diversion level equals the tonnage of recyclables and organic materials collected divided by the total tonnage collected.

**Attachment H: Baseline Waste Characterization and Tonnage Data  
San Diego County Strategic Plan to Reduce Waste**

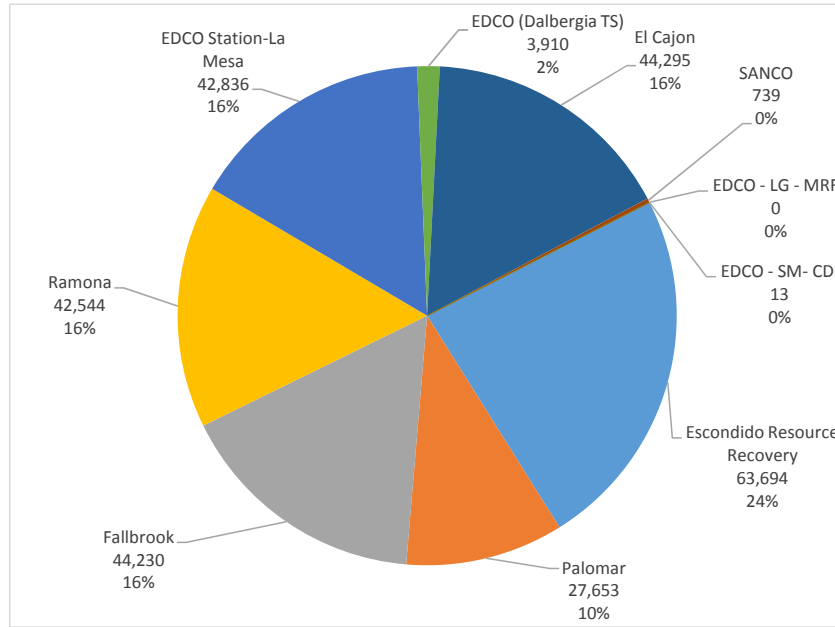


**Attachment H: Baseline Waste Characterization and Tonnage Data  
San Diego County Strategic Plan to Reduce Waste**

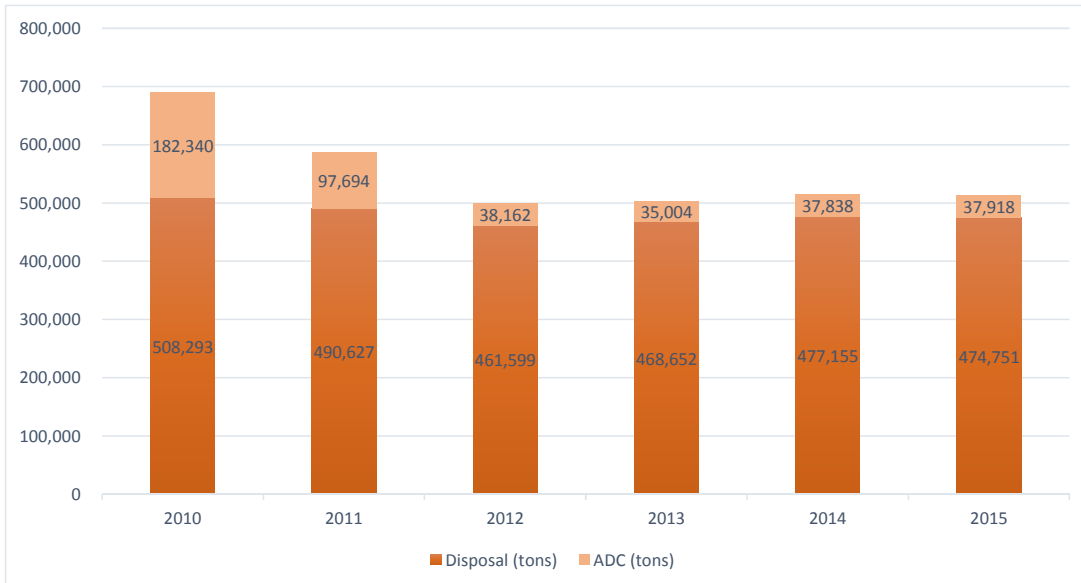


**Attachment H: Baseline Waste Characterization and Tonnage Data  
San Diego County Strategic Plan to Reduce Waste**

**In-County Transfer Stations: Tonnage for 2015**

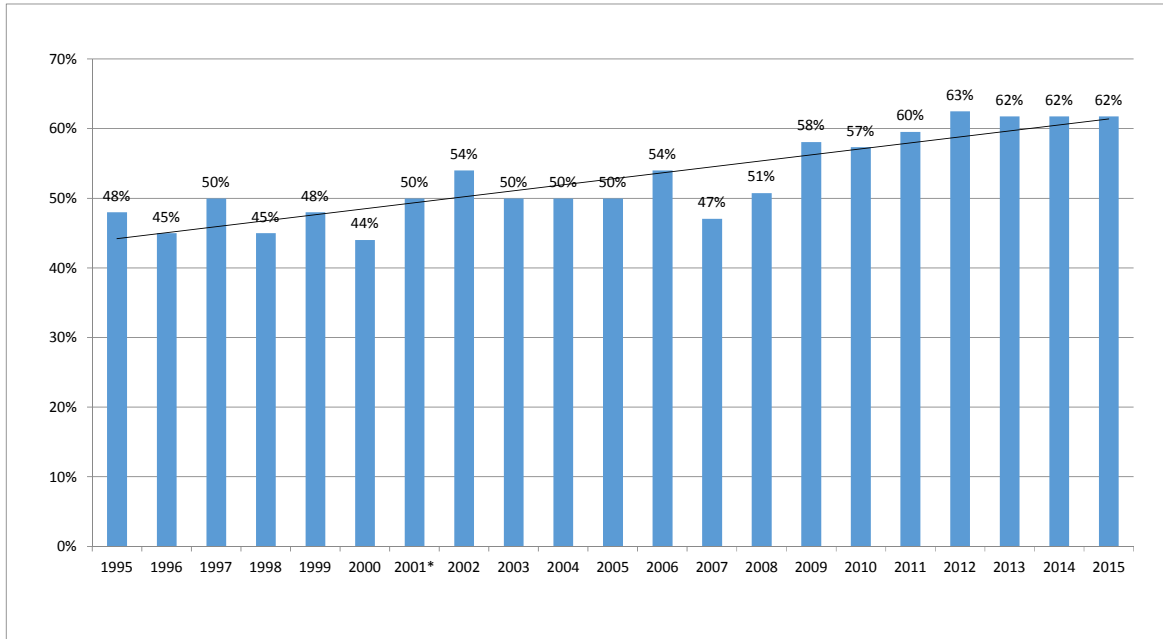


**Annual Solid Waste and ADC Tons**



## Attachment H: Baseline Waste Characterization and Tonnage Data San Diego County Strategic Plan to Reduce Waste

Annual Diversion Rate per State Reporting Methodology



	Diversion	% Change
1995	48%	
1996	45%	-6.2%
1997	50%	11.1%
1998	45%	-10.0%
1999	48%	6.7%
2000	44%	-8.3%
2001*	49%	11.4%
2002	54%	10.2%
2003	50%	-7.4%
2004	50%	0.0%
2005	50%	0.0%
2006	54%	8.0%
2007	47%	-12.9%
2008	51%	7.8%
2009	58%	14.5%
2010	57%	-1.3%
2011	60%	3.8%
2012	63%	4.9%
2013	62%	-1.2%
2014	62%	0.0%
2015	62%	0.0%

Source: CalRecycle Jurisdiction Diversion/Disposal Rate Summary - <http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversion.aspx>  
1995-2006 percentage was provided; post 2006 diversion rate was calculated using annual per capita disposal rate per resident and target per capita disposal rate.

\* For 2001, the Board approved an extension and no diversion rate was approved. The diversion rate presented here is estimated based on 2000 and 2002.

**Attachment H: Baseline Waste Characterization and Tonnage Data  
San Diego County Strategic Plan to Reduce Waste**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
PPD generation	---	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
PPD @ 75%	---	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Actual PPD	---	7.2	6.7	5.7	5.8	5.5	5.1	5.2	5.2	5.2
Diversion	64%	47%	51%	58%	57%	60%	63%	62%	62%	62%
Actual Disposal TPY		630,538	600,484	518,951	508,315	488,548	461,599	468,652	477,155	474,751
Target TPY @ 75%	62,711	298,768	304,019	309,747	299,460	304,131	307,322	305,591	309,520	312,937
Add'l Diversion TPY	(62,711)	331,770	296,465	209,204	208,855	184,417	154,277	163,061	167,635	161,814
Reduction in Disposed Tonnage		52.6%	49.4%	40.3%	41.1%	37.7%	33.4%	34.8%	35.1%	34.1%
Additional Diversion Needed: 3-year Average TPY										164,000
Population		481,495	489,958	499,190	482,610	490,139	495,281	492,491	498,823	504,330
ADC/AIC TPY							38,162	35,004	37,838	37,918

Note: 2013 and 2014 reflect Tonnage Modification Reports submitted by County.

Actual Disposal TPY: 3-year Average	474,000
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PPD = pounds per person per day

	2013	2014	2015
Diversion Rate (%)	62%	62%	62%
Disposal (tons per year)			
Actual	468,652	477,155	474,751
Target to reach 75% goal	305,591	309,520	312,937
Additional Diversion to Achieve 75% Diversion			
Annual (tons per year)	163,061	167,635	161,814
3-Year Average (tons per year)*			164,000

\* Rounded to the nearest 1,000.



**Attachment H: Baseline Waste Characterization and Tonnage Data  
San Diego County Strategic Plan to Reduce Waste**

**Disposal Quantities for Target Material Types**

Food Waste + Compostable Paper Disposed	TPY	%	Source
Residential	26,584	37.8%	Detailed residential waste composition tab
Commercial/Industrial	43,762	62.2%	Detailed commercial waste composition tab
Self-haul	53	0.1%	Detailed self haul waste composition tab
<b>Total</b>	<b>70,398</b>	<b>100.0%</b>	<b>Detailed overall waste composition tab</b>

Yard Trimmings Disposed	TPY	%	Source
Residential	16,632	31.5%	Detailed residential waste composition tab
Commercial/Industrial	23,443	44.3%	Detailed commercial waste composition tab
Self-haul	12,799	24.2%	Detailed self haul waste composition tab
<b>Total</b>	<b>52,874</b>	<b>100.0%</b>	<b>Detailed overall waste composition tab</b>

Commingled Recyclables Disposed	TPY	%	Source
Residential	17,752	30.6%	Detailed residential waste composition tab
Commercial/Industrial	37,357	64.4%	Detailed commercial waste composition tab
Self-haul	2,909	5.0%	Detailed self haul waste composition tab
<b>Total</b>	<b>58,018</b>	<b>100.0%</b>	<b>Detailed overall waste composition tab</b>

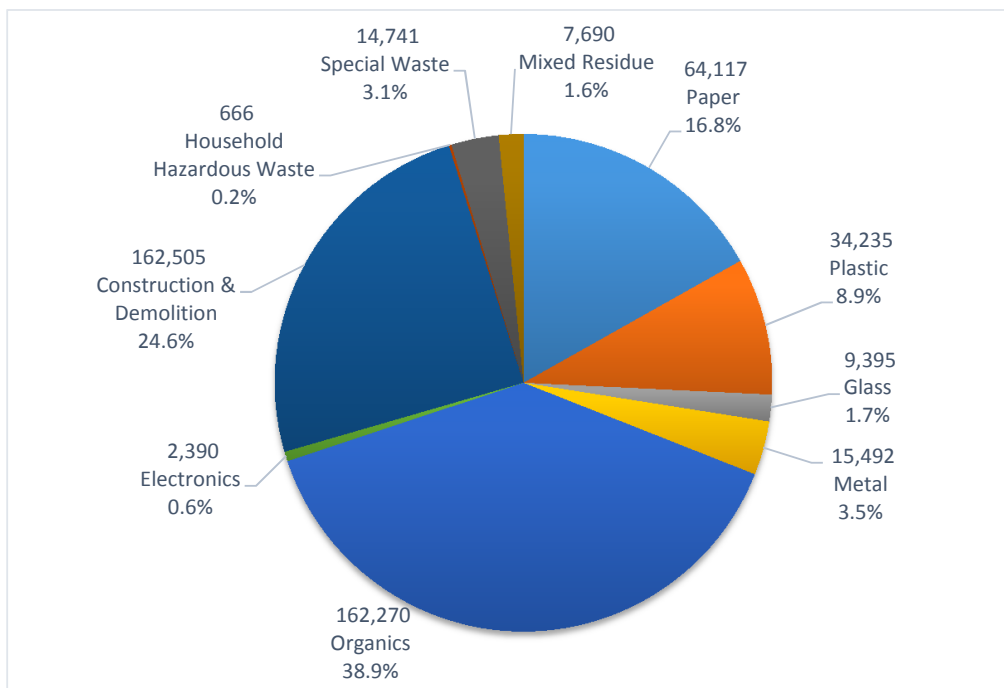
HHW	TPY	%	Source
Residential	183	33.4%	Detailed residential waste composition tab
Commercial/Industrial	254	46.3%	Detailed commercial waste composition tab
Self-haul	111	20.3%	Detailed self haul waste composition tab
<b>Total</b>	<b>547</b>	<b>100.0%</b>	<b>Detailed overall waste composition tab</b>

C&D	TPY	%	Source
Residential	8,398	10.0%	Detailed residential waste composition tab
Commercial/Industrial	43,143	51.3%	Detailed commercial waste composition tab
Self-haul	32,602	38.7%	Detailed self haul waste composition tab
<b>Total</b>	<b>84,143</b>	<b>100.0%</b>	<b>Detailed overall waste composition tab</b>

**Attachment H: Baseline Waste Characterization and Tonnage Data  
San Diego County Strategic Plan to Reduce Waste**

**Overall Waste Disposed, Top Ten Material Types**

<b>Material Type</b>	<b>Estimated Percent</b>	<b>Cumulative Percent</b>	<b>Estimated Tons</b>
Food	11.0%	11.0%	52,242
Leaves and Grass	5.9%	16.9%	27,730
Palm, Succulent, Coral Tree	6.7%	23.5%	31,570
Compostable/Soiled Paper	3.8%	27.4%	18,230
Other Wood Waste	6.2%	33.6%	29,506
Uncoated Corrugated Cardboard	4.1%	37.7%	19,405
Carpet & Carpet Padding	6.1%	43.8%	29,143
Remainder/Composite C&D	5.0%	48.9%	23,879
Prunings and Trimmings	3.0%	51.9%	14,316
Textiles	3.0%	54.9%	14,234
<b>Subtotal</b>	<b>54.9%</b>		<b>260,256</b>
All other material types	43.2%		204,895
<b>Total</b>	<b>100.0%</b>		<b>474,000</b>



**Attachment H: Baseline Waste Characterization and Tonnage Data  
San Diego County Strategic Plan to Reduce Waste**

**Overall Waste Disposed, Primary Material Classes**

<b>Material Class</b>	<b>Estimated Percent</b>	<b>Tons</b>
Paper	16.8%	64,117
Plastic	8.9%	34,235
Glass	1.7%	9,395
Metal	3.5%	15,492
Organics	38.9%	162,270
Electronics	0.6%	2,390
Construction & Demolition	24.6%	162,505
Household Hazardous Waste	0.2%	666
Special Waste	3.1%	14,741
Mixed Residue	1.6%	7,690
<b>Total</b>	<b>100.0%</b>	<b>473,500</b>

# Attachment H: Baseline Waste Characterization and Tonnage Data San Diego County Strategic Plan to Reduce Waste

Detailed Waste Composition, Overall Waste Disposed, Calculated based on the Sum of Residential, Commercial and Self Haul Tonnage

Material	Estimated Percent	Estimated Tons	Material	Estimated Percent	Estimated Tons
<b>Paper</b>	<b># 13.5%</b>	<b>64,117</b>	<b>Electronics</b>	<b># 0.5%</b>	<b>2,390</b>
Uncoated Corrugated Cardboard	4.1%	19,385	Brown Goods	0.3%	1,299
Waxed Corrugated Cardboard	0.3%	1,502	CRT	0.0%	202
Paper Bags	0.2%	958	Computer-Related Electronics	0.0%	147
Newspaper	0.6%	2,692	Other Consumer Electronics	0.1%	468
White Ledger Paper	0.7%	3,436	Video Display Devices (non-CRT devices)	0.1%	274
Mixed Waste Paper	2.3%	10,825			
Magazines	0.4%	1,941	<b>Construction &amp; Demolition</b>	<b># 34.3%</b>	<b>162,505</b>
Phone Books and Directories	0.0%	135	Concrete	2.8%	13,445
Compostable/Soiled Paper	3.8%	18,211	Asphalt Paving	0.5%	2,549
Aseptic/Milk Containers	0.1%	468	Asphalt Composition Shingles	0.5%	2,346
Remainder/Composite Paper	1.0%	4,565	Roofing Tar Paper/Felt	0.5%	2,536
			Roofing Mastic	0.0%	25
<b>Plastic</b>	<b># 7.2%</b>	<b>34,235</b>	Built-Up Roofing	0.4%	1,834
CRV HDPE Containers	0.0%	75	Other Asphalt Roofing Material	0.2%	790
Non-CRV HDPE Containers	0.3%	1,414	Clean Dimensional Lumber	1.5%	7,079
CRV PETE Containers	0.2%	826	Clean Engineered Wood	1.2%	5,657
Non-CRV PETE Containers	0.2%	737	Clean Pallets and Crates	2.4%	11,301
Compostable Biodegradable Plastic Containers	0.0%	40	Other Wood Waste	6.2%	29,475
Miscellaneous Plastic Containers	0.5%	2,187	Clean Gypsum Board	0.7%	3,185
Plastic Grocery and Merchandise Bags	0.2%	860	Painted/Demolition Gypsum Board	1.5%	7,086
Clean Film Plastic	0.7%	3,147	Carpet & Carpet Padding	6.1%	29,112
Dirty Film Plastic	2.0%	9,564	Rock, Soil and Fines	3.7%	17,472
Durable Plastic Items	1.8%	8,556	Contaminated Soil, Street Sweepings, Drain Cleaning	1.0%	4,758
Expanded Polystyrene	0.4%	2,049	Remainder/Composite C&D	5.0%	23,854
Remainder/Composite Plastic	1.0%	4,781			
<b>Glass</b>	<b># 2.0%</b>	<b>9,395</b>	<b>Household Hazardous Waste</b>	<b># 0.1%</b>	<b>666</b>
CRV Clear Glass Bottles	0.1%	626	Oil-Based Paint	0.0%	126
Non-CRV Clear Glass Bottles and Containers	0.2%	857	Water-Based Paint	0.0%	190
CRV Brown Glass Bottles	0.1%	665	Vehicle and Equipment Fluids	0.0%	5
Non-CRV Brown Glass Bottles and Containers	0.0%	161	Used Oil	0.0%	32
CRV Other Colored Glass Bottles	0.1%	302	Lead-Acid Batteries	0.0%	50
Non-CRV other Colored Glass Bottles and Containers	0.1%	657	Household Batteries	0.0%	42
Flat Glass	0.6%	2,805	Sharps	0.0%	3
Remainder/Composite Glass	0.7%	3,322	Pharmaceuticals	0.0%	29
			CFL, Fluorescent Tube and Other Mercury-Containing	0.0%	70
<b>Metal</b>	<b># 3.3%</b>	<b>15,492</b>	Remainder/Composite Household Hazardous	0.0%	119
Tin/Steel Cans	0.4%	1,694	<b>Special Waste</b>	<b># 3.1%</b>	<b>14,741</b>
Major Appliances	0.1%	406	Ash	0.0%	20
Other Ferrous Metal	1.2%	5,556	Sewage Solids	0.0%	0
CRV Aluminum & Tin Cans	0.1%	433	Industrial Sludge	0.0%	0
Non-CRV Aluminum Cans	0.0%	141	Treated Medical Waste	0.0%	67
Used Oil Filters	0.0%	75	Bulky Items	1.9%	9,132
Other Non-Ferrous Metal	0.7%	3,520	Tire	0.6%	2,691
Remainder/Composite Metal	0.8%	3,667	Remainder/Composite Special Waste	0.6%	2,832
<b>Organics</b>	<b># 34.3%</b>	<b>162,270</b>	<b>Mixed Residue</b>	<b># 1.6%</b>	<b>7,690</b>
Food	11.0%	52,187	Mixed Residue	1.6%	7,690
Palm, Succulent, Coral Tree	6.7%	31,537			
Leaves and Grass	5.9%	27,701	<b>Subtotal</b>	<b># 100%</b>	<b>473,500</b>
Prunings and Trimmings	3.0%	14,301			
Branches and Stumps	0.7%	3,501	Curbside Residential Recycling Processing Residuals		n.a.
Agricultural Crop Residues	0.0%	219	C&D Processing Residuals		n.a.
Grass Sod	1.5%	7,152			
Manures	0.1%	287	<b>Total Disposal</b>		<b>474,000</b>
Diapers	1.1%	5,368			
Textiles	3.0%	14,219			
Remainder/Composite Organics	1.2%	5,798			

Materials Disposed	50% of Target Materials	Material
58,018	29,009	Commingled recyclable materials
52,874	26,437	Yard trimmings
70,398	35,199	Food waste + compostable paper
84,143	42,072	C&D
265,433	132,717	Total
	164,000	Target to Reach 75%
	(31,283)	Shortfall

547 HHW overall

Lumber, pallets, crates
18,381 TPY
11.3% of total C&D

Food + Paper	
18,211 Paper	25.9%
52,187 Food	74.1%
70,398	

Recyclables	
33.4%	19,385 Uncoated Corrugated Cardboard
2.6%	1,502 Waxed Corrugated Cardboard
1.7%	958 Paper Bags
4.6%	2,692 Newspaper
5.9%	3,436 White Ledger Paper
18.7%	10,825 Mixed Waste Paper
3.3%	1,941 Magazines
0.2%	135 Phone Books and Directories
0.1%	75 CRV HDPE Containers
2.4%	1,414 Non-CRV HDPE Containers
1.4%	826 CRV PETE Containers
1.3%	737 Non-CRV PETE Containers
14.7%	8,556 Durable Plastic Items
1.1%	626 CRV Clear Glass Bottles
1.5%	857 Non-CRV Clear Glass Bottles and Containers
1.1%	665 CRV Brown Glass Bottles
0.3%	161 Non-CRV Brown Glass Bottles and Containers
0.5%	302 CRV Other Colored Glass Bottles
1.1%	657 Non-CRV other Colored Glass Bottles and Containers
2.9%	1,694 Tin/Steel Cans
0.7%	433 CRV Aluminum & Tin Cans
0.2%	141 Non-CRV Aluminum Cans
	58,018 Total

Difference due to rounding

Source: Calculated based on the sum of the residential, commercial, and self-haul tonnage characterization data, which was derived from Cascadia's report for City of San Diego, Detailed Waste Composition.

## Attachment H: Baseline Waste Characterization and Tonnage Data San Diego County Strategic Plan to Reduce Waste

Detailed Waste Composition, Residential Waste Disposed

Material	Estimated		Material	Estimated		Material	Estimated	
	Percent	+ / -		Tons	Percent		+ / -	Tons
<b>Paper</b>	<b>17.4%</b>		<b>19,403</b>	<b>Electronics</b>	<b>0.8%</b>		<b>892</b>	
Uncoated Corrugated Cardboard	3.7%	0.5%	4,130	Brown Goods	0.5%	0.2%	504	
Waxed Corrugated Cardboard	0.1%	0.1%	101	CRT	0.1%	0.1%	111	
Paper Bags	0.4%	0.1%	403	Computer-Related Electronics	0.0%	0.0%	33	
Newspaper	1.2%	0.2%	1,344	Other Consumer Electronics	0.2%	0.1%	197	
White Ledger Paper	0.7%	0.1%	829	Video Display Devices (non-CRT devices)	0.0%	0.0%	47	
Mixed Waste Paper	3.4%	0.2%	3,793					
Magazines	0.8%	0.2%	858	<b>Construction &amp; Demolition</b>	<b>15.3%</b>		<b>17,016</b>	
Phone Books and Directories	0.1%	0.1%	65	Concrete	1.5%	0.6%	1,689	
Compostable/Soiled Paper	6.0%	0.4%	6,693	Asphalt Paving	0.0%	0.0%	0	
Aseptic/Milk Containers	0.1%	0.0%	157	Asphalt Composition Shingles	0.1%	0.1%	143	
Remainder/Composite Paper	0.9%	0.2%	1,030	Roofing Tar Paper/Felt	0.0%	0.0%	46	
				Roofing Mastic	0.0%	0.0%	0	
<b>Plastic</b>	<b>9.1%</b>		<b>10,091</b>	Built-Up Roofing	0.0%	0.0%	0	
CRV HDPE Containers	0.0%	0.0%	26	Other Asphalt Roofing Material	0.0%	0.0%	44	
Non-CRV HDPE Containers	0.6%	0.1%	626	Clean Dimensional Lumber	0.6%	0.2%	695	
CRV PETE Containers	0.3%	0.0%	282	Clean Engineered Wood	0.6%	0.2%	637	
Non-CRV PETE Containers	0.3%	0.0%	372	Clean Pallets and Crates	0.3%	0.3%	370	
Compostable Biodegradable Plastic Containers	0.0%	0.0%	8	Other Wood Waste	4.2%	0.7%	4,654	
Miscellaneous Plastic Containers	0.7%	0.0%	766	Clean Gypsum Board	0.5%	0.3%	569	
Plastic Grocery and Merchandise Bags	0.4%	0.0%	448	Painted/Demolition Gypsum Board	0.6%	0.3%	629	
Clean Film Plastic	0.3%	0.1%	302	Carpet & Carpet Padding	3.1%	0.8%	3,492	
Dirty Film Plastic	2.7%	0.2%	2,965	Rock, Soil and Fines	1.4%	0.5%	1,582	
Durable Plastic Items	2.4%	0.4%	2,667	Contaminated Soil, Street Sweepings, Drain Cleaning	0.1%	0.2%	147	
Expanded Polystyrene	0.5%	0.0%	552	Remainder/Composite C&D	2.1%	0.5%	2,320	
Remainder/Composite Plastic	1.0%	0.2%	1,078					
				<b>Household Hazardous Waste</b>	<b>0.2%</b>		<b>252</b>	
<b>Glass</b>	<b>1.7%</b>		<b>1,944</b>	Oil-Based Paint	0.0%	0.0%	34	
CRV Clear Glass Bottles	0.2%	0.0%	225	Water-Based Paint	0.0%	0.0%	46	
Non-CRV Clear Glass Bottles and Containers	0.4%	0.1%	480	Vehicle and Equipment Fluids	0.0%	0.0%	0	
CRV Brown Glass Bottles	0.2%	0.0%	261	Used Oil	0.0%	0.0%	0	
Non-CRV Brown Glass Bottles and Containers	0.0%	0.0%	49	Lead-Acid Batteries	0.0%	0.1%	50	
CRV Other Colored Glass Bottles	0.1%	0.0%	79	Household Batteries	0.0%	0.0%	20	
Non-CRV other Colored Glass Bottles and Containers	0.2%	0.0%	260	Sharps	0.0%	0.0%	2	
Flat Glass	0.2%	0.1%	189	Pharmaceuticals	0.0%	0.0%	17	
Remainder/Composite Glass	0.4%	0.1%	402	CFL, Fluorescent Tube and Other Mercury-Containing	0.0%	0.0%	13	
				Remainder/Composite Household Hazardous	0.1%	0.1%	69	
<b>Metal</b>	<b>3.3%</b>		<b>3,653</b>					
Tin/Steel Cans	0.6%	0.1%	665	<b>Special Waste</b>	<b>2.0%</b>		<b>2,275</b>	
Major Appliances	0.0%	0.0%	17	Ash	0.0%	0.0%	6	
Other Ferrous Metal	1.1%	0.3%	1,265	Sewage Solids	0.0%	0.0%	0	
CRV Aluminum & Tin Cans	0.2%	0.1%	194	Industrial Sludge	0.0%	0.0%	0	
Non-CRV Aluminum Cans	0.0%	0.0%	43	Treated Medical Waste	0.0%	0.0%	5	
Used Oil Filters	0.0%	0.0%	0	Bulky Items	1.7%	0.5%	1,841	
Other Non-Ferrous Metal	0.4%	0.1%	452	Tire	0.3%	0.2%	331	
Remainder/Composite Metal	0.9%	0.2%	1,016	Remainder/Composite Special Waste	0.1%	0.1%	91	
<b>Organics</b>	<b>48.1%</b>		<b>53,528</b>	<b>Mixed Residue</b>	<b>2.0%</b>		<b>2,208</b>	
Food	17.9%	1.1%	19,891	Mixed Residue	2.0%	0.4%	2,208	
Palm, Succulent, Coral Tree	5.7%	0.8%	6,329					
Leaves and Grass	9.3%	1.1%	10,332	<b>Subtotal</b>	<b>100.0%</b>		<b>111,261</b>	
Prunings and Trimmings	4.8%	0.8%	5,338					
Branches and Stumps	0.7%	0.3%	827	Curbside Residential Recycling Processing Residuals			0	
Agricultural Crop Residues	0.0%	0.0%	0	C&D Processing Residuals			0	
Grass Sod	0.1%	0.1%	135					
Manures	0.0%	0.0%	44	<b>Total Disposal</b>			<b>111,261</b>	
Diapers	3.3%	0.4%	3,694					
Textiles	4.2%	0.5%	4,698	<b>Sample Count</b>			<b>451</b>	
Remainder/Composite Organics	2.0%	0.3%	2,241					

17,752	Commingled recyclable materials
16,632	Yard trimmings
26,584	Food waste + compostable paper
8,398	C&D
69,365	Total
183	HHW residential

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Source: Estimated percent and +/- variance from Cascadia's report for City of San Diego, Detailed Waste Composition, Overall Residential, 2012, Table 8.

Total annual residential tonnage reflects actual tons of residential solid waste collected by haulers, 3-year average 2013 to 2015. Tonnage for each material type is calculated as the

# Attachment H: Baseline Waste Characterization and Tonnage Data San Diego County Strategic Plan to Reduce Waste

Detailed Waste Composition, Commercial Waste Disposed (including Industrial Tonnage)

Material	Estimated		Tons	Material	Estimated		Tons
	Percent	+ / -			Percent	+ / -	
<b>Paper</b>	<b>16.2%</b>		<b>42,010</b>	<b>Electronics</b>	<b>0.5%</b>		<b>1,222</b>
Uncoated Corrugated Cardboard	5.4%	0.6%	13,918	Brown Goods	0.2%	0.1%	608
Waxed Corrugated Cardboard	0.5%	0.3%	1,401	CRT	0.0%	0.0%	80
Paper Bags	0.2%	0.1%	546	Computer-Related Electronics	0.0%	0.0%	80
Newspaper	0.5%	0.1%	1,267	Other Consumer Electronics	0.1%	0.1%	232
White Ledger Paper	1.0%	0.2%	2,549	Video Display Devices (non-CRT devices)	0.1%	0.1%	223
Mixed Waste Paper	2.4%	0.3%	6,208				
Magazines	0.4%	0.1%	1,032	<b>Construction &amp; Demolition</b>	<b>32.8%</b>		<b>84,910</b>
Phone Books and Directories	0.0%	0.0%	69	Concrete	2.1%	0.9%	5,457
Compostable/Soiled Paper	4.4%	0.4%	11,485	Asphalt Paving	0.4%	0.6%	1,106
Aseptic/Milk Containers	0.1%	0.0%	311	Asphalt Composition Shingles	0.4%	0.2%	1,046
Remainder/Composite Paper	1.2%	0.2%	3,225	Roofing Tar Paper/Felt	0.5%	0.4%	1,241
				Roofing Mastic	0.0%	0.0%	11
<b>Plastic</b>	<b>8.8%</b>		<b>22,856</b>	Built-Up Roofing	0.3%	0.4%	812
CRV HDPE Containers	0.0%	0.0%	48	Other Asphalt Roofing Material	0.1%	0.2%	352
Non-CRV HDPE Containers	0.3%	0.1%	765	Clean Dimensional Lumber	1.7%	0.4%	4,317
CRV PETE Containers	0.2%	0.0%	522	Clean Engineered Wood	1.2%	0.3%	3,166
Non-CRV PETE Containers	0.1%	0.0%	361	Clean Pallets and Crates	3.5%	0.8%	9,170
Compostable Biodegradable Plastic Containers	0.0%	0.0%	32	Other Wood Waste	5.8%	1.0%	15,080
Miscellaneous Plastic Containers	0.5%	0.1%	1,387	Clean Gypsum Board	0.6%	0.3%	1,607
Plastic Grocery and Merchandise Bags	0.2%	0.1%	403	Painted/Demolition Gypsum Board	1.6%	0.5%	4,089
Clean Film Plastic	0.9%	0.3%	2,369	Carpet & Carpet Padding	5.2%	1.1%	13,581
Dirty Film Plastic	2.5%	0.3%	6,508	Rock, Soil and Fines	3.1%	0.9%	7,905
Durable Plastic Items	2.1%	0.4%	5,541	Contaminated Soil, Street Sweepings, Drain Cleaning	0.8%	1.1%	2,036
Expanded Polystyrene	0.5%	0.1%	1,351	Remainder/Composite C&D	5.4%	0.9%	13,933
Remainder/Composite Plastic	1.4%	0.3%	3,571				
				<b>Household Hazardous Waste</b>	<b>0.1%</b>		<b>301</b>
<b>Glass</b>	<b>1.7%</b>		<b>4,529</b>	Oil-Based Paint	0.0%	0.0%	81
CRV Clear Glass Bottles	0.2%	0.0%	390	Water-Based Paint	0.0%	0.0%	101
Non-CRV Clear Glass Bottles and Containers	0.1%	0.0%	344	Vehicle and Equipment Fluids	0.0%	0.0%	3
CRV Brown Glass Bottles	0.2%	0.0%	397	Used Oil	0.0%	0.0%	15
Non-CRV Brown Glass Bottles and Containers	0.0%	0.0%	111	Lead-Acid Batteries	0.0%	0.0%	0
CRV Other Colored Glass Bottles	0.1%	0.0%	223	Household Batteries	0.0%	0.0%	22
Non-CRV Other Colored Glass Bottles and Containers	0.2%	0.0%	396	Sharps	0.0%	0.0%	1
Flat Glass	0.5%	0.2%	1,190	Pharmaceuticals	0.0%	0.0%	12
Remainder/Composite Glass	0.6%	0.3%	1,477	CFL, Fluorescent Tube and Other Mercury-Containing	0.0%	0.0%	19
				Remainder/Composite Household Hazardous	0.0%	0.0%	48
<b>Metal</b>	<b>3.6%</b>		<b>9,336</b>				
Tin/Steel Cans	0.4%	0.1%	951	<b>Special Waste</b>	<b>4.1%</b>		<b>10,535</b>
Major Appliances	0.1%	0.1%	336	Ash	0.0%	0.0%	14
Other Ferrous Metal	1.2%	0.3%	3,195	Sewage Solids	0.0%	0.0%	0
CRV Aluminum & Tin Cans	0.1%	0.0%	226	Industrial Sludge	0.0%	0.0%	0
Non-CRV Aluminum Cans	0.0%	0.0%	92	Treated Medical Waste	0.0%	0.0%	62
Used Oil Filters	0.0%	0.0%	75	Bulky Items	2.1%	0.5%	5,432
Other Non-Ferrous Metal	0.8%	0.2%	2,037	Tire	0.9%	0.6%	2,298
Remainder/Composite Metal	0.9%	0.2%	2,425	Remainder/Composite Special Waste	1.1%	0.4%	2,729
<b>Organics</b>	<b>31.1%</b>		<b>80,520</b>	<b>Mixed Residue</b>	<b>1.1%</b>		<b>2,917</b>
Food	12.5%	1.1%	32,277	Mixed Residue	1.1%	0.3%	2,917
Palm, Succulent, Coral Tree	5.1%	1.5%	13,103				
Leaves and Grass	4.7%	0.8%	12,116	<b>Subtotal</b>	<b>100.0%</b>		<b>259,138</b>
Prunings and Trimmings	2.4%	0.5%	6,316	Curbside Residential Recycling Processing Residuals			0
Branches and Stumps	0.7%	0.3%	1,812	C&D Processing Residuals			0
Agricultural Crop Residues	0.1%	0.1%	203				
Grass Sod	1.2%	1.0%	2,996	<b>Total Disposal</b>			<b>259,138</b>
Manures	0.1%	0.1%	155	<b>Sample Count</b>			<b>989</b>
Diapers	0.6%	0.2%	1,670				
Textiles	2.6%	0.5%	6,774				
Remainder/Composite Organics	1.2%	0.3%	3,098				

37,357 Commingled recyclable materials  
 23,443 Yard trimmings  
 43,762 Food waste + compostable paper  
 43,143 C&D  
 254 HHW

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Source: Estimated percent and +/- variance from Cascadia's report for City of San Diego, Detailed Waste Composition, Overall Commercial, 2012, Table 11.

Total annual commercial tonnage reflects actual tons of commercial and industrial solid waste collected by haulers, 3-year average 2013 to 2015. Tonnage for each material type is calculated as the product of the percentage and total tonnage.

# Attachment H: Baseline Waste Characterization and Tonnage Data San Diego County Strategic Plan to Reduce Waste

Detailed Waste Composition, Self-Haul								
Material	Estimated		Estimated		Material	Estimated		Estimated
	Percent	+ / -	Tons	Tons		Percent	+ / -	
<b>Paper</b>	<b>2.6%</b>		<b>2,703</b>		<b>Electronics</b>	<b>0.3%</b>		<b>276</b>
Uncoated Corrugated Cardboard	1.3%	0.7%	1,336		Brown Goods	0.2%	0.1%	188
Waxed Corrugated Cardboard	0.0%	0.0%	1		CRT	0.0%	0.0%	11
Paper Bags	0.0%	0.0%	9		Computer-Related Electronics	0.0%	0.0%	34
Newspaper	0.1%	0.1%	80		Other Consumer Electronics	0.0%	0.0%	39
White Ledger Paper	0.1%	0.0%	59		Video Display Devices (non-CRT devices)	0.0%	0.0%	4
Mixed Waste Paper	0.8%	0.3%	825					
Magazines	0.0%	0.0%	51		<b>Construction &amp; Demolition</b>	<b>58.8%</b>		<b>60,578</b>
Phone Books and Directories	0.0%	0.0%	1		Concrete	6.1%	2.9%	6,298
Compostable/Soiled Paper	0.0%	0.0%	33		Asphalt Paving	1.4%	2.1%	1,443
Aseptic/Milk Containers	0.0%	0.0%	0		Asphalt Composition Shingles	1.1%	0.6%	1,158
Remainder/Composite Paper	0.3%	0.2%	310		Roofing Tar Paper/Felt	1.2%	1.3%	1,249
					Roofing Mastic	0.0%	0.0%	14
<b>Plastic</b>	<b>1.2%</b>		<b>1,288</b>		Built-Up Roofing	1.0%	1.3%	1,022
CRV HDPE Containers	0.0%	0.0%	2		Other Asphalt Roofing Material	0.4%	0.5%	395
Non-CRV HDPE Containers	0.0%	0.0%	23		Clean Dimensional Lumber	2.0%	0.6%	2,067
CRV PETE Containers	0.0%	0.0%	23		Clean Engineered Wood	1.8%	0.6%	1,854
Non-CRV PETE Containers	0.0%	0.0%	3		Clean Pallets and Crates	1.7%	0.8%	1,761
Compostable Biodegradable Plastic Containers	0.0%	0.0%	0		Other Wood Waste	9.4%	2.1%	9,741
Miscellaneous Plastic Containers	0.0%	0.0%	33		Clean Gypsum Board	1.0%	0.4%	1,008
Plastic Grocery and Merchandise Bags	0.0%	0.0%	9		Painted/Demolition Gypsum Board	2.3%	0.8%	2,368
Clean Film Plastic	0.5%	0.5%	476		Carpet & Carpet Padding	11.7%	2.5%	12,040
Dirty Film Plastic	0.1%	0.0%	91		Rock, Soil and Fines	7.7%	2.8%	7,985
Durable Plastic Items	0.3%	0.1%	348		Contaminated Soil, Street Sweepings, Drain Cleaning	2.5%	3.7%	2,575
Expanded Polystyrene	0.1%	0.1%	146		Remainder/Composite C&D	7.4%	2.1%	7,601
Remainder/Composite Plastic	0.1%	0.0%	132					
<b>Glass</b>	<b>2.8%</b>		<b>2,922</b>		<b>Household Hazardous Waste</b>	<b>0.1%</b>		<b>113</b>
CRV Clear Glass Bottles	0.0%	0.0%	11		Oil-Based Paint	0.01%	0.0%	11
Non-CRV Clear Glass Bottles and Containers	0.0%	0.0%	33		Water-Based Paint	0.04%	0.1%	43
CRV Brown Glass Bottles	0.0%	0.0%	7		Vehicle and Equipment Fluids	0.00%	0.0%	2
Non-CRV Brown Glass Bottles and Containers	0.0%	0.0%	1		Used Oil	0.02%	0.0%	17
CRV Other Colored Glass Bottles	0.0%	0.0%	0		Lead-Acid Batteries	0.00%	0.0%	0
Non-CRV other Colored Glass Bottles and Containers	0.0%	0.0%	2		Household Batteries	0.00%	0.0%	0
Flat Glass	1.4%	0.6%	1,426		Sharps	0.00%	0.0%	0
Remainder/Composite Glass	1.4%	0.9%	1,443		Pharmaceuticals	0.00%	0.0%	0
					CFL, Fluorescent Tube and Other Mercury-Containing	0.04%	0.0%	38
					Remainder/Composite Household Hazardous	0.00%	0.0%	2
<b>Metal</b>	<b>2.4%</b>		<b>2,502</b>		<b>Special Waste</b>	<b>1.9%</b>		<b>1,931</b>
Tin/Steel Cans	0.1%	0.0%	77		Ash	0.0%	0.0%	0
Major Appliances	0.1%	0.1%	53		Sewage Solids	0.0%	0.0%	0
Other Ferrous Metal	1.1%	0.3%	1,096		Industrial Sludge	0.0%	0.0%	0
CRV Aluminum & Tin Cans	0.0%	0.0%	13		Treated Medical Waste	0.0%	0.0%	0
Non-CRV Aluminum Cans	0.0%	0.0%	5		Bulky Items	1.8%	0.4%	1,858
Used Oil Filters	0.0%	0.0%	0		Tire	0.1%	0.1%	61
Other Non-Ferrous Metal	1.0%	0.5%	1,031		Remainder/Composite Special Waste	0.0%	0.0%	11
Remainder/Composite Metal	0.2%	0.1%	226					
<b>Organics</b>	<b>27.4%</b>		<b>28,222</b>		<b>Mixed Residue</b>	<b>2.5%</b>		<b>2,565</b>
Food	0.02%	0.0%	19		Mixed Residue	2.5%	1.0%	2,565
Palm, Succulent, Coral Tree	11.7%	4.7%	12,105					
Leaves and Grass	5.1%	1.3%	5,253		<b>Subtotal</b>	<b>100.0%</b>		<b>103,101</b>
Prunings and Trimmings	2.6%	0.7%	2,647					<i>Difference due to rounding</i>
Branches and Stumps	0.8%	0.4%	863		Curbside Residential Recycling Processing Residuals			0
Agricultural Crop Residues	0.0%	0.0%	16		C&D Processing Residuals			0
Grass Sod	3.9%	3.4%	4,020					
Manures	0.1%	0.1%	88		<b>Total Disposal</b>			<b>103,112</b>
Diapers	0.0%	0.0%	4					
Textiles	2.7%	0.8%	2,747		<b>Sample Count</b>			<b>451</b>
Remainder/Composite Organics	0.4%	0.2%	459					

2,909 Commingled recyclable r  
12,799 Yard trimmings  
53 Food waste + compost  
32,602 C&D  
111 HHW

Note: This self-haul composition may not be reflective of the County of San Diego self-haul. For example, this City of San Diego self-haul composition shows 0.02% of waste disposed is food waste, which reflects that all City residents have garbage collection service. In the County, some residents and businesses self haul garbage. As a result, a County-specific waste composition analysis would show food waste.

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Source: Estimated percent and +/- variance from Cascadia's report for City of San Diego, Table 53, Detailed Waste Composition, Overall Miramar Landfill Self Haul Waste 2012. Total tonnage disposed was obtained from County tonnage data, 3-year average for 2013 to 2015. Tonnage for each material type is calculated as the product of the percentage and total tonnage.

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## Attachment I Part 1: List of Non-Exclusive Hauling Companies San Diego County Strategic Plan to Reduce Waste

List is current as of April 2014

		619-702-3300	800-421-9401	858-578-9300	619-460-3551	714-826-9049	619-702-3300	760-744-7191	619-425-1876	619-287-7555	760-744-5615	800-722-1033	760-789-0516	619-284-9245	858-453-8878	877-714-9273	760-439-2823	618 - 596-5100	
		All American Disposal	Allied Waste Services of San Diego	Allan Company	Burns & Sons Trucking, Inc.	C R & R, Incorporated	Daily Disposal Services, Inc.	Diamond Environmental	Dick's Disposal Services	EDCO Disposal Corporation	EDCO Waste & Recycling Services	Express Waste & Recycling, Inc.	Jemco Equipment Corporation	King Business Services, Inc.	Tayman Industries, Inc.	Ware Disposal Co.	Waste Management North County	Waste Management San Diego	
Region	Community	R = Residential - C = Commercial (dumpster AND/OR Roll-off) - R-C = Residential and Commercial																	
Desert	Agua Caliente				C		C	C						C		C		C	
Alpine	Alpine	R	R-C	C	C		R-C	C		R-C			R-C	C		C		R-C	
Ramona	Ballena		C		C		C	C					R-C	C		C			
Inland	Bankhead Springs		C		C			C						C		C		R-C	
Mountain	Banner	R			C		C	C					R-C	C		C		R	
Alpine	Blossom Valley	R	R-C	C	C		C	C		R-C			R-C	C		C		R-C	
Bonita	Bonita		R-C	C	C		R-C	C		R-C		C		R-C	C	C		R-C	
North Co	Bonsall			C	C		C	C		R-C	R-C			C		C	C		
Desert	Borrego Springs				C		C	C		R-C				C		C		C	
Lakeside	Bostonia		R-C	C	C		R-C	C	R-C	R-C		C		R-C	C	C		R-C	
Inland	Boulevard		C		C		C	C		C				C		C		R-C	
Inland	Buckman Springs		C		C		C	C		C				C		C		R-C	
Inland	Cameron Corners		C		C		C	C						C		C		R	
Inland	Campo		C	C	C		C	C		R-C				C		C		R-C	
Inland	Canyon City				C			C						C		C		R	
Valley	Casa de Oro Valley		R-C	C	C		R-C	C		R-C		C		C	C	C		R-C	
Ramona	Chihuahua Valley				C		C	C					R-C	C		C			
Alpine	Cottonwood	R	R-C	C	C		R-C	C		R-C		C	R-C	C	C	C		R-C	
Crest	Crest	R	C	C	C		C	C		R-C				C		C		R-C	
Mountain	Cuyamaca	R	C		C		C	C		C			R-C	C		C		R-C	
Mountain	Cuyapipe	R	C		C		C	C					R-C	C		C		R	
North Co	De Luz			C	C		C	C		R-C	R-C			C		C			
Alpine	Dehesa	R	R-C	C	C		C	C		R-C			R-C	C		C		R-C	
RSF	Del Dios			C	C		C	C		C	R-C	C		C	C	C	R		
Mountain	Descanso	R	C	C	C		C	C		C			R-C	C		C		R-C	
Bonita	Dulzura		R-C	C	C		C	C		R-C		C		R-C	C	C		R-C	
Cajon	El Cajon (Unin)	R	R-C	C	C		R-C	C	R	R-C		C		C	C	C		R-C	
Otay	Engineer Springs		R-C	C	C		C	C		C		C		C	C	C		R-C	
Escondido	Escondido (Unin)			C	C		C	C		R-C	R-C			C	C	C	C		
Lakeside	Eucalyptus Hills		R-C	C	C		R-C	C	R-C	R-C		C		R-C	C	C		R-C	
RSF	Fairbanks Ranch		R-C	C	C		R-C	C		C	R-C	C		C	C	C	R		
North Co	Fallbrook			C	C		C	C		R-C	R-C	C		C		C	C		
Ramona	Fernbrook		C		C		C	C					R-C	C		C			
Crest	Flinn Springs	R	R-C	C	C		C	C		R-C				C		C		R	
Lakeside	Foster		R-C	C	C		R-C	C	R-C	R-C				R-C		C		R	
Alpine	Glen Oaks	R	R-C	C	C		C	C		C			R-C	C		C		R-C	
Crest	Glenview	R	C	C	C		C	C		C				C	C	C		R-C	
Alpine	Guatay	R	C	C	C		C	C		C			R-C	C		C		R-C	
Crest	Harbinson Canyon	R	R-C	C	C		C	C		C				C		C		R-C	
RSF	Harmony Grove		C	C	C		C	C		C	R-C	C		C	C	C	C		
Mountain	Harrison Park	R	C	C	C			C					R-C	C		C		R	
Alpine	Hulburd Grove	R	C	C	C		C	C		C			R-C	C		C		R	
Bonita	Indian Springs		R-C	C	C		R-C	C		C				R-C		C		R	
Ramona	Irving's Crest		C		C		C	C					R-C	C		C			
Inland	Jacumba		C		C		C	C		C				C		C		C	
Alpine	Jamacha	R	R-C	C	C		C	C		C			R-C	C		C		R	
Bonita	Jamul		R-C	C	C		C	C		R-C				R-C		C		R	

## Attachment I Part 1: List of Non-Exclusive Hauling Companies San Diego County Strategic Plan to Reduce Waste

List is current as of April 2014

Region	Community	619-702-3300	800-421-9401	858-578-9300	619-460-3551	714-826-9049	619-702-3300	760-744-7191	619-425-1876	619-287-7555	760-744-5615	800-722-1033	760-789-0516	619-284-9245	858-453-8878	877-714-9273	760-439-2823	618-596-5100	
		All American Disposal	Allied Waste Services of San Diego	Allan Company	Burns & Sons Trucking, Inc.	C R & R, incorporated	Daily Disposal Services, Inc.	Diamond Environmental	Dick's Disposal Services	EDCO Disposal Corporation	EDCO Waste & Recycling Services	Express Waste & Recycling, Inc.	Jemco Equipment Corporation	King Business Services, Inc.	Tayman Industries, Inc.	Ware Disposal Co.	Waste Management North County	Waste Management San Diego	
		R = Residential - C = Commercial (dumpster AND/OR Roll-off) - R-C = Residential and Commercial																	
Escondido	Jesmond Dene			C	C		C	C		R-C	R-C			C	C	C			
Crest	Johnstown	R	C	C	C		C	C		C				C		C			
Mountain	Julian	R	C		C		C	C		R-C			R-C	C		C		R-C	
Mountain	Kentwood in Pine	R			C		C	C					R-C	C		C		R	
Valley	La Presa		R-C	C	C		R-C	C		R-C				C		C		R	
Ramona	Lake Henshaw				C		C	C		R-C			R-C	C		C			
Lake San M	Lake San Marcos			C	C		C	C			R-C	C		C	C	C	R-C		
Lakeside	Lakeside		R-C	C	C		R-C	C	R-C	R-C		C		R-C	C	C		R-C	
Lakeside	Lakeview		R-C	C	C		R-C	C	R-C	R-C				R-C		C		R	
North Co	Lilac			C	C		C	C		R-C	R-C			C		C			
Bonita	Lincoln Acres		R-C	C	C		R-C	C		R-C				C	C	C		R-C	
North Co	Live Oak Park			C	C		C	C		R-C	R-C			C		C			
Inland	Manzanita		C	C	C		C	C						C		C		R	
Ramona	Mesa Grande		C		C		C	C					R-C	C	C	C			
Inland	Morena Village		C	C	C		C	C						C		C		R-C	
Lakeside	Moreno		R-C	C	C		R-C	C	R-C	R-C				R-C	C	C		R-C	
Cajon	Mount Helix	R	R-C	C	C		C	C		R-C				R-C	C	C		R-C	
Mountain	Mount Laguna	R	C		C		C	C		C			R-C	C		C		R-C	
Ramona	Oak Grove		C		C		C	C					R-C	C		C		R	
Desert	Ocotillo Wells				C		C	C						C		C		C	
Otay	Otay		R-C	C	C		C	C		C		C		C	C	C		R-C	
North Co	Pala				C		C	C		R-C	R-C			C		C	C		
North Co	Pala Mesa Village				C		C	C		R-C	R-C			C		C			
Alpine	Palo Verde	R	R-C	C	C		C	C		C			R-C	C		C		R	
North Co	Palomar Mountain			C	C		C	C		R-C				C		C			
Mountain	Paso Picacho	R	C		C		C	C					R-C	C		C		R	
Pasqual	Pasqual			C	C		C	C			R-C	C		C	C	C			
North Co	Pauma Valley				C		C	C		R-C	R-C			C		C	C		
Pendleton	Pendleton		C	C	C	C	C	C		C	C	C		C		C	R-C		
Mountain	Pine Valley	R	C		C		C	C		R-C			R-C	C		C		C	
Inland	Potero		C	C	C			C		C				C		C		R-C	
North Co	Rainbow				C		C	C		R-C	R-C			C		C			
Ramona	Ramona		C	C	C		C	C		R-C			R-C	C		C			
Desert	Ranchita				C		C	C		C				C		C			
Cajon	Rancho San Diego	R	R-C	C	C		R-C	C		R-C		C		R-C	C	C		R-C	
RSF	Rancho Santa Fe		C	C	C		C	C		C	R-C	C		C	C	C	R		
North Co	Rincon Springs				C		C	C		R-C	R-C			C		C			
Ramona	Rosemont		C		C		C	C					R-C	C		C			
Ramona	S. D. Country Est.		C		C		C	C		R-C			R-C	C		C			
Ramona	San Felipe		C		C		C	C					R-C	C		C			
North Co	San Luis Rey Height				C		C	C		R-C	R-C	C		C		C	R-C		
Ramona	Santa Isabel		C		C		C	C		R-C			R-C	C		C			
Valley	Spring Valley		R-C	C	C		R-C	C		R-C		C		R-C		C		R	
Bonita	Sunnyside		R-C	C	C		R-C	C		C				R-C	C	C		R-C	
Ramona	Sunshine Summit						C	C		C			R-C	C		C			
Desert	Sweeney Pass				C			C						C		C			
Otay	Tecate		C	C	C		C	C		C		C		C	C	C		R-C	
Inland	Terra Del Sol		C		C		C	C						C		C		R	

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		All American Disposal	Allied Waste Services of San Diego	Allan Company	Burns & Sons Trucking, Inc.	C R & R, Incorporated	Daily Disposal Services, Inc.	Diamond Environmental	Dick's Disposal Services	EDCO Disposal Corporation	EDCO Waste & Recycling Services	Express Waste & Recycling, Inc.	Jemco Equipment Corporation	King Business Services, Inc.	Tayman Industries, Inc.	Ware Disposal Co.	Waste Management North County	Waste Management San Diego	
Region	Community	R = Residential - C = Commercial (dumpster AND/OR Roll-off) - R-C = Residential and Commercial																	
Escondido	Twin Oaks			C	C		C	C			R-C	C		C	C	C			
North Co	Valley Center				C		C	C		R-C	R-C	C		C	C	C	C		
Alpine	Victoria	R	R-C	C	C		C	C		C			R-C	C		C		R	
Alpine	Viejas Reservation	R	R-C	C	C		C	C		C			R-C	C		C		R	
Ramona	Warner Springs				C		C	C		R-C			R-C	C		C			
Mountain	Whispering Pines	R	C		C		C	C					R-C	C		C		R	
Mountain	William Heise	R	C		C			C					R-C	C		C		R	
Alpine	Willows	R	R-C	C	C		C	C		R-C			R-C	C		C		R	
Lakeside	Wintergarden		R-C	C	C		R-C	C	R-C	R-C		C		R-C	C	C		R-C	
North Co	Winterwarm				C			C		R-C	R-C			C		C			
Mountain	Wynola	R	C		C			C		C			R-C	C		C		R	
Desert	Yaqui Pass				C		C	C						C		C			

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**Attachment I Part 2: List of Recyclers  
San Diego County Strategic Plan to Reduce Waste**

List is current as of October 2014

Company	Telephone	Computer Paper	White Office Paper	Colored Paper	Office Mixed Paper	Newspaper	Cardboard	CRV Aluminum	CRV Glass	Scrap Glass	Steel & Tin Cans	CRV PET Plastic	HDPE Plastic	Industrial Plastic	Wood Pallets	Multi Family	Yard Waste	plastic 1-7	Styrofoam	PVC	Film plastic	Tetrapak	
Allan Company	(858) 578-9300	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x				x	x	
Allied Waste	(800) 421-9401	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				x	x
AMR Environmental, Inc.	(619)-827-6535						x				x		x	x	x								
Cactus Recycling	(619) 661-1283	x	x	x	x	x	x	x	x	x	x	x	x	x		x		x	x			x	x
California Metals	(800) 286-JUNK							x	x			x	x										
California Waste Solutions	(619) 740-8903	x	x	x	x	x	x				x	x	x	x	x		x						
Cal-Pac Recycling	(760) 768-3236	x	x	x	x	x	x	x	x	x	x	x	x	x	x								
Closing The Loop LLC		x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x
Coast Waste Management	(800) 386-7783				x	x	x	x	x	x	x	x				x	x	x	x			x	x
Daily Disposal Services	(619) 702-3300	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x
Dependable Disposal & Recycling/Burns & Sons Trucking	(619) 460-3551	X	X	X	X	X	x	x	X		x	X	X			X	x						
Diamond Environmental Services	(760) 744-7191					x	x				x				x		x						
Dick's Disposal Services	(619) 425-1876	x	x	x	x	x	x	x	x	x	x	x	x			x	x						
EDCO Disposal Corporation	(619) 287-7555	x	x	x	x	x	x	x	x		x	x	x			x	x	x	x			x	x
Emerald Waste & Recovery Inc.	(619) 448-7274						x				x						x	x	x			x	x
Fibre Resources	(619) 462-0098	x	x	x	x	x	x				x		x	x								x	x
Jones Disposal, Inc.	(619) 596-5100	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x			x	x
Legacy Fibers International	(858) 537-2000	x	x	x	x	x	x	x				x	x	x									
Recall Secure Destruction	(619) 291-5257	x	x	x	x																		
Reliable Waste, Inc.	(619) 234-8744	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x			x	x
San Diego Fibers Corp	(619) 262-8090	x	x	x	x	x	x																
Tayman Industries Inc.	(858) 453-8878	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x
Universal Refuse Removal, El Cajon	(619) 596-5100	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x			x	x
Urban Corps	(619) 235-6884	x	x	x	x	x	x	x	x	x	x	x	x		x		x						
USA Waste Services of Cal.	(619) 596-5100	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x			x	x
Ware Disposal Inc.	(877) 714-9273	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x							
Waste Management of North County	(760) 439-2824	x	x	x	x	x	x	x			x	x	x		x	x	x	x	x			x	x
Waste Management of San Diego	(619) 596-5100	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x			x	x

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## Attachment I Part 2: List of Recyclers San Diego County Strategic Plan to Reduce Waste

List is current as of October 2014

Region	City	Allan Company	Allied Waste Services	AMR Environmental, Inc.	Cactus Recycling	California Metals	California Waste Solutions	Cal Pac Recycling	Closing the Loop (619-838-4226)	Coast Waste Management	Daily Disposal Services	Dependable Disposal & Recycling/Burns & Sons Trucking	Dick's Disposal Service	Diamond Environmental Services	EDCO	Emerald Waste and Recovery Inc.	Fibre Resources	Hones Disposal Inc.	Legacy Fibers International	Recall Secure Destruction	Reliable Waste, Inc.	Resource Management	San Diego Fibers Corp	Tayman Industries Inc							Waste Management of San Diego	
Alpine	Alpine		RC	C	C	R	C	C	C		RC	C		C	C	RC	C	RC	C	C	RC		C							RC		
Alpine	Blossom Valley		RC	C	C	R	C	C	C		RC	C		C	C	RC	C	RC	C	C	RC		C			RC				RC		
Alpine	Cottonwood			C	C	R	C	C	C		RC	C		C	C			R	C	C	R		C			R				R		
Alpine	Dehesa			C	C	R	C	C	C		RC	C		C	C			RC	C	C	RC		C			RC				RC		
Alpine	Glen Oaks			C	C	R	C	C	C		RC	C		C	C				C	C			C							C		
Alpine	Guatay			C	C	R	C	C	C		RC	C		C	C				C	C			C							C		
Alpine	Hulburd Grove			C	C	R	C	C	C		RC	C		C	C				C	C			C							C		
Alpine	Jamacha		RC	C	C	R	C	C	C		RC	C		C	C				C	C			C							C		
Alpine	Palo Verde		R	C	C	R	C	C	C		RC	C		C	C			RC	C	C	RC		C			RC				RC		
Alpine	Victoria		R	C	C	R	C	C	C		RC	C		C	C			R	C	C	R		C			R				R		
Alpine	Viejas Reservation		RC	C	C	R	C	C	C		RC	C		C	C	RC		R	C	C	R		C			R				R		
Alpine	Willows		R	C	C	R	C	C	C		RC	C		C	C	RC			C	C			C							C		
Bonita	Bonita		RC	RC	C	R	C	C	C		RC	C		C	RC		C	RC	C	C	RC		C		RC	RC	RC	RC	C		RC	
Bonita	Dulzura			RC	C	R	C	C	C		RC	C		C	RC				C	C			C			RC				C		
Bonita	Indian Springs			RC	C	R	C	C	C		RC	C		C	C				C	C			C			RC				C		
Bonita	Jamul		RC	RC	C	R	C	C	C		RC	C		C	RC	RC	C	RC	C	C	RC		C		RC	RC	RC	RC	C		RC	
Bonita	Lincoln Acres		RC	RC	C	R	C	C	C		RC	C		C	RC			RC	C	C	RC		C			RC	RC	RC	C		RC	
Bonita	Sunnyside		RC	RC	C	R	C	C	C		RC	C		C	RC			RC	C	C	RC		C			RC	RC	RC	RC	C		RC
Cajon	El Cajon (Unin)		RC	RC	C	R	C	C	C		RC	C		R	C		C	RC	C	C	RC		C			RC	RC	RC	RC	C		RC
Cajon	Mount Helix		RC	RC	C	R	C	C	C		RC	C		C	RC		C	RC	C	C	RC		C			RC	RC	RC	RC	C		RC
Cajon	Rancho San Diego		RC	RC	C	R	C	C	C		RC	C		C	RC	RC	C	RC	C	C	RC		C			RC	RC	RC	RC	C		RC
Crest	Crest			RC	C	RC	C	C	C		RC	C		C	C	R		RC	C	C	RC		C			RC	RC	RC	RC	C		RC
Crest	Flinn Springs		RC	RC	C	R	C	C	C		RC	C		C	C	R		RC	C	C	RC		C			RC	RC	RC	RC	C		RC
Crest	Glenview		RC	RC	C	R	C	C	C		RC	C		C	C			RC	C	C	RC		C			RC	RC	RC	RC	C		RC
Crest	Harbinson Canyon		RC	RC	C	R	C	C	C		RC	C		C	C	R		R	C	C	R		C			R	RC	R	RC	C		R
Crest	Johnstown		RC	RC	C	R	C	C	C		RC	C		C	C			RC	C	C	RC		C			RC	RC	RC	RC	C		RC
Desert	Agua Caliente			C	C		C	C	C		RC	C		C					C	C			C								C	
Desert	Borrego Springs			C	C		C	C	C		RC	C		C					C	C			C								C	
Desert	Ocotillo Wells			C	C		C	C	C		RC	C		C					C	C			C								C	
Desert	Ranchita			C	C		C	C	C		RC	C		C	C				C	C			C								C	
Desert	Sweeney Pass			C	C		C	C	C		RC	C		C					C	C			C								C	
Desert	Yaqui Pass			C	C		C	C	C		RC	C		C					C	C			C								C	
Escondido	Escondido (Unin)			C	C		C	C	C	RC	RC	C		C	RC		C		C	C			C		RC			RC			C	
Escondido	Jesmond Dene			C	C		C	C	C		RC	C		C	RC				C	C			C			RC			RC		C	
Escondido	Twin Oaks			C	C		C	C	C		RC	C		C	RC				C	C			C			RC			RC		C	
Inland	Bankhead Springs			C	C	R	C	C	C			C		C					C	C			C								C	
Inland	Boulevard			C	C	R	C	C	C		RC	C		C	RC				C	C			C								C	
Inland	Buckman Springs			C	C	R	C	C	C		RC	C		C	C	RC			C	C			C								C	
Inland	Cameron Corners			C	C	R	C	C	C		RC	C		C	C				C	C			C								C	
Inland	Campo			C	C	R	C	C	C		RC	C		C	RC	R			C	C			C								C	
Inland	Canyon City			C	C	R	C	C	C			C		C	C				C	C			C								C	

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Inland	Jacumba					C	C	R		C	C		RC	C		C	RC	R			C	C			C								C				
Inland	Manzanita					C	C	R		C	C		RC			C	C					C	C		C									C			
Inland	Morena Village					C	C	R		C	C		RC			C	C					C	C		C									C			
Inland	Potero					C	C	R		C	C		RC			C	C					C	C		C									C			
Inland	Terra Del Sol					C	C	R		C	C					C	C					C	C		C									C			
Lake San Marcos	Lake San Marcos					C	C			C	C	C	RC	C		C	RC		C			C	C		C	RC								C			
Lakeside	Bostonia			RC	C	C	R		C	C	C	RC	C	C		C	C		C	RC	C	C	RC		C			RC	RC	RC	C			RC			
Lakeside	Eucalyptus Hills			RC	C	C	R		C	C	C	RC	C		R	C	C	R		RC	C	C	RC		C			RC	RC	RC	C			RC			
Lakeside	Foster			RC	C	C	R		C	C	C	RC	C			C	C			RC	C	C	RC		C			RC	RC	RC	C			RC			
Lakeside	Lakeside			RC	C	C	RC	C	C	C	C	RC	C		R	C	C	R		RC	C	C	RC		C			RC	RC	RC	C			RC			
Lakeside	Lakeview			RC	C	C	R		C	C	C	RC	C			C	C			RC	C	C	RC		C			RC	RC	RC	C			RC			
Lakeside	Moreno			RC	C	C	R		C	C	C	RC	C		R	C	C			RC	C	C	RC		C			RC	RC	RC	C			RC			
Lakeside	Wintergarden			RC	C	C	R		C	C	C	RC	C		R	C	C	R		RC	C	C	RC		C			RC	RC	RC	C			RC			
Mountain	Banner				C	C	C			C	C	RC				C	C				C	C												C			
Mountain	Cuyamaca				C	C	C			C	C	RC				C	C				C	C												C			
Mountain	Cuyapipe				C	C	C			C	C	RC				C	C				C	C												C			
Mountain	Descanso				C	C	C			C	C	RC				C	C	R			C	C			C									C			
Mountain	Harrison Park				C	C	C			C	C	RC				C	C				C	C			C									C			
Mountain	Julian				C	C	C			C	C	RC				C	RC				C	C			C										C		
Mountain	Kentwood in Pine				C	C	C			C	C	RC				C	C				C	C			C										C		
Mountain	Mount Laguna				C	C	C			C	C	RC				C	C				C	C			C										C		
Mountain	Paso Picacho				C	C	C			C	C	RC				C	C				C	C			C										C		
Mountain	Pine Valley				C	C	C			C	C	RC				C	RC				C	C			C										C		
Mountain	Whispering Pines				C	C	C			C	C	RC				C	C				C	C			C										C		
Mountain	William Heise				C	C	C			C	C	RC				C	C				C	C			C										C		
Mountain	Wynola				C	C	C			C	C	RC				C	C				C	C			C										C		
North Co	Bonsall				C	C	C			C	C	RC	C			C	RC		C		C	C		C		RC								C	C		
North Co	De Luz				C	C	C			C	C	RC	C			C	RC				C	C		C		RC								C	RC		
North Co	Fallbrook				C	C	C			C	C	RC	C			C	RC				C	C		C		RC								C	C		
North Co	Lilac				C	C	C			C	C	RC	C			C	RC				C	C		C		RC									C		
North Co	Live Oak Park				C	C	C			C	C	RC	C			C	RC				C	C		C		RC									C		
North Co	Pala				C	C	C			C	C	RC	C			C	RC				C	C		C		RC										C	
North Co	Pala Mesa Village				C	C	C			C	C	RC	C			C	RC				C	C		C		RC									C		
North Co	Palomar Mountain				C	C	C			C	C	RC	C			C	C				C	C		C		RC									C		
North Co	Pauma Valley				C	C	C			C	C	RC	C			C	RC				C	C		C		RC										C	
North Co	Rainbow				C	C	C			C	C	RC	C			C	RC				C	C		C		RC										C	
North Co	Rincon Springs				C	C	C			C	C	RC	C			C	RC				C	C		C		RC										C	
North Co	San Luis Rey Height				C	C	C			C	C	RC	RC	C		C	RC				C	C		C		RC										C	
North Co	Valley Center				C	C	C			C	C	RC	RC	C		C	RC		C		C	C		C		RC										C	
North Co	Winterwarm				C	C	C			C	C	RC	RC	C		C	RC				C	C		C		RC										C	

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Otay	Engineer Springs					RC	C			C	C		RC	C		C	C				C	C		C		RC									
Otay	Otay				C	RC	C		C				RC	C		C	C		C	C	C	C		C		RC	C	RC	C					C	
Otay	Tecate					RC	C			C	C		RC	C		C	C				C	C		C		RC									
Pasqual	Pasqual						C			C	C		RC	C		C	C				C	C		C		RC									
Pendleton	Pendleton					C	C			C	C	RC	RC	C		C	C				C	C		C										RC	
Ramona	Ballena					C	C			C	C		RC			C	RC				C	C		C											
Ramona	Chihuahua Valley					C	C			C	C		RC			C	RC				C	C		C											
Ramona	Fernbrook					C	C			C	C		RC			C	RC				C	C		C											
Ramona	Irving's Crest					C	C			C	C		RC			C	RC				C	C		C											
Ramona	Lake Henshaw					C	C			C	C		RC			C	RC				C	C		C											
Ramona	Mesa Grande					C	C			C	C		RC			C	RC				C	C		C											
Ramona	Oak Grove					C	C			C	C		RC			C	RC				C	C		C											
Ramona	Ramona					C	C			C	C		RC			C	RC	R			C	C		C		RC									
Ramona	Rosemont					C	C			C	C		RC			C	RC				C	C		C											
Ramona	S. D. Country Est.					C	C			C	C		RC			C	RC				C	C		C											
Ramona	San Felipe					C	C			C	C		RC			C	RC				C	C		C											
Ramona	Santa Isabel					C	C			C	C		RC			C	RC	R			C	C		C											
Ramona	Sunshine Summit					C	C			C	C		RC			C	RC				C	C		C											
Ramona	Warner Springs					C	C			C	C		RC			C	RC				C	C		C											
RSF	Del Dios					C	C	R		C	C		RC	C		C	RC				C	C		C		RC		RC		RC					
RSF	Fairbanks Ranch				RC	C	C	R		C	C	RC	RC	C		C	RC				C	C		C		RC		RC		RC					
RSF	Harmony Grove					C	C	R		C	C		RC	C		C	RC				C	C		C		RC		RC		RC					
RSF	Rancho Santa Fe				RC	C	C	R		C	C	RC	RC	C		C	RC			RC	C	C	RC	C	RC	RC	RC	RC	RC					RC	
Valley	Casa de Oro Valley				RC	RC	C	R	C	C	C		RC	C		C	RC		C	RC	C	C	RC	C	RC	RC	RC	RC	RC						RC
Valley	La Presa				RC	RC	C	R	C	C	C		RC	C		C	RC		C	RC	C	C	RC	C	RC	RC	RC	RC	RC						RC
Valley	Spring Valley				RC	RC	C	RC	C	C	C		RC	C		C	RC	R	C	RC	C	C	RC	C	RC	RC	RC	RC	RC						RC

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## Attachment J: Summary of Non-Exclusive Hauler Service San Diego County Strategic Plan to Reduce Waste

As part of the assessment of current conditions, a questionnaire was developed to gather information from the non-exclusive franchise haulers to gain a better understanding of the collection services provided in the unincorporated areas. In total, eight haulers responded to the questionnaire in April and May 2016. Findings from the questionnaire are summarized below. Sections 1 and 2 present residential and commercial service information. Section 3 provides maps illustrating the areas where the largest haulers operate by zip code and the volumes of materials collected by zip code.

### 1. Residential Collection Services (as of April 2016)

- 3 haulers provide the majority of regular residential cart collection services when accounting for affiliated- and related-party entities, with one additional hauler servicing less than 50 accounts.
- An estimated 68% of single-family households in the unincorporated areas have collection service.<sup>1</sup>
- 91,990 households subscribe to collection service. Account data is presented in Figure J-1.
- 71,258 solid waste carts are in service, which does not align with 91,990 reported accounts. Some or all of the difference may be explained by the fact that some residential accounts use one cubic yard bins, and those containers are reported with the commercial data.
- Based on a comparison of the number of solid carts and recycling carts, it appears that each customer has recycling service, because 77,865 recycling carts are in service.
- Approximately 86% of customers have yard trimmings service (61,291 carts in service compared to 71,258 solid waste carts).
- 210,414 containers are in service for solid waste, recyclables, and organics collection. Approximately 64% of the volume of service provided to residents is for collection and diversion of recyclables and yard trimmings, with the remainder for solid waste.
- 89% of solid waste carts are 96-gallon carts.
- Once a week collection is provided to residents.
- A two-container system is offered to all customers for solid waste and recyclables collection.
- A three-container system is offered for solid waste, recyclables, and yard trimmings collection in many areas. Food scraps collection is not available.
- 3 cart sizes (with 32-, 64-, or 96-gallon capacities) are offered for solid waste, recyclables, and yard trimmings to the majority of residents; while some residents are only offers 96-gallon solid waste and yard trimming carts and 64-gallon recycling carts (by one particular hauler).
- 7 different recyclables processing facilities are being used.
- 3 or more facilities are receiving yard trimmings from the unincorporated areas. Yard trimmings are used for land application, compost, and landfill cover (also known as ADC).

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<sup>1</sup> The estimated 68% subscription rate is for single-family households in the unincorporated area. It does not: (i) include multi-family or mobile homes; (ii) reflect vacancies; or, (iii) account for residents with bin service, because those accounts are included with commercial accounts.

## **Attachment J: Summary of Non-Exclusive Hauler Service San Diego County Strategic Plan to Reduce Waste**

- The 3 residential cart haulers offer bulky item (appliances, large furniture, etc.) collection; in some cases at no charge and, in other cases, for a fee. The majority of collection containers are supplied by the haulers at no charge. Three haulers allow customers to provide containers.
- Curbside service is provided by haulers. One company provides alternative collection locations to its rural customers.
- Haulers charge customers bundled rates that include, at a minimum, solid waste and recycling service, and in many cases, include yard trimmings service. Some haulers charge separately for yard trimmings service.
- One hauler offers curbside collection in Ramona of motor oil. None of the haulers offer curbside collection of motor oil filters or household batteries.
- The 3 residential cart haulers use natural gas fuel (CNG or LNG) for approximately 50% of their collection fleet.
- Most collection is provided with fully-automated side-loaders; some service is performed with semi-automated side-loaders; one company uses front-loading vehicles with Curotto cans; and one company provides some service with rear-loading vehicles.

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**Attachment J: Summary of Non-Exclusive Hauler Service  
San Diego County Strategic Plan to Reduce Waste**

**Figure J-1: Residential Account Data (April 2016)**

<b>Container</b>	<b>Solid Waste</b>	<b>Recyclables</b>	<b>Yard Trimmings</b>
Container Type			
Cans, barrels, bags	2,655	0	10
14-gallon recycling crates	---	2,655	---
35-gallon wheeled cart with lid (or similar size)	727	1,735	454
64-gallon wheeled cart with lid (or similar size)	4,346	51,233	1,879
96-gallon wheeled cart with lid (or similar size)	63,530	22,242	58,948
<b>Total (b)</b>	<b>71,258</b>	<b>77,865</b>	<b>61,291</b>
Container Type (% of total)			
Cans, barrels, bags	3.7%	0.0%	0.0%
14-gallon recycling crates	0.0%	3.4%	0.0%
35-gallon wheeled cart with lid (or similar size)	1.0%	2.2%	0.7%
64-gallon wheeled cart with lid (or similar size)	6.1%	65.8%	3.1%
96-gallon wheeled cart with lid (or similar size)	89.2%	28.6%	96.2%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>% of Solid Waste Containers with Recy/Yard Trimmings</b>		<b>109.3%</b>	<b>86.0%</b>
Capacity (gallons per week)			
Cans, barrels, bags	92,925	0	350
14-gallon recycling crates	0	37,170	0
35-gallon wheeled cart with lid (or similar size)	25,445	60,725	15,890
64-gallon wheeled cart with lid (or similar size)	278,144	3,278,912	120,256
96-gallon wheeled cart with lid (or similar size)	6,098,880	2,135,232	5,659,008
<b>Total</b>	<b>6,495,394</b>	<b>5,512,039</b>	<b>5,795,504</b>
<b>Capacity as a % of Total</b>	<b>36.5%</b>	<b>31.0%</b>	<b>32.6%</b>
<b>Diversion Capacity as a % of Total</b>			<b>63.5%</b>

Source: Account data provided by haulers, April 2016.

(a) In some cases, multi-family customers may be included. Some residential customers have 1 cubic yard or larger dumpster (bin) service, although data is not available for the dumpster accounts. There is a large difference between the number of solid waste carts in service and reported number of accounts. It may be attributable to the dumpster service.

(b) Some accounts have multiple recycling carts and/or multiple yard trimmings carts, which may justify why the number of recycling carts is greater than the number of solid waste carts. While some accounts may have multiple yard trimmings carts, some accounts do not have any yard trimmings carts, which may justify why the number of yard trimmings carts is less than solid waste carts. Data is not available to separately identify customers with and without yard trimmings or with multiple recycling and/or yard trimmings carts.

## **2. Commercial Collection Services (as of April 2016)**

- 11 haulers provide commercial collection services, considering affiliated- and related-party entities.
- 3 haulers provide the majority of regular commercial cart and bin collection service; 1 additional hauler services less than 50 commercial accounts.
- Approximately 13,624 businesses subscribe to collection service.
- 11% of cart and bin service capacity is for collection and diversion of recyclables; 0.1% for yard trimmings collection and diversion.
- 100% of the cart and bin haulers offer commingled recyclables collection in the service areas, with an exception that one company does not offer recyclables collection to its customers in the far eastern parts of the county.
- 5 haulers offer yard trimmings collection.
- 3 haulers offer food scraps collection.
- 3 haulers only provide commercial roll-off service.
- 3 haulers use natural gas fuel (CNG or LNG) for approximately 50% of their collection fleet.
- 5 haulers offer bulky collection; in some cases at no charge and, in other cases, for a fee.
- 1 hauler offers e-waste and u-waste collection to businesses; in some cases at no charge and, in other cases, for a fee.
- Most collection is provided with front-loading vehicles and some with side-loading vehicles. One company uses pick-up truck(s) for bulky item, e-waste, and u-waste collection.
- Containers are provided by the haulers at no charge, with the exception that compactors may be customer provided in some cases.
- Yard trimmings are used for land application, compost, and landfill cover. Where service is available, food scraps are composted.
- All, but one hauler, have separate rates for solid waste, recyclables, and organics collection; one hauler does, in some cases, have bundled rates for solid waste and recycling, and for solid waste, recycling, and organics.

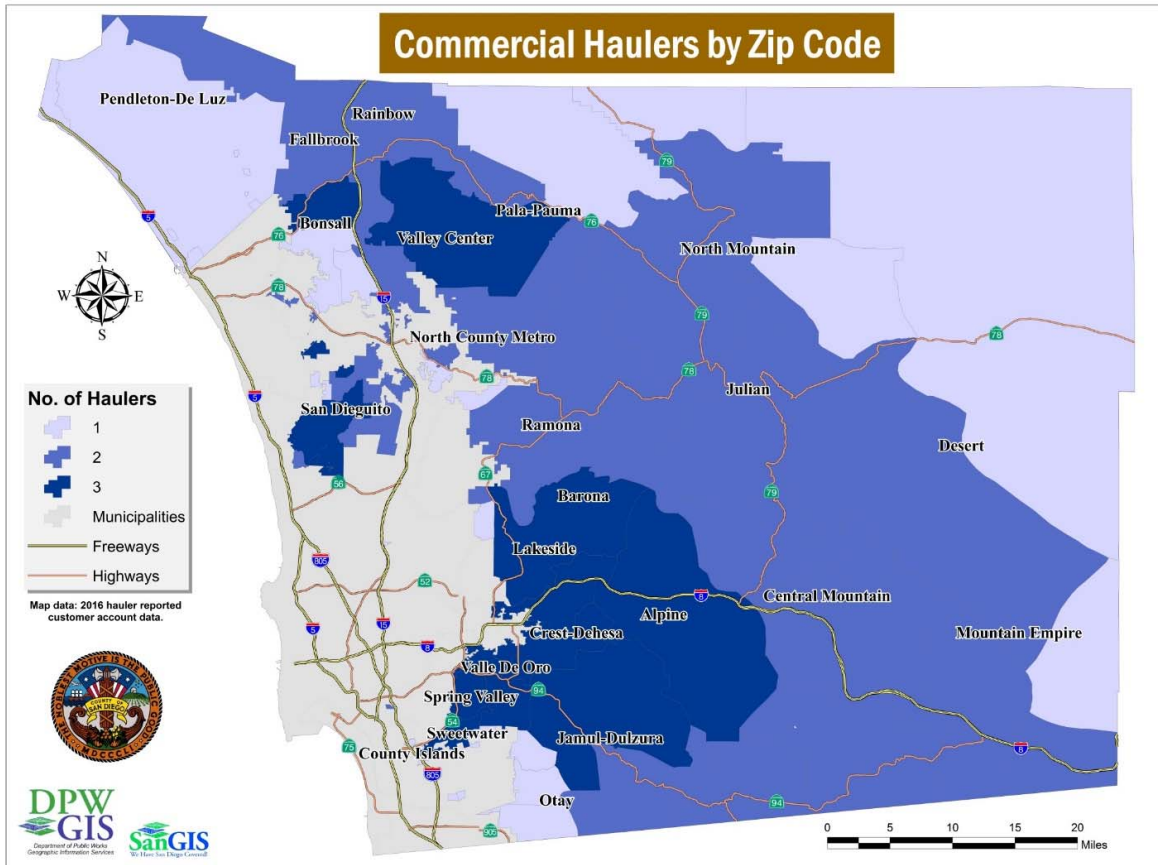
## **3. Geographic Analysis of Commercial Account Data (as of April 2016)**

In 2015, four of the companies – EDCO, Daily Disposal, Republic Services (also known as Allied Waste), and Waste Management – collected 97% of the non-exclusive franchise solid waste, recyclables, and yard trimmings tonnage. In September 2016, EDCO acquired Daily Disposal, so effectively 3 haulers collect 97% of the franchise tonnage. Figures J-2, J-3, and J-4 illustrate the number of the largest haulers operating in various regions of the unincorporated areas and the relative density of the commercial recycling and solid waste collection services. These three figures were prepared using commercial customer account data reported by EDCO, Daily Disposal, Republic Services, and Waste Management in April 2016. Other haulers provide services as well; however, the customer account data was not analyzed and/or was unavailable, and, therefore, not reflected. The figures show that high density service areas include Valley Center, Bonsall, Ramona, Barona, Lakeside, Alpine, Crest-Dehesa, Spring Valley, and Jamul-Dulzura. In these areas, two or three of the largest haulers provide cart and bin commercial collection services. In the other areas,

## Attachment J: Summary of Non-Exclusive Hauler Service San Diego County Strategic Plan to Reduce Waste

one or two haulers provide cart and bin services. Roll-off services are provided by numerous non-exclusive haulers throughout the unincorporated areas.

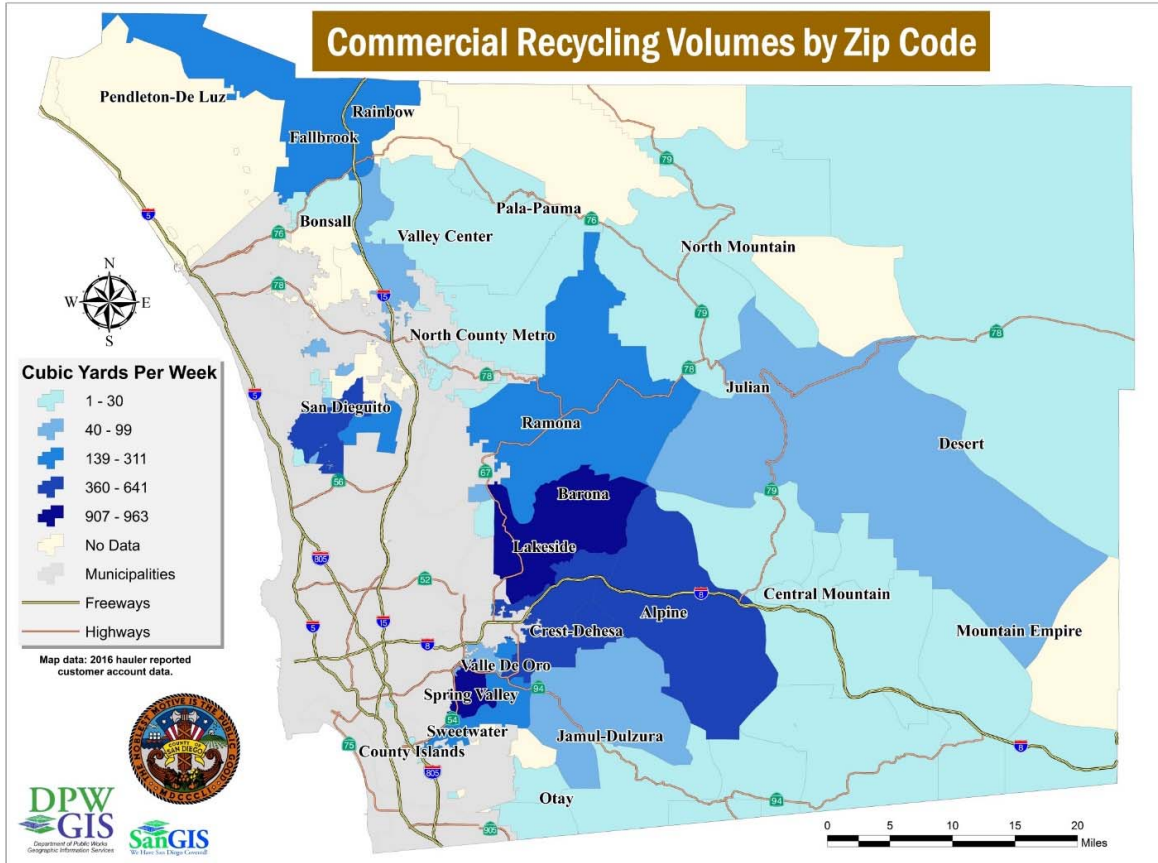
**Figure J-2: Number of Commercial Haulers by Zip Code**  
(Based on data from the Four Largest Non-Exclusive Franchise Haulers, April 2016)\*



\* In April 2016, data was received from the four largest haulers in the unincorporated areas. In the fall of 2016, EDCO acquired Daily Disposal, which resulting in three, not four large haulers operating in in the unincorporated areas. Given this, EDCO and Daily Disposal data was combined for the purposes of Figure J-2.

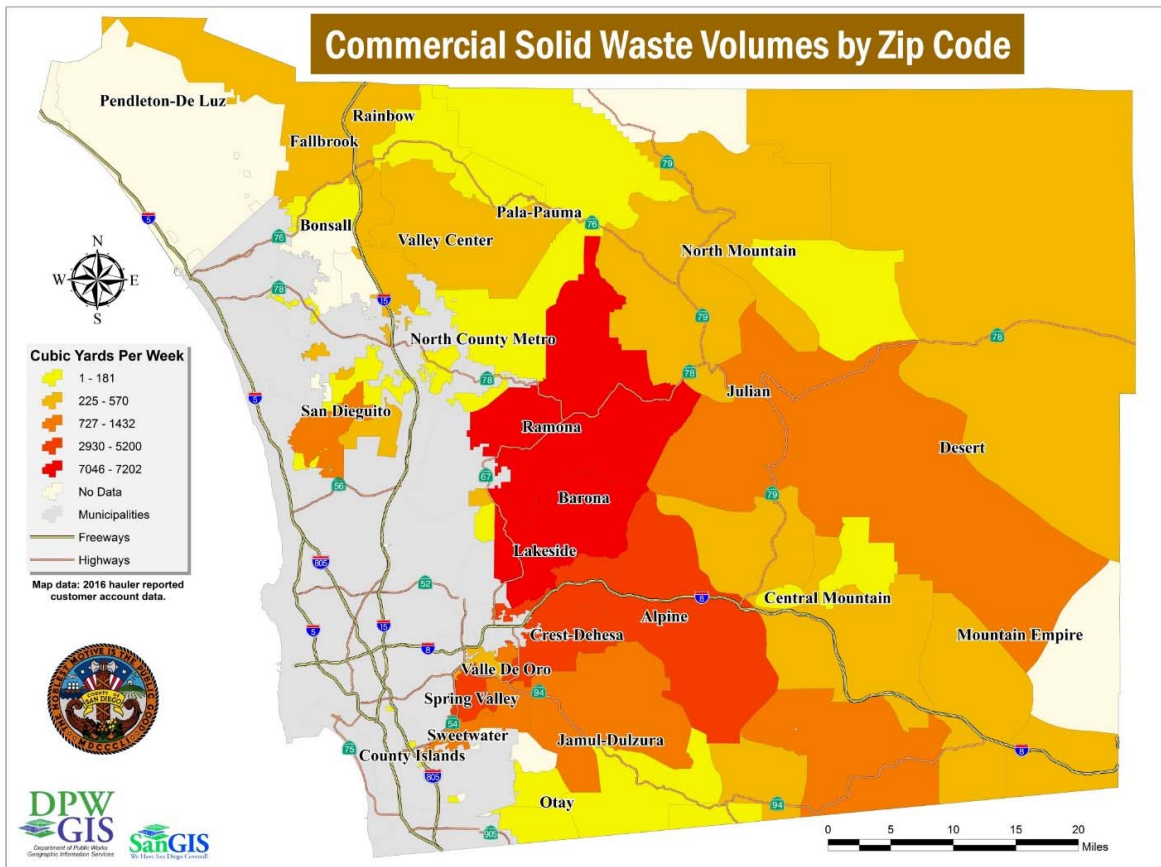
# Attachment J: Summary of Non-Exclusive Hauler Service San Diego County Strategic Plan to Reduce Waste

**Figure J-3: Commercial Recycling Service Volumes by Zip Code**  
(Based on data from the Four Largest Non-Exclusive Franchise Haulers, April 2016)



# Attachment J: Summary of Non-Exclusive Hauler Service San Diego County Strategic Plan to Reduce Waste

**Figure J-4: Commercial Solid Waste Service Volumes by Zip Code**  
(Based on data from the Four Largest Non-Exclusive Franchise Haulers, April 2016)



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**Attachment K: Facility Infrastructure Inventory  
San Diego County Strategic Plan to Reduce Waste**

		Cross			
	Unincorporated	Jurisdictional	Incorporated	Total	
<b>TRANSFER &amp; DISPOSAL FACILITIES</b>					
1	<a href="#">Landfills</a>	1	1	4	6
2	<a href="#">Transfer Stations</a>	9	14	8	31
<b>TRADITIONAL RECYCLING INFRASTRUCTURE</b>					
3	<a href="#">Chipping &amp; Grinding Facilities</a>	3	5	3	11
4	<a href="#">Beneficial Reuse</a>	0	0	3	3
5	<a href="#">Material Recovery Facilities</a>	2	6	1	9
6	<a href="#">Composting Facilities</a>	2	7	2	11
7	<a href="#">C&amp;D Disposal &amp; Processing Facilities</a>	9	15	10	34
8	<a href="#">Buyback Centers</a>	14	39	30	83
<b>SPECIALTY RECYCLING INFRASTRUCTURE</b>					
9	<a href="#">Carpet Recycling</a>	0	0	2	2
10	<a href="#">Tire Remanufacturing, Processing &amp; Disposal</a>	0	2	3	5
11	<a href="#">Used Oil Centers</a>	24	137	99	260
12	<a href="#">Hazardous, Appliance, E-Waste</a>	0	0	19	19
<b>REUSE, REPAIR INFRASTRUCTURE</b>					
13	<a href="#">Architectural Salvage</a>	0	1	6	7
14	<a href="#">Thrift Stores</a>	17	49	54	120
15	<a href="#">Appliance Repair Centers</a>	9	17	10	36
16	<a href="#">Computer &amp; Phone Repair Centers</a>	2	18	14	34
17	<a href="#">Bicycle Repair</a>	2	5	11	18
18	<a href="#">Furniture Repair</a>	2	14	14	30
	<b>Total</b>	96	330	293	719

List current as of April 2016

**Attachment K: Facility Infrastructure Inventory  
San Diego County Strategic Plan to Reduce Waste**

**1. LANDFILLS**

Source: SWIF List Calrecycle

List current as of April 2016

Facility Name	Regulatory Status	Operational Status	Cubic Yards of Capacity		As of (1)	Address
			Permitted Capacity (1)	Remaining Capacity (1)		
Borrego Landfill	Permitted	Active	476,098	111,504	8/31/2015	2449 Palm Caynon Rd, Borrego Springs, 92004
Otay Landfill	Permitted	Active	61,154,000	24,514,904	3/31/2012	1700 Maxwell Rd, Chula Vista, 91911
West Miramar Sanitary Landfill	Permitted	Active	87,760,000	15,527,878	6/30/2014	5180 Convoy St , San Diego, 92111
Sycamore Landfill	Permitted	Active	71,233,171	39,608,998	12/31/2014	8514 Mast Blvd, Santee, 92071
San Onofre Landfill	Permitted	Active	1,920,000	1,244,986	9/30/2009	2.7 Mi E Basilone Gate, Camp Pendleton, 92672
Las Pulgas Landfill	Permitted	Active	12,440,986	10,103,973	11/1/2009	1 Mi N Camp Pulgas off Basilone Rd, Camp Pendleton, 92055

Source:

(1) CalRecycle Solid Waste Information System (SWIS)

Note that the Ramona landfill received County tonnage in the past, but is now closed.

**Attachment K: Facility Infrastructure Inventory  
San Diego County Strategic Plan to Reduce Waste**

## 2. TRANSFER STATIONS

Source: SWIF List Calrecycle, County NDFE Table

List current as of April 2016

Facility Name	Regulatory Status	Operational Status	Activity Description	Address
Allan Company MRF T/S	Permitted	Active	Large Volume Transfer/Proc Facility	6733 Consolidated Way, San Diego, CA 92121
Amswede Recycling	Permitted	Active	Medium Volume Transfer/Proc Fac	149 Reed Ct., Chula Vista, CA 91911
Benchmark Landscape- Poway Branch	Notification	Active	Limited Volume Transfer Operation	12575 Stowe Drive, Poway, CA 92064
Benchmark Landscape- San Marcos	Notification	Active	Limited Volume Transfer Operation	145 N. Pacific Street, San Marcos, CA 92069
Benchmark Landscape- Spring Valley Boulevard LVTO	Notification	Active	Limited Volume Transfer Operation	3763 Bancroft Drive, Spring Valley, CA 91977
Caltrans Henshaw LVTO	Notification	Active	Limited Volume Transfer Operation	40945 Old Highway 80, Boulevard, CA 91905
Carlsbad LVTO	Notification	Active	Limited Volume Transfer Operation	27174 Highway 79, Santa Ysabel, CA 92070
Chula Vista LVTO	Notification	Active	Limited Volume Transfer Operation	6050 Paseo Del Norte, Carlsbad, CA 92011
City of San Diego Env.Ser.Dept. LVTO	Notification	Active	Limited Volume Transfer Operation	570 C St., Chula Vista, CA 91910
Coast Waste Management Inc. LVTO	Notification	Active	Limited Volume Transfer Operation	8353 Miramar Place, San Diego, CA 92121
Coronado Bridge Paint LVTO	Notification	Active	Limited Volume Transfer Operation	5960 El Camino Real, Carlsbad, CA 92008
Descanso LVTO	Notification	Active	Limited Volume Transfer Operation	1995 Newton Ave, San Diego, CA 92113
EDCO Bin Yard	Notification	Active	Limited Volume Transfer Operation	24171 Japatul Rd., Alpine, CA 91901
EDCO Recovery and Transfer	Permitted	Active	Large Volume Transfer/Proc Facility	9005 Kenwood Dr., Spring Valley, CA 91977
EDCO Recycling	Permitted	Active	Large Volume Transfer/Proc Facility	3660 Dalbergia Street, San Diego, CA 92113
EDCO Station	Permitted	Active	Large Volume Transfer/Proc Facility	6600-6700 Federal Blvd., Lemon Grove, CA 91941
EDCO Waste and Recycling - LVTO	Notification	Active	Limited Volume Transfer Operation	8184 Commercial Street, La Mesa, CA 91941
Escondido Disposal, Inc.	Notification	Active	Limited Volume Transfer Operation	224 South Las Posas, San Marcos, CA 92078
Escondido LVTO	Notification	Active	Limited Volume Transfer Operation	1035 West washington Avenue, Escondido, CA 92025
Escondido Resource Recovery	Permitted	Active	Large Volume Transfer/Proc Facility	1780 W. Mission Ave., Escondido, CA 92029
Fallbrook Recycling and Transfer	Permitted	Active	Large Volume Transfer/Proc Facility	1044 W. Washington Avenue, Escondido, CA 92025
Kearny Mesa LVTO	Notification	Active	Limited Volume Transfer Operation	550 West Aviation Road, Fallbrook, CA 92028
Palomar Transfer Station, Inc	Permitted	Active	Large Volume Transfer/Proc Facility	7181 Opportunity Rd., San Diego, CA 92111
Ramona MRF And Transfer Station	Permitted	Active	Large Volume Transfer/Proc Facility	5960 El Camino Real, Carlsbad, CA 92008
SANCO Recycling	Permitted	Active	Large Volume Transfer/Proc Facility	324 Maple Street, Ramona, CA 92065
Santee LVTO	Notification	Active	Limited Volume Transfer Operation	1044 Washington Avenue, Escondido, CA 92025
Universal Refuse Removal Recycling T.S	Permitted	Active	Large Volume Transfer/Proc Facility	8502 Railroad Ave., Santee, CA 92701
Waste Management Of North County	Notification	Active	Sealed Container Transfer Operation	1001 W. Bradley Avenue, El Cajon, CA 92020
Waste Management of San Diego -LVTO	Notification	Active	Limited Volume Transfer Operation	2376 Industry Street, Oceanside, CA 92054
Waste Mgt.North Co. Limited Vol.Trans Op	Notification	Active	Limited Volume Transfer Operation	1001 West Bradley Avenue, El Cajon, CA 92020
				2403 B Industry Street, Oceanside, CA 92054

**Attachment K: Facility Infrastructure Inventory  
San Diego County Strategic Plan to Reduce Waste**

**3. CHIPPING & GRINDING**

List current as of April 2016

Facility Name	Regulatory Status	Operational Status	Activity	Address	Source	Permitted Capacity
Otay Landfill	Permitted	Active	Chipping and Grinding Activity Fac./	1700 Maxwell Road, Chula Vista, CA 91911	SWIF	n.a
Sycamore Landfill	Permitted	Active	Chipping and Grinding Activity Fac./	8514 Mast Blvd. San Diego, CA 92071	SWIF	n.a.
Inland Pacific R.R. Slaughterhouse Yard	Permitted	Active	Chipping and Grinding Activity Fac./	12650 Slaughterhouse Canyon Road, Lakeside, CA	SWIF	450
Inland Pacific Resource Recovery Hwy 67	Permitted	Active	Chipping and Grinding Activity Fac./	12243 Highway 67, Lakeside, CA 92040	SWIF	400
TreeSource Recycling	Notification	Active	Chipping and Grinding Activity Fac./	1311 Walnut St., Ramona, CA 92065	SWIF	160.00 Tons/day
Terra Bella Nursery, Inc.	Notification	Active	Small Vol CD Wood Debris	302 Hollister Street, San Diego, CA 92154	SWIF	72,635 Tons/year
El Corazon Chip and Grind Facility			Chip and grind facility processing green materials and wood waste.	3210 B Oceanside Boulevard, Oceanside, CA 92056	NDFE	200
Evergreen Nursery and Compost Facility			Large scale nursery which operates a chip/grind and compost facility to process green materials and wood waste.	3231 Oceanside Blvd. Oceanside, CA 92056	NDFE	500 cubic yards/ day
Evergreen Nursery and Compost Facility		Proposed	Proposed chip/grind and composting operation.	9617 Blossom Valley Road, El Cajon, CA 92021	NDFE	500 cubic yards/ day
Evergreen Nursery and Compost Facility			Large scale nursery which operates a chip/grind and compost facility to process green materials and wood waste.	13650 Carmel Valley Road, San Diego, CA 92130	NDFE	500 cubic yards/ day
Amswede Recycling				149 Reed Ct, Chula Vista, 91911	FacIT	

**Attachment K: Facility Infrastructure Inventory  
San Diego County Strategic Plan to Reduce Waste**

## 4. BENEFICIAL REUSE

Source: FacIT List Calrecycle

Facility Name	Address
Sycamore Sanitary Landfill	8514 Mast Blvd, Santee, CA 92071
West Miramar Sanitary Landfill & Greenery	5180 Convoy St, San Diego, CA 92111
Las Pulgas Landfill	1 Mi N Camp Pulgas off Basilone Rd, Camp Pendleton, CA 92055

List current as of April 2016

## 5. MATERIAL RECOVERY FACILITIES

Source: FacIT List Calrecycle & NDFE County 2013

Facility Name	Address	Permitted Capacity
Amswede Recycling Inc.	149 Reed Ct., Chula Vista, CA 91911	99
EDCO Recycling	6700 Federal Blvd, Lemon Grove, 91945	516
EDCO Station	8152 Commercial St , La Mesa, 91942	1,000
Escondido Resource Recovery	1044 W. Washington Avenue, Escondido, CA 92025	2,500
Fallbrook Recycling Facility and Transfer	550 West Aviation Road, Fallbrook, CA 92028	500
Allan Company MRF and Transfer Station	6733 Consolidated Way , San Diego, 92126	1,500
Ramona MRF and Transfer Station	324 Maple Street, Ramona, CA 92065	700
SANCO Recycling	1044 Washington Ave, Escondido, 92025	723
Universal Refuse Removal Recycling and Transfer Station	1001 W. Bradley Avenue, El Cajon, CA 92020	2,000

**Attachment K: Facility Infrastructure Inventory  
San Diego County Strategic Plan to Reduce Waste**

**6. COMPOSTING**

List current as of April 2016

Source: SWIF List Calrecycle

Facility Name	Regulatory Status	Operational Status	Activity	Address	Permitted Capacity	Max. Permitted Throughput
El Corazon Compost Facility	Permitted	Active	Composting Facility (Green Waste)	3210 Oceanside Boulevard, Oceanside, CA 92056	50,000 yds <sup>3</sup>	500 Tons/day
Evergreen Nursery	Permitted	Active	Composting Facility (Green Waste)	3231 Oceanside Blvd. Oceanside, CA 92056	10,000 yds <sup>3</sup>	500 yds <sup>3</sup> / day
Hanson Aggregates A-1 Soils	Notification	Active	Composting Operation (Green Waste)	12560 Highway 67, Lakeside, CA 92040	10,000 yds <sup>3</sup>	240 yds <sup>3</sup> / day
Plants Choice Comp Material Handling Op.	Notification	Active	Composting Operation (Green Waste)	1700 Maxwell Road, Chula Vista, CA 91911	40,000	200 Tons/day
Otay Landfill Research Composting Op.	Notification	Active	Composting Operation (Research)	1700 Maxwell Rd. , Chula Vista, CA 91911	Tons/year 11,000	210 Tons/week
Otay Mesa Compost Facility	Notification	Active	Composting Operation (Green Waste)	1700 Maxwell Road, Chula Vista, CA 91911	Tons/year 70,000	200 Tons/day
Miramar Greenery	Permitted	Active	Composting Facility (Mixed)	5180 Convoy Street, San Diego, CA 92111	301,000 yds <sup>3</sup>	690 Tons/day
Evergreen Nursery	Notification	Active	Composting Operation (Green Waste)	13650 Carmel Valley Road San Diego, CA 92130	10,000 yds <sup>3</sup>	200 yds <sup>3</sup> / day
San Pasqual Valley Soils	Notification	Active	Composting Operation (Green Waste)	15777 Old Milky Way, San Diego, CA 92027	77,375	
San Pasqual Valley Soils Research	Notification	Active	Composting Operation (Research)	15777 Old Milky Way, San Diego, CA 92027	Tons/year 8,000 yds <sup>3</sup>	150 Tons/day 1,800 yds <sup>3</sup>
Agromin OC- Oceanside Green Materials	Notification	Active	Composting Operation (Green Waste)	1200 Wilshire, Fallbrook, CA 92028	62,000	200 Tons/day
					Tons/year	

## Attachment K: Facility Infrastructure Inventory San Diego County Strategic Plan to Reduce Waste

List current as of April 2016

### 7. C&D DISPOSAL

Facility Name	Regulatory Status	Operational Status	Activity	Address	Source	Permitted Capacity
3 Mile Pit Inert Debris Eng Fill Op	Notification	Active	Inert Debris ENG Fill Operation	1/8 Mile North of Basilone Road, Camp Pendleton (Mil Res), CA 92055	SWIF	195,000 Tons/year
<i>Borrego Landfill CDI</i>		<i>Proposed</i>		<i>449 Palm Canyon Road, Borrego Springs, CA 92004</i>	<i>NDFE</i>	
Carrol Canyon Landfill	Notification	Active	Inert Debris ENG Fill Operation	10051 Black Mountain Rd , San Diego, 92126	SWIF & NDFE	324,990 Tons/year
EDCO CDI Recycling	Permitted	Active	Medium Vol CDI Debris Proc. Fac.	224 S Las Posas Rd, San Marcos, 92078	SWIF	53,418 Tons/year
Lakeside Land Company	Notification	Active	Inert Debris ENG Fill Operation	11611 Riverford Rd, Lakeside, 92040	SWIF	189,096 Tons/year
Otay CDI MVPF	Permitted	Active	Medium Vol CDI Debris Proc. Fac.	1700 Maxwell Road, Chula Vista, CA 91912	SWIF	54,288 Tons/year
SANCO Resource Recovery	Permitted	Active	Large Vol CDI Debris Proc. Facility	6750 Federal Blvd , Lemon Grove, 91945	SWIF & NDFE	363,000 Tons/year
A-1 Planet Recycling				690 Anita St , Chula Vista, 85004	Facit	
Allan CO				5165 Convoy St , San Diego, 92111	Facit	709086
AMS (Escondido)				1120 West Mission Ave, Escondido, 92025	Facit	470706
AMS (San Diego)				4674 Cardin St , San Diego, 92111	Facit	
Amswede Recycling				149 Reed Ct , Chula Vista, 91911	Facit	
Architectural Salvage				1971 India St , San Diego, 92101	Facit	
Benn Mark Concrete Recycle				845 W Vista Way , Vista, 92083	Facit	
Bonsall Petroleum Construction, Incorporated				3210 Oceanside Blvd, Oceanside, 92056	Facit & NDFE	
Caspar Company				13797 Highway 8 Business, El Cajon, 92021	Facit	
Clauss Construction				8130 La Mesa Blvd Ste 400, La Mesa, 91942	Facit	
Enniss Materials				12421 Vigilante Rd , Lakeside, 92040	Facit	
Escondido Sand & Gravel, LLC				500 N Tulip St , Escondido, 92025	Facit	
Hanson Aggregates A-1 Soils				12560 Highway 67 , Lakeside, 92040	Facit	
Hester's Granite CO/J Cloud Inc.				2094 Willow Glen Dr, El Cajon, 92019	Facit & NDFE	
HVAC Exchange Inc				2675 Faivre St, Chula Vista, 91911	Facit	
Inland Pacific R.R. Slaughterhouse Yard				12650 Slaughterhouse Can Rd Hwy 67, Lakeside, 92040	Facit	
Inter-Block Retaining Systems Incorporated				Post Office Box 2992, Valley Center, 92082	Facit	
Kleen Industrial Services - Chula Vista				676B Moss St , Chula Vista, 91911	Facit	
Liberty Carpet Pad Recycling				2501 Commercial Street, #A, San Diego, 92113	Facit	
Pacific Steel Inc				1700 Cleveland Ave, National City, 91950	Facit	
Planet Recycling				1564 Jayken Way, Chula Vista, 91911	Facit	
RAMCO				8354 Nelson Way, Escondido, 92026	Facit & NDFE	
Rerock Materials Incorporated				1100 Walnut Ave, Ramona, 92067	Facit	
San Diego Asphalt @ Petromat				12512 Highway 67 , Lakeside, 92040	Facit	
Temecula Recycling				27635 Diaz Rd , Temecula, 92590	Facit	
Vulcan Materials - San Diego				5745 Mission Center Rd, San Diego, 92108	Facit	
Whillock Contracting, Inc.				18459 Bee Canyon Rd, Ramona, 92065	Facit	

## Attachment K: Facility Infrastructure Inventory San Diego County Strategic Plan to Reduce Waste

### 8. BUYBACK CENTERS

Source: FacIT List Calrecycle

List current as of April 2016

Facility Name	Address
All Ways Recycling	1425 N Magnolia Ave , El Cajon, CA, 92020
AMR Environmental	2325 Michael Faraday Dr #2, San Diego, CA, 92154
Belmont Park/Mission Beach	3000 Mission Blvd (South Parking Lot), San Diego, CA, 92109
Ben Recycling	395 Via Del Monte, Oceanside, CA, 92054
Bonita Cove West	1100 W Mission Bay Dr, San Diego, CA, 92109
Bonita Point 76	1495 E. H St., Chula Vista, CA, 91910
Bonita Valley Auto Care	3995 Bonita Road, Bonita, CA, 91902
Cactus Recycling	8710 Avenida De La Fuente, San Diego, CA, 92154
California Metals and Electronics	297 S. Marshall Ave., El Cajon, CA, 92020
Carmel Mtn. Ranch Recreation Center	10168 Rancho Carmel, San Diego, CA, 92128
CMS Recycling	1428 W. Mission Ave, Escondido, CA, 92029
Doyle Recreation Center	8175 Regents Rd., San Diego, CA, 92122
EDCO Recycling	224 South Las Posas Rd., San Marcos, CA, 92078
EDCO Sanitation	224 S. Las Posas Rd. , San Marcos, CA, 92069
EDCO Waste & Recycling Services	224 S. Los Posas, San Marcos, CA, 92078
El Carmel Point	El Carmel Place, San Diego, CA, 92109
Escondido Recycling Yard	1350 W. Mission Rd., Escondido, CA, 92029
Green-Go Recycling	130 S Hale Ave, Escondido, CA, 92029
IMS Recycling	2697 Main St., San Diego, CA, 92113
Iron Champs Recycling	9894 Via De La Amistad, San Diego, CA, 92154
Liberty Recycling	5960 El Camino Real, Carlsbad, CA, 92008
Mission Point	San Diego Place, San Diego, CA, 92109
One Earth Recycling	685 Saturn Blvd Suite B, San Diego, CA, 92154
Pacific Beach Recreation Center	1405 Diamond St., San Diego, CA, 92109
Pala Transfer Station and Recycling	12802 Highway 76, Pala, CA, 92059
Quality Recycling	10197 Riverford Rd. Ste. A, Lakeside, CA, 92040
Quality Recycling	13863 Poway Rd, Poway, CA, 92064
Quality Recycling	149 Nettleton Rd., Vista, CA, 92083
Quiroz Recycling	8514 Mast Blvd., Santee, CA, 92071
Ramona Disposal/Recycling	324 Maple St., Ramona, CA, 92065
Recon Recycling	1531 Rigel Street, San Diego, CA, 92113
Richardson Recycling	1018 A Street, Ramona, CA, 92065
Santa Clara Recreation Center	1008 Santa Clara Pl, San Diego, CA, 92109
Save The Planet Recycling Center #1	3137 Beyer Blvd #B, San Diego, CA, 92154
Save The Planet Recycling Center #2	5075 Federal Blvd, San Diego, CA, 92102
Save The Planet Recycling Center #3	303 Highland Ave, National City, CA, 91950
Save The Planet Recycling Center #4	707 E Bradley Ave, El Cajon, CA, 92021
Skyline Recycling Co.	538 N. Quince St., Escondido, CA, 92025
South Mission	Mission Blvd & W Mission Bay Dr, San Diego, CA, 92109
Temecula Recycling	27635 Diaz Rd, Temecula, CA, 92590
Waste Management Recycling Facility	2880 Industry Street, Oceanside, CA, 92054
Waste Management Recycling Facility	925 O'Connor St., El Cajon, CA, 92020
1st Arrow Systems	855 32nd St, San Diego, CA, 92102



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## 8. BUYBACK CENTERS

Source: FacIT List Calrecycle

List current as of April 2016

Facility Name	Address
54th Recycling	5496 University Ave, San Diego, CA, 92105
ABC Recycling	3055 Fairmount Ave, San Diego, CA, 92105
American Recycling	210 El Cajon Blvd., El Cajon, CA, 92020
American Recycling	4070 Home Ave, San Diego, CA, 92105
Amswede Recycling Center	149 Reed Ct, Chula Vista, CA, 91911
AWARE	1509 Broadway, San Diego, CA, 92101
Bancroft Olive Recycling	9108 Olive Dr, Spring Valley, CA, 91977
CalPac Recycling (J&J Recycling)	3374 National Ave, San Diego, CA, 92113
Diana's Recycling	13886 Campo Rd , Jamul, CA, 91935
Euclid Plaza Recycling	5083 Logan Ave, San Diego, CA, 92113
Foodland Supermarket	1050B Cardiff St, San Diego, CA, 92114
Harvest Farms Recycling	29000 Lilac Rd., Valley Center, CA, 92082
IMS Recycling	2731 Newton Ave, San Diego, CA, 92113
Indoor Recycling Center	9332 Jamacha Rd, Spring Valley, CA, 91977
Jasso Recycling Center	13739 Highway 8 Business , El Cajon, CA, 92021
King Recycling	7907 Cajon Rd, El Cajon, CA, 92021
M&M Recycling	1485 N. Magnolia Ave., El Cajon, CA, 92020
Nexcycle Poway	13438 Poway Rd, Poway, CA, 92064
Oak Park Recycling	3117 54th St, San Diego, CA, 92105
Palm Avenue Recycling	1705 Palm Avenue, Imperial Beach, CA, 91932
Picador Recycling Center	1270 Picador Blvd, San Diego, CA, 92154
Plaza Alta Recycling	9246 Jamacha Rd, Spring Valley, CA, 91977
Prince Recycling	5303 University Ave, San Diego, CA, 92105
Prince Recycling Services	3770 Voltaire St, San Diego, CA, 92107
Quality Recycling	10027 Vine St, Lakeside, CA, 92040
Regan Recycling	4731 Clairemont Dr # F, San Diego, CA, 92117
reInterpret	10250 Magnolia Ave, Santee, CA, 92071
rePlanet	2955 Alpine Rd, Alpine, CA, 91901
rePlanet Poway	13438 Poway Rd, Poway, CA, 92064
rePlanet Poway	14837 Pomerado Rd, Poway, CA, 92064
RJ Recycling	4279 Alpha St, San Diego, CA, 92113
San Diego CRV Buyback Center	7702 Paradise Valley Rd, San Diego, CA, 92139
San Diego CRV Center	855 32nd St, San Diego, CA, 92102
Spring Valley Recycling	1069 Elkeltan Blvd, Spring Valley, CA, 91977
Sunshine Summit General Store	35230 Highway 79, Warner Springs, CA, 92086
Target	2911 Jamacha Road, El Cajon, CA, 92019
Target	2911 Jamacha Road, El Cajon, CA, 92019
Time Recycling	412 Cesar E. Chavez Pkwy, San Diego, CA, 92113
Troy Recycling	8743 Troy St., Spring Valley, CA, 91977
Urban Corps Recycling Buyback Center at Qualcomm Stadium	9449 Friars Rd, San Diego, CA, 92108

## 9. CARPET RECYCLING

Source: FacIT List Calrecycle

List current as of April 2016

<u>Facility Name</u>	<u>Address</u>
Liberty Carpet Pad Recycling	2501 Commercial Street, #A, San Diego, 92113
DFS Flooring	10178 Willow Creek Road, San Diego, 92123

## 10. TIRE MANUFACTURING, PROCESSING & DISPOSAL

Source: FacIT List Calrecycle

<u>Facility Name</u>	<u>Address</u>
Petrochem Manufacturing, Inc. (PMI)	5205 Avenida Encinas, Carlsbad, 92008
Progressive Design Playgrounds	2458 South Santa Fe Ave, Vista, 92084
Reliable Tire Inc	2432 Commercial St , San Diego, 92113
Sycamore Sanitary Landfill	8514 Mast Blvd, Santee, 92071
West Miramar Sanitary Landfill AND Greenery	5180 Convoy St , San Diego, 92111

## 11. USED OIL CENTERS

Source: FacIT List Calrecycle

List current as of April 2016

<u>Facility Name</u>	<u>Address</u>
Aqua Clean Car Wash	1435 Ridgeback Rd , Chula Vista, 91910
AutoZone #2817	225 Broadway , Chula Vista, 91910
AutoZone #5643	685 Broadway, Chula Vista, 91910
AutoZone #5644	885 E H St , Chula Vista, 91910
Bonita Point 76	1495 E H St , Chula Vista, 91910
Express Tire-Chula Vista	430 Broadway, Chula Vista, 91910
Jiffy Lube #0897	593 E St , Chula Vista, 91910
Midas #77039	363 Broadway, Chula Vista, 91910
O'Reilly Auto Parts #2777	241 Broadway, Chula Vista, 91910
Pep Boys #651	454 Broadway , Chula Vista, 91910
Pep Boys #872	1000 Tierra Del Rey, Chula Vista, 91910
Synfast Oil Change	899 E H St # B, Chula Vista, 91910
AutoZone #2810	1315 3rd Ave , Chula Vista, 91911
Ecology Auto Parts-Chula Vista	850 Energy Way, Chula Vista, 91911
Firestone Store #2243	830 Broadway, Chula Vista, 91911
Mossy Nissan Chula Vista	1885 Auto Park Pl, Chula Vista, 91911
O'Reilly Auto Parts #3024	1396 3rd Ave, Chula Vista, 91911
Pick Your Part-Chula Vista	880 Energy Way, Chula Vista, 91911
South Bay Motorsports	1890 Auto Park Pl, Chula Vista, 91911
Toyota Chula Vista	650 Main St , Chula Vista, 91911
Synfast Oil Change-Chula Vista	1556 E H St, Chula Vista, 91913
Express Tire-Imperial Beach	950 Palm Ave , Imperial Beach, 91932
Center City Shell Services	3810 Massachusetts Ave, La Mesa, 91941
Aqua Clean Express Oil Change	7959 Parkway Dr , La Mesa, 91942
AutoZone #2809	7791 El Cajon Blvd, La Mesa, 91942
Drew Ford	8970 La Mesa Blvd, La Mesa, 91942
Drew Hyundai	8850 Grossmont Blvd, La Mesa, 91942
Firestone Store #2244	5577 Lake Murray Blvd, La Mesa, 91942
Jiffy Lube #0831	5540 Lake Murray Blvd , La Mesa, 91942
O'Reilly Auto Parts #2686	5350 Jackson Dr, La Mesa, 91942
Valvoline Instant Oil Change-La Mesa	7981 El Cajon Blvd, La Mesa, 91942
AutoZone #5656	7582 Broadway, Lemon Grove, 91945
DCH Honda of Lemon Grove	3615 Lemon Grove Ave , Lemon Grove, 91945
O'Reilly Auto Parts #2668	6925 Federal Blvd, Lemon Grove, 91945
AutoZone #5658	2140 Highland Ave, National City, 91950
AutoZone #5659	2500 E Plaza Blvd , National City, 91950
Express Tire-National City	820 Highland Ave, National City, 91950
Firestone Store #2241	2531 E Plaza Blvd , National City, 91950

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Firestone Store #2245	943 Highland Ave, National City, 91950
O'Reilly Auto Parts #3186	1202 E Plaza Blvd, National City, 91950
Perry Ford of National City	2050 National City Blvd, National City, 91950
South Bay Volkswgen	3131 National City Blvd, National City, 91950
AutoZone #4155	9710 Campo Rd, Spring Valley, 91977
Certified Tire Service Centers Inc.-Spring Val	10050 Campo Rd , Spring Valley, 91977
O'Reilly Auto Parts #2647	8375 Paradise Valley Rd, Spring Valley, 91977
O'Reilly Auto Parts #2675	10050 Campo Rd, Spring Valley, 91977
Pep Boys #1454	8888 Jamacha Blvd, Spring Valley, 91977
Valvoline Instant Oil Change-Spring Valley	483 Sweetwater Rd, Spring Valley, 91977
Jake's Tire and Auto	896 Palm Canyon Dr, Borrego Springs, 92004
Firestone Store #2252	2545 El Camino Real, Carlsbad, 92008
Lexus Carlsbad Service Department	5444 Paseo Del Norte, Carlsbad, 92008
North County Hyundai	5285 Car Country Dr , Carlsbad, 92008
Jiffy Lube #1621	6021 Paseo Del Norte , Carlsbad, 92011
Toyota Carlsbad Service Department	6020 Avenida Encinas, Carlsbad, 92011
Pep Boys #813	201 Jamacha Rd , El Cajon, 92019
BMW of El Cajon	875 El Cajon Blvd, El Cajon, 92020
Certified Tire Service Centers Inc.-El Cajon	790 N Johnson Ave , El Cajon, 92020
Jiffy Lube #3004	1621 N Magnolia Ave , El Cajon, 92020
Mossy Nissan El Cajon	1170 W Main St , El Cajon, 92020
O'Reilly Auto Parts #2792	101 S Mollison Ave, El Cajon, 92020
Oil Changer #503	906 Fletcher Pkwy, El Cajon, 92020
Tipton Honda	889 Arnele Ave, El Cajon, 92020
Toyota of El Cajon	965 Arnele Ave, El Cajon, 92020
AutoZone #3365	1080 E Main St , El Cajon, 92021
AutoZone #5646	1795 E Main St, El Cajon, 92021
Crest Auto Repair	128 La Cresta Rd, El Cajon, 92021
Firestone Store #2254	435 N 2nd St, El Cajon, 92021
Jiffy Lube #0495	539 N 2nd St , El Cajon, 92021
O'Reilly Auto Parts #2847	485 Broadway, El Cajon, 92021
AutoZone #5657	120 Leucadia Blvd, Encinitas, 92024
BMW Encinitas	1302 Encinitas Blvd, Encinitas, 92024
Brad's Foreign and Domestic	565 Westlake St Ste 200C, Encinitas, 92024
Encinitas Foreign and Domestic Auto Repair	901 2nd St, Encinitas, 92024
Herman Cook Volkswagen	1435 Encinitas Blvd , Encinitas, 92024
Hugo's European Car Service	110 N Coast Highway 101, Encinitas, 92024
Jiffy Lube #1764	221 N El Camino Real, Encinitas, 92024
O'Reilly Auto Parts #3154	180 N El Camino Real, Encinitas, 92024
Pep Boys #701	256 N El Camino Real , Encinitas, 92024
Synfast Oil Change-Encinitas	127 S El Camino Real, Encinitas, 92024
AutoZone #5649	642 N Escondido Blvd, Escondido, 92025
AutoZone #5651	440 E 17th Ave , Escondido, 92025

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Express Tire-Escondido	1805 S Centre City Pkwy , Escondido, 92025
O'Reilly Auto Parts #2902	840 W Mission Ave, Escondido, 92025
O'Reilly Auto Parts #2936	910 E Valley Pkwy, Escondido, 92025
Pep Boys #664	855 W Mission Ave , Escondido, 92025
Synfast Oil Change	645 W Mission Ave, Escondido, 92025
Jiffy Lube	314 W El Norte Pkwy, Escondido, 92026
Toyota Scion of Escondido	231 E Lincoln Ave , Escondido, 92026
AutoZone #5650	1495 E Valley Pkwy, Escondido, 92027
O'Reilly Auto Parts #2627	2401 E Valley Pkwy Ste 1, Escondido, 92027
Synfast Oil Change-Escondido	2109 E Valley Pkwy, Escondido, 92027
Valvoline Instant Oil Change GN-0106	1998 E Valley Pkwy, Escondido, 92027
AutoZone #5652	1081 S Mission Rd , Fallbrook, 92028
O'Reilly Auto Parts #1163	812 S Main Ave , Fallbrook, 92028
Ray's Insta Tune	212 E Alvarado St, Fallbrook, 92028
Acura Of Escondido	1502 Auto Park Way, Escondido, 92029
Honda of Escondido	1700 Auto Park Way , Escondido, 92029
Lexus Escondido	1205 Auto Park Way, Escondido, 92029
Mazda of Escondido	1560 Auto Park Way , Escondido, 92029
Mossy Nissan Escondido	1546 Auto Park Way, Escondido, 92029
Mossy Volkswagen	1695 Auto Park Way, Escondido, 92029
North County GMC	1501 Auto Park Way, Escondido, 92029
Quality Chevrolet	1550 Auto Park Way, Escondido, 92029
AutoZone #3341	12421 Woodside Ave , Lakeside, 92040
O'Reilly Auto Parts #2595	9530 Winter Gardens Blvd, Lakeside, 92040
Pep Boys Store #1441	9668 Winter Gardens Blvd, Lakeside, 92040
AutoZone #5661	1040 Mission Ave, Oceanside, 92054
Express Tire-Oceanside	1151 S Coast Hwy , Oceanside, 92054
Jiffy Lube #1278	1970 Oceanside Blvd , Oceanside, 92054
O'Reilly Auto Parts #2598	502 Oceanside Blvd, Oceanside, 92054
AutoZone #4041	3513 Cannon Rd, Oceanside, 92056
AutoZone #4139	4231 Oceanside Blvd, Oceanside, 92056
Jiffy Lube #3244	4106 Oceanside Blvd, Oceanside, 92056
Mossy Nissan Oceanside	3535 College Blvd, Oceanside, 92056
O'Reilly Auto Parts #2690	3840 Plaza Dr , Oceanside, 92056
Pep Boys #742	3752 Plaza Dr , Oceanside, 92056
Oceanside Tire Service Center	499 College Blvd Ste A, Oceanside, 92057
AutoZone #5660	3975 Mission Ave , Oceanside, 92058
O'Reilly Auto Parts #2892	3661 Mission Ave, Oceanside, 92058
Pep Boys #667	2041 Mission Ave , Oceanside, 92058
Pala Transfer Station	12802 Highway 76, Pala, 92059
A + Autocare	13830 Poway Rd, Poway, 92064
AutoZone #5664	13397 Poway Rd, Poway, 92064
Express Tire-Poway	12619 Poway Rd , Poway, 92064

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Jiffy Lube #1656	13409 Poway Rd , Poway, 92064
Mossy Nissan Poway	14100 Poway Rd , Poway, 92064
O'Reilly Auto Parts #2646	13272 Poway Rd, Poway, 92064
Oil Changer #604	12459 Poway Rd, Poway, 92064
Perry Ford	12740 Poway Rd , Poway, 92064
Poway Hyundai	13910 Road, Poway, 92064
AutoZone #2845	370 Pala St , Ramona, 92065
Main Street Auto Care	2317 Main St Ste A, Ramona, 92065
O'Reilly Auto Parts #2724	1935 Main Street - Hwy 67, Ramona, 92065
Oil Changer #619	1809 Main St, Ramona, 92065
RAE Automotive	415 9th St , Ramona, 92065
Ramona Motor Works, Inc.	2317 Main St Ste D, Ramona, 92065
AutoZone #3347	285 Town Center Pkwy , Santee, 92071
Certified Tire and Service Center	9535 Mission Gorge Rd, Santee, 92071
Dion Sons, Inc.	11427 Woodside Ave , Santee, 92071
Firestone Store #2251	9763 Mission Gorge Rd, Santee, 92071
O'Reilly Auto Parts #2968	9675 Mission Gorge Rd, Santee, 92071
Pep Boys #898	10041 Mission Gorge Rd , Santee, 92071
Toyota Certified Center of Santee	8871 Fanita Dr, Santee, 92071
AutoZone #5723	195 S Rancho Santa Fe Rd, San Marcos, 92078
Express Tire-San Marcos	1223 W San Marcos Blvd , San Marcos, 92078
Jiffy Lube #1966	765 W San Marcos Blvd , San Marcos, 92078
Jiffy Lube #1967	218 S Rancho Santa Fe Rd, San Marcos, 92078
O'Reilly Auto Parts #2979	255 S Rancho Santa Fe Rd, San Marcos, 92078
Express Tire-Vista	2030 Hacienda Dr , Vista, 92081
Terry's Auto Repair	27847 Valley Center Rd , Valley Center, 92082
AutoZone #2819	1410 N Santa Fe Ave, Vista, 92083
AutoZone #5679	573 W Vista Way , Vista, 92083
Firestone Complete Auto Care-Vista	1762 University Dr , Vista, 92083
North County Import Specialist	1215 N Melrose Dr Ste A, Vista, 92083
Synfast Oil Change - Vista	243 Sycamore Ave, Vista, 92083
AutoZone #4078	950 S Santa Fe Ave, Vista, 92084
Jiffy Lube #0432	1213 E Vista Way , Vista, 92084
O'Reilly Auto Parts #2802	1220 E Vista Way, Vista, 92084
O'Reilly Auto Parts #3591	1250 S Santa Fe Ave Ste A-D, Vista, 92084
Pep Boys Store #1410	865 E Vista Way, Vista, 92084
Valvoline Instant Oil Change GN-0088	786 E Vista Way, Vista, 92084
Firestone Store #2247	1136 C St, San Diego, 92101
Jiffy Lube #1894	1005 B St , San Diego, 92101
AutoZone #5671	5090 Federal Blvd, San Diego, 92102
AutoZone #5672	2211 Imperial Ave , San Diego, 92102
Lusti Motors	1844 El Cajon Blvd, San Diego, 92103
Mission Hills Automotive	308 W Washington St, San Diego, 92103

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AutoZone #5668	4005 30th St, San Diego, 92104
O'Reilly Auto Parts	3105 El Cajon Blvd, San Diego, 92104
Oil Changer #504	2448 El Cajon Blvd, San Diego, 92104
Pep Boys #810	3550 El Cajon Blvd , San Diego, 92104
AutoZone #5673	3842 University Ave , San Diego, 92105
O'Reilly Auto Parts #3448	4435 University Ave, San Diego, 92105
AutoZone #5665	1950 Cable St, San Diego, 92107
Courtesy Chevrolet	750 Camino Del Rio N , San Diego, 92108
Firestone Store #22F2	6977 Friars Rd Ste 140, San Diego, 92108
John Hine Auto and Truck Center	1545 Camino Del Rio S, San Diego, 92108
Marvin K Brown Auto Ctr	1441 Camino Del Rio S, San Diego, 92108
Quiki Oil Change	4232 Camino Del Rio N, San Diego, 92108
Express Tire-San Diego	1011 Grand Ave , San Diego, 92109
Firestone Store #2250	1245 Garnet Ave, San Diego, 92109
Jiffy Lube #1019	2651 Garnet Ave , San Diego, 92109
Mossy Toyota	4555 Mission Bay Dr, San Diego, 92109
O'Reilly Auto Parts #2779	1501 Garnet Ave, San Diego, 92109
Pacific Nissan	4433 Mission Bay Dr, San Diego, 92109
Certified Tire and Service Centers	3778 Rosecrans St, San Diego, 92110
Genie Car Wash Oil Change	3949 W Point Loma Blvd , San Diego, 92110
Hans Foreign Inc.	4306 Pacific Hwy, San Diego, 92110
Jiffy Lube #1675	3775 Rosecrans St , San Diego, 92110
O'Reilly Auto Parts #2941	2750 Midway Dr, San Diego, 92110
Precision Tune Auto Care	3425 Midway Dr Ste B, San Diego, 92110
Valvoline Instant Oil Change GN-0093	3464 Midway Dr, San Diego, 92110
Western Towing	4370 Pacific Hwy, San Diego, 92110
AutoZone #5667	6085 Balboa Ave, San Diego, 92111
BMW of San Diego	5090 Kearny Mesa Rd, San Diego, 92111
Certified Tire and Service Centers	8303 Clairemont Mesa Blvd, San Diego, 92111
Firestone Store #2255	4161 Convoy St, San Diego, 92111
Jiffy Lube #1869	7207 Clairemont Mesa Blvd, San Diego, 92111
Jiffy Lube #1968	3982 Convoy St , San Diego, 92111
Kearny Mesa Acura	5202 Kearny Mesa Rd, San Diego, 92111
Kearny Mesa Hyundai Subaru	4797 Convoy St , San Diego, 92111
Kearny Mesa Infiniti	4670 Convoy St, San Diego, 92111
Kearny Mesa Toyota	4910 Kearny Mesa Rd, San Diego, 92111
Kearny Pearson Ford	7303 Clairemont Mesa Blvd, San Diego, 92111
Lexus Kearny Mesa	4970 Kearny Mesa Rd, San Diego, 92111
Mercedes Benz San Diego	4750 Kearny Mesa Rd, San Diego, 92111
Mossy Nissan Kearny Mesa	8118 Clairemont Mesa Blvd, San Diego, 92111
O'Reilly Auto Parts #2667	3950 Convoy St, San Diego, 92111
O'Reilly Auto Parts #3187	4121 Genesee Ave, San Diego, 92111
Prestige Autowash Automotive	7860 Othello Ave, San Diego, 92111

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Ray Frey Auto Center Inc	7696 Vickers St, San Diego, 92111
Synfast Oil Change	6395 Balboa Ave, San Diego, 92111
AutoZone #5231	1304 S 43rd St , San Diego, 92113
AutoZone #5674	2865 National Ave, San Diego, 92113
O'Reilly Auto Parts #2645	3548 National Ave, San Diego, 92113
AutoZone #4027	5921 University Ave, San Diego, 92115
AutoZone #5669	5006 El Cajon Blvd , San Diego, 92115
Genie Oil	5985 University Ave , San Diego, 92115
Jiffy Lube #2996	5813 El Cajon Blvd, San Diego, 92115
O'Reilly Auto Parts	6415 Avenue, San Diego, 92115
Pep Boys #647	6714 El Cajon Blvd , San Diego, 92115
O'Reilly Auto Parts #3011	5074 Clairemont Dr, San Diego, 92117
Pep Boys #978	4441 Genesee Ave , San Diego, 92117
Valvoline Instant Oil Change GN-0092	4365 Genesee Ave, San Diego, 92117
O'Reilly Auto Parts #3173	8704 Lake Murray Blvd, San Diego, 92119
San Carlos Auto Service	8865 Lake Murray Blvd, San Diego, 92119
AutoZone #4040	6424 Mission Gorge Rd, San Diego, 92120
Honda of Mission Valley	5812 Mission Gorge Rd, San Diego, 92120
O'Reilly Auto Parts #2682	5177 Waring Rd, San Diego, 92120
Toyota San Diego	5910 Mission Gorge Rd , San Diego, 92120
Certified Tire Service Centers Inc.	6660 Miramar Rd, San Diego, 92121
G Win Auto Repair	8448 Miracrest Pl Ste A, San Diego, 92121
Jiffy Lube #1763	6696 Miramar Rd , San Diego, 92121
Synfast Oil Change - San Diego	6914 Miramar Rd, San Diego, 92121
Aero Auto Repair	9756 Aero Dr , San Diego, 92123
AutoZone #4138	10645 Tierrasanta Blvd, San Diego, 92124
Audi San Deigo	9010 Miramar Rd, San Diego, 92126
AutoZone #3351	9152 Mira Mesa Blvd , San Diego, 92126
Firestone Store #2249	9690 Reagan Rd, San Diego, 92126
O'Reilly Auto Parts #2589	10656 Camino Ruiz, San Diego, 92126
Performance Tire	8286 Miramar Rd, San Diego, 92126
Synfast Oil Change	9470 Mira Mesa Blvd, San Diego, 92126
Firestone Store #2246	16646 Bernardo Center Dr , San Diego, 92128
Valvoline Instant Oil Change GN-0091	12120 Carmel Mountain Rd, San Diego, 92128
O'Reilly Auto Parts #2714	13181 Black Mountain Rd, San Diego, 92129
Shell Carwash Express Lube	3861 Valley Centre Dr, San Diego, 92130
Big O Tires #672	12093 Scripps Summit Dr Ste A, San Diego, 92131
Valvoline Instant Oil Change GN-0037	12055 Scripps Summit Dr, San Diego, 92131
Valvoline Instant Oil Change GN-0124	2260 Callegan Highway Bldg 3456 Nbsd, San Diego, 92136
AutoZone #2808	1344 Palm Ave , San Diego, 92154
AutoZone #5886	3321 Palm Ave, San Diego, 92154
O'Reilly Auto Parts #2798	2965 Beyer Blvd, San Diego, 92154
O'Reilly Auto Parts #4175	2472 Roll Dr , San Diego, 92154

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Truck.Net LLC  
AutoZone #5662  
AutoZone #5676  
O'Reilly Auto Parts #2718  
Jiffy Lube #1874  
AutoZone #5678  
Temarry Recycling, Inc.

8490 Avenida De La Fuente, San Diego, 92154  
2445 Otay Center Dr, San Ysidro, 92173  
636 E San Ysidro Blvd , San Ysidro, 92173  
4550 Border Village Rd, San Ysidro, 92173  
1298 Palm Ave, Imperial Beach, 91932  
699 Sweetwater Rd, Spring Valley E, 91977  
476 Tecate Rd, Tecate, 91980

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## 12. HAZARDOUS, APPLIANCE, E-WASTE

Source: FacIT List Calrecycle

List current as of April 2016

<u>Facility Name</u>	<u>Address</u>
Miramar Household Hazardous Waste Facility	5161 Convoy St, San Diego, 92111
IMS Electronics Recycling	12455 Kerran St Ste 300, Poway, 92064
IMS Recycling Service, Inc.	2697 Main St, San Diego, 92113
E-World Recyclers LLC	1390 Engineer St, Vista, 92081
Mission Bay South Shores Park	404 Sea World Dr, San Diego, 92109
Morse High School	6905 Skyline Dr, San Diego, 92114
Mira Mesa High School	10510 Reagan Rd, San Diego, 92126
School of Creative Performing Arts	2425 Dusk Ave, San Diego, 92139
Montgomery High School	3250 Palm Ave, San Diego, 92154
Southwest High School	1685 Hollister St, San Diego, 92154
Regional Solid Waste Association-Chula Vista	1800 Maxwell Rd, Chula Vista, 91911
EDCO Station Buyback CTR	8184 Commercial St , La Mesa, 91942
Regional Solid Waste Assoc./City of Poway PHHWCF	12325 Crosthwaite Cir , Poway, 92064
Regional Solid Waste Assoc./City of Vista PHHWCF	1145 E Taylor St , Vista, 92084
Escondido Disposal Inc./RSWA Escondido	1044 W Washington Ave , Escondido, 92025
Ramona MRF And Transfer Station	324 Maple St , Ramona, 92065
Universal Refuse Removal Recycling Transfer Station	1001 W Bradley Ave, El Cajon, 92020
Waste MGMT Of North County	2141 Oceanside Blvd, Oceanside, 92054
City of Coronado Public Services	101 B Ave, Coronado, 92118

### 13. ARCHITECTURAL SALVAGE

Source: ILACSD Recycling Database

List current as of April 2016

<b>Facility Name</b>	<b>Address</b>
Architectural Salvage	2401 Kettner Blvd, San Diego, CA, 92101
Kids Around the World	<a href="http://www.katw.net">http://www.katw.net</a> - San Diego , CA, 92106
Reclaimed Wood San Diego	3584 Hancock Street, San Diego, CA, 92110
Reconstruction Warehouse	3650 Hancock St, San Diego, CA, 92110
ReStore, Habitat 4 Humanity (reuse location)	10222 San Diego Mission Rd, San Diego, CA, 92108
ReStore, Habitat 4 Humanity (reuse location)	837 Metcalf St, Escondido, CA, 92025
The ReUse People (Reuse Location)	San Diego, CA, 92101

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## 14. THRIFT STORES

Source: ILACSD Recycling Database

List current as of April 2016

<b>Facility Name</b>	<b>Address</b>
Amvets Thrift Store	1130 E. Main St., El Cajon, CA, 92021
Amvets Thrift Store	3441 Sutherland Ave., San Diego, CA, 92110
Amvets Thrift Stores	999 Cardiff St., San Diego, CA, 92114
Angel Shop	1002 S. Main Ave, Fallbrook, CA, 92028
April Thrift Store	5583 Clairemont Mesa Blvd, San Diego, CA, 92117
Assistance League Inland North County	2068 E Valley Pkwy, Escondido, CA, 92027
Assistance League Thrift Shop	108 University Ave., San Diego, CA, 92103
Auntie Helens Thrift Store	4127 30th Street, San Diego, CA, 92104
Baras Foundation	1455 University Ave, San Diego, CA, 92103
BGR Resale	6360 Riverdale St, San Diego, CA, 92120
Brother Benno's Thrift Shop	3955 Mission Ave, Oceanside, CA, 92058
Christ Episcopal Church Thrift Store	1210 9th St, Coronado, CA, 92118
Community Resource Thrift Store	1405 S El Camino Real, Oceanside, CA, 92054
Community Resource Thrift Store	1055 Carlsbad Village Dr, Carlsbad, CA, 92008
Community Resource Thrift Store	111 C St, Encinitas, CA, 92024
Community Resource Thrift Store	208 S Rancho Santa Fe, San Marcos, CA, 92078
Consignment Classics	3602 Kurtz St, San Diego, CA, 92110
Deseret Industries Thrift Store	1773 Broadway, Chula Vista, CA, 91911
Diego's Thrift Store	9935 Campo Rd, Spring Valley, CA, 91977
Disabled American Veterans	1049 Elkeltan Blvd, Spring Valley, CA, 91977
Disabled American Veterans	1624 South Coast Blvd., Oceanside, CA, 92054
Disabled American Veterans	881 Broadway, Chula Vista, CA, 91911
Dress for Success Professional Apparel Donat	3295 Mead Ave, San Diego, CA, 92116
Eastside Sequel	1392 E Palomar St., #503, Chula Vista, CA, 91915
Fallbrook Senoir Citizen's Thrift Store	399 Heald Ln, Fallbrook, CA, 92028
Friends Resale Shop	9500 Gilman Dr, La Jolla, CA, 92093
Fur Pet's Sake Thrift Store	230 W. Aviation Rd., Fallbrook, CA, 92028
Goodwill - Kearny Mesa	7061 Clairemont Mesa Boulevard, Suite 201, San Diego, CA, 92111
Goodwill - Alpine	1834B Alpine Blvd., Alpine, CA, 91901
Goodwill - Chula Vista	1177 Broadway, Chula Vista, CA, 91911
Goodwill - Chula Vista	495 Telegraph Canyon Rd, Chula Vista, CA, 91910
Goodwill - City Heights	4359 Home Avenue, San Diego, CA, 92105
Goodwill - Clairemont	4220 Balboa Ave, San Diego, CA, 92117
Goodwill - Del Cerro	6378 Del Cerro Blvd, San Diego, CA, 92120
Goodwill - Del Mar	12791 Sorrento Valley Rd, San Diego, CA, 92130
Goodwill - Eastlake	2220 Otay Lakes Rd. #501, Chula Vista, CA, 91915
Goodwill - El Cajon	13702 Camino Canada, El Cajon, CA, 92021

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San Diego County Strategic Plan to Reduce Waste**

Goodwill - El Cajon	352 S Marshall Ave, El Cajon, CA, 92020
Goodwill - El Cajon	420 N. 2nd Street, El Cajon, CA, 92021
Goodwill - Encinitas	1520 Encinitas Blvd, Encinitas, CA, 92024
Goodwill - Encinitas	710 La Costa Avenue , Encinitas, CA, 92024
Goodwill - Escondido	1815A S. Centre City Parkway, Escondido, CA, 92025
Goodwill - Escondido	506 W Washington Ave, Escondido, CA, 92025
Goodwill - Hillcrest	1219 University Ave, San Diego, CA, 92103
Goodwill - Imperial Beach	880 Palm Ave., Imperial Beach, CA, 91932
Goodwill - La Jolla	7631 Girard, La Jolla, CA, 92037
Goodwill - La Mesa	3713-3717 Avocado Boulevard, La Mesa, CA, 91941
Goodwill - La Mesa	4250 Spring St, La Mesa, CA, 91941
Goodwill - La Mesa	7255 Alvarado Rd, San Diego, CA, 92120
Goodwill - La Mesa	8250 La Mesa Blvd., La Mesa, CA, 91942
Goodwill - La Mesa	9100 Amaya Dr, La Mesa, CA, 91941
Goodwill - Lake Murray	6127 Lake Murray Blvd, La Mesa, CA, 91942
Goodwill - Lakeside	12522 Mapleview, Lakeside, CA, 92040
Goodwill - Lemon Grove (reuse locations)	7875 Broadway, Lemon Grove, CA, 91945
Goodwill - Mira Mesa	8145 Mira Mesa Blvd, San Diego, CA, 92126
Goodwill - Mira Mesa	See comments, San Diego, CA, 92126
Goodwill - Miramar	5165 Convoy St, San Diego, CA, 92111
Goodwill - National City	2300 Sweetwater Rd, National City, CA, 91950
Goodwill - Oceanside	1928 Moreno St, Oceanside, CA, 92054
Goodwill - Oceanside	3700 Haymar Dr, Oceanside, CA, 92056
Goodwill - Oceanside	3841 Plaza Drive #902, Oceanside, CA, 92056
Goodwill - Oceanside	3935 Mission Ave, Oceanside, CA, 92058
Goodwill - Otay	6655 Camino Maquiladora, San Diego, CA, 92154
Goodwill - Pacific Beach	1430 Garnet Avenue, San Diego, CA, 92109
Goodwill - Point Loma	3663 Rosecrans St, San Diego, CA, 92110
Goodwill - Poway	13140 Poway Rd, Poway, CA, 92064
Goodwill - Ramona	1676 Main St, Ramona, CA, 92065
Goodwill - Rancho Bernardo	15703 Bernardo Heights Pkwy, San Diego, CA, 92128
Goodwill - Rancho Pensquitos	10060 Carmel Mountain Rd, San Diego, CA, 92128
Goodwill - Rancho San Diego	2650 Jamacha Road # 153, El Cajon, CA, 92019
Goodwill - San Marcos	685 S. Rancho Santa Fe Road, San Marcos, CA, 92078
Goodwill - San Ysidro	630 Front Street, San Ysidro, CA, 92173
Goodwill - Santee	9575 Mission Gorge Rd, Santee, CA, 92071
Goodwill - Santee	9740 Mission Gorge Rd Ste C, Santee, CA, 92071
Goodwill - Serra Mesa	3232 Greyling Drive Suites A&B, San Diego, CA, 92123
Goodwill - Sorrento Valley	See comments., San Diego, CA, 92121
Goodwill - Tierra Santa	10601 Tierrasanta Blvd Suite L and M, San Diego, CA, 92124
Goodwill - University City	4023 Governor Drive, San Diego, CA, 92122
Goodwill - Vista	1056 E. Vista Way, Vista, CA, 92084

List current as of April 2016

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Hidden Treasures Thrift Store	913 Main Ave, Fallbrook, CA, 92028
JV Resale and Thrift Store	12845 Poway Rd, Poway, CA, 92064
La Mesa Thrift Shop	8340 Lemon Ave, La Mesa, CA, 91941
Milena's a Thrift Boutique	129 E. Hawthorne St., Fallbrook, CA, 92028
Miramar Landfill	5180 Convoy St., San Diego, CA, 92111
Miramar Liquidators	9586 Distribution Ave. Ste A, San Diego, CA, 92121
Mission Outreach Thrift Store	3186 Adams Ave, San Diego, CA, 92116
Mothers N Kids Place	1123 Highland Ave, National City, CA, 91950
Planet Aid Bins	Multiple locations , San Diego , CA, 92113
Ramona Food and Clothes Closet	773 Main St, Ramona, CA, 92065
Rancho Coastal Humane Society Thrift Shop	120 Aberdeen Dr, Cardiff, CA, 92007
RB Community Presbyterian Resale Shop	12845 Poway Rd, Poway, CA, 92064
Reusable Finds	5320 Custer St. , San Diego, CA, 92110
Rock Thrift Store	3191-E Sports Arena Blvd, San Diego, CA, 92110
Safari Seconds Thrift Store	2875 El Cajon Blvd, San Diego, CA, 92104
Salvation Army	13020 Poway Rd, Poway, CA, 92064
Salvation Army	183 E. Washington Ave., Escondido, CA, 92025
Salvation Army	3240 Sports Arena Blvd, San Diego, CA, 92110
Salvation Army	6875 El Cajon Blvd., San Diego, CA, 92115
Salvation Army	8828 Cuyamaca St, Santee, CA, 92071
Salvation Army	901 Park Blvd, San Diego, CA, 92101
San Diego Rescue Mission	10 N. Euclid Ave , National City, CA, 91950
San Diego Rescue Mission	3055 University Ave, San Diego, CA, 92104
San Diego Rescue Mission	3601 Sports Arena Blvd, San Diego, CA, 92110
San Diego Rescue Mission	5150 University Ave, San Diego, CA, 92104
Skills Center of America	6195 University Ave, San Diego, CA, 92115
St. Bartholomew's Thrift Shop	12845 Poway Rd, Poway, CA, 92064
St. John's Thrift Shop	1075 S. Mission Rd., Fallbrook, CA, 92028
St. Michael's Thrift Store	12845 Poway Rd., San Diego, CA, 92064
St. Vincent De Paul	2325 Fletcher Parkway, El Cajon, CA, 92020
Sustainable Surplus Exchange	2647 Gateway Rd, Suite 105-404, Carlsbad, CA, 92009
The Spare Room	4148 Bonita Rd, Bonita, CA, 91902
Thrift Korral	8693 Glen St , La Mesa, CA, 91942
Twice Treasured Thrift Store	8363 Center Dr, Ste 1, La Mesa, CA, 91942
United Cerebral Palsy Thrift Store	4341 El Cajon Blvd., San Diego, CA, 92105
United Cerebral Palsy Thrift Store	1454 Garnet Ave, San Diego, CA, 92109
United Cerebral Palsy Thrift Store	405 Broadway, Chula Vista, CA, 91910
United Cerebral Palsy Thrift Store	7875 Broadway, Lemon Grove, CA, 91945
Valley Thrift Store	2085 E Valley Pkwy, Escondido, CA, 92027
Veteran's Thrift Store	1049 Elkeltan Blvd., Spring Valley, CA, 91977
Veteran's Village of San Diego	4141 Pacific Hwy, San Diego, CA, 92110

List current as of April 2016

**Attachment K: Facility Infrastructure Inventory  
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## 15. APPLIANCE REPAIR

Source: ILACSD Repair & Reuse Database

List current as of April 2016

<b>Facility Name</b>	<b>Address</b>
1800 Appliance	800appliance.com
858 Appliance	3701 El Cajon Blvd, San Diego, CA 92105
911 Appliance	4216 Poplar St, San Diego, CA 92105
A+ Appliances	1536 Fayette St, El Cajon, CA 92020
Alcaraz Appliance	1717 National City Blvd, National City, CA 91950
Alex Appliances	3455 Caminito Sierra, Carlsbad, CA 92009
All Appliance Experts	La Jolla, CA 92037
All San Diego and East County Appliance	10770 Jamacha Blvd, Spring Valley, CA 91978
All TV Appliance	1195 Linda Vista Dr, San Marcos, CA 92078
Apex Appliance Service	Solana Beach, CA 92075
Appliance PRO Repair	3522 Meade Ave, San Diego, CA 92116
Appliance Repair Clinic	Poway, CA 92064
ARC Appliance Repair Center	Bonsall, CA 92003
B & B Appliance	1743 S Escondido Blvd, Escondido, CA 92025
Chula Vista Appliance Repair Experts	642 Palomar St, Ste 406-237, Chula Vista, CA 91911
Coastal Appliances Heating & Air	San Marcos, CA 92069
DJ's Appliance Service	383 Union St, Encinitas, CA 92024
Econo Appliance Service	10509 San Diego Mission Rd, Ste P, San Diego, CA 92108
El Cajon Appliance Repair Experts	864 N 2nd St, El Cajon, CA 92021
Euro Appliance Service	710 W 5th Ave, Escondido, CA 92025
FixIt Clinics every 2nd Saturday at the Central	330 Park Blvd, San Diego, CA 91901
Gormsen Appliance Company	1429 Garnet Ave, San Diego, CA 92109
High Valley Appliance Repair	2117 Main St., Ste A, Ramona, CA 92065
House Call Appliance Repair	Fallbrook, CA 92028
Kemper Appliance	525 N Andreasen Dr #J, Escondido, CA 92029
Low Rates Appliance Repair	6292 Canyon Bluff Ct, San Diego, CA 92121
Mayor #1 Appliance Service	Ramona, CA 92065
Mr. Ron's Appliance Repair	2553 Boundary Ave, Ramona, CA 92065
North County Appliance Repair	Encinitas, CA 92024
Pacific Heating & Air Conditioning	5638 Lake Murray Blvd, La Mesa, CA 91941
Premier Appliance Repair	Santee, CA 92071
Quality Appliances	7105 El Cajon Blvd, San Diego, CA 92115
Reliable Service Company	324 Coogan Way, El Cajon, CA 92020
Schuster Appliance	3235 Kenora Dr, Spring Valley, CA 91977
Sears Blue Service Crew	San Diego, CA 92101
Serv-U-Appliance	1722 E Valley Pkwy, Escondido, CA 92027
South Appliance Repair	747 Woodlawn Ave, Chula Vista, CA 91910

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## 16. COMPUTER & PHONE REPAIR

Source: ILACSD Repair & Reuse Database

List current as of April 2016

<b>Facility Name</b>	<b>Address</b>
619 Computer Repair	2748 Donax Avenue, San Diego, CA 92154
Adaptive Computer Empowerment Services	10054 Prospect Ave Suite E, Santee, CA 92071
Anytime Computer	12943 Pomerado Rd, Poway, CA 92064
Bullseye Computer	8703 La Mesa Boulevard, La Mesa, CA 91942
Chip & Bytes	2531 State St, Carlsbad, CA 92008
Clean PC and Mac	2843 Main St. Ste B, Chula Vista, CA 91911
Computer Doctor	1930 Balboa Ave, San Diego, CA 92109
Computer Services Unlimited	2750 Auto Park Way, Escondido, CA 92029
Computerized Cobbler	200 E Via Rancho Pkwy, Ste 151, Escondido, CA 92025
Dave's Computer Repair	112 N. Kalmia St., Escondido, CA 92025
DC Computers	1080 University Ave Suite H115, San Diego, CA 92103
DJ Computer World	1716 8th St, National City, CA 91950
FixIt Clinics every 2nd Saturday at the Central	330 Park Blvd, San Diego, CA 91901
Geek Available	3052 Clairemont Dr Suite 12, San Diego, CA 92117
Geeks.com Store	2455 Vista Way Suite M, Oceanside, CA 92054
iRepair San Diego	962 Eastlake Pkwy, Chula Vista , CA 91914
Mr. Mobile	7317 El Cajon Blvd, La Mesa , CA 91942
New Age Computers	2295 Needham Rd, El Cajon , CA 92020
Novinsky Computer Repair	Jamul , CA 91935
PC Repair Center	384 N. El Camino Real, Oceanside , CA 92054
Pro Camera Repair	7910 Raytheon Road, San Diego , CA 92111
ProTech Computer Repair	12324 Poway Rd, Poway , CA 92064
Quick Fix Tech Repair	645 B Street, San Diego , CA 92101
San Diego PC Help	7905 Silverton Ave. Suite 104, San Diego , CA 92126
SD Laptops	3251 Adams Av. , San Diego , CA 92116
Sears Blue Service Crew	San Diego , CA 92101
Selectronic	3205 Midway Dr Ste A, San Diego , CA 92110
StarTech Computers	830 Fletcher Parkway, El Cajon , CA 92020
Stearns Business Machines	507 Vista Way, Oceanside , CA 92054
Super Charged Console and Computer Repair	5500 Grossmont Center Drive Wall Store F, La Mesa , CA 91942
TechMate	7960 University Ave #210, La Mesa , CA 91942
The Computerized Cobbler	8750 Genesee Ave #250, San Diego , CA 92122
TV and Hi-Fi Center	5714 El Cajon Blvd, San Diego , CA 92105
uBreakiFix	3619 Midway Dr Suite E, San Diego , CA 92110
Batteries Plus	2070 Hacienda Dr, Escondido, CA 92025
Fast Fix Jewelry & Watch Repair	200 E Via Rancho Pkwy, Escondido, CA 92025
iGeek Repair	5575 Lake Parkway, La Mesa , CA 91942



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iSquad Repair	184 North Coast Hwy 101, Encinitas , CA 92024
Jl iPhone, iPad, Android Repair	426 W 2nd Ave, Escondido , CA 92025
On Track Sliding Glass Door Repair	7668 El Camino Real, Ste 104-114, Carlsbad , CA 92009
Phone Zone Wireless	2984 Jamacha Rd, El Cajon , CA 92019
SD iRepairs	3660 Clairemont Dr Ste 1B, San Diego , CA 92117
Mobile Re-screen	7187 Colony Rd, La Mesa , CA 91941
Sweet Spot Golf Repair	San Diego, CA 92120
True Sharp Quality Sharpening Service	1855 S Centre City Pkwy, Escondido , CA 92025

List current as of April 2016

## 17. BICYCLE REPAIR

Source: ILACSD Repair & Reuse Database

<b>Facility Name</b>	<b>Address</b>
A & B Cycle	10147 Mission Gorge Rd, Santee, CA 92071
Adams Avenue Bicycles	2606 Adams Ave, San Diego, CA 92116
Anywhere Bicycle Repair	7292 Opportunity Road, Ste A, San Diego, CA 92111
Baja California Cycle	2801 Main St, Chula Vista, CA 91911
Bicycle Maintenance and Safety Workshop at	4149 Newton , San Diego, CA 92113
Bike Repair Clinic Workshops every 1st Saturc	121 N. El Camino Real , Encinitas, CA 92024
Black Mountain Bicycles	9860 Hibert St, C1, San Diego, CA 92131
BRC Bike Shop	8801 La Mesa Blvd, La Mesa, CA 91942
Campus Bike and Skate	9500 Gilman Dr Student Center 0323, La Jolla, CA 92093
FixIt Clinics every 2nd Saturday at the Central	330 Park Blvd, San Diego, CA 91901
Hidden Valley Bicycle	1040 E Valley Pkwy Ste B, Escondido , CA 92025
Mission Hills Bicycle Shop	141 W Washington St, San Diego , CA 92103
Performance Bicycle	3619 Midway Dr., San Diego , CA 92110
REI	2015 Birch Road, Suite 150, San Diego , CA 92111
San Diego Bike Shop	619 C St, San Diego , CA 92101
South Bay Bicycles Inc	250 Third Ave, Chula Vista , CA 91910
Surf Monkey Bicycles	853 Grand Ave, San Diego , CA 92109
West Coast Rideshop	1347 Tavern Rd, Alpine , CA 91901

List current as of April 2016

## 18. FURNITURE REPAIR

Source: ILACSD Repair & Reuse Database

List current as of April 2016

<b>Facility Name</b>	<b>Address</b>
A Walkers Shoe Repair	2697 Mission Village Drive, San Diego, CA 92123
Abbas Upholstery	3003 Adams Ave, San Diego, CA 92116
Angelos Furniture Refinishing and Antique Res	Lakeside, CA 92040
Ariel's Refinishing and Upholstery	3431 Park Blvd, San Diego, CA 92103
Baronet Upholstery	2235 Fletcher Pkwy, El Cajon, CA 92020
Carl's Boot & Leather Shop	862 N 2nd St, El Cajon, CA 92021
Century Upholstery	8155 Center Street, La Mesa, CA 91942
Eagle 1 Repair and Upholstery Cleaning	3620 Columbia Street, San Diego, CA 92103
Encinitas Custom Upholstery	6353 El Camino Real, Ste I, Carlsbad, CA 92009
Franco's Upholstery	5931 Sea Lion Pl, Carlsbad, CA 92010
Furniture Build and Renew	2601 Hoover Ave, Ste F, National City, CA 91950
Furniture Medic	4626 Morrell Stand , San Diego, CA 9210
Gledhill's Vintage Furniture	2610 Adams Ave, San Diego , CA 92116
Hillcrest Upholstery	2903 El Cajon Blvd, San Diego , CA 92104
Home Interior Custom Upholstery	133 Newport Drive Suite H, San Marcos , CA 92069
L & C Upholstery	14034 Poway Rd Ste N, Poway , CA 92064
Manuel's Upholstery	1201 1/2 S Escondido Blvd, Escondido , CA 92025
Ming's Upholstery	12319 Poway Rd, Poway , CA 92064
Mission Upholstery	2592 Market St, San Diego , CA 92102
Pacific Drapery	3801 30th St, San Diego , CA 92104
Quality Interiors	1181 W Morena Blvd, San Diego , CA 92110
Resurrection Custom Upholstery	1250 Greenfield Dr, Ste E, El Cajon , CA 92021
SK Upholstery	7075 Mission Gorge Rd, Ste P, San Diego , CA 92120
SOS Upholstery	660 Crouch St, Oceanside , CA 92054
The Furniture Doctor	San Diego , CA 92119
Total Leather Care	12570 Lemon Crest Dr, Lakeside , CA 92040
Upholstery by Frank	2954 Anaheim St, Escondido , CA 92025
Upholstery Fabric Outlet	1919 Hoover Ave, National City , CA 91950
V Squared Upholstery	5416 Gaines St, Ste C, San Diego , CA 92110
Whyte's Furniture Repair and Upholstery	4160 Voltaire St, San Diego , CA 92107

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## **Attachment L: Current Programs and Policies for the Unincorporated Areas San Diego County Strategic Plan to Reduce Waste**

The County has been committed to increasing diversion in the unincorporated areas since AB 939 was passed in 1989. This Attachment describes the programs and policies that have been implemented to increase the diversion rate in the unincorporated areas. The figure at the end of the Attachment categorizes the programs and policies and identifies the sectors and material types targeted.

### **Reduce, Reuse, Repair**

- The County was instrumental in creating the San Diego Reuse and Repair Network (SDRRN) to share best practices and foster collaborations between reuse and repair organizations, jurisdictions, and solid waste facility operators to promote these practices and to reduce waste.
- The County partnered with local non-profits and local agencies to coordinate and hold Reuse and Repair Fairs at the Earth Fairs in Balboa Park in 2014, 2015 and 2016 featuring workshops, demonstrations, and products from more than 20 reuse and repair organizations.
- The County was instrumental in forming the San Diego Food Systems Alliance to bring together various players in the food system from farmers to food donation agencies to solve the problems of food waste and access to healthy food.

### **Collection**

- The County ensures that all residents, businesses, and institutions (including those living in multi-family residential complexes) have access to waste hauling and recycling services by ensuring that at least one non-exclusive hauler provides collection services in each County service area.
- The County's Solid Waste Ordinance (SWO) requires that single and multi-family residents separate yard trimmings for collection or delivery to a processing facility.
- Commingled recycling is offered by non-exclusive haulers enabling customers to place recyclable materials into a single collection container.

### **Drop-Off**

- Within the county, there are many conveniently located drop-off or buyback centers for various materials. In the unincorporated areas, CalRecycle's Facilities Information Toolbox reports there are 53 buyback centers for traditional recyclables and 161 drop off centers for used oil.
- The County offers free oil and filter recycling drop-off collection events throughout the year in various communities throughout unincorporated county.
- Information on tire collection centers is offered through the County's Recycling and Household Hazardous Waste Hotline and On-line Database. The County also hosts free tire recycling as part of its community cleanup events.
- Through a private-public partnership facilitated through the County, farmers and ranchers are able to recycle materials, such as motor oil and plastic chemical containers. Two collection events for recycling used pesticide containers were held in 2015. Businesses interested in serving as an agricultural oil collection site, may qualify for free equipment and reimbursement of related costs.
- The County offers grants to businesses interested in offering free collection of motor oil and filters to the public. Businesses may be eligible for free equipment and reimbursement of related costs.
- The County provides one permanent HHW drop-off facility (operated by a contractor) in Ramona; contracts with the cities of El Cajon and Chula Vista for a limited number of HHW drop-off

## **Attachment L: Current Programs and Policies for the Unincorporated Areas San Diego County Strategic Plan to Reduce Waste**

appointments; and offers occasional mobile HHW drop off events throughout the unincorporated areas. All collected HHW materials are managed according to State requirements, and approximately 75% of the HHW collected is recycled, including aerosols, refrigerants, and other products that contain high global warming potential (GWP) gases.

- The County administers a Conditionally Exempt Small Quantity Generator (CESQG) collection program for small businesses generating less than 27 gallons of hazardous waste per month or less than 1 quart of acute hazardous waste per month. The CESQG program offers businesses an affordable, safe, and convenient manner to dispose of hazardous waste.
- The County offers community cleanup events throughout the unincorporated county areas for special materials. In 2015, at events held in Alpine, Campo, Lakeside, Spring Valley, Fallbrook, Ramona, and Valley Center, the County reports that staff and contractors collected and recycled 24 tons of scrap metal, 25 tons of green waste, and 56 tons of tires from unincorporated county residents.

### **Processing**

- The region has a strong recyclable and C&D processing infrastructure as described in Section 3.4.
- The County administers the North San Diego County Recycling Market Development Zone (RMDZ) Program and participates in the South San Diego County RMDZ. The RMDZ program offers assistance and low-interest loans to businesses that produce product(s) with materials that would otherwise be landfilled or that manufacture products using recycled materials. This program helps to expand regional waste diversion processing infrastructure and to meet State and local waste diversion goals.

### **Education and Outreach**

- The County offers a technical assistance program to educate and assist multi-family complexes, businesses, and schools on best practices related to recycling and composting. Assistance is provided in the form of presentations, trainings, and on-site waste assessments.
- DPW–Recycling provides low-cost residential compost and vermi-compost bins as part of its composting outreach and education.
- In 2015, the County conducted 12 composting workshops and 5 community educational events for residents to increase diversion of organic materials from landfills.
- In 2015, the County provided two educational workshops and two community events to horse-owning residents to encourage composting and proper manure management.
- DPW–Recycling and DEH offer a Recycling and Household Hazardous Waste Hotline and Online Database, which offers reuse and recycling options.
- The County maintains a website offering information on waste reduction and recycling regulations, best practices, and events. Recycling topics pertaining to single- and multi-family residences, businesses, and schools is provided as well as information on used oil, oil filters, composting, food waste, and C&D. The website also has links to solid waste and recycling planning documents and a solid waste facilities map.
- Numerous recycling guides targeting single- and multi-family residences composting and vermicomposting, HHW, automotive materials, C&D materials, food waste prevention, and others

## **Attachment L: Current Programs and Policies for the Unincorporated Areas San Diego County Strategic Plan to Reduce Waste**

are made available to residents and businesses. Several guides have been prepared in both English and Spanish. Household Recycling and Reuse Guide, Business Recycling Guide for Mandatory Organics Recycling (AB 1826), Recycling Junk Mail, Yard Trimmings Recycling Guide, Compost it Yourself Guide, Sustainable Landscape Practices, and Automotive Recycling Guide are just some examples of materials available.

### **Policies**

Since the passing of AB 939 in 1989, the County has adopted several policies and regulations to support diversion.

- Recycling Requirements for Residents and Businesses (1991, revised 2010 and 2013)
  - The County amended its Management of Solid Waste Ordinance (SWO) in 1991 to require residents and businesses in the unincorporated areas to separate recyclable materials and divert them from landfill disposal through collection programs or delivery to recycling facilities.
  - The County’s recycling requirements were amended in 2010 to provide clarification and again in 2013 to align with AB 341, which mandates recycling for businesses and multi-family and sets a State-wide recycling goal of 75%.
  - The County SWO does not require residents and businesses to subscribe to collection services.
- Minimum Recycling Collection Requirements (1991)
  - The County established and manages the non-exclusive franchise hauling system for solid waste, recyclables, and organics collection from residents and businesses.
  - The County amended its non-exclusive solid waste management agreements (SWMAs) with over two dozen hauling companies to require that haulers offer residents and businesses separate collection of recyclables.
- The Construction and Demolition (C&D) Recycling Ordinance requires all new construction or demolition of buildings larger than 40,000 square feet and all phased construction with a total build out of over 40,000 square feet to recycle 90% of inert materials and 70% of all other materials. Each qualified project is required to submit a C&D Debris Management Plan and a fully refundable performance guarantee prior to building permit issuance, and submit documentation of compliance with diversion requirements. From 2009 through mid-2015, 358 C&D projects were covered by the ordinance. Of those, 239 building projects reported recycling 41,684 tons of C&D materials.
- The County’s Green Building Program encourages natural resource conservation. For example, new buildings using baled straw from harvested grain for the construction of the exterior walls qualify for green building incentives. Builders are also eligible for incentives by using primary building materials made using post-consumer, recycled-content materials. Incentives include preferential treatment and/or permit credits.

## Attachment L: Current Programs and Policies for the Unincorporated Areas San Diego County Strategic Plan to Reduce Waste

Category	Policy or Program	Policy or Program Description	Single-Family	Multi-Family	Commercial	Self-Haul	Internal County Operations	Hauler	Facility Op. Farm, School, Non-Profit	Policy	Community Services	Traditional Recyc	Yard Trimmings/Wood	Food Scraps	Organics	Batteries	Special Materials	C&D	Solid Waste	Other
Reuse & Repair	Lead by Example - Road Construction	Incorporate reusable and recycled materials into municipal road construction and maintenance projects; support adoption regionally.					X			X	X							X		
Reuse & Repair	San Diego Reuse & Repair Network (SDRRN)	SDRRN was created to share best practices and foster collaborations between reuse and repair organizations, jurisdictions, and solid waste facilities to promote these practices and to reduce waste.									X									X
Reuse & Repair	San Diego Food System Alliance	County was instrumental in forming the SDFSA to organize various players in the food system from farmers to food donation agencies to solve problems of food waste and access to healthy food.									X			X	X					
Collection	Enhanced Collection - Recycling Provisions	Require by ordinance that trash collection is contingent on recycling bin set out or that businesses and institutions have recycling plans and/or space for recycling.	X	X	X			X		X		X								
Collection	Resource Recovery Park or Center	Develop or contract for a central facility at which reuse, recycling, and compost processing is co-located with manufacturing and retail businesses.			X					X		X			X					
Collection	Enhanced Collection - Recycling Overages Collection	Contractor to collect any extra recyclables set out adjacent to the recycling cart.		X	X			X				X								
Drop-off	Drop-off - Hauler-Provided Locations	Require haulers that collected a specified amount of materials to provide a drop-off facility for receipt of various types of materials.	X	X	X	X	X	X				X	X	X	X	X	X			X
Drop-off	Household Hazardous Waste Program	Mobile drop off events are hosted by County throughout unincorporated county areas to collect household hazardous waste.	X	X	X	X			X									X		
Drop-off	Grants and funding to build drop-off network	The County offers grants to businesses interested in offering free collection of motor oil and filters to the public. Businesses may be eligible for free equipment and reimbursement of related costs.	X	X	X	X												X		
Drop-off	Conditionally Exempt Small Quantity Generator (CESQG) collection program for small business generating hazardous waste	County administers a Conditionally Exempt Small Quantity Generator (CESQG) collection program for small business generating less than 27 gallons of hazardous waste per month or less than 1 quart of acute hazardous waste per month. The CESQG program is an affordable, safe, legal, and convenient disposal of hazardous waste for businesses.	X	X	X	X												X		
Processing	North County Recycling Market Development Zone	The RMDZ program offers assistance and low-interest loans to businesses that recycle or manufacture using recycled materials. The RMDZ program helps to expand regional waste diversion processing infrastructure and to meet state and local waste diversion goals.							X			X	X	X	X	X	X	X		
Education & Outreach	Enhanced Education - Rental Business Promotions	Help promote services that provide short term rentals of reusable goods such as tools, sports equipment, party equipment (tables, chairs, serving utensils), as well as sharing websites.	X	X	X	X					X									



## Attachment L: Current Programs and Policies for the Unincorporated Areas San Diego County Strategic Plan to Reduce Waste

Category	Policy or Program	Policy or Program Description	Single-Family	Multi-Family	Commercial	Self-Haul	Internal County Operations	Hauler	Facility Op, Farm, School, Non-Profit	Policy	Community Services	Traditional Recyc	Yard Trimmings/Wood	Food Scraps	Organics	Batteries	Special Materials	C&D	Solid Waste	Other	
Education & Outreach	Expanded Technical Assistance	Expand outreach and technical assistance program for various generator types. - Multi-Family/Businesses: Expand outreach and technical assistance program for multi-family and businesses to address recycling and/or composting logistics and to increase business participation. - Schools: Expande targeted outreach and technical assistance to schools. Emphasis of program could be as focused as recycling and composting or as broad as to include water and energy conservation and environmental education components. - Private events/venues: Promote setting of zero waste goals to owners/operators of private venues (e.g., sports stadiums, hotel conferences). Provide training and technical assistance to event coordinators for implementation of zero waste action plans.		X	X			X	X			X	X	X	X						
Education & Outreach	Composting Workshops		X	X	X									X	X						
Education & Outreach	Residential Compost Bin Discount Program		X											X	X						
Education & Outreach	Recycling and Household Hazardous Waste Hotline											X	X	X	X	X	X	X			

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## **Attachment M: Current Programs and Policies for Internal Operations San Diego County Strategic Plan to Reduce Waste**

The County has adopted several policies and implemented numerous programs designed to reduce and divert waste generated by its internal operations. This Attachment describes these diversion programs and policies. The figure at the end of the Attachment identifies the target materials for each program and quantities of materials diverted for those programs that had readily available data.

### **Policies**

The County has adopted several policies to promote reuse, recycling, and environmentally-preferable purchasing within its operations. Some policies were adopted at the Board of Supervisor (BOS) level and apply to all County departments. Others have been implemented at a departmental level and serve as a model for other departments to consider.

- BOS Policy A-94 (Disposal of Personal Property) is designed to ensure that County property and materials are available for reuse and/or donation to members of the general public. Sale of property owned or under the custody of the County must be conducted in an open and competitive environment providing maximum public exposure to the disposal process, minimizing disposal costs, and assuring that revenue from sales is maximized and obtained in a timely manner.
- BOS Policy B-67 (Recycled Products Procurement) requires that products having a certain percentage of recycled content be given preference in the procurement practices of the County, its contractors, and its grantees.
- BOS Policy G-15 (Design Standards to County Facility and Property) requires demonstration of recycling and waste reduction best practices in the design, construction, improvement, and implementation of owned or leased County facilities and property. This policy is renewed every three years, at which time, the County can explore options for policy enhancements. The policy will be renewed January 1, 2017 and may capture revisions to support increased diversion.
- The Water Conservation in Landscaping Ordinance (Title 8, Division 6, Chapter 7 of the San Diego County Code of Regulatory Ordinances) promotes the use of locally-sourced compost and mulch to conserve water.
- DPW Policy AD-5 (Recycled Paper Products) promotes DPW's use of paper products with 100% recycled content.
- DPW Policy AD-1 (Water Conservation in Landscaping) prescribes landscaping practices for County projects and facilities that are focused on water conservation, which includes practices that support reduction of yard trimmings and encourages the use of mulch.
- DGS and DPW have adopted policies requiring all current landscaping vendors under contract to recycle green waste at green waste composting facilities or to self-compost.

### **Reduce and Reuse**

The County offers several programs and tools to encourage reduction in the amount of waste generated and to promote recycling of materials. These programs and initiatives are listed below.

- Co-sign is a tool to digitally sign electronic documents available to all County employees.
- Health & Human Services, Farm & Home Advisor, Environmental Health, Child Welfare Services, and County Counsel are some departments that promote the use of rechargeable batteries in their internal operations.

## **Attachment M: Current Programs and Policies for Internal Operations San Diego County Strategic Plan to Reduce Waste**

- DPW–Recycling conducted a successful pilot project in 2015 to reduce the use of disposable to-go food containers. The pilot offered reusable to-go food containers at the County Operations Center Commons Café. The Commons Café also offers discounts for patrons that bring reusable cups and mugs.
- DPC’s contract for the disposal of surplus property through TNT Auction Services results in 95% of all surplus property being reused, donated, or sold.
- DPC’s contracts through Office Max and Xerox ensure that 100% of printer and toner cartridges are returned to be refilled and resold, or recycled.
- DPR mulches most landscape debris and grasscycles lawn clippings in most of its parks.
- DPW uses rubberized asphalt (crumb rubber from old tires) when resurfacing some of the County-maintained roadways. As of 2015, the County has installed approximately 97 lane miles of rubberized asphalt roadway.
- The Sheriff’s kitchen has a contract with New Leaf Biodiesel to collect grease once a month or as needed at no cost. The grease is used in the production of bio-diesel fuel.
- The Sheriff’s department reuses furniture (storage cabinets, desks, chairs and modular furniture) whenever a unit moves, remodels, or reconfigures. Sheriff’s department has a contract with First Choice to remove, store, and design new areas and to install the modular furniture in new reconfigured areas. Sheriff’s department also obtains used furniture from other County departments through the surplus property reutilization program, using inmate workers to help move furniture.

### **Collection**

- Existing collection programs encourage recycling and separation of special materials to increase diversion. DGS manages a facilities collection services contract (County Collection Contract) for provision of solid waste, recyclables, yard trimmings, and food scraps collection at approximately 150 County sites. Through the County Collection Contract, the County receives service level information for each property serviced identifying the container type, size, frequency of collection, material collected, and cost of service. The current contractor periodically estimates the tonnage of recyclables, organics, and solid waste collected from the internal operations and reported collecting 1,644 tons of recyclables in 2014. While the majority of County sites served by the County Collection Contractor have recyclable collection service, yard trimming and food scraps collection is very limited with service being offered at only three sites for each service type.
- DGS reports that there are approximately 1,100 County sites. Approximately 150 County sites receive collection services through the County Collection Contract. Other County sites arrange for their collection service outside the County Collection Contract, self-haul, or rely on services arranged by the lessor (for leased sites). For these situations, the County does not have data on the volume of materials diverted or disposed.
- DPC manages a County contract for recycling of spent batteries, bulbs, ballasts, and e-waste as well as for confidential document shredding and recycling.
- DPR generates a significant amount of yard and landscape trimmings from maintenance of parks and recreation areas. Some of the material is mulched on site. The material that DPR does not mulch on-site is collected and diverted.

## **Attachment M: Current Programs and Policies for Internal Operations San Diego County Strategic Plan to Reduce Waste**

- DPR offers recycling opportunities for visitors at the majority of park facilities.
- Animal Services has a recycling program for medical waste, sharps, and dead animals.
- DEH collects aluminum cans, glass bottles, and plastic bottles in its break rooms. Recyclables are redeemed to benefit their annual picnic.
- Fire Authority recycles hoses in various ways. Damaged sections are repaired and recoupled. Some are sent to State salvage, which resells to vendors that upcycle the hoses. Couplings (aluminum) are removed and reused for new hose manufacturing. Old hoses, protective clothing, and foam are also repurposed through donations to fire departments in Mexico.
- The Sheriff's department recycles lead and brass bullet casings from two shooting ranges.
- DGS managed construction projects for County facilities. It reported diversion in 2015 of 824 tons from the Las Colinas Detention and Re-entry Facility and 78 tons from the Alpine library construction projects. Additional diversion may have occurred at other facilities.

### **Food Waste and Composting**

County has model programs for food scraps and yard waste composting at several County facilities.

- The East Mesa Detention Facility has a vermicomposting program, which composts up to 10 pounds of food waste each day. DPW partnered with the Sheriff to develop a Master Composter curriculum to train inmates on composting and vermicomposting practices as well as in the application of finished compost.
- Four County Parks are composting organic materials onsite including Otay Lakes, Sweetwater, Dos Picos, and Stelzer Parks.
- Fire Authority has a dead, dying, and diseased tree program that manages these trees. Through this program, recovered wood is mulched, composted, or is used as biomass to produce energy.
- Three facilities have food scraps collection services, including the County Administration Center, Polinsky Children's Center, and County Operations Center.

**Attachment M: Current Programs and Policies for Internal Operations  
San Diego County Strategic Plan to Reduce Waste**

Menu Category	Department	Short Program Description	Traditional Recyclables	Yard Trimmings/Wood	Food Scraps	Batteries	Special Materials	C&D	Solid Waste	Other	Quantities (if data was readily available)				
											Units	2013	2014	2015	2016 (est)
Policy	BOS Policy	Disposal of Personal Property Policy (A-94)								X					
Policy	BOS Policy	Recycled Products Procurement Policy (B-67)								X					
Policy	BOS Policy	Design Standards to County Facility & Property Policy (G-15)								X					
Policy	DGS, DPW Recycling	Composting by landscapers		X											
Policy	DPW	Recycled Paper Products Policy (AD-5)	X												
Policy	DPW	Water Conservation: Landscaping (AD-1)		X											
Reduce	Countywide	E-sign Tool	X												
Reduce	Auditor Controller, Farm & Home Advisor, Registrar of Voters	Rechargeable batteries					X								
Reduce	DPW Recycling	Promote reusables at County cafes	X												
Reuse	DPC	Surplus property reuse								X	tons				
Reuse	DPC	Toner cartridge reuse					X				tons				
Reuse	DPR	Mulching on-site		X							tons				280
Reuse	DPW	Rubberized asphalt roadways								X					
Reuse	Sheriff	Food Grease								X					

**Attachment M: Current Programs and Policies for Internal Operations  
San Diego County Strategic Plan to Reduce Waste**

Menu Category	Department	Short Program Description	Traditional Recyclables	Yard Trimmings/Wood	Food Scraps	Batteries	Special Materials	C&D	Solid Waste	Other	Quantities (if data was readily available)				
											Units	2013	2014	2015	2016 (est)
Reuse	Sheriff	Furniture								X					
Collection	Animal Services	Medical waste, sharps and dead animals recycling					X								
Collection	DGS	Yard trimmings collection and diversion for County facilities		X							tons				9.57
Collection	DGS	Food scraps collection and diversion for County facilities			X						tons	39	39		
Collection	DGS, DPW	Recycling for County facilities	X								tons	1,872	1,830		
Collection	DPC	Batteries, bulbs, and ballasts recycling				X	X				tons			14	
Collection	DPC	E-waste recycling					X				tons				
Collection	DPC	Confidential shredding	X								tons			1,050	
Collection	DPR	Yard trimmings diversion		X							tons				40
Collection	DPR	Parks and recreation recycling program	X								tons				40
Collection	Environmental Health	Bottle & Cans recycling	X												
Collection	Fire Authority	Fire hose recycling					X								
Collection	Sheriff	Lead recycling					X								
Recycling	DPW	Road maintenance recycling						X			tons			13,753	
Recycling	DGS	C&D diversion from County projects (partial data; not all)						X			tons			892	
Food Waste & Composting	DEH, DPW, HHSA	On-site food waste composting			X										
Food Waste & Composting	DPR	On-site composting at parks		X	X										
Food Waste & Composting	Fire Authority	Dying and diseased trees program		X							# of trees			420	420

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## Attachment N: Comprehensive Menu of Program and Policy Options for Unincorporated Areas San Diego County Strategic Plan to Reduce Waste

Category	Source	Reference No	Policy or Program	Policy or Program Description	Single-Family	Multi-Family	Commercial	Self-Haul	Internal County Operations	Hauler	Facility Op, Farm, School, Non-Profit	Policy	Community Services	Traditional Recyc	Yard Trimmings/Wood	Food Scraps	Organics	Batteries	Special Materials	C&D	Solid Waste	Other	
Reuse & Repair	EPA	10	Lead by Example - Road Construction	Incorporate reusable and recycled materials into municipal road construction and maintenance projects; support adoption regionally.					X			X	X							X			
Reuse & Repair	EPA	48	Food Waste Prevention and Donation	<p>Promote and support food waste prevention and donation activities.</p> <p><b>Prevention:</b></p> <ul style="list-style-type: none"> <li>- Conduct outreach to residents, grocery stores, restaurants, school cafeterias and other food service vendors on opportunities and practices to prevent food waste.</li> <li>- Support San Diego Food System Alliance (sdfsa.org), other local efforts, Ugly Fruit campaigns, etc.</li> </ul> <p><b>Donation by Businesses:</b></p> <ul style="list-style-type: none"> <li>- Consider expanding food donation activities by formalizing partnerships with food donation agencies and create a food recovery action plan.</li> <li>- Business donation program: Encourage pick-up and delivery of pre-consumer, edible food from food service vendors for donation to food banks or soup kitchens.</li> <li>- Farm/garden harvest donation program: (1) Encourage formation of "Gleaner" volunteer groups to harvest surplus crops from local farms or community gardens and distribute to food banks or soup kitchens' (2) Looking at reducing liability of farmers when working with gleaners.</li> </ul>	X	X	X		X		X	X			X	X							
Reuse & Repair	EPA	49	Food Donation - Farms and Community Gardens	Encourage formation of "Gleaner" volunteer groups to harvest surplus crops from local farms or community gardens and distribute to food banks or soup kitchens.			X				X	X			X	X							
Reuse & Repair	EPA	52	Food Waste Prevention	<ul style="list-style-type: none"> <li>- Conduct outreach to residents, grocery stores, restaurants, school cafeterias and other food service vendors on opportunities and practices to prevent food waste.</li> <li>- Support San Diego food System Alliance (sdfsa.org), other local efforts, Ugly Fruit campaigns, etc.</li> </ul>	X	X	X		X		X	X				X	X						
Reuse & Repair	EPA	59	Reuse - Retail Reuse Promotions	Encourage retail store "bargain basements" for sale of used clothes and other goods at discounted prices.	X	X	X																
Reuse & Repair	EPA	60	Reuse - Repair and Reuse Business Network, Education, Workshops	<ul style="list-style-type: none"> <li>- Continue to participate in and support the San Diego County Repair and Reuse Network, a network of local businesses (established in 2011) that repair, refurbish, market and sell used products.</li> <li>- Support SDCRRN's efforts to provide more education and more Fix It Clinics.</li> <li>- Sponsor or organize product repair workshops or reuse workshops with local service clubs.</li> </ul>	X	X	X	X			X	X								X	X	X	X
Reuse & Repair	EPA	77	Reuse - Promotion of Local Options	Promote location options for reuse including thrift stores, flea markets, garage sales, swaps for household goods (e.g., clothing, toys, etc.) and on-line resources (e.g., Craigslist, FB, Backpage, etc.)	X	X		X					X										
Reuse & Repair	EPA	78	Reuse - Garage Sales & Reuse Swaps	Promote garage sales or swaps for household goods (e.g., clothing, toys, etc.)	X	X		X					X										

## Attachment N: Comprehensive Menu of Program and Policy Options for Unincorporated Areas San Diego County Strategic Plan to Reduce Waste

Category	Source	Reference No	Policy or Program	Policy or Program Description	Single-Family	Multi-Family	Commercial	Self-Haul	Internal County Operations	Hauler	Facility Op., Farm, School, Non-Profit	Policy	Community Services	Traditional Recyc	Yard Trimmings/Wood	Food Scraps	Organics	Batteries	Special Materials	C&D	Solid Waste	Other
Reuse & Repair	EPA	79	Reuse/Repair - Workshops	Sponsor or organize product repair workshops or reuse workshops with local service clubs.	X	X	X	X			X		X						X	X	X	X
Reuse & Repair	EPA	87	Reuse Closet	Encourage storing of unwanted office and school supplies for use by staff and teachers.			X						X									
Reuse & Repair	EPA	88	Reuse - Library Reuse Center	Set up and promote public libraries as Community Reuse Centers.	X	X		X					X									
Reuse & Repair	EPA	89	Reuse - Swap Shed	Develop or contract for free drop and take areas or sheds at existing centers including transfer stations, recycling centers, landfills and HHW facilities.	X	X	X	X					X									
Reuse & Repair	EPA	90	Reuse - Center for Sale of Used Goods	Support development of or contract for one or more reuse centers that potentially have different focuses and purposes. - Develop or contract for reuse centers for sale of salvaged building materials and used household items. Develop an incubator for a Reuse Store business and issue RFP for non-profits or businesses working with disadvantaged youth or other workforce training to operate the facility. Can focus on reusable goods and/or construction and demolition debris. - "Reuse closet/Reuse depot/Goods Bank" - Develop, contract for, or support programs for storing and distribution of unwanted office supplies, school supplies, and other reusable items for donation to social services programs, teachers, artists and/or the public. - "Swap shed" - Develop or contract for free drop-and-take areas or sheds at existing centers including transfer stations, recycling centers, landfills and HHW facilities. - Low-cost/No-cost storage - Provide or facilitate access to low-cost or no-cost warehouse space for reuse-repair organizations so they have more time to recover value from materials.	X	X	X	X					X								X	
Reuse & Repair	EPA	91	Reuse Depot/Goods Bank	Develop or contract for Goods Banks of reusable items for donation to social services programs, teachers, artists and/or the public.	X	X	X	X					X									
Reuse & Repair	Inika	205	Reuse/Repair Network - Alliance with Mexico	Play a leading role in facilitating a cross-border agreement to send materials over to Mexico for reuse-repair. Several smaller organizations struggle with Border Patrol on Mexican side to allow this exchange.							X											
Reuse & Repair	Industry Mtg	206	Reuse/Repair Network - Low-Cost/No Cost Warehouse Space	Provide or facilitate access to low-cost or no-cost warehouse space for reuse-repair organisations so they have more time to recover value from materials.							X											
Reuse & Repair	Inika	411	San Diego Reuse & Repair Network (SDRRN)	SDRRN was created to share best practices and foster collaborations between reuse and repair organizations, jurisdictions, and solid waste facilities to promote these practices and to reduce waste.									X									X
Reuse & Repair	Inika	413	San Diego Food System Alliance	County was instrumental in forming the SDFSA to organize various players in the food system from farmers to food donation agencies to solve problems of food waste and access to healthy food.									X			X	X					
Collection	EPA	12	Enhanced Collection - County-Wide Access	Require access to collection service for all households and/or businesses and institutions within jurisdictional boundaries by ensuring that at least one hauler is operating in each region/community.	X	X	X			X		X		X	X	X	X					

## Attachment N: Comprehensive Menu of Program and Policy Options for Unincorporated Areas San Diego County Strategic Plan to Reduce Waste

Category	Source	Reference No	Policy or Program	Policy or Program Description	Single-Family	Multi-Family	Commercial	Self-Haul	Internal County Operations	Hauler	Facility Op, Farm, School, Non-Profit	Policy	Community Services	Traditional Recyc	Yard Trimmings/Wood	Food Scraps	Organics	Batteries	Special Materials	C&D	Solid Waste	Other
Collection	EPA	16	Enhanced Collection - Pay-As-You-Throw (PAYT)	Enact a volume-based fee structure for trash.	X	X	X			X												
Collection	EPA	17	Mandatory Recycling / Source Separation	Require by ordinance compliance of households or businesses with recycling / properly separating recyclables from refuse. County has an ordinance in place already.	X	X	X					X		X	X							
Collection	EPA	19	Mandatory Composting/Organics Diversion	Require by ordinance compliance of households or businesses with composting and/or properly separating organics from refuse.	X	X	X			X		X		X	X	X						
Collection	EPA	20	Single Stream Recycling	Streamline recyclables collection by enabling customers to place recyclables into a single bin or cart for added convenience.	X	X	X			X				X								
Collection	EPA	26	Enhanced Collection - Recycling Provisions	Require by ordinance that trash collection is contingent on recycling bin set out or that businesses and institutions have recycling plans and/or space for recycling.	X	X	X			X		X		X								
Collection	EPA	30	Enhanced Collection - Source Separation Rate Incentives or Disincentives	Enact discounted rates or fees for separating recyclables and/or compostables from trash to incentivize customers' diversion efforts.		X	X			X				X	X	X	X					
Collection	EPA	33	Other - Municipal Curbside Recycling Collection Services	Establish curbside recycling collection services for readily recyclable materials.	X	X	X			X				X								
Collection	EPA	34	Enhanced Collection - Expand Types of Recyclables	Expand curbside collection services to include recyclable items that contain toxic materials or are bulky and hard to handle.	X	X	X			X				X					X			
Collection	EPA	35	Enhanced Collection - Yard Trimmings Collection for All Customers	Expand existing collection services to offer yard trimmings collection for all customers.	X	X	X			X				X		X						
Collection	EPA	37	Enhanced Collection - Food Scraps Collection for all Customers	Expand existing collection services to offer food scraps (and soiled paper) to customers.	X	X	X			X	X					X	X					

## Attachment N: Comprehensive Menu of Program and Policy Options for Unincorporated Areas San Diego County Strategic Plan to Reduce Waste

Category	Source	Reference No	Policy or Program	Policy or Program Description	Single-Family	Multi-Family	Commercial	Self-Haul	Internal County Operations	Hauler	Facility Op, Farm, School, Non-Profit	Policy	Community Services	Traditional Recyc	Yard Trimmings/Wood	Food Scraps	Organics	Batteries	Special Materials	C&D	Solid Waste	Other
Collection	EPA	38	Enhanced Collection - Multi-Family Recycling	Expand existing recyclables collection services to include multi-family units.		X								X			X					
Collection	EPA	40	Enhanced Collection - Program Optimization	Upgrade curbside recycling and/or organics containers and improve collection efficiencies (e.g., move from bins to carts, include additional materials, consider degree of commingling).						X				X	X	X	X					
Collection	EPA	42	Enhanced Collection - Right-Size Service	Provide technical assistance to customers to help them select containers that are the right size for the amount of trash, recyclables, and compostables produced.		X	X							X			X					
Collection	EPA	43	Enhanced Collection: Every-Other-Week Trash Collection	Modify trash collection schedule to every-other-week pickup and, at the same time, add or expand weekly organics collection. To reduce contamination from residences, address diaper and pet waste disposal through education and/or separate pickup.	X	X	X							X	X	X	X					X
Collection	EPA	44	Reduce - Reusable or Compostable Diapers	Promote alternatives to disposable diapers.	X	X							X						X			
Collection	EPA	47	Zero Waste - Collection Infrastructure Planning	Ask service providers to develop strategies to transform the current collection infrastructure.						X	X		X									
Collection	EPA	50	Food Waste Pickup for Composting	Encourage pick-up and delivery of food waste from food service vendors for composting by community gardens or small farms if allowed, e.g., by bicycle or electric cart.			X						X			X	X					
Collection	EPA	53	Food Waste Collection for Businesses	Initiate a sign-up program for businesses and institutions that discard food waste to obtain compost bins and collection service.			X									X	X					
Collection	EPA	82	Rural (Backcounty) Recycling Marketing Cooperative	Collaborate with neighboring small communities to jointly market recyclable materials to attract buyers and receive more competitive pricing from bulk volumes.	X	X	X	X					X	X								
Collection	EPA	92	Resource Recovery Park or Center	Develop or contract for a central facility at which reuse, recycling, and compost processing is co-located with manufacturing and retail businesses.			X					X		X			X					

## Attachment N: Comprehensive Menu of Program and Policy Options for Unincorporated Areas San Diego County Strategic Plan to Reduce Waste

Category	Source	Reference No	Policy or Program	Policy or Program Description	Single-Family	Multi-Family	Commercial	Self-Haul	Internal County Operations	Hauler	Facility Op, Farm, School, Non-Profit	Policy	Community Services	Traditional Recyc	Yard Trimmings/Wood	Food Scraps	Organics	Batteries	Special Materials	C&D	Solid Waste	Other
Collection	HFH	105	Enhanced Collection - Recycling Overages Collection	Contractor to collect any extra recyclables set out adjacent to the recycling cart.		X	X			X				X								
Collection	HFH	107	Enhance Collection Reuse and Bulky Collection and Diversion	Require all haulers to offer bulky-item and re-use collection events and specify minimum program requirements (number of events per year, minimum material types to be collected, minimum diversion requirements through reuse or recycling, minimum volume to be collected, etc.).	X	X	X			X									X			
Collection	HFH	109	Enhanced Collection - Wet/Dry Routing for Commercial	Require contractor to identify customers for wet/dry routing. Customers with very little food waste in their solid waste container can be routed for single-stream or mixed recovery. Customers with high levels of food and fibers and low levels of plastics, glasses, and metals can be routed for screening and composting.		X	X							X			X					
Collection	HFH	117	Enhanced Collection - Increased Recycling and Organics Capacity	Require haulers to offer a minimum of 2 or 3 recycling and organics carts at no charge to customers with large volumes of materials. Contractor to collect any extra recyclables set out adjacent to the recycling cart. For yard trimmings, Contractor to collect any yard trimmings set out adjacent to the organics cart placed in a "Kraft Bag" or customer-provided container. Each bag/container not to exceed 50 lbs.	X					X				X	X	X	X					
Collection	HFH	123	Rural (Backcountry) Diversion Programs	Explore custom solutions to provide diversion opportunities to the rural / backcountry areas of the County.  Recycling market cooperative: Collaborate with neighboring small communities to jointly market recyclable materials to attract buyers and receive more competitive pricing from bulk volumes. This hub-and-spoke idea to get recyclables to market can bring mom and pop recyclers into the County's fold through this initiative.	X	X	X			X	X			X	X	X	X					X
Collection	HFH	130	Enhanced Collection - Increased Subscription through Universal Service Ordinance	Adopt ordinance that requires residents and businesses in the more densely-populated unincorporated areas to subscribe to collection services with exemptions for self hauling, vacant properties, and undeveloped parcels.	X	X	X			X		X		X	X	X	X					X

## Attachment N: Comprehensive Menu of Program and Policy Options for Unincorporated Areas San Diego County Strategic Plan to Reduce Waste

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Collection	HFH	131	Enhanced Collection - Single-Family	<p>Implement several changes to hauler service requirements to support single-family diversion.</p> <ul style="list-style-type: none"> <li>- Require 3-container system in more densely-populated areas to increase subscription for recycling and organics service</li> <li>- Set a minimum capacity for recycling and organics service provided by haulers</li> <li>- Specify pay-as-you-throw rate structure to potentially include 3 cart-sizes for waste; consider minimum rate differential</li> <li>- State minimum overage service obligations for recycling and organics</li> <li>- Ensure that at least one hauler offers collection services in remote areas (potentially limited to recycling service)</li> <li>- Allow for rate discount for at-home composting</li> <li>- Expand list of recyclables haulers must offer to collect over time as processing/markets are viable</li> <li>- Expand collection obligations to hard-to-handle materials (phones, batteries, CFLs, e-waste)</li> <li>- Add food scraps collection when processing capacity is available</li> </ul>	X					X		X		X	X	X	X					
Collection	HFH	132	Enhanced Collection - Minimum Recycling Capacity per Multi-Family Dwelling Unit	Set a minimum default capacity to be provided by haulers to multi-family premises on a per-unit basis (e.g., 32 gallons per unit)		X				X		X		X								

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Collection	HFH	141	Enhanced Collection - NEFA Requirements	<p>Implement several changes to NEFA service requirements to support residential and commercial diversion.</p> <p><b>Single-Family</b> -Require 3-container system in more densely-populated areas to increase subscription for recycling and organics service- Allow for rate discount for at-home composting - Set a minimum capacity for recycling and organics service provided by haulers - Specify pay-as-you-throw rate structure to potentially include 3 cart-sizes for waste; consider minimum rate differential - Expand list of recyclables haulers must offer to collect over time as processing/markets are viable (e.g., Plastic bags, e-waste peripherals, rigid plastics, hard cover books, scrap metal/aluminum under 40 lbs., and textiles.) - Expand collection obligations to hard-to-handle materials (phones, batteries, CFLs, e-waste) - Add food scraps collection when processing capacity is available - Require bulky item and re-use collection events; specify minimum program requirements (number of events per year, minimum material types to be collected, minimum diversion requirements through reuse or recycling, minimum volume to be collected per household, etc.).</p> <p><b>Multi-Family/Commercial</b> - Set minimum recycling service level standards for haulers (e.g., x gallons of recycling capacity per tenant unit) or specify minimum service level ratio- If exclusive franchise services are put in place at some point, consider enacting discounted rates or fees for separating recyclables and/or compostables from trash to incentivize customers' diversion efforts. - Expand current commercial food scraps collection services (supports business compliance with AB 1826); contingent on availability of processing</p>																		
Collection	HFH	142	Enhanced Collection - Multi-Family	<p>Implement several changes to hauler service requirements to support multi-family diversion.</p> <p>- Set minimum recycling service level standards for haulers (e.g., x gallons of recycling capacity per tenant unit) or specify minimum service level ratio - If exclusive franchise services are put in place at some point, consider enacting discounted rates or fees for separating recyclables and/or compostables from trash to incentivize customers' diversion efforts.</p>																		
Collection	Hauler Mtg	202	Enhanced Collection - Support Manure Collection	<p>Support efficient collection of manure from residents and businesses by developing route density for this service. County can work with haulers on developing demand for this service. Consider exclusive franchise to provide economies of scale in collection.</p>	X		X	X		X							X		X			
Drop-off	EPA	83	Drop-Off - Recyclables	<p>Partner with nonprofit agencies, e-Steward recyclers, or B-corporation certified recyclers to accept and/or establish locations in the community for drop-off of recyclable items, including those that contain toxics or are bulky and hard to handle.</p>	X	X	X						X	X					X			

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Drop-off	EPA	84	Drop-Off - Reuse Events for Commercial	Partner with nonprofit agencies and local retailers to accept and/or establish locations in the community for drop-off of reusable or refurbishable items, including those that are bulky and hard to handle.	X	X	X	X					X									
Drop-off	EPA	85	Drop-Off - Compostables	Partner with nonprofit agencies and local retailers to accept and/or establish locations in the community for drop-off of compostable items, such as yard debris, non-reusable wood, food waste and pet waste.	X	X	X	X					X	X	X	X						
Drop-off	EPA	86	Drop-Off - Miscellaneous	Promote collection hubs in the community for hazardous products, medical waste and hard to recycle items, e.g., oil, antifreeze, paint, tires, batteries, pharmaceuticals, carpet. Encourage management of collected items by manufacturers or retailers.	X	X	X	X					X					X	X			
Drop-off	EPA	93	Drop-Off - Center for Hard-to-Recycle Materials	Develop or contract for facilities that accept materials that are hard to recycle for reuse, refurbishing and /or recycling.	X	X	X	X					X						X			
Drop-off	HFH	106	Drop-Off - Reuse Events for Residents	Offer residents periodic drop-off events for reusable and recyclable materials.	X	X		X					X						X			X
Drop-off	HFH	112	Drop-Off - Free Diversion Dump at Local Facilities	Offer residents one or more diversion dump coupons at local transfer facilities or landfills for recyclables, yard trimmings and/or C&D	X	X							X	X	X	X				X		
Drop-off	HFH	116	Drop-Off/Buy-Back Recycling Centers	Provide conveniently located drop-off or buy-back recycling centers	X	X	X	X			X		X	X								
Drop-off	HFH	134	Drop-Off - Expansion of HHW Drop-Off Program	Provide drop-off locations for HHW and other hard-to-handle materials. Include combination of permanent drop-off facilities and periodic drop-off events.	X	X		X			X		X					X	X			X



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Drop-off	HFH	136	Drop-off - Hauler-Provided Locations	Require haulers that collected a specified amount of materials to provide a drop-off facility for receipt of various types of materials.	X	X	X	X	X	X				X	X	X	X	X	X			X
Drop-off	HFH	137	Drop-off Program Expansion for a Variety of Materials	<ul style="list-style-type: none"> <li>- Residential options: Expand residential drop-off program with strategies for different materials streams including: HHW, medical waste, hard-to-handle materials, reusable and recyclable materials, tires, carpet, etc. Include combination of permanent drop-off facilities and periodic drop-off events.</li> <li>- HHW: Establish additional HHW drop-off location in Fallbrook and expand schedule of periodic drop-off events in various locations.</li> <li>- Ag plastics: Provide regularly scheduled drop-off collection events for ag plastics with standard calendar for farm recycling events because if a farmer knows an event is coming up in their area they will set aside plastics for it.</li> <li>- Hauler-provided locations: Consider requiring NEFA haulers to provide drop off facilities.</li> <li>- Diversion dump coupons: Offer residents one or more diversion dump coupons at local transfer facilities or landfills for recyclables, yard trimmings and/or C&amp;D.</li> <li>- Center for Hard-to-Recycle Materials: Develop or contract for facilities that accept materials that are hard to recycle for reuse, refurbishing and /or recycling.</li> <li>- Remote areas: Consider viability of permanent drop-off locations for recyclables and organics (recognizing that illegal dumping had been a challenge in the past.)</li> <li>- Partners: Look to partner with nonprofit agencies, e-Steward recyclers, or B-corporation certified recyclers to accept and/or establish locations.</li> </ul>	X	X	X	X		X			X	X				X	X			X
Drop-off	Industry Mtg	208	Drop-Off - Agricultural Plastics	Provide regularly scheduled drop-off collection events for ag plastics with standard calendar for farm recycling events because if a farmer knows an event is coming up in their area they will set aside plastics for it.							X									X		
Drop-off	Hauler Mtg	305	Drop-Off - Periodic Household Hazardous Waste Drop-off Events	Conduct periodic householder hazardous waste drop-off events in various unincorporated areas.	X	X							X							X		
Drop-off	Inika	412	Household Hazardous Waste	Mobile drop off events are hosted by County throughout unincorporated county areas to collect household hazardous waste.	X	X	X	X			X									X		
Drop-off	Inika		Grants and funding to build drop-off network	The County offers grants to businesses interested in offering free collection of motor oil and filters to the public. Businesses may be eligible for free equipment and reimbursement of related costs.	X	X	X	X												X		

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Drop-off	Inika		Conditionally Exempt Small Quantity Generator (CESQG) collection program for small business generating	County administers a Conditionally Exempt Small Quantity Generator (CESQG) collection program for small business generating less than 27 gallons of hazardous waste per month or less than 1 quart of acute hazardous waste per month. The CESQG program is an affordable, safe, legal, and convenient disposal of hazardous waste for businesses.	X	X	X	X											X			
Processing	EPA	94	Composting Facility Development	Develop or contract for local or regional compost processing facilities for yard debris and/or food waste.							X	X			X	X	X					
Processing	EPA	95	Anaerobic Digestion	Develop or contract for local or regional anaerobic digestion facilities for processing food waste, Fats, Oil and Grease (F.O.G.) and/or sewage sludge.			X				X	X			X	X	X					
Processing	EPA	96	C&D Recovery Facility for Inerts	County has strong C&D processing infrastructure for source-separated C&D. Further contracts with local or regional C&D Recovery facilities should be developed to recover inert materials (e.g., rock, asphalt, concrete, bricks).							X	X									X	
Processing	EPA	97	C&D Recovery Facility - Organics	Develop or contract for local or regional C&D Recovery facilities to recover organic materials (e.g., wood).								X			X		X				X	
Processing	EPA	98	Processing - Pre-Disposal Residuals Treatment	Develop or contract for a facility to biologically pre-treat trash residuals before disposal to stabilize organic component.							X	X					X					
Processing	EPA	99	Processing - Pre-Disposal Salvage / Mixed Materials Processing	Develop or contract for facilities or sorting lines to remove and recover reusable, recyclable, and compostable materials from source separated trash; incentivize development by others	X	X	X				X	X		X	X	X	X			X	X	
Processing	HFH	127	Composting - Yard Trimmings	Plan for AB 1594 which specifies that, beginning January 1, 2020, the use of green material used as ADC will not constitute diversion through recycling and will be considered disposal.							X	X			X							

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Processing	HFH 138	Composting/Organics Processing Capacity Development	Support development of composting capacity through multiple strategies: at home, at a community level, by schools, businesses, farms/ranches, and through compost facility development. - To support capacity development, established tier-permitting process for composting by working with PDS and DEH. Concept would be to allow materials from off-site under a certain threshold by right and potentially allow farms to generate a revenue stream from collection of this material. - For community gardens, allow composting on-site as long as material is contributed by active members. Such programs can allow garden members to bring foodscraps from home. Also serve as excellent demonstration sites. For composting or anaerobic digestion facilities, develop or contract for local or regional compost processing facilities for yard debris and/or food waste. - For individual generator efforts, continue to promote backyard/on-site composting and promote anaerobic digestion of food scraps using a Bokashi bucket method. The Bokashi method is a Japanese method of fermenting (or pickling) food scraps using bran inoculated with beneficial bacteria and molasses, converting kitchen waste into a soil amendment. Offer incentives to residents and businesses for on-site composting/digestion (e.g. rate reductions for backyard							X	X			X	X	X						
Processing	HFH 140	C&D Processing Capacity	Support C&D processing facility expansion or new development if needed for various types of C&D materials: inerts (e.g., rock, asphalt, concrete, bricks), wood waste, mixed materials, etc.							X	X		X						X			
Processing	Inika 200	Composting in the Community	Set up strategic partnerships with community groups (e.g. community gardens, farms, farmers markets etc) to set up and promote community	X	X	X	X					X		X	X	X						
Processing	Industry Mtg 209	Composting Facility Tiered Permitting	Work with PDS and DEH to develop a tiered-permitting process for composting. Concept would be to allow materials from off-site under a certain threshold by right and potentially allow farms to generate a revenue stream from collection of this material.	X	X	X	X			X				X	X	X						
Processing	Fallbrook 300	At-Home Anaerobic Digestion of Food Scraps (Bokashi method)	Promote anaerobic digestion of food scraps at home using a Bokashi bucket method. The Bokashi method is a Japanese method of fermenting (or pickling) food scraps using bran inoculated with beneficial bacteria and molasses, converting kitchen waste into a soil amendment.	X	X										X	X						
Processing	Inika 410	North County Recycling Market Development Zone	The RMDZ program offers assistance and low-interest loans to businesses that recycle or manufacture using recycled materials. The RMDZ program helps to expand regional waste diversion processing infrastructure and to meet state and local waste diversion goals.							X			X	X	X	X	X	X	X			
Education & Outreach	EPA 7	Lead by Example - Green Procurement - Voluntary	Encourage green purchasing practices; pursue regional purchasing cooperatives to buy recycled products; adopt the "precautionary principle" for purchases and services and support regionally.					X			X	X	X				X	X				X

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Education & Outreach	EPA	8	Lead by Example - Green Procurement - Mandatory	Require green purchasing practices in contractual agreements.					X			X	X	X				X	X			X
Education & Outreach	EPA	9	Lead by Example - Zero Waste Procurement	Incorporate Zero Waste objectives into contractual purchases and services, e.g., avoiding purchase of disposable goods, minimal waste in product and packaging design, product take-back services, and lifecycle analysis.					X			X	X									X
Education & Outreach	EPA	11	Zero Waste - Venues & Events	Public events: Adopt and implement Zero Waste goals and action plans for all public venues and events. Provide training and technical assistance to venue and event coordinators, displays, and signs.			X				X	X	X	X	X	X	X					
Education & Outreach	EPA	27	Markets - Recycled-Content Buying Cooperative	Encourage local buying cooperatives or other coordinated approaches for private sector businesses and organizations to procure recycled-content products.			X		X		X		X									
Education & Outreach	EPA	31	Lead by Example - Recycling and/or Composting	Establish non-binding recycling targets across government operations and through County hauler; provide technical assistance across government operations (e.g., police, fire, facilities, parks and public areas, venues and events) to increase recycling and/or composting rates.					X			X		X			X					
Education & Outreach	EPA	32	Zero Waste - Private Venues & Events	Promote setting of zero waste goals to owners/operators of private venues, e.g., sports stadiums, hotel conferences. Provide training and technical assistance to event coordinators for implementation of zero waste action plans.			X						X									
Education & Outreach	EPA	36	Composting in Backyards/ Neighborhoods	Encourage and provide incentives for homes, neighborhoods, schools and businesses to set up a bin for composting food and yard waste. (Considered a source reduction activity with upstream impacts.)	X	X	X						X		X	X	X					
Education & Outreach	EPA	39	Expanded Technical Assistance - Multi-Family	Provide outreach and technical assistance to owners and tenants of multi-family units to address recycling and/or composting logistics and to increase tenant participation.		X								X			X					

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Education & Outreach	EPA	51	Food Waste Outreach & Prevention (vendors)	Conduct outreach to grocery stores, restaurants, school cafeterias and other food service vendors on opportunities and practices to prevent food waste.			X		X		X		X			X	X					
Education & Outreach	EPA	54	Enhanced Education - Paper Reduction at Offices	Conduct outreach on "Paperless Office" strategies.			X		X													
Education & Outreach	EPA	55	Technical Assistance - Best Practices Training for Business Recycling and Organics	Conduct training, e.g., site visits, walk-through audits, distribution of displays and signs to increase rates of recycling and/or composting at facilities.			X						X	X	X		X					
Education & Outreach	EPA	58	Reuse - Materials Exchange for Businesses	Develop or facilitate an online network to foster business-to-business connections to match unwanted material byproducts or commodities to opportunities for reuse or recycling as feedstock.			X		X				X									
Education & Outreach	EPA	61	Enhanced Education - Rental Business Promotions	Help promote services that provide short term rentals of reusable goods such as tools, sports equipment, party equipment (tables, chairs, serving utensils), as well as sharing websites.	X	X	X	X					X									
Education & Outreach	EPA	62	Recognition & Certification Programs	To increase the level of participation in recycling and composting programs, provide recognition for successes through a local, regional, state, and/or national recognition and/or certification programs (e.g., Green Business programs, Zero Waste Businesses or Schools programs.)		X	X						X									
Education & Outreach	EPA	63	Recognition & Certification Programs - National	To encourage businesses and institutions to adopt and implement zero waste or high diversion goals and plans, help connect them to national recognition and/or certification programs.		X	X						X									
Education & Outreach	EPA	65	C&D Demolition Permit Publication	Require publication in the local newspaper of all building demolition permit applications to solicit salvage of reusable items by deconstruction firms.									X	X							X	
Education & Outreach	EPA	69	C&D Recycling/Reuse Guidance	Prepare and post on the web a how-to deconstruction and services guide.									X								X	
Education & Outreach	EPA	73	Enhanced Education - Recycling /Reuse Directory	Continue to support local searchable web-based directory of local or regional options specific to sector and/or industry of how and where to recycle or drop off used consumer products managed by ILACSD.org and San Diego Repair and Reuse Network.	X	X	X						X	X								
Education & Outreach	EPA	74	Enhanced Education - Green Products & Services Directory	Create a searchable web-based directory of local or regional businesses that offer green products or services, including vendor contact information. Consider working with ILACSD.	X	X	X	X					X									

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Education & Outreach	EPA	75	Enhanced Education - Social Marketing	Expand County's existing social marketing/behavior change marketing program to find the best means to motivate people to reduce, reuse, recycle and compost.	X	X	X	X					X	X	X	X	X	X	X			X	
Education & Outreach	EPA	76	Enhanced Education & Outreach	Enhance County's public education and outreach efforts to broadly support reduction, reuse, repair, recycling, proper handling of HHW and other special materials through a variety of methods. - Prevention/reduction - Help promote short-term rentals of reusable goods such as tools, sports equipment, party equipment (tables, chairs, serving utensils), as well as sharing websites. - Reuse, repair, recycling, HHW, etc. - Expand promotion of various resources that are available to residents and businesses to provide guidance on reuse and repair vendors, HHW options, hard-to-handle materials, recycling, grasscycling, and other options for various materials including wasteFreeSD.org/ cleanSD.org/I Love a Clean San Diego, etc. Support ILACSD.org and San Diego Repair and Reuse Networks efforts to education, maintain databases, etc. - Green products and services: Create a web-based directory of local/regional businesses that offer green products or services, including vendor contact information. Consider working with ILACSD. - Collection services: Increase education efforts to residents and businesses describing recyclables and organics collection options, proper set out instructions, regulatory requirements, etc. Add pub ed requirements to NEFA. - Landscaping professionals: Build a program that offer workshops specifically to landscaping professionals on grasscycling, yard trimming recycling and on-site composting. Consider offering incentives to landscapers to attend training (e.g., raffle, certification); partner with Home Depot to offer training and information. - Engage others in efforts: (1) Engage Community Groups to Provide Education and Training; (2) Create a training program on Zero Waste in partnership with a college; (3) Join with other local agencies to fund a	X	X	X	X		X	X		X	X	X	X	X	X	X	X			X
Education & Outreach	EPA	100	Reduce - R&D Museum of Bad Design	Develop or contract for a research & development facility at which residual discards are evaluated and considered for prevention and redesign.									X										
Education & Outreach	HFH	103	C&D Education and Outreach	Evaluate how County communicates requirements to contractors and permitted haulers. Consider how to improve outreach. Could host/co-host periodic contractor workshops and perform targeted outreach to high-volume or problem contractors.									X								X		
Education & Outreach	HFH	108	School Diversion Programs	Support diversion programs and collection services at schools. - Consider including schools in the scope of the franchise agreement to provide service at no cost to schools. - Facilitate development of boilerplate language to include in custodial contracts for school districts.							X		X	X	X	X	X						

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					Education & Outreach	HFH	110	School Education Program	Provide targeted outreach and technical assistance to schools throughout the County. The emphasis of this program could be as focused as recycling and composting or as broad as to include water and energy conservation and environmental education components.							X		X					
Education & Outreach	HFH	113	Enhanced Education - Explanation of Available Collection Services	Increase education efforts to residents and businesses describing recyclables and organics collection options, proper set out instructions, regulatory requirements, etc.	X	X	X	X		X				X	X	X	X					X	
Education & Outreach	HFH	114	Enhanced Education on Recycling and Reuse Resources	Promote the use of various resources that are available to residents and businesses to provide guidance on reuse and repair vendors, recycling and other options for various materials including <a href="http://wasteFreeSD.org/">wasteFreeSD.org/</a> <a href="http://cleanSD.org/">cleanSD.org/</a> <a href="http://Love a Clean San Diego">Love a Clean San Diego</a> , etc. and the Recycling hotline	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	X
Education & Outreach	HFH	115	Enhanced Education - HHW and Hard-to-Handle Materials	Expand promotion of various resources that are available to residents and businesses to provide guidance on handling of HHW and hard-to-recycle materials through County drop-off facilities, recycling and other options including <a href="http://wasteFreeSD.org/">wasteFreeSD.org/</a> <a href="http://cleanSD.org/">cleanSD.org/</a> <a href="http://Love a Clean San Diego">Love a Clean San Diego</a> , etc.	X	X	X	X		X	X		X						X	X			
Education & Outreach	HFH	118	Lead by Example - Recognition & Certification Programs	To lead by example, County to obtain Green Business certification or Zero Waste Businesses for County facilities.					X				X	X			X						
Education & Outreach	HFH	121	Expanded Technical Assistance	Expand outreach and technical assistance program for various generator types. - Multi-Family/Businesses: Expand outreach and technical assistance program for multi-family and businesses to address recycling and/or composting logistics and to increase business participation. - Schools: Expande targeted outreach and technical assistance to schools. Emphasis of program could be as focused as recycling and composting or as broad as to include water and energy conservation and environmental education components. - Private events/venues: Promote setting of zero waste goals to owners/operators of private venues (e.g., sports stadiums, hotel conferences). Provide training and technical assistance to event coordinators for implementation of zero waste action plans.		X	X			X	X			X	X	X	X						
Education & Outreach	HFH	124	Lead by Example - Food Donation	Encourage pick-up and delivery of pre-consumer, edible food from County facilities for donation to food banks or soup kitchens					X				X				X						
Education & Outreach	HFH	125	Lead by Example - Food Waste Outreach & Prevention	Conduct outreach to County facilities on opportunities and practices to prevent food waste. Focus on large jail.					X				X				X						

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Education & Outreach	Hauler Mtg	201	Enhanced Education - Landscaping Industry	Build a program that offer workshops specifically to landscaping professionals on grasscycling, yard trimming recycling and on-site composting.	X	X		X							X		X					
Education & Outreach	Inika	203	Lead by Example - Waste Audit for Internal Operations	Conduct waste audits of internal County operations to develop a baseline to measure progress against.					X													
Education & Outreach	Inika	204	Enhanced Education - Zero Waste Block Leader	Work with homeowners and businesses to develop block leaders through which messages on programs and best practices can be relayed. Also applies to County internal operations.	X	X	X							X	X	X	X	X	X	X	X	X
Education & Outreach	Industry Mtg	207	Enhanced Education/Outreach - Regional Efforts	Join with other local agencies to fund a regional media campaign on waste reduction, reuse, repair, recycling.	X	X	X	X	X					X	X	X	X	X	X	X		
Education & Outreach	Industry Mtg	210	School Recycling	Facilitate development of boilerplate language to include in custodial contracts for school districts.							X			X	X	X	X					
Education & Outreach	Industry Mtg	211	Enhanced Education/Outreach - Training	Create a training program on Zero Waste in partnership with a college.									X									
Education & Outreach	Fallbrook	301	Reduce - Grasscycling	Encourage on-site grasscycling through education of generators and the landscaping community.	X	X	X								X		X					
Education & Outreach	Fallbrook	303	Enhanced Education - Engage Community Groups to Provide Education and Training		X	X	X						X	X	X	X	X	X		X		
Education & Outreach	Inika	407	Composting Workshops		X	X	X									X	X					
Education & Outreach	Inika	408	Residential Compost Bin Discount Program		X											X	X					
Education & Outreach	Inika	409	Recycling and Household Hazardous Waste Hotline											X	X	X	X	X	X	X		



## Attachment N: Comprehensive Menu of Program and Policy Options for Unincorporated Areas San Diego County Strategic Plan to Reduce Waste

Category	Source	Reference No	Policy or Program	Policy or Program Description	Single-Family	Multi-Family	Commercial	Self-Haul	Internal County Operations	Hauler	Facility Op., Farm, School, Non-Profit	Policy	Community Services	Traditional Recyc	Yard Trimmings/Wood	Food Scraps	Organics	Batteries	Special Materials	C&D	Solid Waste	Other	
Policies	EPA	1	Policy - High Diversion Zero Waste Goal/Plan	<p>Adopt a goal and plan for reaching 75% diversion by 2020 and Zero Waste (90%) by 2040.</p> <p>Provide organizational capacity and framework for oversee and implement the ZW Plan (e.g., establish a Sustainability Office or assign authority to LEUG or DPW for oversight and implementation of the ZW Plan, rename DPW Recycling Section the Zero Waste Section, require each County departments to appoint a ZW Coordinator, etc.)</p> <p>Make linkages between achieving ZW and how this serve objectives of other plans for the County, including the Climate Action Plan, Live Well Food Systems, SEP, Sustainability, General and Economic Development Plans, etc.</p>								X		X	X	X	X	X	X	X	X	X	X
Policies	EPA	2	Policy - Zero Waste Goal/Plan	Adopt a goal and plan for reaching 90% or more diversion from landfilling and combustion by a specific year through "reduce and reuse" as well as recycling and composting. Consider renaming the Solid Waste Department to the Zero Waste Department.								X		X	X	X	X	X	X	X	X	X	X
Policies	EPA	3	Policy - High Diversion/Zero Waste - Goal Integration Across Plans	Make linkages between achieving high diversion and how this would serve objectives of other plans for the community, including Climate Action, Sustainability, General and Economic Development Plans.								X											
Policies	EPA	4	Policy - Zero Waste Goals for Organics	Adopt a Zero Food Waste hierarchy; adopt a goal to phase out compostable organics from refuse collection and from entering local transfer stations, landfills or incinerators.	X	X	X					X			X	X	X						
Policies	EPA	5	Policy - Landfill Ban - Organics and Recyclables	<p>Adopt an ordinance to limit, then ban organics from refuse collection and from entering local transfer stations, landfills and incinerators; support adoption regionally and statewide after expanding composting and digestion programs as needed.</p> <p>Adopt an ordinance to ban specific recyclable or toxic materials from entering local transfer stations, landfills, and incinerators.</p>	X	X	X		X		FAC	X			X	X	X						
Policies	EPA	6	Landfill Ban - Recyclables	Adopt an ordinance to ban specific recyclable or toxic materials from entering local transfer stations, landfills, and incinerators.	X	X	X		X		FAC	X		X				X	X				
Policies	EPA	14	Mandatory Subscription - Recycling	Require all households and/or businesses and institutions within jurisdictional boundaries to sign up for recycling collection service.	X	X	X			X		X		X									

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Policies	EPA	15	Mandatory Subscription - Organics	Require all households and/or businesses and institutions that generate organics within jurisdictional boundaries to sign up for organics collection service.	X	X	X			X		X			X	X	X					
Policies	EPA	18	Mandatory Recycling Percentage for Businesses and Multi-Family	Require by ordinance that owners of businesses, institutions, or multi-family complexes recycle a specific percentage of solid waste generated.	X	X	X					X		X								
Policies	EPA	21	Policy - Product Fees	Adopt point-of-sale fees for products that are toxic and/or hard to reuse, recycle or compost. Alternatively support others advocating for product fees (e.g., support State initiatives)	X	X	X					X								X		
Policies	EPA	22	Policy - Retailer Take-back (Voluntary)	Encourage businesses to take back products and associated packaging, especially items that are toxic in their manufacture, use, or disposal that are not currently reusable, recyclable or compostable locally.	X	X	X						X							X		
Policies	EPA	23	Policy - Retailer Take-back	Consider voluntary or mandatory retailer take-back program in which businesses that sell items that must be collected as HHW or are not currently reusable, recyclable, or compostable locally <b>voluntarily</b> take back (or are <b>required</b> to take back) those items for proper reuse, recycling, or disposal.	X	X	X					X								X		
Policies	EPA	24	Policy - Product & Packaging Bans	Adopt ordinances that limit or ban sales of toxic or hard to recover products and product packaging.	X	X	X					X								X		
Policies	EPA	25	Policy - Fees on Disposable Items	Adopt an ordinance that places a fee on the sale of certain disposable items, such as disposable shopping bags, to incentivize customer reuse.	X	X	X					X								X		
Policies	EPA	28	Hauler Regulation - License/Regulation of Haulers with Reporting	License all haulers. Require haulers to report the amount of garbage, recyclables, and compostables collected.						X		X		X			X					
Policies	EPA	29	Policy - Trash Disposal Surcharge	Enact taxes or surcharges on the disposal of municipal solid waste to increase the tipping fee relative to recycling or compost.  Explore option of increasing the County's \$0.02/ton Solid Waste Planning Fee and setting annual inflation index adjustment (would require amendment to SW ordinance and possible noticing).				X		X		X										
Policies	EPA	41	Policy - Hauler Regulation - Expanded Authority for Service - License or Permit Recyclables Haulers	Expand municipal authority to provide or oversee collection services for sectors served by open market private haulers (if applicable). For San Diego County, a permit or license system could be established for recycling haulers.		X	X			X		X		X	X	X	X					

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Policies	EPA	56	Policy - Extended Producer Responsibility - Legislation and Compliance	- Advocate for new Extended Producer Responsibility (EPR) legislation and programs for more products/materials (e.g., become member of California Product Stewardship Council and/or adopting local resolutions). - Promote producer compliance in managing the reuse, recycling and/or safe disposal of products covered by existing EPR legislation.								X	X						X				
Policies	EPA	57	Extended Producer Responsibility - Compliance	Promote producer compliance in managing the reuse, recycling and/or safe disposal of products covered by EPR legislation.									X						X				
Policies	EPA	64	C&D Adaptive Reuse of Older or Historic Bldg through Policy Incentives	Provide incentives to developers, e.g., streamlined permit review, permit fee reductions, flexibility in parking requirements, to support "adaptive reuse" of older or historic buildings to new uses.								X	X								X		
Policies	EPA	66	C&D Diversion Rate Requirements	Adopt requirements for C&D recycling/reuse in a C&D or Green Building ordinance or building permit.								X									X		
Policies	EPA	67	C&D Mandatory Source Separation	Require contractors to separate recyclable C&D debris from non-recyclable materials and sort the recyclables on site by staff or a service. Alternatively, require the recycled materials be hauled to a facility that sorts C&D materials.								X										X	
Policies	EPA	68	C&D Policy Incentives for Recycled-Content Use, Reuse, and Recycling	Update Green Building Policy to provide incentives attractive to developers, e.g., higher development ratios, lower set-backs, or credits for use of materials made from recycled content or for on-site reuse and recycling.								X										X	
Policies	EPA	70	C&D Service Rate Incentives	Require C&D processing facility(ies) to provide financial incentives to increase recovery rates, e.g., lower tipping fees, pre-sorting discounts, coupons, and/or expedited service.								X										X	
Policies	EPA	71	C&D Permit Incentives - Refundable Fee	Charge a deposit for permitted projects, refundable upon permittee demonstrating that a high percentage, e.g., 75%, of C&D debris has been delivered to a recovery facility.	X	X						X										X	
Policies	EPA	72	Green Building Incentives through Permit Preference & Credits	The County's Green Building Program promotes Natural Resource Conservation. Construction of exterior walls from straw baled from harvested grain qualifies for incentives. Builders are also eligible for incentives if they use a certain amount of post-consumer recycled content materials. Incentives include preferential treatment and/or permit credits. Update Green Building Policy to provide incentives attractive to developers (e.g., higher development ratios, lower set-backs, or credits for use of materials made from recycled content or for on-site reuse and recycling).								X										X	
Policies	EPA	80	Other - Market Development Opportunities Assessment	Assess the state of existing local and regional markets for materials across the waste stream; study service voids for missed opportunities to recover commodities. Shape strategic action plans around the findings.									X										

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Policies	EPA	81	Markets - Recycling Market Development Zone (RMZD)	Launch/participate in a regional initiative to encourage businesses to use recycled materials in their manufacturing processes for new products; collaborate with local economic development staff to provide financial, siting, permit, feedstock, and marketing assistance and incentives to businesses.			X						X	X								
Policies	HFH	101	C&D Enhanced Ordinance, Education, and Enforcement	<ul style="list-style-type: none"> <li>- Ordinance revisions: Collect/analyze data from C&amp;D permit program; revise C&amp;D ordinance (e.g., reduce project threshold from 40,000 SF for projects; change performance security).</li> <li>- Enforcement: Improve enforcement and tracking of compliance with the C&amp;D ordinance. This may involve improving coordination between the permit counter, building inspectors, and recycling program staff. Consider additional tools (change performance security requirements), certifying C&amp;D facilities.</li> <li>- Training: Train building inspectors about WMPs and recycling.</li> <li>- Educate contractors and haulers: (1) Evaluate how County communicates requirements to building and demolition contractors and permitted haulers; (2) Consider how to improve outreach and education about the ordinance requirements and how to reduce, reuse, deconstruct, recycle, etc.; (3) Could host/co-host periodic contractor workshops and perform targeted outreach to high-volume or problem contractors.</li> </ul>								X								X		
Policies	HFH	111	Policy - Self-Haul Facility Agreements	Enter into agreement with transfer stations, MRFs, and/or landfills that accept self-haul to: (i) accept source separated recyclables, organics; and C&D; (ii) process loads rich with recyclables, organic materials, and C&D; (iii) create stronger pricing incentives for self-haulers to separate recyclables, organics, and C&D; and/or (iv) provide more "free" tipping areas for the recyclable and reusable materials. Alternatively, require some services through the County's SW ordinance.				X					X	X		X				X		

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Policies	HFH	126	Policy - Hauler Regulation Modifications	Amend the SW Ordinance to expand the County's authority to oversee collection services for sectors served by NEFA haulers and by open market private haulers. Strategies include: - Changes to NEFA system: (1) Simplify NEFA system - Develop strategy to: (a) reduce the number of NEFA available; (b) reduce the number of haulers operating in each service areas; and/or (c) structure agreements around type of collection service provided (e.g., cart/bin vs roll-off). (2) Create opportunity for an exclusive franchise system in the future (e.g., county-wide, multiple service areas, and/or by type of collection service) - (a) Issuing 5-year notices to hauler per PRC Sections 49520-49524; (2) Winding down 10-year term on existing NEFAs (following amendments to expand requirements). - Establish permit system or grant NEFAs to C&D haulers to manage and monitor C&D hauling, processing, and diversion, establish minimum diversion and reporting requirements, collect franchise fee and/or permit/admin fee, etc. - Establish permit system or grant NEFAs to recyclers in a manner similar to C&D haulers described above; this could be limited to recyclers that charge for service, tiered requirements depending on volumes collected, minimum container and signage requirements, etc. - Establish franchise fees and administrative fees on volume collected (or gross receipts) by haulers.	X	X	X			X													
Policies	HFH	128	Mandatory Recycling Ordinance to Residents - Education	Educate residents on the County's ordinance requirements to separate and recycle designated materials (including yard trimmings) from solid waste.	X	X								X	X		X						
Policies	HFH	129	Mandatory Recycling Ordinance for Residents - Enforcement	Enforce residents compliance with the County's ordinance requirements to separate and recycle designated materials (including yard trimmings) from solid waste.	X	X						X		X	X		X						

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Policies	HFH	133	Policy - Hauler Regulation - New NEFA Performance Standards	<p>Amend NEFA to expand diversion services, standards, and reporting obligations of haulers.</p> <ul style="list-style-type: none"> <li>- Collection programs: Enhance collection services covered by 141.</li> <li>- Diversion standards: Establish minimum diversion requirement(s) (e.g., minimum diversion guarantee as percent of amount collected and minimum diversion program requirements with liquidated damages for failure to achieve), and/or incentivize diversion performance by offering contract extensions or bonuses for achievement of goals. Consider options to incentivize/compensate haulers for exceeding minimum diversion requirements (e.g., recycling rebates or worker rewards).</li> <li>- Container/signage standards: Require haulers to provide a uniform color scheme or labeling system; establish minimum signage requirements to allow for consistent education and outreach campaigns and to make recycling and organics containers easily distinguishable throughout the unincorporated areas.</li> <li>- Reporting: Expand reporting requirements to include account data for single-family and multi-family accounts.</li> <li>- Customer arrangements: Prohibit evergreen/auto-renew customer contracts;</li> <li>- Ordinance: Amend SW ordinance as necessary to support NEFA changes; other program/rate changes.</li> <li>- Flow control: Reserve right for County to direct organic materials to facility(ies) selected by County.</li> </ul>						X		X		X	X	X	X					X	
Policies	Fallbrook/Group Hauler	302	Mandatory Recycling and Organics Requirements for HOAs	<p>Include provisions in County ordinance specifying recycling and organics diversion program requirements for home owners associations (HOAs). For example, HOAs rely on landscapers to haul yard trimmings off-site but there is not verification that these materials are diverted.</p>	X	X						X		X	X	X	X						

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Policies	Group Hauler Mtg	304	Mandatory Recycling and Organics Diversion by Generators - Education and Enforcement	<p><b>Solid Waste Ordinance:</b></p> <ul style="list-style-type: none"> <li>- Amend ordinance to include yard trimmings and food scraps in Commercial Recyclables definition in a manner consistent with AB 1826 requirements (thereby allowing County to assess fines for non-compliance with Ordinance/AB 1826).</li> <li>- Consider establishing minimum service level ratios (recycling+organics : solid waste capacity) for multi-family complexes, HOAs and businesses with exception for space limitations and self-hauling.</li> <li>- Require landscapers hauling yard trimmings to arrange for composting or mulching.</li> </ul> <p><b>Residents:</b> Educate single-family residents on the mandatory recycling/yard trimmings requirements of the County SW ordinance; and, consider enforcement at a later date.<b>Multi-family/Businesses:</b></p> <ul style="list-style-type: none"> <li>- Continue to educate multi-family and businesses on mandatory recycling and organics diversion requirements.</li> <li>- Implement enforcement program.</li> </ul>	X	X	X					X		X	X	X	X							
Hauler Standards	EPA	13	Hauler Regulation - Modify Private Hauler Collection Requirements	<p>Establish requirements for licensed solid waste haulers to provide curbside recycling and/or organics collection service to their customers.</p> <p>Add the following: 3-container system for recyclables, yard trimmings, and solid waste in densely-populated areas</p> <p>Minimum weekly capacity of 64 gallons each for recycling and organics (exceptions for space constraints or disabled)</p> <p>Exemptions for on-site composting, hardscapes, xeriscaping</p> <p>Pay-as-you-throw rate structure</p>						X		X		X	X	X	X					X		
Hauler Standards	EPA	45	Hauler Regulation - Service Provider Rewards	Take actions to compensate haulers for recycling or composting, e.g., recycling rebates or worker rewards.					X	X			X	X			X							
Hauler Standards	EPA	46	Hauler Regulation - Service Provider Contract and Franchise Agreement	Amend Service Provider contract or agreement to achieve high diversion by providing incentives or setting requirements, e.g., contract extensions, bonuses or liquidated damages, limited or no disposal payments, required productive use of organics.						X				X			X							
Hauler Standards	HFH	102	C&D Hauler Regulation	Regulate all C&D haulers consistently to ensure diversion of C&D materials. Currently, County regulates some C&D haulers through its NEFA system. Haulers that only handle C&D/recyclables that are 90% recyclable are not required to have a NEFA. Establish NEFA requirements for all C&D haulers, with minimum diversion and reporting requirements.								X								X				
Hauler Standards	HFH	135	Hauler Requirements - Uniform Container Colors and Signage	Require haulers and recyclers to provide a uniform color scheme or labeling system and establish minimum signage requirements to allow for consistent education and outreach campaigns and to make recycling and organics container options easily distinguishable throughout the unincorporated	X	X	X	X	X	X				X	X	X	X							

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## Attachment O: Comprehensive Menu of Program and Policy Options for Internal Operations San Diego County Strategic Plan to Reduce Waste

Menu Policy/Program	Policy or Program Description	Lead Department	Program 1	Program 2	Program 3	Program 4	Program 5
<b>New Policy</b>	Adopt policy to support County initiative. Identify County department responsible for oversight of HD/ZW initiatives for internal operations, and specify identification of Sustainability Chiefs in each department to provide organizational framework for implementation and on-going monitoring	CAO, BOS	Adopt High Diversion/Zero Waste Policy for internal County operations	Identify responsible parties and each dept's Sustainability Chief	Hold annual Round Table with all Sustainability Chiefs	Monitor implementation of initiatives	Annual reporting to the Board and goal setting for each dept
<b>Policy Review</b>	Review existing policies for enhancements and improved application	DPW, DPC	Require food vendors to have a food waste reduction and donation policy in place.	Encourage/require food vendors to participate in composting practices when facilities become available.	Set goal for each County facility to receive Green Business certification	Require C&D ordinance implementation by depts for County projects	Require Zero Waste criteria/policies be followed at all County sponsored/hosted events
<b>Collection Contracting</b>	Review the existing contracting practices for collection services and streamline the process when practical. Include additional service and performance standards in the County's BPA for collection services.	DPC, DPW	Establish policy on when depts must use County BPA and conditions under which depts may contract separately for collection services	Standardize requirements for tracking and services in BPA and non-BPA hauler contracts	Require leased facilities to have minimum recycling services, waste reduction policies, and reporting	Set minimum diversion requirements in hauler agreements and include incentives/disincentives	Set standards for uniform container colors and clear signage on containers
<b>On-Going Measurement and Progress Reporting</b>	Conduct waste audits of internal County operations to develop a baseline to measure progress against, and regularly assess progress.	DPW	Conduct waste audit for County internal operations	Identify high value and high volume materials	Identify hard-to-recycle materials	Establish baseline for tracking future diversion	Set reporting requirements for depts
<b>Reduce Programs</b>	Implement strategies to reduce waste starting with initiatives to reduce the use of paper	DPC, Attorney's Office	Eliminate individual printers/ Introduce a pre-approval process for individual printers	Require new printers to have double-sided printing functionality	Provide hand dryers in all facilities	Adopt e-sign and electronic review/approval of forms and documents	Prioritize online subscriptions to references and periodicals
<b>Reuse/ Repair Programs</b>	Implement strategies to reduce waste starting with initiatives to reduce the use of paper	DPC	Increase awareness of County's existing reutilization process	Increase # of days items are listed on reutilization website	Offer incentives/recognition to depts purchasing through reutilization system	Require salvage vendor to track and report volume/weight/impact of auction process	Partner with colleges, schools or organizations to repair items
<b>Recycling Programs</b>	Increase volume and type of materials collected.	DPW, GS	Incentivize depts to increase volume of traditional recyclables collected. E.g. recycle bottles & cans in parks to benefit parks	Incentivize depts/reduce burden on depts recycling E-Waste & Universal Waste. E.g. Batteries, bulbs, Ballasts	Work with vendors to take back or introduce programs to recycle special materials. E.g. Plastic coated paper (Jackson Traps), Toner cartridge, Propane Tanks	Increase participation in hazardous waste collection and proper disposal for all depts	Review practices for collection and disposal of medical waste & sharps at all County facilities and evaluate options for proper disposal

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<b>Education &amp; Training</b>	Increase education and awareness of internal reduction, reuse, recycling and other waste diversion policies including related purchasing policies. Increasing the ability and convenience for employees to participate in diversion programs	DPW, CAO	Provide technical assistance/ certification to internal County depts	Require training of janitorial contractors	Develop a LMS training module for staff and employees - continuing and new recruits	Develop a recycling training specifically for DPR volunteers and PTE	Promote County programs for reduction, reuse, recycling, and organics diversion
<b>Rewards &amp; Recognition</b>	Integrate rewards and recognition for individuals and depts going above and beyond	CAO	Showcase model programs implemented by depts	Include non-bidding waste reduction goals in the County's Business Plan for internal operations	Integrate "waste reduction" in the operational excellence goals of depts	Appoint a Sustainability Chief through all depts	Set goal for each County facility to receive Green Business certification
<b>Purchasing</b>	Encourage green purchasing practices; pursue regional purchasing cooperatives to buy recycled products; adopt the "precautionary principle" for purchases and services and support regionally.	DPC	Participate or initiate a cooperative to reduce costs	Incorporate Zero Waste objectives into contracts avoiding purchase of disposable goods	Incorporate Zero Waste objectives into contracts minimal waste in product and packaging design	Incorporate Zero Waste objectives into contracts product take-back services	Incorporate Zero Waste objectives into contracts lifecycle analysis.
<b>Sheriff Department</b>	Programs to promote waste diversion and recycling specifically for Sheriff's dept	Sheriff	Introduce repair skills program for inmates	Review reuseability of electronics purchased by Sheriff's dept	Review use of compostable food service ware used by Sheriff dept	Expand pilot composting project at East Mesa detention facility to other facilities	
<b>Parks &amp; Recreation</b>	Programs to promote waste diversion and recycling specifically for DPR	DPR	Show recycling facilities on campground maps and add additional recycling locations as needed	Partner with Goodwill to have reuseable pickup for County parks and facilities	Develop a recycling training program specifically for DPR volunteers and PTE	Improve distribution of mulch from DPR within community - social media, Chip N Drop	Partner with farms to improve distribution of mulch from DPR (Ag Weights & Measures)
<b>Food Waste Prevention and Composting Programs</b>	Encourage donation and recycling of food and organics generated through County departments and operations	Individual Dept	Partner with food bank to donate food for large events sponsored or hosted at County facilities	Introduce vendors to food donation agencies	Include food reduction and donation requirements in County contracts with food service vendors; specify reporting requirements	Explore on-site composting options at County facilities	Explore options for composting at open spaces that have community gardens

**Attachment O: Comprehensive Menu of Program and Policy Options for Internal Operations  
San Diego County Strategic Plan to Reduce Waste**

Menu Policy/Program	Policy or Program Description	Program 6	Program 7	Program 8	Program 9	Program 10
<b>New Policy</b>	Adopt policy to support County initiative. Identify County department responsible for oversight of HD/ZW initiatives for internal operations, and specify identification of Sustainability Chiefs in each department to provide organizational framework for implementation and on-going monitoring					
<b>Policy Review</b>	Review existing policies for enhancements and improved application	Require use of recycled materials in road construction	Review Recycled Products Procurement Policy (B-67) periodically and expand or enhance requirements.	Review Disposal of Personal Property Policy (A-94) periodically and expand or enhance requirements.		
<b>Collection Contracting</b>	Review the existing contracting practices for collection services and streamline the process when practical. Include additional service and performance standards in the County's BPA for collection services.	Expand reporting to include solid waste, recycling, yard trimmings and food scraps service level data by facility and monthly tonnage/cubic yard	Provide recycling bins to all fire stations and other facilities			
<b>On-Going Measurement and Progress Reporting</b>	Conduct waste audits of internal County operations to develop a baseline to measure progress against, and regularly assess progress.	Annually monitor County's progress and implementation of new programs				
<b>Reduce Programs</b>	Implement strategies to reduce waste starting with initiatives to reduce the use of paper	Review hard copy record retention policy. Allow scanned copies.	Install and use of water-filling station or filtration units to reduce water bottle delivery purchases			
<b>Reuse/ Repair Programs</b>	Implement strategies to reduce waste starting with initiatives to reduce the use of paper	Partner with Goodwill to have pickups for reuseables or drop-off boxes	Partner with local artists to create artistic displays for community centers and facilities from recycled materials	Phase in rechargeable batteries and charging equipment to all facilities	Review use of compostable food service ware used by Sheriff dept	Offer/sell reuseable foodservice kits for campers.
<b>Recycling Programs</b>	Increase volume and type of materials collected.	Review practices for disposal of dead animals and evaluate options.	Review practices for collection and disposal of C&D within all County depts and require recycling	Introduce programs to collect hard-to-recycle materials. E.g. Plastic film and bags		

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San Diego County Strategic Plan to Reduce Waste**

Menu Policy/Program	Policy or Program Description	Program 6	Program 7	Program 8	Program 9	Program 10
<b>Education &amp; Training</b>	Increase education and awareness of internal reduction, reuse, recycling and other waste diversion policies including related purchasing policies. Increasing the ability and convenience for employees to participate in diversion programs					
<b>Rewards &amp; Recognition</b>	Integrate rewards and recognition for individuals and depts going above and beyond					
<b>Purchasing</b>	Encourage green purchasing practices; pursue regional purchasing cooperatives to buy recycled products; adopt the "precautionary principle" for purchases and services and support regionally.	Incorporate Zero Waste objectives into contracts repairability	Work with supply vendor to prioritize display of waste-friendly product choices on purchasing platform	Promote choices that use minimal packaging/recyclable packaging in vending machine contracts	Include waste considerations in training provided to P-card holders	Review reuseability of electronics purchased by Sheriff's dept
<b>Sheriff Department</b>	Programs to promote waste diversion and recycling specifically for Sheriff's dept					
<b>Parks &amp; Recreation</b>	Programs to promote waste diversion and recycling specifically for DPR	Improve utilization of mulch from DPR in other depts or public works projects - DPW, Caltrans	Explore on-site composting options at County facilities	Offer/sell reuseable foodservice kits for campers		
<b>Food Waste Prevention and Composting Programs</b>	Encourage donation and recycling of food and organics generated through County departments and operations					

## **Attachment P: Program and Policy Descriptions San Diego County Strategic Plan to Reduce Waste**

This Attachment presents brief descriptions of the programs and policies recommended for the unincorporated areas and for the County's internal operations. The manner in which the County implements the programs and policies may be different than what is presented here as the County will refine the approach to and scope of the programs prior to implementation to match available staff resources and skills.

### **P.1 Program and Policy Descriptions for the Unincorporated Areas**

The strategic planning process involved evaluation and recommendation of 20 programs for the unincorporated area. The programs, which received a detailed analysis, are briefly described below.

#### **Recommended Near-Term Programs (2017-2020)**

1. **Enhance zoning ordinance to support organics processing.** Work with relevant County departments and other regional agencies to remove barriers to organics processing from zoning and land use policies. This applies to enabling small- to medium-community based composting (in community gardens and urban and rural farms), as well as easing zoning restrictions on large-scale processing facilities. Objectives may include:
  - Establishing a tiered-permitting process for composting by working with Department of Planning and Development Services and DEH. This would be designed to allow materials from off-site transportation of organics to a local composter under a certain thresholds by right and potentially allow farms to generate a revenue stream from collection of this material. For example, tiered permitting could address allowing agricultural sites that pose low potential for impact to accept organic materials from others to produce soil amendments.
  - For community gardens, allowing composting on-site as long as material is contributed by active members. Such programs can allow garden members to bring food scraps from home. Also serve as excellent demonstration sites.
  - Considering different types of organic materials to support diversion of a wide range of organics including green material, agricultural material, food material, food-soiled compostable paper, vegetative food material and animal manure.
  - Encouraging farms to use compost as soil amendments, which will help to divert these materials, conserve water, increase crop yields, and sequester carbon dioxide from the atmosphere in the soil.

The cost estimate for this program reflects one-time costs for the staff, with support of a consultant to identify appropriate zoning/ordinance changes and to amend the ordinance. It also includes costs associated with conducting an EIR process, should that be necessary. These costs are annualized over three to five years to present an annual program costs. Ongoing costs include staff time to address questions, work with project applicants, and amend the ordinance as need.

2. **Support organics processing facility development/contracting.** With the need for approximately 100,000 tons per year of organics processing capacity, the County will need to take an active role in stimulating and supporting large-scale facility development. The program envisions that the County will support organics processing facility development at a local or regional level for yard trimmings, food scraps, and food-soiled compostable paper. The County may increase performance standards in the solid waste management agreements (SWMA) for franchise haulers to achieve Diversion Targets for organic and other recyclable materials, including penalties of liquidated damages and

## Attachment P: Program and Policy Descriptions San Diego County Strategic Plan to Reduce Waste

default provisions for non-compliance. Adding additional performance standards specifically targeting organic materials is likely to stimulate infrastructure development for processing facilities, as haulers need the processing capacity to comply with the SWMA requirements. This recommendation goes hand-in-hand with requiring implementation of commercial and single-family food scraps and food-soiled compostable paper collection programs (Programs 3 and 12).

In addition, the County can support organics processing facility development by providing input to regulatory agencies (e.g., the Regional Water Quality Control Board, Air Resources Board, etc.) during development of regulations for organics processing facility siting and expansion with an objective of reducing barriers for new and/or expanded facilities. The County's efforts should support regulations that address processing of various organics including green material, agricultural material, food material, food-soiled compostable paper, vegetative food material and animal manure.

3. **Commercial food scraps collection/mandatory organics.** This program involves implementation of a robust commercial food scraps collection program to support business compliance with AB 1826 and to divert food scraps and food-soiled compostable papers, which make up 43,762 tons per year of the commercial waste stream. It anticipates that the County will build this requirement into the SWMAs (with recognition that time may be required until processing capacity is available), at least for the haulers that provide cart and bin service to customers.

As the County develops the food scraps collection program requirements for the SWMAs, it will be important to consider the practical challenges of food scraps collection programs particularly in terms of motivating customer participation. For example, the County will want to think about program specifications related to public education and outreach and technical assistance. In addition, data shows that programs that accept and then screen out plastic bags have higher customer participation levels and better usage rates; however, plastic bags create added costs and challenges for processors. As a result, the County will want to consider whether or not to specify that haulers and processors must establish organics programs that accept plastic bags.

One-time costs of building new requirements into the SWMAs is reflected in Program 14. Ongoing costs reflected for this program focus on the impacts to the haulers' collection services and additional time businesses will need to separate food scraps and food-soiled compostable paper for collection.

Ongoing costs include the following:

- Estimated increased collection costs for food scraps and food-soiled compostable paper service and processing costs for these additional materials.
- Annualized costs of new carts and bins, where cart and bin costs are annualized over 10 years.
- Estimated cost for businesses to dedicate employee time to separation of food scraps for collection.
- Cost estimated for reduced solid waste collection and avoided landfill disposal costs and related franchise fees on the disposal costs.
- Costs for two educational mailers per year.
- County staff time to provide ongoing program support.

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4. **Regulate C&D haulers by establishing minimum diversion requirements.** The objective of this program is integration of the C&D haulers into the non-exclusive system to regulate the diversion activities. This will allow the County to specify a minimum diversion rate and define reporting requirements. This will also allow for improved managing and monitoring of C&D hauling, processing, and diversion, particularly for C&D that is not covered through the C&D permit requirements. Lastly, requirements will specify that effective January 1, 2020, all yard trimmings collected from residents and businesses shall be processed for diversion and use as ADC will be prohibited by the County (in recognition of AB 1594's limitation on counting ADC as diversion).

One-time costs to bring the C&D haulers into the non-exclusive system are reflected in Program 14. Ongoing costs include:

- Staff time for franchise oversight and management, including reporting.
  - Additional hauler time associated with the franchise and reporting.
  - Increased C&D processing costs, avoided landfill disposal costs and related franchise fees on the disposal costs.
5. **Single-family collection with consistent hauler requirements.** This program would establish requirements for non-exclusive haulers providing regular curbside cart collection services. Each hauler would be required to provide the following services, some of which may be limited to densely-populated areas:
- Three-container system for recyclables, yard trimmings, and solid waste in densely-populated areas to increase subscription for recycling and organics service.
  - Minimum weekly capacity of 64 gallons each for recycling and organics (exceptions for space constraints, disabled customers, or customers who have on-site composting, hardscapes or xeriscapes).
  - A pay-as-you-throw rate incentive requirement, potentially with a County-defined minimum rate differential for solid waste cart sizes.
  - Rate discounts for at-home composting.
  - Expanded list of recyclables over time as processing/markets are viable (e.g., plastic bags, e-waste peripherals, rigid plastics, hard cover books, scrap metal/aluminum under 40 lbs., and textiles).
  - Bulky item and re-use collection events specifying minimum program requirements such as number of events per year, minimum material types to be collected, minimum diversion requirements through reuse or recycling, minimum volume to be collected per household, etc.

One-time costs of building new requirements into the SWMAs are reflected in Program 14. Ongoing costs reflected for this program focus on the impacts to hauler collection services; and, specifically include the following:

- Estimated increased collection costs for handling increased volumes of recyclable materials and yard trimmings and the processing costs for these materials.
- Annualized costs of new collection containers reflecting increased participation in the programs, where cart costs are annualized over 10 years.

## Attachment P: Program and Policy Descriptions San Diego County Strategic Plan to Reduce Waste

- Reduced solid waste collection and avoided landfill disposal costs and related franchise fees on the disposal costs.
  - Costs for two educational mailers at the start-up (with those costs annualized over 3 to 5 years).
6. **Commercial collection with minimum recycling level requirements.** Set a minimum recycling service ratio or container size to be provided by haulers to commercial or multi-family premises. This could be modeled on City of San Diego’s program of requiring a minimum service level ratio of 30 percent. Alternatively it could also be specified as a minimum recycling container size on a per-unit basis (e.g., x gallons of recycling capacity per tenant unit).

In addition, the County may consider specifying discounted rates or fees for separating recyclables and/or compostables from trash to incentivize customers' diversion efforts.

One-time costs of building new requirements into the SWMAs is reflected in Program 14. Ongoing costs reflected for this program focus on the impacts to hauler collection services; and, specifically include the following:

- Estimated increased collection and processing costs for handling increased volumes of recyclable materials.
  - Annualized costs of new carts and bins reflecting increased participation in the programs, where cart and bin costs are annualized over 10 years.
  - Reduced solid waste collection and avoided landfill disposal costs and related franchise fees on the disposal costs.
  - Costs for two educational mailers at the start-up (with those costs annualized over 3 to 5 years).
7. **Enhance C&D diversion with ordinance amendment.** The County’s C&D ordinance requires that “covered” projects, which are 40,000 square feet or larger, recycle 90% diversion of inert materials and 70% diversion of all other C&D materials. In order to comply with the ordinance, applicants must submit: (1) a Construction and Demolition Debris Management Plan and a fully refundable performance guarantee prior to building permit issuance; and, (2) documentation of compliance at the end of the project. DPW administers the program. Given that diversion of C&D accounts for as much as 6.2% of the diversion needed to reach the 75% Diversion Target, HF&H recommends an amendment to the C&D ordinance to lower the covered project threshold to capture more projects under the County’s C&D recycling program. HF&H reviewed 3 years of historical permit data provided by the County and recommends that the project threshold for covered projects be revised to capture all projects of 5,000 square feet or more and all projects with total job value of \$100,000 or more. Estimates anticipate that an additional 115 to 400 C&D projects will be covered C&D projects (at a median project size of 7,000 square feet). Note that projects falling below the proposed covered project thresholds will be subject to CALGreen C&D recycling requirements, which require 65% C&D recycling for many project types; however, these projects will not be required to comply with the County’s Debris Management Plan, performance guarantee, and review process.

One-time costs anticipate staff efforts related to: drafting the C&D ordinance revisions, seeking stakeholder input, finalizing the ordinance, revising education materials and the County website, and conducting additional outreach after adoption of the amendments to the ordinance. Ongoing costs include:



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- Staff time for review and oversight of additional Debris Management Plans.
- Periodic mailers and outreach to construction and demolition contractors.
- Increased C&D processing costs and avoided landfill disposal costs and related franchise fees on the disposal costs.

8. **Expand social marketing/behavior change marketing program.** This program envisions a robust outreach campaign that is focused on one or two key messages (e.g., putting recyclables in the right container, putting food scraps in the green container, or reducing food waste). To be effective, these types of campaigns need to be sustained over a few years to change the behavior of people. The campaign would rely on a wide range of outreach tools such as: TV, Facebook, Pandora/Spotify, Mobile online ads, Newspaper/print, Radio promotions, Blurbs in hauler material, Local banners/materials in libraries, and street sign flags. Messaging would use a flighted schedule throughout the year, with a blitz in November/December for the holiday season.

One-time costs are not included for this program because the efforts will be ongoing. The efforts will include working with a marketing consulting firm for the development and implementation of marketing campaigns that will change and evolve over time. Ongoing program costs include:

- County staff time to manage the marketing consulting firm and marketing campaigns.
- Marketing consulting firm costs, which are inclusive of the outreach costs.
- Increased collection costs for diversion of more recyclables and organics and processing costs for these additional materials.
- Annualized costs of new carts and bins, where cart and bin costs are annualized over 10 years.
- Reduced solid waste collection and avoided landfill disposal costs and related franchise fees on the disposal costs.

9. **Support on-site community/commercial/farm composting.** With limited organics processing capacity, particularly for food scraps, development of on-site community gardens, on-site composting programs by businesses, and farm composting projects can provide some capacity to manage the organic materials and assist businesses in compliance with AB 1826 mandatory recycling requirements. In addition, on-site composting operations can divert plant materials, food-soiled compostable paper, agricultural organics, and animal manure. On-site composting provides additional options that do not require significant transportation, which makes them particularly useful for rural residents and businesses. Program strategies include:

- Providing technical assistance to support these on-site composting projects as well as grant funds for purchase of compost systems, food storage bins, etc.
- For individual generator efforts, continuing to promote backyard/on-site composting through education, bin rebates, and rate reductions.
- Supporting efforts of others such as the Solana Center for Environmental Innovation, which has organized mid-scale composting workshops working with the County's Farm Bureau and field trips for businesses to Costanza Farm and Ramona High School to learn about their on-site composting projects.
- Revising the County's Solid Waste Ordinance and SWMAs to clarify that parties (in addition to non-exclusive haulers) may engage in the transportation of food scraps, food-soiled

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compostable paper, and yard trimmings for delivery to community- and farm-based composting operations.

One-time costs are not included for this program as the costs are built around an annual approach to support new small-scale composting projects. Ongoing costs include:

- Staff time to manage the program, including the annual grant funding efforts and technical assistance consulting contract(s).
- Grant fund money for project applicants for purchase of composting equipment.
- Costs for a technical assistance consultant to support project development and ongoing composting projects.
- Avoided landfill disposal costs and related franchise fees on the disposal costs for organics no longer landfilled.

10. **Expand the technical assistance program.** The County currently manages technical assistance programs for multi-family properties, businesses, and schools. The technical assistance includes waste assessments, recycling and diversion program recommendations, and implementation support. This program proposes expansion of this technical assistance program to reach more properties, anticipating doubling or tripling the size of the program, and to include a business and multi-family recognition program to periodically acknowledge those with successful diversion programs.

One-time costs are not included for this program because the County has an existing technical assistance program in place that can be expanded. Ongoing costs include:

- Staff time to manage the program and the technical assistance consulting contract(s).
- Funds for grants to multi-families, businesses, and schools for the purchase of containers, signage, and/or to make storage enclosure modifications; or, for the County's purchase of containers and signage for distribution to multi-families, businesses, and schools.
- Costs for technical assistance consultant(s) support for multi-families, businesses, and schools and for the food collection program.
- Increased collection costs for diversion of more recyclables and organics and processing costs for these additional materials.
- Annualized costs of new carts and bins, where cart and bin costs are annualized over 10 years.
- Reduced solid waste collection and avoided landfill disposal costs and related franchise fees on the disposal costs.

11. **Support efforts for reuse of textiles and State EPR programs for mattresses, carpet/padding, paint, and other covered materials.** This program is a no-cost program to the County, as the promotion of reuse and recycling alternatives will be integrated into existing education and outreach activities or into new education activities contemplated in other programs; furthermore, State EPR programs for carpet, mattresses, paint, and other materials shift the recycling costs on the industry rather than to the County or the end user. To promote these EPR programs, the County may also partner with others, including the haulers and local water agencies and utilities. Some of the partnerships identified include:

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- Reuse of Textiles - The thrift community has the capacity to accept more textiles, which account for 3% of the waste disposed.
- Carpet/Padding Recycling - The State passed the Carpet Stewardship Law (AB 2398) to set carpet recycling standards. Through this program, more opportunities for carpet/padding recycling are becoming available. Since carpet/padding is one of the top 10 materials disposed in the unincorporated area (6.1% of total; 29,143 tons per year), the County should promote recycling opportunities and monitor Carpet America Recovery Effort's (CARE) efforts to ensure sufficient carpet recycling capacity is available in the County.
- Mattress Recycling – The State passed the California Used Mattress Recovery and Recycling Act (SB 254), which established an industry-run, statewide program for mattress recovery and recycling. Similar to carpet recycling, the County should promote recycling opportunities and monitor the Mattress Recycling Council's efforts to ensure sufficient mattress recycling is available in the County.
- Paint and Other Materials – The County should promote other State EPR programs such as use of paint collection sites through California's Paint Stewardship Program, PaintCare.

No costs have been included for this program because it is assumed that the County will promote reuse and recycling of these materials through other education and outreach efforts and its website.

12. **Single-family food scraps collection.** This program involves expanding the existing yard trimmings collection services to include collection of food scraps and food-soiled compostable paper in the same container. It anticipates that the County will build this requirement into the SWMAs (with recognition that time may be required until processing capacity is available), at least for the haulers that provide cart and bin service to customers.

One-time costs of building new requirements into the SWMAs is reflected in Program 14. Ongoing costs reflected for this program focus on the impacts to hauler collection services; and, specifically include the following:

- Estimated increased collection costs for handling increased volumes of organic materials with the addition of food scraps and food-soiled compostable paper to the yard trimmings costs, as well as the processing costs for these additional materials.
  - Annualized costs of providing kitchen pails to customers, where costs of the pails are annualized over 10 years and include an annual inventory for replacements and new customers.
  - Reduced solid waste collection and avoided landfill disposal costs and related franchise fees on the disposal costs.
  - Costs for two educational mailers at the start-up (with those costs annualized over 3 to 5 years).
13. **Enhance hauler performance standards, including minimum diversion goals.** Several programs identify enhancement to the scope of the collection services provided by haulers. This program highlights a few additional performance standard enhancement to support diversion including the following:
- Minimum diversion goals.
  - Consistent color scheme for containers and signage.

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- Increased public education requirements (e.g., annual service guide, twice annual newsletters, direct mailer to multi-family units).
- Ongoing education, outreach, and monitoring to comply with the requirements of AB 341, AB 1826, and the County mandatory recycling requirements.

One-time costs to integrate enhanced performance standards is included in one-time costs for Program 14. Ongoing costs include the following:

- Staff time for review of hauler-prepared public education materials.
- Costs for the haulers' development and distribution of education materials including annual service guides for residents and businesses, two annual newsletters per year per account, and two mailers annually to multi-family units.
- Cost to replace cart lids for uniform color scheme throughout the unincorporated areas (annualized over 5 years).
- Increased processing costs for additional recyclables and organics and avoided landfill disposal costs and related franchise fees on the disposal costs.

14. **Improve diversion, tracking and oversight of haulers.** This program involves revisions to the non-exclusive franchise system to incorporate the recommended changes addressed in other programs and to integrate additional reporting requirements that allow for closer tracking of diversion performance. More robust reporting of residential and commercial account data and tonnage information will allow for analysis of diversion program performance and the voluntary subscription level in the unincorporated area (compared to self-haulers), and will provide data needed to plan future programs. One-time efforts will be focused on revising the SWMAs. Ongoing efforts anticipate a higher level of contractor oversight than currently provided by the County so that the monthly reporting by haulers can be monitored closely to track diversion rate performance and results of new diversion programs. In addition, it is anticipated that the County will periodically assess haulers' compliance with performance standards and audit franchise fee payments.

One-time costs focus on the process of implementing a two-tiered hauler system and the revisions to the SWMAs reflecting the two-tier system and the additional diversion requirements contemplated by several of the recommended programs. One-time costs include staff time and consultant services. This effort anticipates conducting a public input process to engage the hauling companies and C&D industry. The input process will give these stakeholders opportunities to learn more about the County's goals, plans and proposed hauler requirements and to provide their input.

Ongoing costs include the following:

- Additional hauler time associated with the franchise and reporting.
- Increased organics processing costs (to comply with AB 1594 and avoided landfill disposal costs and related franchise fees on the disposal costs).
- Note that additional staff time has not been included for ongoing franchise management as it is assumed the current staff level is sufficient, with the exception that additional staff time was included (for Program 4) for ongoing franchise oversight and management of the C&D haulers.

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15. **Promote food waste prevention.** The County's promotion of food waste prevention is estimated to yield 1.5% of the diversion needed to reach the 75% Diversion Target. The program reflected in the cost analysis anticipates that the County will pursue the following tasks:

- Developing a food waste prevention plan targeted at residents and businesses throughout the unincorporated areas.
- Retaining a social marketing/behavior change consulting firm to develop a multi-year campaign on food waste prevention targeted at residents, grocery stores, restaurants, school cafeterias, and other food service vendors with a focus on opportunities and practices to prevent food waste.
- Collaborating with other agencies and organizations to use and/or share resources and tools developed by others, to reduce duplication of efforts, and to potentially pool funding.
- Including recognition of businesses with food waste prevention success stories in outreach efforts.
- Training DEH staff to provide education on food waste prevention to businesses during DEH inspections/visits.

The one-time costs for this program include staff time to prepare a food waste prevention plan. Ongoing program costs are included for the marketing consulting firm and the marketing campaign efforts and anticipate separate campaign efforts for residential and commercial campaigns. The success of these programs is tied to repeated messaging; therefore, this program and related annual costs are anticipated to continue annually, which will allow for changes in messaging and outreach strategies. A small amount of staff time is anticipated on an ongoing basis to train DEH inspectors that interface with food-generating businesses during inspections.

Lastly, the ongoing cost analysis factors in the avoided landfill disposal costs and related franchise fees on the disposal costs for the reduction in food disposal.

16. **Support food donation through the County's Food System Initiative.** The County's promotion of food donation activities is estimated to yield 1.0% of the diversion needed to reach the 75% Diversion Target. The estimated donation quantities have the potential to provide over 1 million meals annually to feed the hungry. The County's Food System Initiative will include a focus on food donation. These efforts will be led by the County's Food System Initiative Coordinator (a new position staffed in the fall of 2016). The development of a food donation plan will be the first step in implementation of this program and will provide a more comprehensive road map for the County's role in food waste donation.

If selected for implementation, the program is likely to include the following types of tasks:

- Developing a Food Donation Plan.
- Promoting and supporting food donation activities through business education and outreach to encourage donation of pre-consumer, edible food from food service vendors to food banks or soup kitchens.
- Encouraging farm and garden donation programs through the support of gleaning groups to harvest surplus crops and distribute to food banks.
- Focusing on reducing liability of farmers working with gleaners, providing resources, and

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educating farmers on this subject.

- Evaluating the establishment of a grant funding program to offer grants to organizations involved in food rescue to purchase vehicles, food storage equipment, and technology needed for recovery and distribution; and offering grants to non-profits engaged in food donation efforts.
- Supporting local organizations that are working on food donation programs (e.g., San Diego Food System Alliance's Food Recovery Working Group, North County Food Policy Council, etc.).
- Training DEH staff to provide education on food donation to businesses during DEH food facility inspections/visits.
- Recognizing businesses with successful food donation stories in outreach efforts.
- Updating the SWMAs to document that parties (in addition to non-exclusive haulers) may transport food to food donation and rescue organizations.

Diversion from the food donation program is dependent on implementation of the County's Food System Initiative. Staffing and costs, which will be covered by the Initiative, are not included in the Plan.

17. **Hauler-provided drop-off facilities.** Require licensed haulers to provide drop-off facilities for recyclables, used oil and filters, cell phones, batteries, and potentially other materials for the convenience of their customers, including those in rural areas.

One-time costs include the following:

- Capital costs for equipment at the drop-off site including bins and drop boxes, signage, and security cameras, which are annualized over 10 years.
- County staff time to plan and manage the project.
- Consultant support to assist with the planning and management of the project.
- Note that land acquisition and facility lease costs are not included, as this program anticipates that haulers can accommodate the drop-off at their existing facilities.

Ongoing costs are included for the operation of the drop-off site anticipating that a part-time level of effort is required on a daily basis for the operation. Costs do not include outreach materials because the County and haulers can promote the drop-off sites through other education and outreach materials.

18. **Provide regular education on mandatory requirements.** The County has mandatory recycling requirements through the County's Solid Waste Ordinance for residents and businesses. Additionally, AB 341 and AB 1826 include requirements for businesses and multi-family recycling and organics. The program is focused on providing regular education to all residents, businesses, and institutions on these requirements. The education needs to focus not only on those customers that subscribe to collection services, but also on the residents and businesses that self-haul. While the haulers can reach their customers with information on the mandatory requirements, the County needs to provide its own regular education, reaching out to all property owners (e.g., mailing to all postal addresses) once or twice per year. In addition to conducting its own education efforts, the County can look to partner with others such as local water and utility agencies that also deliver

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education materials to property owners with the goal of integrating the County's messaging on the mandatory recycling requirements.

The cost estimate includes only ongoing costs for the following:

- Two educational mailers per year.
- County staff time to coordinate the mailer process including updates to the GIS database with hauler data to identify customers not subscribing to hauler services.
- Estimated increased collection costs for diversion of more recyclables and organics and processing costs for these additional materials.
- Annualized costs of new carts and bins, where cart and bin costs are annualized over 10 years.
- Reduced solid waste collection and avoided landfill disposal costs and related franchise fees on the disposal costs.

19. **Collaborate with industry for an HHW facility in the North County unincorporated area.** During the stakeholder process and through the residential questionnaire, residents requested increased access to HHW collection programs particularly in the northern part of the unincorporated area by collaborating with industry. This program was considered in response to this request and anticipates development of an HHW facility in the North County. The program costs and diversion estimates for the facility are based on the County's existing HHW programs using information provided by DEH in terms of equipment needs, operating hours, operating costs, and diversion. The facility itself is envisioned to consist of an office trailer, HHW storage lockers, spill deck, storage containers, pallets, and a few other pieces of equipment. The cost estimate anticipates that the facility would be operational two to four days per month. The cost analysis makes a significant assumption that the County can identify a no-cost site for the HHW facility by co-locating the facility with another existing County facility or locating it at a hauling company's yard or at a materials management facility (similar to the arrangements for the Ramona and El Cajon HHW facilities). If a no cost or low cost location cannot be identified through collaboration with hauling, processing, or disposal company(ies), HF&H does not recommend developing a permanent HHW in the northern part of the county in the Near-Term Phase. In such case, HF&H recommends providing additional periodic mobile drop-off events, which are discussed below.

One-time costs include the following:

- Capital costs for equipment (see list above) and site improvements, which are annualized over 10 years.
- County staff time to plan and manage the project.
- Consultant support to assist with the planning and management of the project.

Ongoing costs are included for the operation of the HHW site, anticipating that the facility will be open two to four days per month. Costs include:

- County staff time to plan, promote, and manage the events.
- HHW contractor costs for conducting each event.
- Advertising costs to promote the events.

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20. **HHW mobile drop-off events.** Increase number of mobile drop-off events offered during the year by adding two to four more events in different areas of the county. Publish a calendar for drop-off events so residents know about them in advance.

One-time costs are not anticipated for this program because the County currently conducts mobile events and does not need to conduct any additional planning to add new events. Ongoing costs cover:

- County staff time to plan and manage each events.
- HHW contractor costs for each event.
- Advertising costs to promote the events.

### **Supplemental Near-Term Programs (2017-2020)**

Near-term implementation of supplemental programs (described below) will provide additional diversion that will serve as a contingency if the diversion from the recommended programs and policies presented above do not result in achievement of 75% diversion. Cost analysis was not prepared for these programs, which are anticipated to include:

1. Support animal manure collection and diversion (e.g., horse manure).
2. Consider partnering to expand drop-off facility network. Possibilities include: (i) transfer station/landfill operators offering residents “diversion dump coupons” for recycling, yard trimmings, and C&D; or, (ii) non-profit or other organizations establishing locations to accept various materials.
3. Continue periodic drop-off events for agricultural plastics with objective to create regularly-scheduled events.
4. Continue to support and expand regional campaign efforts and online resources, including consistent signage for recycling, reuse, repair, equipment rental, sharing sites, HHW drop-offs, hard-to-handle materials by working with other agencies and non-profit organizations (I Love a Clean San Diego, San Diego Repair and Reuse Network, Solana Center, and others).
5. Support programs to integrate trainings on appropriate plantings, pruning, grass cycling, yard trimming recycling, and on-site composting; offer incentives to attend training; and partner with retailers to provide training and information.
6. Create education program and engage and train others to educate the community (through volunteer network or partnerships with and/or funding efforts of community group(s) or local colleges).
7. Develop zero waste neighborhood leader program to provide education and promote best practices.

### **Agencies with Programs Comparable to Recommended Unincorporated Area Programs**

The recommended programs and policies have been implemented successfully by other agencies. Figure 1 provides examples of agencies that have implemented the programs and policies recommended for the Near-Term and Mid-Term Phases for the unincorporated areas.



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**Figure P-1: Example Agencies with Recommended Programs/Policies for Unincorporated Areas**

	<b>Program/Policy</b>	<b>Example Cities and Counties</b>
<b>Recommended Programs (Near-Term)</b>		
1	Enhance zoning ordinance to support organics processing	--
2	Support organics processing facility development	Cities of Oceanside, San Diego, Chula Vista, San Jose, Santa Cruz County (planned), Central Contra Costa Waste Management Authority
3	Implement commercial food scraps collection	City of San Diego, Oceanside (pilot), Chula Vista (pilot), Huntington Park, Dana Point, Aliso Viejo, Englewood, San Clemente, San Francisco, San Jose, dozens of cities in Northern California
4	Regulate C&D haulers with minimum diversion requirements	Santa Clarita, Santa Cruz County, City of Fresno, Fairfield (all through non-exclusive franchises)
5	Enhance single-family collection with consistent hauler requirements	Chula Vista, Oceanside, La Habra Heights, Malibu (both through non-exclusive franchises)
6	Enhance commercial collection with minimum recycling level requirements	City of San Diego, Bell Gardens, Irvine (planned)
7	Enhance C&D diversion with ordinance amendment to lower project threshold	City of San Diego, Chula Vista, Lawndale, El Monte (Lawndale and El Monte match CALGreen standards), Oakland, San Jose, and CALGreen C&D recycling requirements to be effective January 1, 2017
8	Expand social/behavior change marketing program	Alameda County (StopWaste.Org), Livermore, Marin County, San Francisco, Palo Alto
9	Support on-site community/commercial/farm composting	Santa Cruz County, New York (NY), Portland, Eugene (OR)
10	Expand technical assistance for multi-family, businesses, schools	San Diego County, LA County, Irvine, Redondo Beach, San Francisco, Alameda County (StopWaste.Org), Fremont
11	Support efforts for reuse of textiles and State Extended Producer Responsibility (EPR) programs for mattresses, carpet/padding, paint, and other covered materials	Numerous cities and counties throughout California
12	Collect food waste from single-family premises	Chula Vista (pilot), Calimesa, Costa Mesa Sanitary District, Hemet, Santa Monica (pilot), San Francisco, Temecula, dozens of agencies in Northern California
13	Enhance hauler performance standards	City of San Diego, City of Los Angeles, Pasadena, Irvine (planned)
14	Improve diversion, tracking and oversight of haulers	City of San Diego, Santa Cruz County, Fairfield, Fresno, Petaluma

**Attachment P: Program and Policy Descriptions  
San Diego County Strategic Plan to Reduce Waste**

	<b>Program/Policy</b>	<b>Example Cities and Counties</b>
15	Promote food waste prevention	Alameda County (StopWaste.Org)
16	Support food donation through County Food System Initiative	Alameda County (Food Shift), Santa Clara County, Irvine (Second Harvest Food Bank), San Francisco (Food Shift), Seattle
17	Establish additional hauler-provided drop-off facilities	La Mesa, Escondido, Palm Desert (Burrtec), Lawndale (collect e-waste at their City yard, hauler picks material up)
18	Provide regular education on County and State recycling requirements	Alameda County (StopWaste.Org), Lawndale, El Monte, Bell Gardens (commercial and multi-family education)
19	Collaborate with industry to establish an HHW facility in North County unincorporated area	San Diego County, Fremont
20	Provide additional HHW mobile drop-off events	San Diego County, Los Angeles County, Alameda County (StopWaste.Org)
<b>Supplemental Programs (Near-Term)</b>		
21	Support animal manure collection and diversion (e.g., horse manure)	City of San Juan Capistrano, Santa Clarita Valley, El Monte, Rolling Hills Estates, Palmdale (planned)
22	Partner to expand drop-off facility network. Possibilities include: (i) transfer station/landfills operators offering residents “diversion dump coupons”; or, (ii) non-profit or other organizations establishing locations to various materials	Milpitas, Sonoma County
23	Continue periodic drop-off events for agricultural plastics with goal to create regularly scheduled events	San Diego County, Santa Clara County, San Joaquin County
24	Continue to support/expand regional campaign efforts and online resources (including consistent signage for recycling and reuse, repair, equipment rental opportunities, sharing sites, HHW drop-offs, and hard-to-handle materials) by working with other agencies and non-profit organizations (e.g., I Love a Clean San Diego, San Diego Repair and Reuse Network, Solana Center, and others)	San Diego, Chula Vista, Oceanside, Huntington Beach (Fix It clinics)
25	Support programs to integrate trainings on plantings, pruning, grass cycling, yard trimming recycling, and on-site composting; offer incentives to attend training; partner with retailers to provide information	Alameda County (StopWaste.Org), San Joaquin County, LA County

**Attachment P: Program and Policy Descriptions  
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	<b>Program/Policy</b>	<b>Example Cities and Counties</b>
26	Create education program and engage and train others to educate the community (through volunteer network or partnerships with and/or funding efforts of community group(s) or local colleges)	San Joaquin County
27	Develop Zero Waste neighborhood leader program to promote best practices	Oceanside, Palo Alto, Austin (TX), Memphis (TN)
<b>Recommended Programs (Mid-Term)</b>		
1	Evaluation of the achievement of the franchise collection system Diversion Targets, and, if warranted, evaluation of other options that may improve hauler diversion	City of San Diego (considering), Beverly Hills, Lawndale, Los Angeles, San Jose, Santa Clarita, Fresno County, San Bernardino County
2	Expanded hauler diversion requirements	Numerous cities and counties throughout California
3	Evaluation of universal collection ordinance, and adoption of ordinance, if warranted	Santa Cruz County
4	Enforcement of County and State mandatory diversion requirements	Alameda County (StopWaste.Org), City of San Diego
5	Amendment of C&D ordinance to increase diversion	City of San Diego, Chula Vista, Lawndale, El Monte (both match CALGreen standards), Oakland, San Jose
6	Landfill bans on selected materials	Sonoma County Waste Management Agency, Santa Cruz County
7	Producer responsibility ordinances	Pharmaceuticals: Alameda County, Los Angeles County, San Francisco; Sharps: Santa Cruz County, San Luis Obispo County, Tulare County, City of Sacramento, Galt. Find more at calpsc.org
8	Product or packaging bans	Calabasas, Cathedral City, Dana Point, Del Mar, Encinitas, Glendale, City & County of Los Angeles, Oceanside, Pasadena, City of San Diego (151 agencies are covered by single-use bag ordinances per <a href="http://www.cawrecycles.org/list-of-local-bag-bans">www.cawrecycles.org/list-of-local-bag-bans</a> )
9	More convenient organics collection service	Mountain View and Castro Valley Sanitary District (pilot for every other week residential collection)
10	Mixed materials processing	Anaheim (Comm), Bell Gardens (Res), Lawndale (Comm), Los Angeles County (Comm), Redondo Beach (Res/Com); San Jose (MFD/Comm)

## **P.2 Program and Policy Descriptions for Internal Operations**

1. **Adopt a formal waste diversion policy and integrate it into the Department of Excellence goals for the County and its departments.** Designate a department to be responsible for oversight and monitoring of overall progress. This department will be supported by Waste Reduction Captains within each department with defined roles and responsibilities.
2. **Establish measurement and reporting process and conduct a baseline analysis to gain a more complete understanding of the waste prevention, diversion, and disposal practices across the County and by department.** This effort could be performed by County staff or by obtaining a consultant. Likely tasks may include:
  - Compiling data and calculating or estimating baseline diversion.
  - Setting diversion goals for overall County operations and by department.
  - Requiring waste reduction and recycling reporting by departments if this data is not already reported through County Collection Contract.
  - Tracking and reporting annual progress for internal operations overall for the County and by department.
  - Tracking percentage of common supplies purchased from recycled-content list or environmental preferable materials list (using vendor reports).
  - Gather reports from departments on a regular basis and track diversion performance on an ongoing basis.

To manage the staff time and level of effort associated with the baseline analysis and ongoing tracking process, the County should focus its assessment on programs and policies with the largest impact on diversion of materials from internal operations and that lend themselves to tracking and reporting of diversion and disposal results. The Waste Reduction Captains should support this effort by identifying and reporting waste prevention, diversion, and disposal data for their departments, if such quantities are significant and data can be captured now or in the future. For example, data should be collected not only for diversion and disposal through the County Collection Contract, but also from: the surplus property program; landscaping activities; mulching and composting at County facilities; park maintenance activities; new building projects; road projects; dying and diseased tree program; and, specialty material recycling contracts (e.g., paper shredding, batteries, bulbs, ballasts, toner cartridges, lead, grease, medical waste, e-waste, other u-waste, etc.). In addition, reporting of materials diverted and disposed should be obtained from facilities/departments that generate substantial quantities of materials or employ a significant number of staff, but do not use the County Collection Contract. These facilities/departments may be identified by reviewing DGS's data on approximately 1,100 County sites and applying some qualifying criteria and by working with the Waste Reduction Captains. Lastly, reporting on waste prevention efforts and use of recycled-content materials in road projects and through product purchases would be useful in defining baseline conditions, setting goals, and monitoring on an ongoing basis.

3. **Enhance C&D recycling for County projects** by revising Policy G-15 (Design Standards for County Facilities) to include diversion from some or all renovation projects (using qualifying criteria such as size of project, type of project, and/or County-owned or leased facility) and prioritize the use of recycled materials in road construction. This policy is renewed every three years, at which time the County should explore options for policy enhancements that will increase diversion of road

## **Attachment P: Program and Policy Descriptions San Diego County Strategic Plan to Reduce Waste**

construction materials and use of recycled materials in the construction projects. The policy will be renewed January 1, 2017 and may capture revisions to support the County's Diversion Targets.

4. **Evaluate County operations to offer and encourage use of reusable items** such as reusable water bottles, reusable mugs, reusable to-go containers and bulk condiment dispensers in County cafes, refillable pens and pencils, and rechargeable batteries; and, encourage installation and use of water-filling station and/or water filtration units to reduce water bottle delivery purchases (of both single use bottles and five-gallon bottles).
5. **Consider return to use of reusable trays in detention facilities.**
6. **Set goal for reduction of paper use by departments** through expansion of electronic review and approval of documents, limiting the use of individual printers and prioritizing online subscriptions to periodicals and references.
7. **Increase use of County's existing reutilization process** by improving Policy A-94 (Disposal of Personal Property), promoting the reutilization website, offering incentives and recognition to departments that purchase through reutilization and tracking volume or weight of materials reused, sold or disposed.
8. **Partner with non-profit organization to provide reuse collections or drop-off boxes at County facilities for employees.** Establish a policy defining under what circumstances surplus property may be donated to non-profit organizations for reuse; and, promote this type of donation through Waste Reduction Captains, County online employee news center (*Insite*), and other internal communications. Consider locating drop-boxes at County facilities for County discards and employee use. The feasibility of a drop-box program for reusable materials will need to be evaluated to determine if the program is practical. Furthermore, the County will need to identify what department will be responsible for: planning and implementing the program; ongoing management of the non-profit organization; program monitoring and maintenance of the donation boxes; and, more.
9. **Partner with Sheriff's Inmate Re-entry Services to consider training program on repair.**
10. **Expand Policy B-67 (Recycled Products Purchasing) into an Environmentally Preferable Purchasing Policy (EP3).**
11. **Incorporate Zero Waste objectives into County procurements** by avoiding the purchase of disposable materials, considering reparability and life-cycle analysis of products when making purchasing decisions. Work with suppliers to offer products that minimize waste in product and packaging design, take back or pick-up products that are hard to recycle, prioritize environmentally preferable products, and promote minimal or recyclable packaging in vending machine contracts. Require recycling containers and collection in public spaces at County buildings, libraries, and parks.
12. **Report percentage of common supplies purchased from recycled-content list or environmentally preferable list by department.**
13. **Enhance requirements in waste collection contracts** by setting minimum diversion requirements in agreement(s) and adding incentives or disincentives. Integrate provision and servicing of recycling containers in public spaces including County buildings, libraries, and parks. It is also recommended that reporting requirements be expanded to track progress at each County facility while setting standards for uniform container colors and container signage.
14. **Ensure optimal recycling at facilities owned or leased by County** by conducting waste assessments for departments and tailoring programs based on this information. This program would include

## **Attachment P: Program and Policy Descriptions San Diego County Strategic Plan to Reduce Waste**

providing adequate signage near recycling containers, ensuring that each recycling bin is accompanied by a recycling bin, and that janitorial staff is trained on proper recycling practices. For facilities accessed by the public including County buildings, libraries, and parks, pair recycling containers with waste containers in the public areas. Most of these programs can be included as contract requirements for haulers or janitorial contractors.

15. **Upon lease renewal or amendment and execution of new leases, require leased facilities to meet minimum diversion requirements and report data.** Given that some leases have 10- to 15-year terms, the County may be delayed in incorporating diversion requirements and reporting described in this section. In the interim, it is important to recognize that lessors are businesses that need to comply with AB 1826, AB 341, and mandatory recycling requirements of the jurisdiction where the site is located. The County can direct its efforts on informing the lessors of their diversion obligations and verifying their compliance with State and local recycling requirements.
16. **Create capability for collection of used pallets from County facilities.**
17. **Require recycling and composting for County-sponsored events.** Availability of composting services would need to be confirmed annually with DGS since facilities and options are currently limited to select areas.
18. **Support food waste reduction and donation at County operations** by implementing a food waste reduction and donation policy, a composting program, and reporting requirements. It is further recommended that a policy be put in place to donate surplus food from large County events to attendees or food relief organizations.
19. **Increase diversion of yard, wood, and food waste generated by County** by requiring diversion of organic materials in contracts and events. This program would also require County to explore options for on-site composting at County facilities, including community gardens at parks and open spaces.
20. **Use of locally produced mulch and compost would be increased at County facilities.** As organics processing facilities come on line in the County, there will be an increased need for the resulting organics products to be purchased locally. The County can support the use of locally-produced mulch/compost by integrating specific purchasing policies into its EP3 policy.
21. **Increase education and outreach efforts** by providing educational materials to employees, implementing an annual LMS training module and including an environmentally preferable purchasing education in P-card training. Develop a recycling training specifically for DPR volunteers and part-time employees to educate park visitors on recycling programs. Establish a departmental waste reduction report which should be shared with employees annually.
22. **Support waste reduction and recycling by departments.** The program above focuses on educating employees to take personal responsibility for participating in the County's diversion programs. It emphasizes education of the Captains and Department leadership that will be engaged in implementing diversion programs and/or reporting efforts. HF&H recommends the following actions:
  - Periodically showcase model recycling programs and environmentally preferable purchasing practices implemented by departments.
  - Conduct waste assessments and provide technical assistance to departments on recycling and environmentally preferable purchasing (overlaps with other programs described above).
  - Set-up incentive, recognition, certification, and/or County award programs for departments.

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- Apply for local, State, and/or federal awards or certifications for exemplary diversion programs, including EPA WasteWise awards, California Resource Recovery Association (CRRA) awards, California Green Business Certification, etc.
23. **Require regular training of janitorial staff, including contractors.**
24. **Consider expanding partnerships with artists to create displays from repurposed material.**

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## Attachment Q: Recommended Internal Program and Policy Cost and Staffing Information San Diego County Strategic Plan to Reduce Waste

### Summary: Internal Operations Program and Policy Options

	DPW-Recy	DEH	DGS	DPC	Other Dpts	Total County	Other Cost	Total
<b>2017-2018 Timeframe</b>								
<b>Staff Time</b>								
One-time effort (FTE)	0.29	0.02	0.44	0.53	0.34	1.53		
On-going program effort (FTE)	0.16	0.02	0.49	0.37	2.20	3.19		
<b>Cost</b>								
One-time effort (\$)	\$31,879	\$1,904	\$48,865	\$57,962	\$37,125	\$177,735	\$156,800	\$334,535
On-going program effort (\$/yr)	\$17,917	\$2,115	\$53,837	\$40,658	\$242,214	\$350,776	\$109,642	\$460,418
<b>2019-2020 Timeframe</b>								
<b>Staff Time</b>								
One-time effort (FTE)	0.10	0.00	0.40	0.24	0.49	1.23		
On-going program effort (FTE)	0.10	0.00	0.48	0.00	1.13	1.71		
<b>Cost</b>								
One-time effort (\$)	\$10,894	\$0	\$43,788	\$26,442	\$54,154	\$135,279	\$180,000	\$315,279
On-going program effort (\$/yr)	\$10,788	\$0	\$52,462	\$0	\$124,358	\$187,608	\$43,368	\$230,976
<b>Total Near Term Timeframe</b>								
<b>Staff Time</b>								
One-time effort (FTE)	0.39	0.02	0.84	0.77	0.83	2.76		
On-going program effort (FTE)	0.26	0.02	0.97	0.37	3.33	4.89		
<b>Cost</b>								
One-time effort (\$)	\$42,773	\$1,904	\$92,654	\$84,404	\$91,279	\$313,013	\$336,800	\$649,813
On-going program effort (\$/yr)	\$28,706	\$2,115	\$106,298	\$40,658	\$366,572	\$538,384	\$153,010	\$691,394

Note: Staff time and costs for "Other Departments" reflects the total for all other departments (not additional time/cost for each department).

# of Prgms
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## Attachment Q: Recommended Internal Program and Policy Cost and Staffing Information San Diego County Strategic Plan to Reduce Waste

	DPW-Recy	DEH	DGS	DPC	Other Dpts	Total County	
<b>One-Time Staff Time (FTE)</b>							
<b>2017 / 2018 Programs and Policies</b>							
HD/ZW Policy and Organization: Establish High Diversion/Zero Waste Policy and Organization	0.07	0.02	0.02	0.02	0.12	0.23	
HD/ZW Organization: Measurement and Reporting	0.10	0.00	0.01	0.10	0.04	0.15	
Reuse: Increase use of County's existing reutilization process	0.02	0.00	0.00	0.09	0.00	0.11	
Purchasing: Expand the B-67 Recycled Products Purchasing Policy into an Environmentally Preferable Purchasing Policy (EP3)	0.02	0.00	0.00	0.15	0.02	0.19	
Purchasing: Incorporate Zero Waste objectives into County procurements	0.00	0.00	0.00	0.04	0.00	0.04	
Collection: Enhance diversion requirements in waste collection contracts	0.01	0.00	0.07	0.00	0.00	0.08	
Collection: Ensure optimal recycling at facilities owned and/or leased by County	0.01	0.00	0.03	0.00	0.00	0.04	
Food waste: Increase diversion of yard/wood /food waste generated by County	0.03	0.00	0.15	0.12	0.13	0.43	
Education: Provide waste reduction and recycling training to employees	0.02	0.00	0.15	0.01	0.03	0.21	
Education: Require regular training of janitorial staff including contractors	0.00	0.00	0.02	0.01	0.00	0.03	
<b>Subtotal 2017 / 2018 Programs and Policies</b>	<b>0.29</b>	<b>0.02</b>	<b>0.44</b>	<b>0.53</b>	<b>0.34</b>	<b>1.53</b>	
<b>2019 / 2020 Programs and Policies</b>							
C&D policy: Revise G-15 Design Standards to Include Renovations of Facilities	0.01	0.00	0.04	0.00	0.00	0.05	
C&D policy: Prioritize Use of Recycled Materials in Road Construction	0.00	0.00	0.00	0.00	0.24	0.24	
Reuse: Partner with non-profit organization to provide reuse collections or drop-off boxes at County facilities for employees	0.03	0.00	0.08	0.08	0.00	0.18	
Repair: Partner with Sheriff's Inmate Re-entry Services to consider training program on repair	0.00	0.00	0.00	0.00	0.10	0.10	
Collection: Create capability for collection of used pallets from County facilities	0.00	0.00	0.00	0.00	0.00	0.00	Time/cost not estimated
Collection: Require recycling and composting for County-sponsored events	0.00	0.00	0.00	0.00	0.00	0.00	Time/cost not estimated
Food waste: Support food waste reduction and food donation at County operations	0.03	0.00	0.17	0.15	0.13	0.50	
Food waste: Increase use of locally-produced mulch/compost at County facilities	0.02	0.00	0.09	0.00	0.02	0.12	
Education: Support waste reduction and recycling by department through technical assistance	0.01	0.00	0.02	0.01	0.00	0.03	
Education: Consider expanding partnerships with artists to create displays from repurposed material	0.00	0.00	0.00	0.00	0.00	0.00	Time/cost not estimated
<b>Subtotal 2017 / 2018 Programs and Policies</b>	<b>0.10</b>	<b>0.00</b>	<b>0.40</b>	<b>0.24</b>	<b>0.49</b>	<b>1.23</b>	
One-time staff time (FTEs/yr)	0.39	0.02	0.84	0.77	0.83	2.76	

Note: Staff time and costs for "Other Departments" reflects the total for all other departments (not additional time/cost for each department).

**Attachment Q: Recommended Internal Program and Policy Cost and Staffing Information  
San Diego County Strategic Plan to Reduce Waste**

	DPW-Recy	DEH	DGS	DPC	Other Dpts	Total County	
<b>On-Going Staff Time (FTE/yr)</b>							
<b>2017 / 2018 Programs and Policies</b>							
HD/ZW Policy and Organization: Establish High Diversion/Zero Waste Policy and Organization	0.02	0.01	0.12	0.02	0.19	0.37	
HD/ZW Organization: Measurement and Reporting	0.01	0.01	0.01	0.06	0.12	0.14	
Reuse: Increase use of County's existing reutilization process	0.02	0.00	0.00	0.05	0.00	0.06	
Purchasing: Expand the B-67 Recycled Products Purchasing Policy into an Environmentally Preferable Purchasing Policy (EP3)	0.01	0.00	0.00	0.07	0.00	0.08	
Purchasing: Incorporate Zero Waste objectives into County procurements	0.00	0.00	0.00	0.15	0.00	0.15	
Collection: Enhance diversion requirements in waste collection contracts	0.01	0.00	0.07	0.00	0.01	0.10	
Collection: Ensure optimal recycling at facilities owned and/or leased by County	0.04	0.00	0.10	0.02	0.04	0.19	
Food waste: Increase diversion of yard/wood /food waste generated by County	0.03	0.00	0.13	0.00	1.81	1.97	
Education: Provide waste reduction and recycling training to employees	0.02	0.00	0.05	0.01	0.03	0.11	
Education: Require regular training of janitorial staff including contractors	0.01	0.00	0.01	0.00	0.00	0.02	
<b>Subtotal 2017 / 2018 Programs and Policies</b>	<b>0.16</b>	<b>0.02</b>	<b>0.49</b>	<b>0.37</b>	<b>2.20</b>	<b>3.19</b>	
<b>2019 / 2020 Programs and Policies</b>							
C&D policy: Revise G-15 Design Standards to Include Renovations of Facilities	0.00	0.00	0.02	0.00	0.02	0.04	
C&D policy: Prioritize Use of Recycled Materials in Road Construction	0.00	0.00	0.00	0.00	0.07	0.07	
Reuse: Partner with non-profit organization to provide reuse collections or drop-off boxes at County facilities for employees	0.02	0.00	0.10	0.00	0.00	0.11	
Repair: Partner with Sheriff's Inmate Re-entry Services to consider training program on repair	0.00	0.00	0.00	0.00	0.00	0.00	
Collection: Create capability for collection of used pallets from County facilities	0.00	0.00	0.00	0.00	0.00	0.00	Time/cost not estimated
Collection: Require recycling and composting for County-sponsored events	0.00	0.00	0.00	0.00	0.00	0.00	Time/cost not estimated
Food waste: Support food waste reduction and food donation at County operations	0.05	0.00	0.25	0.00	0.98	1.28	
Food waste: Increase use of locally-produced mulch/compost at County facilities	0.01	0.00	0.03	0.00	0.02	0.05	
Education: Support waste reduction and recycling by department through technical assistance	0.02	0.00	0.08	0.00	0.04	0.14	
Education: Consider expanding partnerships with artists to create displays from repurposed material	0.00	0.00	0.00	0.00	0.00	0.00	Time/cost not estimated
<b>Subtotal 2017 / 2018 Programs and Policies</b>	<b>0.10</b>	<b>0.00</b>	<b>0.48</b>	<b>0.00</b>	<b>1.13</b>	<b>1.71</b>	
<b>Annual on-going staff time (FTEs/yr)</b>	<b>0.26</b>	<b>0.02</b>	<b>0.97</b>	<b>0.37</b>	<b>3.33</b>	<b>4.89</b>	

Note: Staff time and costs for "Other Departments" reflects the total for all other departments (not additional time/cost for each department).

## Attachment Q: Recommended Internal Program and Policy Cost and Staffing Information San Diego County Strategic Plan to Reduce Waste

Summary	DPW-Recy	DEH	DGS	DPC	Other Dpts	Total County	Other Cost	Total	
<b>One-Time Costs (\$)</b>									
<b>2017 / 2018 Programs and Policies</b>									
HD/ZW Policy and Organization: Establish High Diversion/Zero Waste Policy and Organization	\$7,404	\$1,692	\$1,692	\$1,692	\$12,692	\$25,173	\$0	\$25,173	
HD/ZW Organization: Measurement and Reporting	\$10,577	\$212	\$635	\$11,000	\$4,231	\$26,654	\$0	\$26,654	Other cost: Consultant cost to develop baseline
Reuse: Increase use of County's existing reutilization process	\$2,538	\$0	\$0	\$9,519	\$0	\$12,058	\$0	\$12,058	
Purchasing: Expand the B-67 Recycled Products Purchasing Policy into an Environmentally Preferable Purchasing Policy (EP3)	\$2,538	\$0	\$0	\$16,923	\$1,692	\$21,154	\$50,000	\$71,154	Other cost: Consultant cost for EP3 development
Purchasing: Incorporate Zero Waste objectives into County procurements	\$423	\$0	\$0	\$4,231	\$0	\$4,654	\$0	\$4,654	
Collection: Enhance diversion requirements in waste collection contracts	\$1,523	\$0	\$7,615	\$0	\$0	\$9,138	\$0	\$9,138	
Collection: Ensure optimal recycling at facilities owned and/or leased by County	\$1,269	\$0	\$3,173	\$0	\$0	\$4,442	\$0	\$4,442	
Food waste: Increase diversion of yard/wood /food waste generated by County	\$3,385	\$0	\$16,923	\$12,692	\$14,808	\$47,808	\$106,800	\$154,608	Other cost: Purchase on-site
Education: Provide waste reduction and recycling training to employees	\$1,798	\$0	\$16,712	\$1,058	\$3,702	\$23,269	\$0	\$23,269	
Education: Require regular training of janitorial staff including contractors	\$423	\$0	\$2,115	\$846	\$0	\$3,385	\$0	\$3,385	
<b>Subtotal 2017 / 2018 Programs and Policies</b>	<b>\$31,879</b>	<b>\$1,904</b>	<b>\$48,865</b>	<b>\$57,962</b>	<b>\$37,125</b>	<b>\$177,735</b>	<b>\$156,800</b>	<b>\$334,535</b>	
<b>2019 / 2020 Programs and Policies</b>									
C&D policy: Revise G-15 Design Standards to Include Renovations of Facilities	\$952	\$0	\$4,231	\$212	\$0	\$5,394	\$0	\$5,394	
C&D policy: Prioritize Use of Recycled Materials in Road Construction	\$0	\$0	\$0	\$0	\$26,865	\$26,865	\$0	\$26,865	
Reuse: Partner with non-profit organization to provide reuse collections or drop-off boxes at County facilities for employees	\$3,173	\$0	\$8,462	\$8,462	\$0	\$20,096	\$0	\$20,096	
Repair: Partner with Sheriff's Inmate Re-entry Services to consider training program on repair	\$423	\$0	\$423	\$0	\$10,577	\$11,423	\$50,000	\$61,423	Other cost: Consultant for feasibility study
Collection: Create capability for collection of used pallets from County facilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Time/cost not estimated
Collection: Require recycling and composting for County-sponsored events	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Time/cost not estimated
Food waste: Support food waste reduction and food donation at County operations	\$3,808	\$0	\$19,038	\$16,923	\$14,808	\$54,577	\$130,000	\$184,577	Other cost: Consultant for assessment/impl plan; purchase food storage equip
Food waste: Increase use of locally-produced mulch/compost at County facilities	\$1,692	\$0	\$9,519	\$0	\$1,904	\$13,115	\$0	\$13,115	
Education: Support waste reduction and recycling by department through technical assistance	\$846	\$0	\$2,115	\$846	\$0	\$3,808	\$0	\$3,808	
Education: Consider expanding partnerships with artists to create displays from repurposed material	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Time/cost not estimated
<b>Subtotal 2017 / 2018 Programs and Policies</b>	<b>\$10,894</b>	<b>\$0</b>	<b>\$43,788</b>	<b>\$26,442</b>	<b>\$54,154</b>	<b>\$135,279</b>	<b>\$180,000</b>	<b>\$315,279</b>	
<b>One-Time Costs (\$)</b>	<b>\$42,773</b>	<b>\$1,904</b>	<b>\$92,654</b>	<b>\$84,404</b>	<b>\$91,279</b>	<b>\$313,013</b>	<b>\$336,800</b>	<b>\$649,813</b>	

Note: Staff time and costs for "Other Departments" reflects the total for all other departments (not additional time/cost for each department).

## Attachment Q: Recommended Internal Program and Policy Cost and Staffing Information San Diego County Strategic Plan to Reduce Waste

Summary	DPW-Recy	DEH	DGS	DPC	Other Dpts	Total County	Other Cost	Total	
On-going program costs (\$/yr)									
<b>2017 / 2018 Programs and Policies</b>									
HD/ZW Policy and Organization: Establish High Diversion/Zero Waste Policy and Organization	\$2,538	\$1,481	\$13,327	\$1,904	\$21,154	\$40,404	\$0	\$40,404	
HD/ZW Organization: Measurement and Reporting	\$635	\$635	\$635	\$6,600	\$12,692	\$15,231	\$0	\$15,231	
Reuse: Increase use of County's existing reutilization process	\$1,692	\$0	\$0	\$5,077	\$0	\$6,769	\$0	\$6,769	
Purchasing: Expand the B-67 Recycled Products Purchasing Policy into an Environmentally Preferable Purchasing Policy (EP3)	\$1,269	\$0	\$0	\$7,192	\$0	\$8,462	\$0	\$8,462	
Purchasing: Incorporate Zero Waste objectives into County procurements	\$0	\$0	\$0	\$16,923	\$0	\$16,923	\$0	\$16,923	
Collection: Enhance diversion requirements in waste collection contracts	\$1,523	\$0	\$7,615	\$0	\$1,523	\$10,662	\$0	\$10,662	
Collection: Ensure optimal recycling at facilities owned and/or leased by County	\$3,913	\$0	\$10,471	\$2,115	\$4,231	\$20,731	\$4,912	\$25,643	Other cost: Increased recycling
Food waste: Increase diversion of yard/wood /food waste generated by County	\$2,962	\$0	\$14,808	\$0	\$199,230	\$216,999	\$84,930	\$301,929	Other cost: Added time for cafeteria
Education: Provide waste reduction and recycling training to employees	\$2,115	\$0	\$5,712	\$846	\$3,385	\$12,058	\$3,000	\$15,058	Other cost: Printing pub ed mtls
Education: Require regular training of janitorial staff including contractors	\$1,269	\$0	\$1,269	\$0	\$0	\$2,538	\$16,800	\$19,338	Other cost: Add'l janitorial contractor
<b>Subtotal 2017 / 2018 Programs and Policies</b>	<b>\$17,917</b>	<b>\$2,115</b>	<b>\$53,837</b>	<b>\$40,658</b>	<b>\$242,214</b>	<b>\$350,776</b>	<b>\$109,642</b>	<b>\$460,418</b>	
<b>2019 / 2020 Programs and Policies</b>									
C&D policy: Revise G-15 Design Standards to Include Renovations of Facilities	\$423	\$0	\$2,115	\$0	\$2,115	\$4,654	\$0	\$4,654	
C&D policy: Prioritize Use of Recycled Materials in Road Construction	\$0	\$0	\$0	\$0	\$8,038	\$8,038	\$0	\$8,038	
Reuse: Partner with non-profit organization to provide reuse collections or drop-off boxes at County facilities for employees	\$1,904	\$0	\$10,577	\$0	\$0	\$12,481	\$0	\$12,481	Other cost: Non-profit service textile donation boxes
Repair: Partner with Sheriff's Inmate Re-entry Services to consider training program on repair	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Collection: Create capability for collection of used pallets from County facilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Time/cost not estimated
Collection: Require recycling and composting for County-sponsored events	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Time/cost not estimated
Food waste: Support food waste reduction and food donation at County operations	\$5,500	\$0	\$27,500	\$0	\$108,281	\$141,281	\$56,368	\$197,649	Other cost: Added time for cafeteria staff to separate food
Food waste: Increase use of locally-produced mulch/compost at County facilities	\$1,058	\$0	\$2,962	\$0	\$1,692	\$5,712	(\$13,000)	(\$7,288)	Other cost: Avoided purchase of mulch/compost
Education: Support waste reduction and recycling by department through technical assistance	\$1,904	\$0	\$9,308	\$0	\$4,231	\$15,442	\$0	\$15,442	
Education: Consider expanding partnerships with artists to create displays from repurposed material	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Time/cost not estimated
<b>Subtotal 2017 / 2018 Programs and Policies</b>	<b>\$10,788</b>	<b>\$0</b>	<b>\$52,462</b>	<b>\$0</b>	<b>\$124,358</b>	<b>\$187,608</b>	<b>\$43,368</b>	<b>\$230,976</b>	
Annual on-going cost (\$/yr)	\$28,706	\$2,115	\$106,298	\$40,658	\$366,572	\$538,384	\$153,010	\$691,394	

Note: Staff time and costs for "Other Departments" reflects the total for all other departments (not additional time/cost for each department).

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## Attachment R: Sustainable Funding Background Information San Diego County Strategic Plan to Reduce Waste

### R.1 County Sources and Uses of Funds

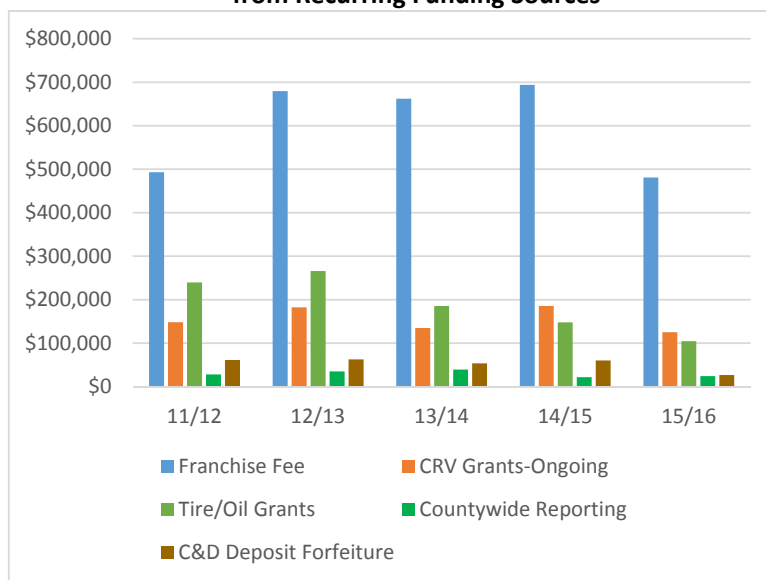
Historically, the County has funded the majority of its diversion-related activities for the unincorporated areas through a \$2.35 per ton SWMA franchise fee on all tonnage landfilled by non-exclusive haulers to fund DPW-Recycling programs at \$1.25 per ton and DEH-HHW programs at \$1.10 per ton. Figure R-1 illustrates the last five years' franchise fee revenues received for DPW-Recycling and DEH-HHW. Additional funding sources include: a \$0.02 per ton Countywide solid waste planning fee assessed on tonnage landfilled in San Diego County or that is generated in the County of San Diego and hauled to out-of-County landfills; C&D deposit forfeitures; grants; and, other periodic funding opportunities.

Figures R-2 and R-3 illustrate the history of DPW-Recycling expenditures for both the recurring funding sources (Figure R-2) and project-based funding sources (Figure R-3).

**Figure R-1: Historical Franchise Fees  
Received from Non-Exclusive Haulers**

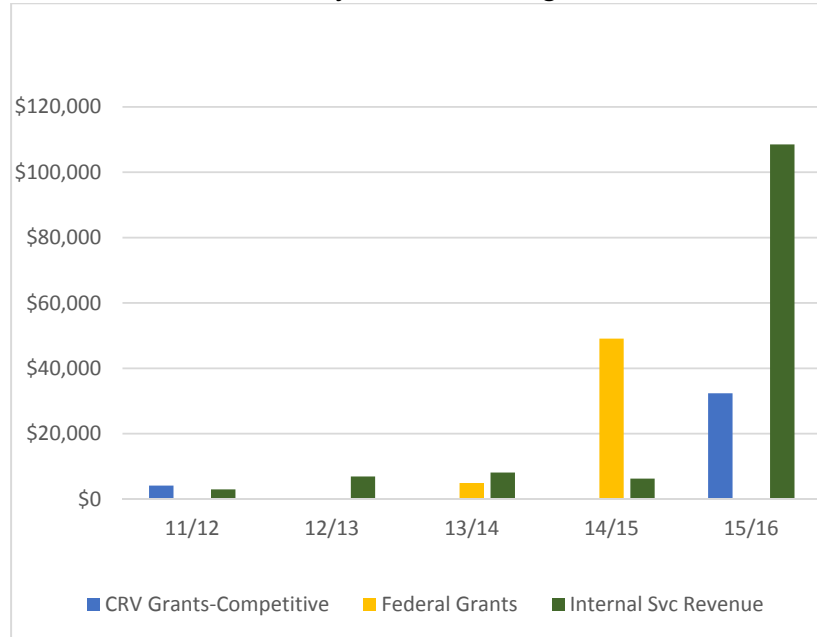
Year	Total Revenue	DPW- Recycling	DEH HHW
2010/2011	\$ 920,410.54	\$ 489,580.08	\$ 430,830.47
2011/2012	\$ 871,872.68	\$ 463,762.06	\$ 408,110.62
2012/2013	\$ 836,469.62	\$ 444,930.65	\$ 391,538.97
2013/2014	\$ 855,257.94	\$ 454,924.44	\$ 400,333.51
2014/2015	\$ 899,535.80	\$ 478,476.49	\$ 421,059.31
<b>Average</b>	<b>\$ 876,709.32</b>	<b>\$ 466,334.74</b>	<b>\$ 410,374.58</b>

**Figure R-2: Historical DPW-Recycling Uses of Funds  
from Recurring Funding Sources**



## Attachment R: Sustainable Funding Background Information San Diego County Strategic Plan to Reduce Waste

Figure R-3: Historical DPW-Recycling Use of Funds  
from Project-Based Funding Sources



### R.2 Evaluation of Sustainable Funding Options

A survey of recycling and solid waste funding approaches from other communities throughout California was conducted, as well as a survey of funding approaches approved through legislation. The survey resulted in the identification of the following list of potential funding options that the County can employ as alternatives to the current funding methods. HF&H identified many other funding approaches and opportunities that are not presented here because they do not fit the County's conditions and/or may exacerbate the short-comings of the current disposal-based funding methods.

- **Customer Rates.** Much of the operational costs associated with implementing new programs and services under this Strategic Plan will be paid for by residential and commercial generators through the rates they pay to non-exclusive hauler(s) that they subscribe to for regular collection services.
- **Franchise Fees (Gross Receipts).** The County can modify the current franchise fee payment approach to be based on a percentage of gross rate receipts collected by the non-exclusive haulers from their customers.
- **Franchise Fees (Container Volume).** The County can modify the current franchise fee payment approach to be based on the volume of service provided by each non-exclusive hauler for all materials collected.
- **Franchise Fees (All Tons).** The County can modify the current franchise fee payment approach to be based on the tonnage of material collected by non-exclusive haulers for all types of materials collected.



## Attachment R: Sustainable Funding Background Information San Diego County Strategic Plan to Reduce Waste

- **Franchise Fees (Disposal Tons).** The County can continue to collect the franchise fee on disposal tons. An adjustment mechanism would be required to routinely increase the per-ton amount of the fee to offset losses in revenue associated with declining disposal tonnage and to reflect inflationary increases in program costs.
- **AB 939 Fees.** The County can assess an AB 939 fee to be collected by the non-exclusive haulers, as authorized under the California Integrated Waste Management Act of 1989 (commonly “AB 939”) to recover any costs the County incurs in the implementation, ongoing operation, management, monitoring, and/or reporting of policies, programs, services, and/or facilities contemplated by the County’s Source Reduction and Recycling Element (SRRE), Non Disposal Facility Element (NDFE), or Household Hazardous Waste Element (HHWE). The approach to assessing the AB 939 fee on non-exclusive haulers can take many forms (e.g., percent of gross receipts, fee per customer account, fee per cubic yard of service subscribed, etc.).
- **AB 341 Fees.** The County can assess an AB 341 fee to be collected by the non-exclusive haulers, as authorized under AB 341, to recover any costs the County incurs in the implementation, ongoing operation, management, monitoring, and/or reporting of policies, programs, services, and/or facilities required to comply with the requirements of the State’s mandatory commercial and multi-family recycling laws. The approach to assessing the fee could take many forms (e.g., percent of gross receipts, fee per customer account, per cubic yard of service subscribed, etc.). Whatever mechanism is used to collect the fee, it should be paid only by those entities in the unincorporated County who are covered entities under the requirements of AB 341.
- **AB 1826 Fees.** The County can assess an AB 1826 fee to be collected by the non-exclusive haulers, as authorized under AB 1826, to recover any costs the County incurs in the implementation, ongoing operation, management, monitoring, and/or reporting of policies, programs, services, and/or facilities required to comply with the requirements of the State’s mandatory commercial and multi-family organics recycling laws. The approach to assessing the fee could take many forms, as described above. Whatever mechanism is used to collect the fee, it should be paid only by those entities in the unincorporated County who are covered entities under the requirements of AB 1826.
- **HHW Fees.** The County can assess an HHW fee to replace and/or enhance the portion (\$1.10 per ton) of the current franchise fee that is used to fund the DEH-HHW operations. Alameda County recently adopted such a fee as a Proposition 218 assessment on all residential properties within Alameda County and all incorporated cities and has successfully defended a legal challenge of the fee to the First District Court of Appeals.
- **Administration Fees.** The County can assess, through the SWMA contracts, an administration fee to recover the County’s direct costs of monitoring, auditing, enforcing, and otherwise administering the County’s contracts with non-exclusive haulers. This fee can be assessed as either a percentage of gross receipts or as a stated annual amount. In the event that the County proceeds with HF&H’s recommendations to establish a two-tier SWMA system, the fee can be different for the two tiers to reflect the level of oversight required by each.
- **Parcel Fees.** The County can seek taxpayer approval, through a public election, to assess parcel fees on real property (or certain land uses) within the unincorporated County. As a publicly approved tax, the fees would have to be used for the purpose and under the conditions described in the ballot measure.

## Attachment R: Sustainable Funding Background Information San Diego County Strategic Plan to Reduce Waste

- **C&D Permit Fees.** The County can assess permit fees on all C&D permits issued by the County that are subject to the recycling requirements of the County's C&D recycling ordinance. These fees should be assessed in a manner consistent with the County's existing C&D permit fees and in amounts directly correlating to the amount of time spent reviewing, approving, monitoring, and enforcing the requirements of the ordinance.
- **State-wide Producer Responsibility Legislation.** The County is likely to benefit from a set of State-wide funding opportunities that were created through legislation that seeks to shift the cost responsibility for managing products at the end of life to the producers of those products. Public agencies in California are already experiencing significant cost savings (hundreds of thousands to millions of dollars per year for agencies of the County's size) from producer responsibility legislation on paint, carpet, mattresses, mercury-containing devices, and other covered products. As additional producer responsibility legislation is passed at the State level, the County will benefit from the reduction in its costs to manage the covered products.
- **County Producer Responsibility Ordinances.** The County can adopt its own producer responsibility funding mechanisms through laws (ordinances) to require producers to manage the recovery programs and incur the costs associated with products that are hazardous to public health and/or create public nuisance. Such local ordinances have been passed by several California counties and one city related to management of pharmaceuticals and sharps. Alameda County's ordinance was challenged and appealed all the way to the U.S. Supreme Court and has been upheld, establishing a nationwide precedent.