



Memorandum

TO: TRANSPORTATION AND ENVIRONMENT COMMITTEE

FROM: Kerrie Romanow

SUBJECT: STATUS REPORT ON ZERO WASTE STRATEGIC PLAN 2022 **DATE:** February 15, 2017

Approved

Date

2.24.17

RECOMMENDATION

Accept this report providing an update on the status of the strategic plan to achieve zero waste; and provide feedback to staff on the strategies described in the report.

OUTCOME

Acceptance of this report will inform the Transportation and Environment (T&E) Committee on the City's strategic plan to achieve zero waste, and provide feedback to staff on the development of a roadmap to dramatically increase recycling and waste diversion in the City. Staff will continue to refine these programs and pursue new recycling initiatives that will help the City achieve its zero waste goals.

BACKGROUND

The Environmental Services Department (ESD) Integrated Waste Management (IWM) Division supports solid waste collection, processing and disposal for residential, commercial, and City facility operations. On October 30, 2007, Council adopted Resolution 74077 (see Attachment A), establishing a goal to reduce the amount of material being landfilled by 75 percent by 2013, and a goal of zero waste by 2022. In San José, "zero waste" is defined as landfilling no more than 10 percent of waste, or recycling 90 percent. San José's overall recycling rate was 73 percent in 2013 and 66 percent in 2015. The City is driven by State legislation to reduce landfilling of materials, and to reduce the greenhouse gas (GHG) emission impacts of solid waste, which contribute to climate change. Recycling reduces GHG emissions by lessening the need for natural resource extraction, saving energy in the manufacturing of new products, and minimizing landfill emissions.

The 2007 zero waste resolution approved by Council includes four core principles. These are incorporated into this plan and continue to be reflected in strategies by leading environmental cities.

1. Improving "downstream" reuse and recycling of end-of-life products and materials to ensure their highest and best use;
2. Pursuing "upstream" re-design strategies to reduce the volume and toxicity of discarded products and materials and promote less wasteful lifestyles;
3. Fostering and supporting the use of discarded products and materials to stimulate and drive local economic workforce development; and
4. Preserving land for sustainable development and green industry infrastructure.

Zero Waste-Related Regulation and Policy

In 2006, California adopted Assembly Bill (AB) 32, the Global Warming Solutions Act, which requires a reduction in GHG emissions throughout the state to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. Mandatory Commercial Recycling (AB 341) was one of the measures adopted in the AB 32 Scoping Plan by the Air Resources Board (ARB). AB 341 went into effect in July 2012 and requires recycling by all businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units. On and after April 2016, AB 1826 requires businesses and multi-family dwellings with five or more units to recycle their organic waste depending on the amount of waste they generate per week. This law phases in the mandatory recycling of organics from these sectors over time.

Methane emissions from landfills caused from decomposing organic material make up a significant source of GHG emissions. Senate Bill (SB) 1383, approved in September 2016, identifies reducing organics sent to landfill as a key municipal action over the next decade. Specifically, SB 1383 requires the ARB to adopt regulations that achieve a statewide organics disposal reduction of 50 percent of the 2014 level by 2020 and 75 percent of the 2014 level by 2025. In regards to transportation emissions, some of the City's contracted residential haulers have transitioned from diesel trucks to cleaner burning compressed natural gas (CNG), and the July 2012 transition to Republic Services (Republic) for all commercial collections required CNG trucks.

ESD is currently developing a city-wide Environmental Sustainability Plan (ESP), which will focus on reducing GHG emissions as they relate to energy and mobility, and ensuring a sustainable water supply. The ESP is anticipated for Council consideration in fall 2017. Potential future statewide regulations include a 75 percent recycling rate mandate, up from the current 50 percent mandate established in 1989.

ESD is actively involved in County, regional, statewide, and national industry networks to better understand industry trends and inform actions. ESD staff serve on various technical organizations, including: Santa Clara County Recycling & Waste Reduction Commission; California Organics Recycling Coalition; California Resource Recovery Association; State of California Illegal Dumping Task Force; California Mattress Recycling Council; Urban Sustainability Directors Network; and Solid Waste Association of North America.

Measuring Recycling

Each California jurisdiction has a maximum per capita disposal target based on their disposal data from 2003 to 2006. San José's maximum per-capita disposal is 5.2 lbs./person/day. Using the City's 2015 per capita disposal rate of 3.5 lbs./person/day and population, it is estimated that the City avoided sending 66 percent of its total waste stream to landfill. The City was closest to zero waste in 2013 when an estimated 73 percent of waste was recycled. A similar reduction in the recycling rate was also seen in other cities and statewide (see Figure 1). CalRecycle reports that the statewide recycling rate was 65 percent in 2013 and 63 percent 2015. According to CalRecycle, increased disposal over the last few years is likely due to California's improving economy and a growing population, which brought about increased construction activity and consumption of goods; generating more garbage at homes and workplaces (<http://www.calrecycle.ca.gov/Publications/Documents/1556/201601556.pdf>).

ESD implements a variety of waste management programs to serve the community and lead the way toward meeting zero waste. The waste management sectors that significantly contribute to the waste stream include residential garbage and recycling, commercial wet/dry material, and construction and demolition material (see Figure 2). Waste that is currently landfilled typically originates from entities that self-haul or as processing residuals of City waste management programs. The three most significant waste management sectors account for about 550,000 tons of waste that originated from San José and sent to landfill in 2015.

2015 Per Capita Waste Disposal of Major CA Cities vs. Calrecycle Disposal Targets

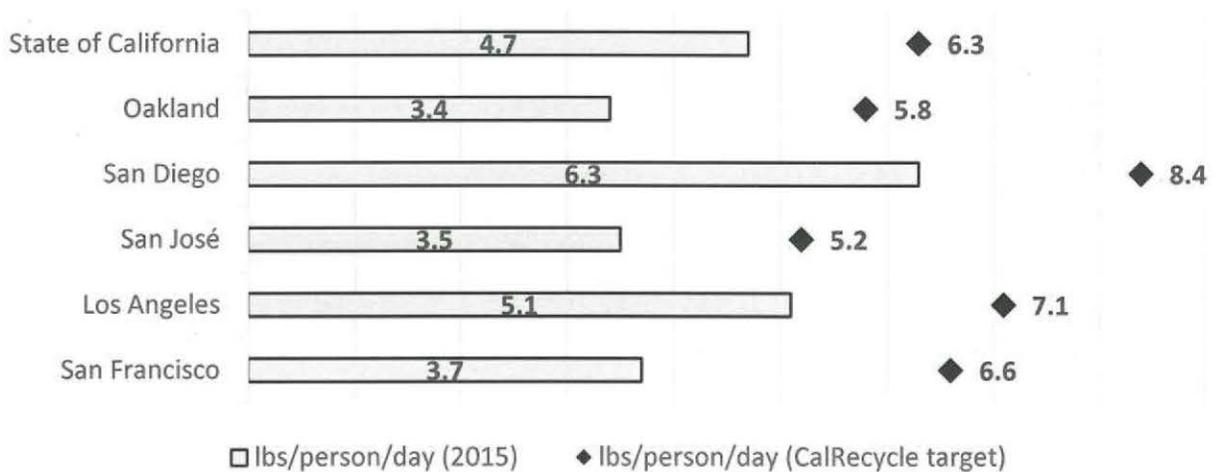


Figure 1 San José disposal per capita is lower than San Francisco, Los Angeles, San Diego and the statewide rate.

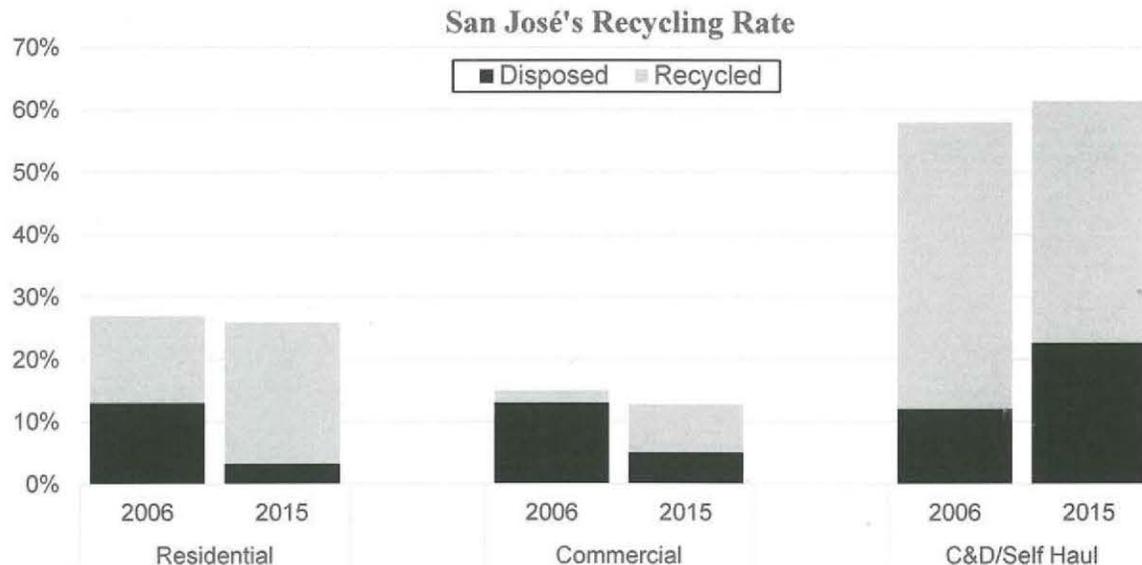


Figure 2 Recycling rates before zero waste goal (2006) and calendar year 2015.

The increase in residential and commercial recycling rates is due to several initiatives such as: first-of-its kind wet/dry commercial collection program (2012); the new anaerobic digestion system for commercial organics (2013); the nation's best performing multi-family recycling program (2008); and, the gradual phasing in of single-family garbage processing to extract recyclables and organics (2014). These initiatives have moved the City closer to its environmental goals while providing models for the rest of the country that enhance San José's reputation as an environmental leader. Los Angeles and New York City have modeled waste collection programs after the San José's waste service solicitations and hauler contracts. Awards for ESD's waste management programs are shown in Attachment B.

Recycling Infrastructure

San José is unique in the amount of solid waste facility infrastructure located within City limits. Four material recovery facilities (MRF) utilized for the City's residential and commercial material are located in north San José (GreenWaste Recovery, California Waste Solutions, Newby Island Resource Recovery Park, and Zero Waste Energy Development). Most of the compostable organics from these waste streams, such as food waste, yard waste, and compostable paper, are processed by the Z-Best facility located in southern Santa Clara County. Currently, 12 certified construction and demolition (C&D) waste facilities are located in San José, and recycle at least 75 percent of C&D debris. Lastly, there are currently five landfills in San José and have enough projected capacity to continue operating through 2022. Many of the above-mentioned facilities are among the most advanced in the country and serve as national benchmarks. Most facilities also serve other local jurisdictions and provide employment opportunities for San José.

San José Recycling Systems and Waste Streams Overview

Commercial Waste

On July 1, 2012, San José launched one of the most comprehensive commercial waste management systems in the United States. The system is a three-way collaboration between the City, Republic Services, and Zero Waste Energy Development Company (ZWED), based on complementary 15-year exclusive agreements. The commercial system attracted over \$100 million in private infrastructure development, including construction of the world’s largest MRF, owned and operated by Republic, and the first commercial-scale dry anaerobic digestion facility in the United States, owned and operated by ZWED. Under the new system, no material goes directly to landfill.

Republic provides commercial solid waste collection program to over 8,000 business sites in San José. Republic processes the material collected from San José businesses to remove recyclables and organics before any portion is disposed. The organics portion is sent to the ZWED facility for processing into energy and compost. Republic’s processing keeps San José businesses compliant with the state-mandated recycling requirements (AB 341 and AB 1826), including organics recycling, and furthers San José’s sustainability goals.

The new wet/dry system (see Attachment C) and infrastructure led to improvement in the commercial recycling rate (see Figure 3). Although some dry materials are not currently able to be recycled, ESD and Republic are exploring the potential to recycle through enhanced mechanical and manual sorting and market development.

Non-Exclusive Commercial System (1998-2011)
22% Diversion



Exclusive Franchises Commercial System (2012-2015)
71% Diversion

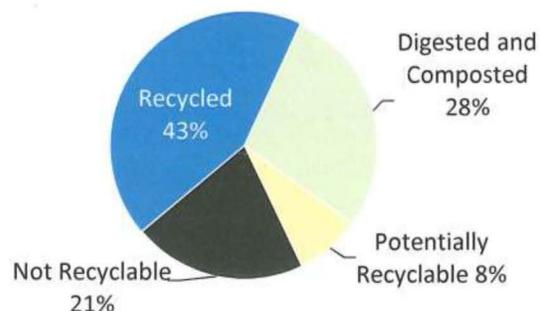


Figure 3 Commercial recycling increased from 22 to 70 percent with the 2012 system.

As with any first-of-its-kind system, there have been challenges. City staff, ZWED, and Republic continuously collaborate to resolve any system performance issues and make adjustments. Both Republic and ZWED have added equipment and made changes to operating procedures over time to enhance recycling. At inception, the new system was anticipated to

reach an 80 percent recycling rate by 2014. However, the commercial recycling rate has remained near 70 percent since 2012.

In 2016, improvements were made to increase recycling and reduce landfill disposal. Republic increased its MRF staffing to improve the quality and quantity of materials sent to ZWED and ZWED has invested in facility enhancements to increase organics recycling. The ZWED facility enhancements significantly reduced landfill disposal and reduced costs (see Attachment D). City staff, Republic, and ZWED are committed to achieving an 80 percent recycling rate and demonstrating a successful, replicable model that combines ease of use with elevated recycling. Comprehensive program evaluation and waste characterization studies are being planned to identify the wet/dry system refinements needed to reach the City's goals.

Residential Waste

San José has long been recognized as a leader in recycling, and was one of the first to implement a residential curbside recycling program in 1985 (see Attachment E). The residential hauler service districts were implemented in 1993, and the current Recycle Plus program design went live in 2002. These contracts were set to expire in 2013; however, in June 2010, the City Council approved new agreements with all four Recycle Plus service providers with terms through June 2021. By the time the current contracts expire, the Recycle Plus program will have been in existence for nearly 20 years.

ESD provides recycling and garbage services to more than 320,000 residential households from both single-family (SFDs) and multi-family dwellings (MFDs) through four contracted service providers: California Waste Solutions (CWS), Garden City Sanitation Inc. (GCS), Green Team of San José (GreenTeam), and GreenWaste Recovery. Since 2007, CWS and GCS have served residential Districts A and C, representing 75 percent (164,000) of single-family households. GreenTeam has served residential District B, representing 25 percent (50,000) of single-family households since 2002, and all multi-family households (106,000) since 1993. Combined, this system is one of largest privatized solid waste systems in the nation and budget is approximately \$100 million annually.

The Recycle Plus program is highly visible, and the 2015-2016 Annual Report of City Services indicated that approximately 72 percent of San José residents rate recycling services as "good" or "excellent." In 2016, the Recycle Plus program recycled 68 percent of materials collected, and a program redesign is needed to further approach zero waste. The current program includes curbside garbage and recycling collection, yard trimmings collection, street sweeping, and garbage processing (citywide MFDs and majority of SFDs) provided by four contractors within three service areas. Materials that are not landfilled include recyclables (single-stream and extracted recyclables from garbage processing), organics (yard trimmings and organics extracted from garbage processing sent to a composting facility), and 70 percent or more of materials collected from Neighborhood Cleanup (NCU) events, curbside junk pickup (mattresses, appliances), and City Council Neighborhood Beautification Days are recycled. A chart illustrating the flow of single-family residential materials through the City's recycling system is included as Attachment F.

Contractual recycling requirements in the residential program are 30 percent in Service District A and 35 percent in Service Districts B and C. The requirements have not been met in District A since 2013 and in District C since 2012. The recycling targets may be challenging to achieve given an approximate decrease of 16 percent in recyclables set out for collection from 2008 to 2015, changes in the global commodities markets, presence of non-recyclable materials in recycling carts, and operational changes. The replacement of the current agreements provides opportunities for redesign, streamlining, and enhancements to the residential program. Preparations for the new agreements began in fall 2015 with a waste characterization of SFD recyclables.

Household Hazardous Waste

San José's permanent and state-of-the-art Household Hazardous Waste (HHW) drop-off facility, located at the Environmental Innovation Center, opened in September 2014. Hazardous materials, such as batteries, pesticides, household cleaners, and other items containing harmful substances such as lead and mercury are accepted for free with a drop off appointment coordinated by the County of Santa Clara. In 2015-2016, residential appointments reached the highest in program history (13,800), up 30 percent from the previous year, representing 582 tons of material. The increase in participation is due to the facility's convenience to residents and increased public outreach such as the San José Earthquakes partnership.

Construction and Demolition (C&D) Waste

ESD manages non-exclusive franchise agreements with approximately 25 C&D debris haulers to provide temporary drop-box and debris collection services for new construction, remodeling, and demolition projects and residential clean-outs. C&D continues to be the largest component of the overall City waste stream by weight. Additionally, C&D waste is composed of heavy materials (concrete, asphalt, etc.), which do not breakdown in the same way as other waste. Therefore, C&D materials sent to landfill take up more space. Since C&D waste is a large proportion of what is placed in landfills, recycling programs like ESD's Construction and Demolition Diversion (CDD) Program are essential if the City is to reach its Zero waste goal. The CDD program and related C&D recycling efforts are funded through the debris deposit program.

Achieving a recycling rate of 75 percent or more is a challenge due to:

- Hard to recycle materials such as carpeting;
- Limitations of manual and mechanical sorting processing, and technologies;
- C&D materials that either are not recyclable or have insufficient market demand to make recycling worthwhile; and
- A significant amount of waste from construction projects is self-hauled and is not part of the City's C&D non-exclusive franchises sector.

C&D debris recycling is incentivized through the CDD program, established in 2001, consistent with Part 15, Chapter 9 of the San José Municipal Code (see Attachment G). The CDD program uses financial incentives to encourage the recycling of C&D material and requires projects to achieve a 75 percent recycling rate. Under the program, contractors, homeowners, or developers,

pay a deposit when they apply for a construction permit with the City. The deposit is fully refundable if C&D materials were reused, donated, or sent to a certified processing facility – which are mandated to recycle at least 75 percent of C&D materials under ESD’s certified facility program. Unclaimed deposits fund the CDD program, including all administrative costs. The CDD program has served as a model for C&D recycling for cities nationwide, including New York City and San Diego.

With the introduction of CALGreen regulations on January 1, 2011 – a statewide requirement for new building construction projects to recycle at least 50 percent of C&D material (CALGreen does not apply to remodels, see <http://www.bsc.ca.gov/Home/CALGreen.aspx>) – it was assumed that San José’s recycling rate would go up and the CDD recycling incentive program would not need to be relied upon to achieve a high recycling rate. However, despite the CALGreen recycling mandate and incremental increases (the 50 percent recycling mandate increased to 65 percent starting January 1, 2017), the C&D debris recycling rate has decreased over the last few years.

The CDD program’s deposit-recycle-refund mechanism is effective in ensuring recycling, if permit holders understand the program and take the steps necessary to reclaim their deposit. Staff have found that there is a direct, positive correlation between outreach efforts and the number of people following through with recycling and claiming their deposits (see Attachment H). Over time, there has been a reduction in unclaimed deposits. There was a decrease of approximately 50 percent in the amount of unclaimed deposits in 2015-2016, as compared to unclaimed deposits in 2009-2010.

Pilots to Encourage Innovation

Staff seeks out innovative initiatives that could improve recycling and develop new markets for recycled materials. Haulers also have also brought forward new pilot projects, which have been implemented to evaluate if could be implemented throughout the City. Two examples of pilot efforts include:

- Garbage Processing – In 2003, ESD implemented a pilot that increased apartment recycling from 11 percent to 35 percent, by pulling recyclables and compostable organics from garbage dumpsters. This became a permanent program for city-wide MFDs in 2008 and increased the MFD recycling rate from approximately 35 percent in 2006-2007 to approximately 80 percent in 2008-2009. This program model has now been applied (using a phased approach) to approximately 70 percent of SFDs. As a result, the SFD recycling rate increased from approximately 30 percent in 2013-2014 to approximately 68 percent in 2015-2016 and created over 60 jobs in San José.
- Pilot to Use Low Grade Plastics - ESD is in early discussions with BioCollection Inc. to consider a pilot using their biotechnology to turn hard-to-recycle plastics such as plastic film and polystyrene. Plastics are difficult to recycle and occupy substantial volume in San José’s waste stream. Film plastic is also one of the most problematic materials still being landfilled, both from the residential and commercial streams. BioCollection's

technology could open new markets for this plastic material. Staff have facilitated discussions between BioCollection and the contracted recycling facilities that process our residential and commercial waste streams, and has connected BioCollection with CalRecycle to discuss permitting, business development, and potential state funding.

Recycling Market Development

In 1993, CalRecycle designated San José a Recycling Market Development Zone (RMDZ) to encourage market creation and development. The RMDZ program provides loans to fund recycling-based manufacturing businesses. The City acts as a model by requiring the purchase of recycled content products where possible. ESD assists companies interested in using recycled material as feedstock in their manufacturing process by connecting them with State programs that support such investments, and consequently convert landfilled materials into jobs and new products.

California's Beverage Container Recycling and Litter Reduction Act of 1986 created a deposit-refund-recycling system for beverage containers. In the early years of the Act, the program brought focus to resource conservation by successfully educating consumers on the environmental impacts of littering and the benefits of collecting beverage containers for recycling. Consumers pay \$0.05 or \$0.10 on each beverage container purchased, and in order to get their deposit back, consumers must travel to a recycling center to return their container. Funds from this program are used to support both the collection and recycling of beverage containers and to develop markets for recycled containers.

Developing and sustaining local markets for post-consumer recycled materials that otherwise would end up landfilled is an important element in achieving zero waste. Fluctuations in commodity scrap values and global demand affect whether materials are recycled or disposed. Recycling programs are also affected by changes in consumer products and behavior, advancements in processing technologies and systems, and public perceptions and awareness of what is and is not recyclable. For example, it is a common misconception that the iconic chasing arrows stamped on beverage containers and other items signify that the item is recyclable (see Attachment I).

Producing Less Waste

Educating the public about the benefits of reducing wasteful consumption results in less waste generated for processing, which equates to less expense and effort spent on trying to recycle commodities that may have low scrap value in the current global market. Staff uses a multi-pronged approach to influence the generation of waste through consumer behavior change, business practices, and policy. The City has been engaged in two public outreach campaigns on reuse and food waste reduction utilizing partnerships with the San José Earthquakes, Santa Clara County and cities, and the Bay Area Recycling Outreach Coalition.

Through a Bay Area-wide collaboration, staff has also participated on the Ad Council's food waste reduction campaign, which is messaging about food shopping guidelines and clarifying "best if used by" food label dates. The message is going out throughout the County via radio and

online advertisements, bus shelters, and billboards. Additionally, through a partnership with non-profit Clean Water Action's Rethink Disposable program, staff spoke with 35 San José food service businesses to provide technical assistance to replace disposables with reusables.

Funding for Programs

Residential programs are funded by customer rates and per the San José Municipal Code are billed by the City to the residential property owner. Commercial programs are funded by customer rates, which are billed by Republic, the service provider. Unclaimed deposits fund the CDD program, including all administrative costs.

ANALYSIS

Staff reviewed zero waste strategies from cities that lead the world in recycling efforts, including Vancouver, Copenhagen, Amsterdam and Frankfurt. This plan provides an overview of key zero waste initiatives and the policies, programs, and processing facility advancements that will be needed within the next five years to accomplish the City's vision of achieving zero waste. These strategies include a combination of compatible, integrated programs, such as: recyclables market development, regulatory incentives, public engagement and outreach, program evaluation and revision, and refinements to processing facilities and hauler contracts.

Zero Waste 2022

The strategies to achieve zero waste in the next five years are highlighted below. These objectives aim to reduce the amount of waste generated, expand recycling programs, and improve processing technologies in order to achieve zero waste in San José by 2022.

1. Reduce Per Capita Waste to Landfill
2. Ease of Use
3. Competitive Rates
4. Increase Types of Materials Beneficially Reused
5. Increase Commercial and Residential Hauler Role in Collecting Illegally Dumped Materials

2017 Strategic Plan Initiatives

Commercial Program

- Identify and make adjustments to the commercial solid waste customer rates structure to incentivize improved sorting of material and recycling rate. *Target completion: 3rd Quarter 2017*
- Require Republic to assess the effectiveness of collection truck routes to streamline services provided to businesses. *Target completion: 4th Quarter 2017*
- Identify and implement improvements to increase recycling at the commercial program processing facilities (Republic and ZWED). *Target completion: 4th Quarter 2017*

- Audit the material left over after processing at Republic, which currently goes to landfill, to identify opportunities for improved recycling.
- Audit the incoming wet and dry materials at Republic, before they are processed, to assess the effectiveness of the wet/dry, two-container system and material collection routes.
- Audit organic materials at ZWED before and after they are processed to determine the effectiveness of waste-to-energy and compost recycling and identify and implement improvements.
- Utilize audits to identify opportunities to improve collection routes, service offerings, and technical assistance and outreach provided to businesses.
- Evaluate effectiveness of wet/dry at smaller businesses and restaurants, including cost. *Target completion: 4th Quarter 2017*
- Work with Republic to reassess training and support for businesses, including the rewards system, and other incentives to encourage maximum participation and implement changes in the program. *Target completion: 4th Quarter 2017*
- Identify and implement opportunities to enhance recovery of recyclables and organics through incentives provided to businesses, changes to the service options offered to businesses, or processing equipment improvements. *Target completion: 3rd Quarter 2017*
- Work with ZWED to implement small scale, proof of concept, pilot projects to test at least one new processing technology which targets a priority hard-to-recycle material. *Target completion: 3rd Quarter 2017*

Residential Program

- Complete final phase of SFD garbage processing from the roughly 30 percent of remaining SFDs. This action would increase the overall SFD recycling rate to approximately 77 percent. *Target completion: 3rd Quarter 2017*
- Complete researching program and policy options, and finalize recommendation for redesign for residential contracts. *Target completion: 4th Quarter 2017*
 - Evaluate collection options to facilitate recycling and improve the customer experience, including combined garbage and recycling service from one sole contractor per district, and wet/dry system;
 - Analyze and develop workplan to reduce residual material from processing;
 - Redesigning district boundaries so they better account for household size and new housing developments, and to improve collection efficiencies and effectiveness;
 - Evaluate alternative rate structures, including one flat rate for all services (as opposed to current rate structure based on size of garbage cart);
 - Explore new contract requirements, including customer service standards, City access to data, performance metrics, and more allowable program materials; and,
 - Recycle illegally dumped material and identify program enhancements to align with illegal dumping and BeautifySJ initiatives. This can include haulers collecting illegal dumping on their routes.

- Implement initiatives to discourage residents putting non-recyclables in recycling carts, including site visits on properties that receive more than four non-collection notices per quarter, and follow up with residents to correct recycling, and property owners as necessary for enforcement actions. *Target completion: 4th Quarter 2017*
- As directed by Council on February 14, 2017, develop plan to discontinue the NCU program and begin offering unlimited Junk Pickup service Citywide to residents. *Target completion: 4th Quarter 2017*
- Continue the extensive Junk Pickup outreach campaign, which includes targeted advertising in areas with a high incidence of illegal dumping, a multi-faceted campaign with Univision, and advertising on Vietnamese radio and newspaper. *Ongoing effort*
- Continue to assist Council offices in organizing neighborhood-led Beautification Days, subject to Council approval of funding. These efforts align with the BeautifySJ initiative. *Target completion: 4th Quarter 2017*
- Expand public outreach and education on the HHW program and proper disposal, both within San José and countywide, through two sports franchise partners: The San José Earthquakes professional soccer team and the San José Sharks professional ice hockey team. The latter is a new partnership to reach a new targeted audience and continue the increase of HHW appointment, with a goal of increasing appointments by 10 percent. *Target completion: 4th Quarter 2017*

C&D Recycling and Waste Diversion

- Survey C&D programs in other jurisdictions, including recently updated programs in Palo Alto and Hayward, and evaluate program features that may be incorporated into the City's CDD program and ensure alignment with state requirements (CALGreen). *Target completion: 2nd Quarter 2017*
 - Explore third party certification of recycling rates.
 - Evaluate programs in other jurisdictions that include deconstruction plans and waste management plans for demolition projects to improve recycling.
- Evaluate current policies, requirements, procedures, reporting, and accounting controls of the CDD program and incorporate improvements. *Target completion: 4th Quarter 2017*
- Identify and implement strategies to increase recycling based on the regional C&D markets, C&D facilities operations and infrastructure, and other successful C&D programs. *Target completion: 3rd Quarter 2017*
- Increase performance requirements by updating C&D non-exclusive franchise agreements. *Target completion: 2nd Quarter 2017*
- Identify and implement opportunities to increase recycling by franchised C&D haulers and at certified C&D processing facilities including processing C&D materials prior to any disposal, consistent with the Residential and Commercial programs. *Target completion: 4th Quarter 2017*

- Audit materials collected by the non-exclusive franchise haulers to determine the recyclable content and to identify and evaluate opportunities to improve recycling rates through processing and market development.
- Audit material left over after processing at certified facilities, which currently goes to landfill, to identify opportunities to capture additional recyclable material and identify materials that could be recycled through market development.

Illegal Dumping

- Implement easy-to-use mechanisms for public reporting, including a new customer relationship management (CRM) system and associated new mobile app, mySanJose. The CRM and mySanJose app will allow the public to easily report illegal dumping (and other concerns like graffiti and potholes) to the City, especially for residents without access to a computer at home. Staff anticipates this increase in reporting will improve the available data on where illegal dumping occurs in the city. *Target completion (Phase 1): 3rd Quarter 2017.*
- Install deterrents, such as cameras, lighting and bollards, in areas where illegal dumping is a known problem. *Target completion: 3rd Quarter 2017*
- Implement improved program performance metrics. In 2017, staff implemented ESD's On-land Visual Trash Assessment Protocol to assist in evaluating the performance of the illegal dumping mitigation effort. Utilize the Unity database system to manage illegal dumping service requests, and continue to update the database, including increasing the item categories to better reflect the types and amounts of illegally dumped materials collected. This information is used to better tailor programs and outreach materials. *Target completion: 3rd Quarter 2017*
- Continue conducting extensive outreach campaign which began in December 2016 and continues into 2017. The campaign utilizes 33 outreach tactics, including targeted advertising in areas with a high incidence of illegal dumping. Targeted tactics include posting trilingual fence banners and running bus shelter advertisements in some of the top 20 illegal dumping hotspots. Implement a multi-faceted marketing campaign with Univision, which has major Spanish television, radio, and digital outlets, to build further awareness within the Spanish-speaking community. Advertise junk pickup service on Vietnamese radio, and place ads in Vietnamese newspapers in Spring 2017. Staff continues to collaborate with neighborhood associations and utilize free digital methods such as NextDoor, Twitter, Facebook, and Instagram. *Target completion: 4th Quarter 2017*
- Partner with CommUniverCity on the second annual Move Out event at San José State University in May 2017. The event is held in conjunction with a junk pickup route, to reduce the amount of material illegally dumped by students moving out at the end of the semester. *Target completion: 2nd Quarter 2017*

- Continue collection of mattresses (significant illegally dumped item) for recycling. The City and its contracted haulers have collected over 10,700 mattresses since July 2016. The mattresses were collected through the ESD's junk pickup program, Council-led Beautification Events, and illegal dumping routes. Improve recycling rate of items collected through the illegal dumping program. *Target completion: 4th Quarter 2017*
- Provide feedback to the State on how to improve the Mattress Recycling Council's Illegal Dumping Mattress Compensation Program for 2017 and beyond, including recommending increased funding for the statewide effort. The first year of the program concluded in 2016. *Target completion: 3rd Quarter 2017*

Recycling Market Development

- Attend stakeholder meetings and provide feedback to CalRecycle to ensure San José and its residents fully benefit from the Beverage Container Recycling program. CalRecycle is in process of working with stakeholders to improve the program, as described in their January 2017 white paper, "Modernizing the Beverage Container Recycling Program" (Attachment J). *Target completion: 3rd Quarter 2017*

Recycling Infrastructure

- ESD staff participate in County workgroup to assess the capacity of in-county and out-of-county facilities to accept and recycle organic waste, and develop recommendations on how to divert more organics from landfills. *Target completion: 3rd Quarter 2017*

Promote Strategies for Producing Less Waste

- Complete implementation plan with the County of Santa Clara, Joint Venture Silicon Valley and several Silicon Valley non-profit and for-profit organizations to develop a network to facilitate the donation and distribution of surplus prepared food to reach those in need more efficiently (see <http://www.jointventure.org/initiatives/surplus-harvest>). *Target completion: 4th Quarter 2017*
- Engage in the State of California's upcoming effort to develop a comprehensive Packaging Reform policy to better manage packaging materials. The State is hosting the first workshop on this issue in late March 2017. *Target completion: 3rd Quarter 2017*
- Finalize and implement County-wide outreach initiative to the public on reducing waste. *Target completion: 4th Quarter 2017*

EVALUATION AND FOLLOW-UP

Staff will return to Council for consideration of any items in this report requiring Council approval.

PUBLIC OUTREACH

This memorandum will be posted on the City's website for the March 6, 2017 T&E Committee Agenda.

COORDINATION

This memorandum has been coordinated with the City Attorney's Office and City Manager's Budget Office.

CEQA

Not a Project, File No.PP10-069 (a), City Administrative Activities, Staff Reports.

/s/
KERRIE ROMANOW
Director, Environmental Services

For questions, please contact Jo Zientek, Deputy Director, Environmental Services Department, at (408) 535-8557.

Attachments:

- A. Resolution 74077 of the Council of the City of San José Adopting a Goal of 75 Percent Waste Diversion by 2013 and a Goal of Zero Waste by 2022 for the City of San José
- B. ESD Awards
- C. Commercial Wet/Dry Program Collateral
- D. Commercial Organics Processing Background Memo
- E. Recycle Plus Program History
- F. Recycle Plus Single-Family Material Flow
- G. CDD Brochure 2017
- H. C&D Diversion Program Analysis
- I. Plastics Chart
- J. "Modernizing the Beverage Container Recycling Program" (CalRecycle, January 2017)