

San José Construction and Demolition Diversion Program

San José, California



Population: 982,765 (2012)¹

Land Area: 466 km² (174.9 mi²)

Density: 2,100 persons/km² (5,620 persons/mi²)

Median Age: 35.2

**Housing Mix – Single:Multi-Family – 70:30
(198,000 SFDs/88,000 MFDs)**

Average persons per household: 3.1

**2012 State of California disposal rate:
710 kg per capita (all sources)²**

Program Highlights / Summary

The City of San José's Construction & Demolition Diversion Program (CDD) was created in 2001 to encourage the recovery of debris from construction and demolition projects using financial incentives. The program successfully increased CR&D waste diversion through a refundable deposit system based on contractors providing proper documentation showing that construction debris has been appropriately diverted from landfilling. The City of San José adopted its own ordinance, aiming to ensure that at least 65% (now 75%) of construction waste is recovered and diverted.

The program has been modified in recent years due to the establishment of statewide diversion requirements (CALGreen). Currently, most projects are subject to CALGreen reporting requirements that must be met prior to receiving occupancy permits. Projects not subject to CALGreen requirements are subject to the City's deposit-based diversion requirements. The City handles both program requirements.

All CR&D waste materials must be sent for reuse or to a certified processing facility. All processing facilities are mandated to divert 75% of incoming materials.

San José reports that they have achieved 75% diversion of CR&D waste. They are now exploring ways to improve the CDD program through paperless application tracking and regional certification and monitoring of waste diversion facilities.

¹ Demographics from <http://www.city-data.com/city/San-Jose-California.html>

² According to figures compiled by the Department of Resources Recycling and Recovery (CalRecycle), California's disposal rate was 4.3 pounds (1.95 kg) per person per day in 2012. Last year, 29.3 million tons were disposed state-wide, and the population was 37.7 million, resulting in the 4.3 pounds (1.95 kg) per person per day disposal rate (about 710 kg/person/year).

Program Details

Currently, San José has one of the highest overall recycling rates in the nation, recycling over 73% of solid waste citywide.

In 2007, San José adopted “Green Vision”, a 15-year plan for economic growth, environmental sustainability, and an enhanced quality of life for its community. Goal 5 specifically targeted waste, with an aim to divert 100% of waste from landfill and convert waste to energy. Research showed that more than 30% of landfill waste in San José was comprised of construction and demolition debris. Consequently, the City of San José created the CDD program to further Goal 5, encouraging recovery and diversion of this waste stream.

The CDD program was launched in advance of CALGreen, which established mandatory waste diversion targets for all municipalities in the State of California (refer to the CALGreen Case Study for more information on this state-wide program).

Although CALGreen requires a mandatory 50% diversion of CR&D waste, San Jose’s CCD program requires CR&D projects to achieve 75% diversion. As a result of CALGreen, the City’s CDD program is undergoing modifications to bring the City’s program more in-line with CALGreen’s requirements, while still maintaining an expectation of 75% diversion.

Prior to CALGreen, the CDD program included the following key features:

- City collects a deposit that is refunded after documentation of diversion is achieved
- Deposit based on size and type of project
- Materials can be reused/donated or taken to a CDD-certified facility
- Certified facilities achieve a minimum of 75% diversion (was initially set at 50%)

With the advent of CALGreen, the CDD program now includes:

- All CR&D projects are subject to a non-refundable \$100 “CDD Review” fee.
- Projects covered by CALGreen are required to submit documentation to substantiate adequate CR&D debris diversion in order to obtain an occupancy permit.
- Projects not covered by CALGreen require a deposit prior to receiving a permit. A refund is provided upon submission of proof of diversion.
- Materials can be reused/donated or taken to a CDD-certified facility
- Both ‘tracks’ (CALGreen projects and non-CALGreen projects) require the same review by City staff.

As of January 1, 2014, a majority of construction projects and virtually all demolition activity is now subject to CALGreen 2013 requirements, tying diversion compliance to occupancy permits. The only projects remaining under the City’s CDD deposit system are non-residential alterations under \$200,000 in value, non-residential additions under 1,000 ft², and residential alteration / addition activities that do not increase the building’s area, volume, or size. Before CALGreen, most construction projects in San José fell under the City’s deposit system.

As noted above, San José requires all construction and demolition debris be hauled to a City-certified waste diversion facility. The City monitors certified facilities through monthly reports and annual site visits. Waybills provided at the diversion facilities include the project’s building permit number so that

CR&D Case Study 8: Waste Diversion, Mandatory Mechanism

the amount of diversion can be easily tracked and reported. The waybills are submitted as part of the completed tracking application to the City. For projects subject to CALGreen, a final sign-off on the permit inspection record is required to obtain an occupancy permit.

In the event of material donation or re-use, the applicant prepares a short report describing how the materials were eliminated (reused or donated) or indicating that no excess materials were generated. The project's building permit number appears on each page and attachments include:

- Photographs of salvaged materials
- Donation receipts, if material was donated
- The permit receipt and completed application to the City

San José is conducting a pilot program with GreenHalo Systems to simplify project waste and recycling reporting via paperless, online submissions.

Program Results

Financial Data

Capital Costs

No capital costs incurred.

Operating Costs

Minimal costs cover printing of brochures and application packages.

Staffing Implications

Three staff members are assigned to the CDD program part time, in addition to other duties. A manager oversees the overall program administration and development, as well as provides customer service as needed. The two clerical staff members on the team provide customer interface. They process applications, provide deposit refunds and approve final signoffs. This provides proper management and ensures that the individual who receives the application and performs the initial review is not the person that ultimately approves the refund.

Cost Recovery

The \$100 processing fee is intended to cover the costs associated with staff time for administrative review.

Deposits received under the CDD program, which are not claimed, are recognized as revenue and used to fund other aspects of the Integrated Waste Management programs in San José.

Environmental

Reduction and Diversion

The City reports that the CR&D waste diversion rate hovers around 75% based on data reported by the certified processing facilities.

Disposal Impact / Landfill Space Savings

More than 30% of all landfill waste is construction and demolition debris. The CDD program ensures that at least 75% of this waste is recovered and diverted from landfills.

GHG Reduction

Not calculated.

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Social

Political Acceptability

The CDD program supports the City's "Green Vision", a 15-year plan for economic growth, environmental sustainability, and an enhanced quality of life for its community. Goal 5 of the plan is: Divert 100% of waste from Landfill and Convert Waste to Energy.

Community / User Acceptability

The program has been in operation for several years and industry is fully accustomed to the requirements.

Community Economic Development

The CDD program ensures that CR&D waste is diverted to private processing facilities and other organizations involved in the reuse of CR&D materials. The specific economic value of keeping the materials in the active economy rather than having them landfilled has not been calculated.

Lessons Learned

San José is conducting a pilot program with GreenHalo Systems to simplify the project waste and recycling reporting via paperless, online submissions.



The City is also looking at a region-wide certification program for processing facilities, where several local jurisdictions would work together in monitoring processing facilities in the area.

The City found that there is a direct, positive correlation between outreach efforts and the number of people following through and claiming their deposits. They believe that the number of unclaimed deposits could be lowered if they established a better method for communicating with depositors.

Establishing a diversion rate higher than 75% is hindered by:

- contamination,
- the limitations of manual / mechanical sorting processes / technologies, and
- the existence of certain CR&D materials that either are not recyclable or don't have enough of a market or volume to make recycling worthwhile.

Communities with Similar Programs

City of Santa Monica, City of San Diego and City of Oakland, California all have similar requirements that construction and demolition projects achieve a waste diversion percentage higher than CALGreen requirements and/or refundable deposits for building / demolition permits.

Program Contacts

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