

# **Bond Case Briefs**

*Municipal Finance Law Since 1971*

---

## **The Obstacles in the Pathway to Zero Waste.**

**A resource recovery rate of 100 percent may be a worthwhile goal, but there are plenty of challenges facing governments that want to achieve it.**

Trash, garbage, rubbish, refuse, scrap, debris, junk, dregs — we refer to the waste we produce by many names. However, a shift in our terminology is rapidly taking place: More and more, waste collection and disposal are being relabeled as “resource recovery.” That “waste” is getting trashed as a concept reflects a growing awareness that we can’t continue to bury our garbage in landfills forever.

That awareness is central to an emerging goal of zero waste: a resource-recovery rate of 100 percent. We’re a long way from that now. Nationally, the average waste-diversion rate is about 35 percent, while reported diversion rates around the country vary widely, from single digits to just over 80 percent for San Francisco at the top of the scale.

While waste-diversion rates are important, they offer only one measure of the entire cradle-to-grave system of materials sourcing, production, use and disposal. Most simply conceived, that system encompasses raw material (mined, extracted or grown) that is made into products that, at the end of their useful lives, are thrown away. But branching and connected subsystems add complexity. For example, when raw materials become limited due to availability or pricing, or disposal becomes too expensive or restricted, more products are reused or their components are recycled, creating “feedback loops” into the system.

More complexity is added when input and output flows are considered. Raw materials are inputs, but so are recycled materials when they are looped back into the system. Similarly, wastes can be disposed of as solids (in landfills) but also as liquids (via sewer systems and wastewater treatment plants). Then factor in whether the waste is coming from residential, commercial, industrial or agricultural sectors. A diagram of the system components and flow pathways gets more and more tangled.

In this light, measuring waste diversion is not so simple. Yet, without finding a widely accepted way to calculate diversion rates, how could one ever claim zero waste has been achieved?

Nevertheless, “it’s important to set a zero-waste goal,” says Jared Blumenfeld, the U.S. Environmental Protection Agency’s Region 9 administrator and former director of San Francisco’s Department of the Environment, because “it gets you on the road to designing a zero-waste system.” As that process proceeds, he says, “you’ll engage in waste-characterization studies and find lots of things that don’t need to go into landfills.”

As compelling as the idea of a zero-waste system may seem, there are plenty of challenges facing governments that are embarking on the process Blumenfeld advocates. Los Angeles already has the highest waste-diversion rate among the 10 largest U.S. cities, having achieved 72 percent in 2012. But Sinnott Murphy and Stephanie Pincetl, authors of [a recent research paper](#) on L.A.’s quest to achieve zero waste, find that while the city’s efforts are “aggressive” they are “insufficient for addressing resource conservation challenges.” Murphy and Pincetl cite L.A.’s “continued reliance on

waste management approaches that have proven inadequate to address the increasing complexity of solid waste and limited data quantifying and characterizing waste generation patterns.”

L.A.’s waste-management methods are common to existing systems in the United States. They are a legacy of the Progressive Era, when federal policy institutionalized solid-waste management at the local level and set a design for systems to take unlimited quantities of waste and try to deal with them to minimize adverse local impacts.

Murphy and Pincetl note that while little attention is being paid to waste generation at the federal level, many states have enacted recycling goals to divert waste from landfills and have pursued extended producer-responsibility policies to reduce the more-toxic elements of the waste stream. But Murphy and Pincetl conclude that “these policies have been too limited in scope to stem the tide of increases in waste generation,” leaving cities and counties “managing a problem that continues to grow.”

Indeed, as is so true of politics, all waste is local. Local communities sit at the end of the waste stream. The more effectively they act, the less goes to waste. But the local recovery system is part of the much larger materials system, and it’s going to take an integrated policy and regulatory framework by government at all levels to create true pathways to zero waste.

APRIL 21, 2014

[Bob Graves](#) | Associate Director of the Governing Institute

---

[bgraves@governing.com](mailto:bgraves@governing.com)

Copyright © 2024 Bond Case Briefs | [bondcasebriefs.com](http://bondcasebriefs.com)