Around the States

Cities Are Talking Trash Again — and This Time It's Zero Trash

How quickly cities

reach their goals

will vary, but landfill

diversion is here to stay

lities around the country are stepping up efforts to divert municipal solid waste from landfills. They are motivated by several factors. As the U.S. population increases, so does the sheer magnitude of its trash. The amount of MSW almost tripled between 1960 and 2013 — from 88 million tons annually to over 254 million tons. Only 34 percent of it was recycled or composted. The amount of MSW per capita also has increased — to 4.4 pounds per day in 2013 up from 2.68 pounds in 1960. Not surprisingly, landfills are filling up and multi-year disposal contracts are expiring, but many cities do not relish the challenge of siting additional landfills and negotiating new, often costly disposal contracts.

Climate change mitigation also drives efforts to divert MSW from disposal. Over one thousand U.S. mayors

have signed the Conference of Mayors' Climate Protection Agreement or joined the Compact of Mayors, agreeing to reduce greenhouse gas emissions. Solid waste

diversion offers a way to meet climate mitigation goals, because organics, such as food waste and yard trimmings — the largest component of landfill waste — produce methane when disposed of in landfills. For example, EPA estimates that the recycling and composting of 87 million tons of MSW in 2013 prevented 186 million metric tons of carbon dioxide equivalent from entering the atmosphere — an amount similar to emissions from 39 million passenger cars. In addition, manufacturing with recovered rather than new materials can mitigate climate change. Eschewing landfills also enables municipalities to avoid other types of potentially harmful air emissions and water pollution.

Not only does diverting MSW

prevent negative consequences, it provides positive benefits. The BlueGreen Alliance estimates that if Americans recycled 75 percent of their trash, the result would be 1.5 million new jobs. Furthermore, diversion produces recycled materials that can be used in lieu of extracting new materials and depleting limited natural resources. And, composting produces a valuable product that can be used as a fertilizer, weed inhibitor, and also fosters water retention when applied to crops. In addition, wasted food that would be sent to landfills in many instances can feed food-insecure Americans.

Accordingly, it is not surprising that municipalities are embracing alternatives to landfills. Ten cities — including Dallas, New York, and San Francisco — have set the very ambitious goal of achieving zero waste, although their timelines and definitions vary. Others

have set less aspiring goals but nevertheless are striving to increase diversion. Some cities and states are no longer simply focused on "diversion" but are instead setting spe-

cific goals for reduction, recycling, and composting.

Cities' current diversion rates vary considerably. San Francisco leads the pack at 80 percent, with other California cities such as San Diego not far behind. In contrast, cities such as Tucson, which had a 10 percent diversion rate in 2014, are working hard to step up their efforts.

Regardless of current diversion rates, EPA encourages localities to follow principles of sustainable materials management: "a systemic approach to using and reusing materials more productively over their entire lifecycles." EPA explains that a key objective is to "decrease the disposal rate, which includes source reduction, reuse, recycling, and prevention."



For example, EPA reports that over one thousand localities are implementing "Pay as You Throw" trash collection and disposal programs, which incentivize customers to reduce waste. Other cities prohibit use of problematic products or materials, such as plastic bags or polystyrene foam, or ban materials from their landfills, such as food waste. Laura Moreno, a Berkeley graduate student, explains that even though it is the hardest to measure and implement, "If we truly want to reduce the social and environmental impact of our stuff, source reduction needs more attention."

To foster recycling, EPA data show that cities managed over 9,800 curbside recycling programs in 2011 and over 200 localities in 16 states offered curbside food collection programs in 2013. In 2013, there also were over 3,500 community composting programs. Many localities also offer drop-off locations for food waste that will be composted, including Boulder, the District of Columbia, and Minneapolis.

Not only municipal measures but state laws and policies can boost diversion through landfill bans, mandated diversion rates, and beverage container deposit systems. Some states also impose extended producer responsibility laws for hard-to-recycle products, such as New York's electronic manufacturers' takeback requirements.

How quickly and in what manner cities and states reach their goals will vary, but diversion efforts are here to stay.