



2017 INFRASTRUCTURE REPORT CARD

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Solid Waste

258 million tons of municipal solid waste generated in one year

OVERVIEW

Overall management of municipal solid waste (MSW) across America is currently in fair condition. In many cases, the transport and disposal of MSW is self-funded and managed by the private sector, and therefore is sufficiently funded. Americans generate about 258 million tons of MSW annually, of which approximately 53% is deposited in landfills — a share that has plateaued in recent years. Currently, 34.6% of MSW is recycled and 12.8% is combusted for energy production. There is a need to change the way we think of how solid waste is generated, managed, and potentially used as a resource. Americans need to recognize that what is routinely discarded may in fact be a reusable resource.

CAPACITY & CONDITION

Municipal solid waste (MSW) – more commonly called trash or garbage – consists of everyday items that are used and then thrown away, such as product packaging, grass clippings, furniture, clothing, bottles, food waste, newspapers, appliances, paint, and batteries. After these items are removed from the waste stream for recycling and composting, the remainder are deposited into landfills facilities. Americans generated about 258 million tons of MSW in 2014, up from the previous peak of 255 million tons in 2007. The average American produces 4.4 pounds per person per day of MSW, down from the peak of 4.74 pounds in 2000, however that has remained relatively flat over the past 25 years.

Current production and consumption systems do not offer enough incentives for preventing and reducing waste. From product design and packaging to material choices, the entire chain is not designed with waste prevention in mind. Changing the way we think about waste requires effort by all the parties concerned: consumers, producers, policymakers, local authorities, and waste treatment facilities, among others. Increases in recycling can only occur where consumers are willing to sort their household waste and the infrastructure and market is in place to collect and utilize the recycled materials.



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marketable and new innovative ways to manage MSW for a useful purpose of benefit (i.e. waste to energy) or new technologies, which would prevent solid waste from entering a landfill (i.e. anaerobic digesters and plasma gasification). Additional funding mechanisms are needed to help transition to a system that recognizes MSW as more of a resource to be utilized than waste to be disposed.

PUBLIC SAFETY & RESILIENCE

Non-hazardous solid waste is regulated by the federal government. States play a lead role in ensuring the federal criteria for operating municipal solid waste and industrial waste landfills regulations are met, and they may set more stringent requirements. In absence of an approved state program, the federal requirements must be met by waste facilities. Regulations address common problems associated with landfills including location restrictions, liner requirements, leachate collection and removal systems, groundwater monitoring requirements, and closure and post-closure care requirements.

There is a danger posed by natural disasters such as hurricanes, earthquakes, and other events, which can have impacts on groundwater, the overall environment and public health in areas near landfills and other solid waste facilities. Additionally, solid waste management is inherently tied to the proper functioning of other infrastructure, such that without fully-functioning transportation options—roads, bridges, rail, inland waterways—solid waste collection is compromised with the resulting impacts to public health.

RECOMMENDATIONS TO RAISE THE GRADE

- Pass federal and state legislation that would promote, enhance, or facilitate development of resource recovery facilities, including those for recycling, composting, reuse, and energy recovery, as well as technologies for reduction of waste generation.
- Promote development of cost effective recycling and sustainable waste handling options for municipalities, specifically in communities where scale and/or the use of older outdated systems is an impediment.
- Allow for the interstate movement of MSW to regional solid waste facilities designed in accordance with state and federal regulations as part of regional solid waste planning efforts.
- Fund research into alternatives for use of waste, including examining approaches used in other countries.
- Require manufacturers to meet standards for the generation of recyclable materials.
- Address the true cost of waste – such as through deposits on bottles and fees on plastic bags.
- Change the way Americans think of solid waste beyond “garbage” or “trash,” to understand that “waste is not waste until it is wasted.” The materials Americans routinely discard are potential resources.

DEFINITIONS

Energy Recovery from Waste — The conversion of non-recyclable waste materials into useable heat, electricity, or fuel through a variety of processes, including combustion, gasification, pyrolyzation, anaerobic digestion, and landfill gas (LFG) recovery.

