A Tale of Thousands of Dumps

Source: <u>saveonenergy.com</u>

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The average American tosses <u>4.4 pounds of trash</u> every single day. It may not seem all that astonishing on the surface, but with <u>323.7 million people</u> living in the United States, that is roughly 728,000 tons of daily garbage – enough to fill 63,000 garbage trucks.

That is 22 billion plastic bottles every year. Enough office paper to construct a 12-foot-high wall from Los Angeles to Manhattan. It is 300 laps around the equator in paper and plastic cups, forks, and spoons. It is 500 disposable cups per average American worker – cups that will still be sitting in the landfill five centuries from now.

Approximately half of the 254 million tons of <u>yearly waste</u> will meet its fate in one of the more than <u>2,000</u> active landfills across the country – and you probably live, work or socialize closer to one than you may think.



Source: https://www3.epa.gov/lmop/projects-candidates/

The easiest way to know you're living near a landfill is by smelling it, right? Wrong.

The United States is home to thousands of <u>inactive landfills</u> – and some have found new life and purpose as <u>public parks</u>.

But most are out of sight, out of mind. The West Coast is practically overflowing with landfills: There are a dozen in the Los Angeles area alone, though most are now closed. New Yorkers

hailing from Manhattan, Brooklyn, Bronx, and Queens have no problem beating up on Staten Island, a borough practically built on top of what used to be the world's largest garbage dump.

Even the Sunshine State isn't immune to taking some of the load. Landfills linger in the heart of Miami and West Palm Beach, though they pale in comparison to the dump deluge in Tennessee and the Carolinas.

Landfills have a long and relatively unsorted history. Before the first municipal dumps appeared on the map in the 20th century, humans either <u>burned their garbage</u> or buried it on the outskirts of town to avoid disease. The circa 1937 Fresno Municipal Sanitary Landfill is <u>considered the first</u> modern, sanitary landfill of its kind, and future landfills followed suit.

At first, they weren't much more than man-made craters in the earth – a dramatic step up from the first municipal dump established in <u>ancient Athens</u> but still pretty crude. They were <u>environmental disasters</u>, leaching contaminated liquid into the soil and groundwater, and releasing overwhelming amounts of methane into the air.

The 1976 Resource Conservation and Recovery Act changed all of that. The law requires landfills to be lined with plastic, clay or both, effectively killing the old idea of a "dump," or those old-school craters.

The Landfill Evolution



Over the last hundred years, the number of dumps and landfills has dramatically increased across the country – as seen in the time lapse above – to accommodate the growing population's garbage disposal needs.

That's a Ton of Trash



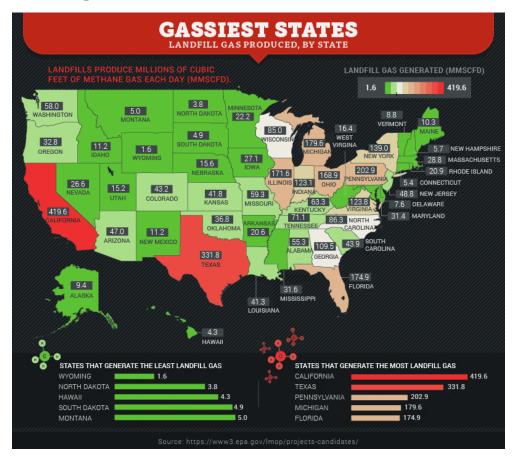
Las Vegas may be the city of sin, but its home state Nevada is the land of garbage, with a whopping 38.4 tons of waste per person in its landfills.

Idaho, North Dakota, and Connecticut are the only three states in the country with less than 10 tons of landfill waste per person – putting Pennsylvania, Colorado, and California to shame, with their average of 35 tons of landfill garbage per person.

That's not to say that these state residents are necessarily producing all of this landfill waste themselves. The trash trade is a \$4 billion industry, and many state landfills are only too happy to take garbage from other states.

Transport fees are cheapest in the South and Midwest – as low as \$19 per ton in states like Alabama. Ohio, for example, is famous for accepting as much as <u>3.4 million tons</u> of out-of-state waste per year, to the tune of \$35 per ton. The most offensive giver of trash was New York, accounting for nearly 32 percent of Ohio's out-of-state total, with New Jersey not far behind.

Landfill Gases, a Top Concern

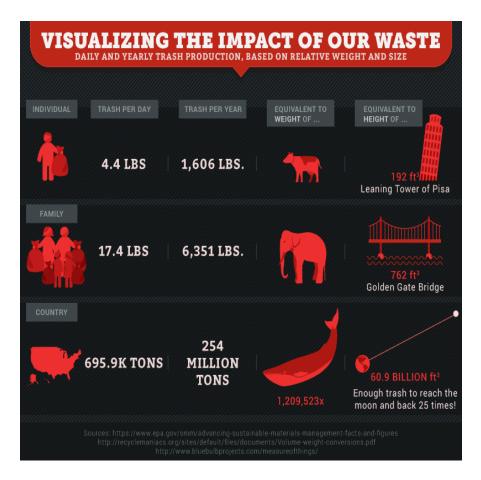


Landfill gas is a dangerous, virtually invisible concoction generated in the <u>most natural way possible</u>: the bacterial decomposition of organic material. The result is half methane and half carbon dioxide and water vapor, with trace amounts of oxygen, nitrogen, hydrogen and nonmethane organic compounds, or NMOCs, which can cause smog if uncontrolled.

In the past, environmentalists have been more concerned by carbon dioxide emissions, but now, they are worrying about methane. Even though methane doesn't linger as long as carbon dioxide, it is far more effective at absorbing the sun's heat and contributing to global warming. For the first 20 years after it meets the atmosphere, methane is 84 times more potent as a greenhouse gas than carbon dioxide.

The population-heavy states of California and Texas are currently facing the greatest problem with landfill-produced methane, but the repercussions of this problem could eventually affect the entire world.

Visualize Your Garbage



It can be hard to wrap our minds around the impact of our waste in terms of landfill gas and metrics that stretch into the billions. So let's scale it down.

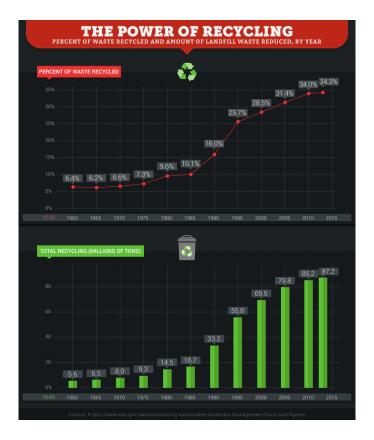
Your 4.4 pounds of daily trash is approximately the weight of a modest-sized pumpkin that you would carve on Halloween. Add up all those "pumpkins" over the seasons and they come in at 1,606 pounds – or the size of your average cow. But if you pack that trash into cubed feet, you're looking at the height of the Leaning Tower of Pisa.

The waste tally for a family of four is even grimmer. That yearly haul weighs as much as an Asian elephant and stacks up to the height of the Golden Gate Bridge.

Think that's bad? The annual weight of trash for the entire country equals 254 million tons, or 1.2 million blue whales, and would reach the <u>moon and back</u> 25 times, a journey of 11,534,090 miles.

Not all hope is lost, though. Keep reading to learn about how you can cut back on your waste.

Going Green



Now, more than ever, Americans are hopping on the recycling bandwagon. Last year marked the all-time high for recycling: 34.3 percent of our garbage, or 87.2 million tons, could have ended up in a landfill but didn't. Bravo, America!

But though recycling has increased in recent years, so has trash generation. More than <u>60 million</u> <u>plastic bottles</u> still find their way to landfills and incinerators on a daily basis. Six times as many water bottles were thrown away in 2004 than in 1997.

Clearly, there is still work to be done. And you can make a difference.

Conclusion

Whether we are a running out of <u>landfill space in America</u> is a hotly debated topic, but that doesn't mean we should produce garbage like there is no tomorrow. Here are some tips to <u>help</u> reduce your personal waste:

- Bring reusable bags when you go shopping, and choose reusable containers for packing meals.
- Buy in bulk whenever possible. Beware of double packing or individually wrapped items that are repackaged and sold as bulk.
- Compost your food scraps and yard waste whenever possible.
- Cut back on <u>junk mail</u> you receive more than 30 pounds of it per year.

Methodology

We analyzed the EPA's Greenhouse Gas Reporting Program data on landfills to determine the per capita waste in tons for each state. We also looked at the total sum of landfill gasses by state. For the graphic titled "Visualizing the Impact of Our Waste," we used the EPA's average estimate of 4.4 pounds of trash produced per person per day to calculate the yearly waste average per person, per family of four, and for the entire United States.

To calculate the height of the waste tallies, we assumed that loose residential waste weighs 225 pounds per cubic yard, and converted this to square footage. To compare these heights and weights with real world animals and objects, we used http://www.bluebulbprojects.com/measureofthings/.

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