



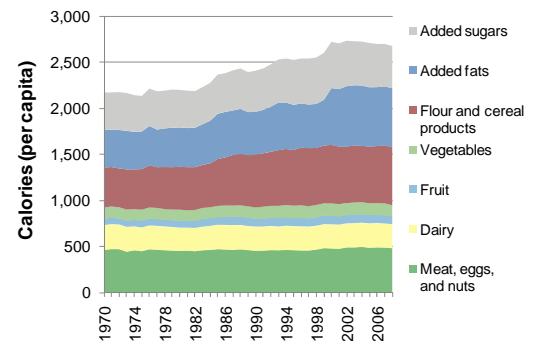
# U.S. Environmental Footprint

The U.S. population is expected to grow from nearly 312 million in 2011 to 370 million by 2030.<sup>1</sup> Pressure on the environment will increase unless consumption patterns are significantly adjusted to account for the limited natural resource base. A suite of Factsheets expanding on the topics below are available at: < <http://css.snre.umich.edu/publications/factsheets> >.

## Food

- The average American's daily Calorie consumption increased from 2,168 in 1970 to 2,673 in 2008.<sup>2</sup>
- In 2001, the average American consumed 49 gallons of soft drinks - a 350% increase since 1947. Over this same period, per capita milk consumption decreased 45%, down to 22 gallons per year.<sup>3</sup>
- The average American consumes about 30 teaspoons of added sugars and sweeteners per day – more than triple the recommended amount.<sup>4</sup>
- U.S. per capita consumption of fats added to food (not naturally present) increased by 53% between 1970 and 2008.<sup>2</sup>
- More than 73% of U.S. adults are overweight or obese (body mass index of 25 or more), and nearly 20% of children age 6-19 are obese.<sup>5</sup>
- 26% of available edible food is wasted at the consumer level.<sup>6</sup>

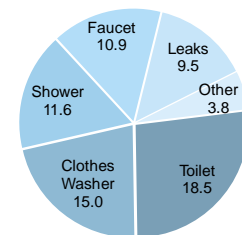
U.S. Daily Per Capita Calorie Intake<sup>2</sup>  
by Food Type, 1970-2008



## Water

- In 2005, total water withdrawals in the U.S. for all uses were estimated to be 410 billion gallons per day. The biggest users are thermoelectric power (49%) and irrigation (31%).<sup>7</sup>
- Water use per person was roughly 44% higher in western states than eastern states in 2005, mostly due to crop irrigation in the west.<sup>7</sup>
- Domestic water use was less than 12% of total water use in 2005.<sup>7</sup>
- The average American household uses nearly 70 gallons of water per person per day for bathing, cleaning, and other uses at home (see figure on right). Households with more efficient fixtures and no leaks could drop to their use to 45 gallons per person per day.<sup>8</sup>

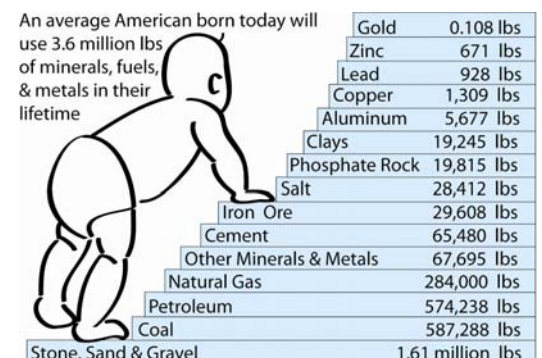
U.S. Household Water Use  
Gallons Per Capita Per Day<sup>8</sup>



## Material Use and Waste Management

- In 2000, the per capita consumption of all materials in the United States was 23.7 metric tons, 52% more than the European average.<sup>10</sup>
- In the last century, raw material consumption (non-fossil fuel or food) increased 5.1 times faster than population.<sup>11</sup>
- In 2009, the average American generated 4.3 lbs of municipal solid waste (MSW) each day, with only 1.1 lbs recovered for recycling.<sup>12</sup> (For comparison, MSW generation rates (lbs/person/day) are 2.4 in Canada, 3.5 in Germany, and 3.4 in the UK.)<sup>13</sup>
- In 2009, nearly 34% of MSW generated in the U.S. was recovered for recycling or composting, diverting 82 million tons of material from landfills and incinerators – more than double the value from 15 years earlier.<sup>12</sup>
- More than 9,000 curbside recycling programs serve 71% of the U.S. population. A greater percentage of people are served in the Northeast than other regions.<sup>12</sup>

Average American Lifetime Material Consumption<sup>9</sup>



<sup>1</sup> U.S. Census Bureau (2011). "Population Clocks" and (2008) "US Population Projections."

<sup>2</sup> USDA (2010) "Loss-Adjusted Food Availability" <http://www.ers.usda.gov/Data/FoodConsumption/FoodGuideIndex.htm#calories>.

<sup>3</sup> USDA (2004). "Indicators." <http://www.ers.usda.gov/AmberWaves/April04/pdf/indicators.pdf>.

<sup>4</sup> USDA Economic Research Service (2008), Food Availability (Per Capita) Data System. Dietary Assessment of Major Trends in U.S. Food Consumption, 1970-2005.

<sup>5</sup> Centers for Disease Control and Prevention (2010) FastStats, <http://www.cdc.gov/nchs/faststats/overwt.htm>.

<sup>6</sup> Heller, M.C. and G.A. Keoleian (2000) *Life Cycle-Based Sustainability Indicators for Assessment of the U.S. Food System* (CSS00-04).

<sup>7</sup> Kenny, Joan F. et al. (2009) *Estimated Use of Water in the United States in 2005*. U.S. Geological Survey, Circular 1344 <http://pubs.usgs.gov/circ/1344/>.

<sup>8</sup> American Water Works Association (2008) "Water Use Statistics" <http://www.drinkingwater.org/consumerdmn/Default.aspx?tabid=85>.

<sup>9</sup> Mineral Information Institute (2008) "MII Baby" <http://www.mii.org/>.

<sup>10</sup> World Resources Institute (2008) *Material Flows in the United States: A Physical Accounting of the U.S. Industrial Ecology*.

<sup>11</sup> U.S. Geological Survey (2007) *Effects of Regulation and Technology on End Uses of Nonfuel Mineral Commodities in the United States*.

<sup>12</sup> U.S. Environmental Protection Agency (2010) *Municipal Solid Waste Generation, Recycling, and Disposal in the United States: 2009 Facts and Figures*.

<sup>13</sup> Organization for Economic Co-operation and Development (2010) *Factbook 2010: Municipal Waste*.

