## **Vermont's Plastic Usage by the Numbers**

## **PLASTIC BAGS**

It is estimated that Americans use 100 billion plastic bags per year, and Vermont (.0019% of the country's population) would account for 190 million of those – divided by the Vermont adult population (512,500), that number would come out to roughly 370 plastic bags per person. 512,500 multiplied by 370 is 189,625,000/year. That would mean in 6 months, Vermonters use 94,812,500 plastic bags.

It is estimated that 47.75% of American adults ages 50+, 42.17% of American adults ages 30-49, and 39.65% of American adults ages 18-29 used reusable grocery bags in 2018. Applied to Vermont, that would mean an estimated total of 227,016 Vermonters use reusable bags instead of plastic. That would reduce the total bags used in Vermont per year by 83,995,920 bags, bringing the annual total to 105,629,080. Therefore, in a six month period, we can assume we have saved approximately 52,814,540 plastic bags.

The distribution of plastic bags was banned in Vermont beginning on July 1, 2020. Based on the above calculations, we can assume that in the final 6 months of 2020 since the plastic bag ban went into effect, Vermonters avoided using approximately 52,814,540 plastic bags.\*

\*This does not account for the fact that many distributors were allowed under the law to continue to distribute the rest of their plastic bags bought prior to the passage of the law in May, 2019.

Estimates show that it would take approximately the same amount of oil to produce 14 bags as it would to drive an average car one mile. The average person drives their car 13,500 miles in a year, or 6,750 miles in 6 months. Therefore, by saving 52,814,540 plastic bags in the last six months in Vermont, we have effectively taken 482 cars off the road for that same 6 month period (or 241 cars for a year). (52,814,540/14)/6,750

A <u>large plastic bag is 12" W x 6" D x 22" H</u> (Width x Side Gusset x Height - Including Handle Height of about 5"). This creates a volume of 1,584 cubic inches, or .91666667 cubic feet per plastic bag. <u>Olympic-size swimming pools</u> are approximately 164 feet in length, 82 feet in width, 6 feet in depth. These measurements create a volume of 88,263 cubic feet. Using these numbers, we can assume that it would take 96,286.9087 plastic bags to fill *one* Olympic size swimming pools. Therefore, it can be assumed that in the past 6 months, Vermonters have saved enough plastic bags to fill 585 (rounded from 997.99) Olympic size swimming pools.