How Did We Get The Numbers?

Important Values:

Population of Lethbridge, 2025	110,695
Population of Lethbridge over 18	85,000
Number of Households, 2019	42,022

If everyone in Lethbridge threw away 5 apples a week, in one year there would be enough apple cores to fill 18 two-car garages.

5 Apples	x	52 Weeks/year	=	260 Apples/person/year

Translate to total population

260 Apples/person/year	x	110,695 Lethbridge Population	=	28,780,700 Apples/Lethbridge/year

Measured dimensions of apple core: 7cm tall with 2cm radius
Volume = $\pi r^2 h$ = $\pi(2^2)(7)$ = 88cm^3 = 0.000088m^3 per apple

0.000088 m^3 Apple volume	x	28,780,700 Apples/Leth/year	=	2532 m^3 Total volume/year

The average car garage is around 22’ x 22’ x 10’. The volume is 4840 ft^3.
Converting to metres: 137.0535 m^3

2532 m^3 Total volume/year	/	137.0535 m^3 Volume/garage	=	**18.5** **Garages**

If everyone over the age of 18 in Lethbridge had 2 cups of coffee per day in reusable mugs instead of paper cups, we would save 12,800 trees/year

2 Cups/day x 365 days = 730 cups/person/year

730 Cups/person/year	x	0.011 kg Weight per cup	=	682,550 kg Cups/year

Every 2000 lbs (907 kg) of recycled paper can save 17 tress (link), to expand:

682,550 kg Cups/year	/	907 kg/17 trees	=	**12,800** **Trees/year**

If every household in Lethbridge recycled 1 toilet paper tube and 1 plastic bottle from the bathroom each week, in one year there would be enough cardboard & plastic to make 21,800 12 in cube boxes and 5840 curbside bins.

Based on weight …

One cardboard toilet paper tube weighs:	4 g
One 12” cube cardboard box weighs:	400 g
The average plastic bottle weighs:	50 g
A large curbside bin weighs:	18.7 kg

If each household used one tube and bottle per week:

4 g Tube	x	52 Weeks/y	x	42,022 Households	=	8,740,576 g Cardboard/y
50 g Bottle						109,257,200 g Plastic/y

Toilet Paper Rolls:

8,740,576 g Cardboard/y	/	400 g Weight 12” cube box	=	**21,851** **Cardboard boxes/year**

Plastic Bottle:

109,257,200 g Plastic/y	/	18700 g Weight curbside bin	=	**5843** **Curbside bins/year**

If every household in Lethbridge left their grass clippings to decompose rather than collecting them, the amount of landfill space saved in one year would be the same as filling 449 garbage trucks.

How much grass waste does the average lawn create in a year? The average lawn is 2,000 square feet, which produces about 600 pounds of grass/year (link). The volume of 600 pounds of grass is approximately 0.45 cubic meters when compacted (link).

0.45 m^3 (per 600 lbs grass)	x	30,500 Single-detached homes	=	**13,725 m^3** **Grass**

The volume of a garbage truck is 40 cubic yards, which converts to 30.5822 m^3.

13,725 m^3 **Grass**	/	30.5822 m^3 Volume of truck	=	**448.79** **Garbage trucks/year**

If everyone over the age of 18 in Lethbridge threw away 5 plastic shopping bags each week, in one year there would be enough petroleum in those bags to drive a car across Canada almost 325 times!

According to Greener Footprint, 8.7 plastic shopping bags contain enough embodied petroleum to drive a car 1km (link).

5 Plastic bags/person/week	x	85,000 Population over 18		52 Weeks/year	=	22,100,000 Plastic bags/year

22,100,000 Plastic bags/year	/	8.7 Plastic bags / km	=	2,540,229 km/year

2,540,229 km/year	/	7821 km TransCanada	=	**325** **Cross-Canada Trips**