

# **Humans & Land Area**

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The Earth's population is estimated to be around 7.8 billion people. If we were to calculate the amount of space each individual would consume, given a specific area, we can gain a better understanding of our collective spatial footprint. This report aims to provide a perspective on the space consumption if each person on Earth occupied 4 square feet.

## **Calculation:**

Population of Earth = 7.8 billion

Space consumed by each person = 4 square feet

Total space consumed = Population of Earth × Space consumed by each person

= 7.8 billion × 4 square feet

= 31.2 billion square feet

To convert square feet to square miles:

1 square mile = 27,878,400 square feet

Total space in square miles = Total space in square feet ÷ Square feet in a square mile

= 31.2 billion ÷ 27,878,400

= 1,120 square miles

## **Geographical Perspective:**

To provide a clearer understanding of what 1,120 square miles looks like, here are some cities in the United States with land areas close to this size:

- San Jose, California: Approximately 177.9 square miles (land area).
- Peoria, Arizona: Approximately 176.7 square miles (land area).
- New Orleans, Louisiana: Approximately 169.5 square miles (land area).
- Aurora, Colorado: Approximately 163.0 square miles (land area).
- Wichita, Kansas: Approximately 162.9 square miles (land area).

The combined area of these cities is approximately 850 square miles. This means the total consumed space of 1,120 square miles is slightly larger than the combined areas of these cities.

## **Conclusion:**

While the idea of every person consuming 4 square feet of space might seem small on an individual level, when multiplied by the Earth's population, it results in a vast area. This exercise provides a perspective on our collective footprint and emphasizes the importance of efficient space utilization and sustainable living.