**Regularize Source or Target TIN???**

Suppose we want to create a mesh fine enough to have a triangle for every 1/10,000th of the population of the conterminous U.S. If we keep the triangles regular on the source TIN, how many triangles will we need?

Wikipedia:

Population of conterminous USA is 306.68 million

* So one triangle will need to represent ~30,668 people.

Manhattan’s population density is 66,940 per square mile.

* so smallest triangle will need to be < 1/2 square mile (1/2.183)

48 contiguous states plus DC are 3.12 million square miles.

* so we’ll need > 6 million triangles (6,811,000)

If we keep the triangles regular on the target TIN instead, we only need 10,000 triangles. Thus, for the first approach we need ~ 68x as many triangles as the latter approach. Note that if we zoom in to the district level, the most densely population district in NYC (Manhattan Community Board 8) has a population density of over 100,000/sq. mile, so the ratio approaches 100x.