A Model of the Visible Universe

(Taken from James Nickels' book, Lift Up Your Eyes on High)

One way to help us comprehend the immensity of the visible universe is to shrink it down. For example, the diameter of the Milky Way galaxy is about 100,000 light-years. From Earth, we can see stars in all directions at a maximum of 1.4×10^{10} light-years away (radius from the Earth).

Looking from a different viewpoint, let's say our galaxy is four inches in diameter. The visible universe would extend from Earth in a nine-mile radius (eighteen-mile diameter). You would find another galaxy like ours every 25 to 35 inches uniformly distributed throughout that eighteen-mile diameter!