A metric measure space is said to be of \( Q \)-bounded geometry for some \( Q > 1 \) if the measure on the space is Ahlfors \( Q \)-regular and supports a \( Q \)-Poincaré inequality. From the work of Heinonen and Koskela, it is well-known that a homeomorphism between two such spaces is quasiconformal if and only if that homeomorphism quasi-preserves the \( Q \)-modulus of families of paths in the space. In this talk we will discuss a related characterization of quasiconformal mappings in terms of quasi-preservation of the \( \frac{Q}{Q-1} \)-modulus of families of bounded sets of finite perimeter. (Received July 03, 2019)