Numerical semigroups are complement-finite additive subsemigroups of \( \mathbb{N}_0 \); that is, they are the sets of sums of whole-number multiples of its whole-number generators. While their additive factorization theory has been widely studied, their multiplicative structure has not. The elasticity \( \rho(S) = \sup \{m/n: a_1 \cdots a_m = b_1 \cdots b_n: a_i, b_j \text{ irreducible elements} \} \) of a multiplicative semigroup \( S \) provides a measure of how nonunique its factorization can be. The multiplicative elasticity of a numerical semigroup is always finite, and is larger than 1 unless \( S = \mathbb{N} \). By relating numerical semigroups to an easier-to-understand additive structure we can characterize the irreducible elements and provide tighter bounds for \( \rho(S) \). (Received September 12, 2018)