Assume the position

Before 1960 it was believed the maximum attainable μ_s for an automobile tire was less than 1.0. In 1962, three companies independently developed racing tires with a μ_s of 1.6. Since then, tires have improved.

In September 1989, (Cha-cha) Shirley Muldowney set the record for the fastest time interval for a piston-engine to cover the quarter mile at 4.974 seconds.

Assuming constant acceleration and only the back tires in contact with the raceway, what minimum μ_s is necessary to achieve this time interval?