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We study the pressureless Euler/Euler-Poisson system arising in adhesion particle dynamics. The sticky particles model at the discrete level is employed to obtain global solutions for these systems of equations in spatial dimension one. We consider the case of finite, nonnegative initial Borel measures with finite second-order moment, along with continuous initial velocities of at most quadratic growth and finite energy. We prove the time regularity of the solution and obtain that the velocity satisfies the Oleinik entropy condition, which leads to a result on uniqueness for the pressureless Euler system. (Received February 06, 2009)