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**Mostafa Ghandehari\*** (ghandeha@cse.uta.edu), Civil and Environmental Engineering,  
University of Texas at Arlington, Box 19308, Arlington, TX 76019, and **Sia Ardekani**. *A system  
of delay partial differential equations for traffic flow.*

A system of delay differential equations is given for traffic at an intersection. The continuous two-fluid model of traffic is linearized to obtain approximate densities of intersecting lanes as a function of time, position and initial densities. This will have implications in timing of traffic signals as well as estimation of delays at intersections. (Received July 20, 2006)