

Enhancing Transportation Services to the Elderly, Disabled and Students, Using GPS Technology

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By providing mobility management to transportation providers in the southeastern region of Massachusetts, a more coordinated and efficient transportation delivery system can be established for the elderly, people with lower incomes, students, and people with disabilities and special needs. The project also provides a service learning experience for UMass Dartmouth students.

The new technology that students are deploying enables real-time fleet tracking of vehicles and enhances the mobility management of three local transportation providers: the New Bedford Council on Aging (NBCA), Community Care-A-Vans (CCAV) and the UMass Dartmouth DartVan services. Although current lower costs for fleet tracking software and hardware make implementation feasible, many community providers have little knowledge about their deployment. Through interaction with the providers and their drivers, students are accumulating a list of needs and resource data. In addition, a mapping decision support systems (DSS) is now under construction and will be housed in the UMass Transportation Laboratory and DataCenter. It will contain both tracking capabilities as well as database infrastructure for these three transportation providers. The DSS will be flexible in design so that other providers may join. Through their joint point of contact, the website could facilitate the sharing of transportation resources in the region.



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