

Maturity of Key Technologies Provides More Options for Transit and Paratransit Planners

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Travel needs and patterns within metropolitan regions are becoming increasingly more complex. Community pressure to use limited operations budgets in the most effective and efficient manner is also increasing, even though these requirements often conflict. Ideally, in response, service planners should be able to explore a wide range of service design options, unencumbered by technological constraints. A service planning concept based on a spectrum of possible service designs ranging from pure fixed route to pure demand responsive, with many intermediate options, is described. Intelligent transportation system technologies and scheduling software have matured to the point that this concept is now realistic. How these technologies enable a highly integrated system in which numerous service designs can be operated simultaneously is explained. Likely benefits are presented from several perspectives: planning latitude given by time of day, by change of season, and for efficient vehicle use and adaptation to changes in service area character over the years. Some requirements for reorganization by typical transit agencies are discussed. Potential benefits from better coordination or the merger with outside agencies are outlined. Vendors have been cautious to date and are unlikely to complete the technological integration needed without firm commitments. Thus, a funded research project at an appropriate volunteer site would be required.