

Automobiles USED as Minibuses? Help for Harried Commuters

Reduction of congestion on city streets would be one of the advantages of the CART System, in which automobile drivers are paid to pick up other passengers on a fixed route.



Urban commuting can often be a parade of trials and tribulations. Public transportation, when it is available, is often crowded, uncomfortable, unreliable, and inconvenient. The cost of providing public transit has proved to be an enormous financial burden for local governments caught in the vicious fare-increase and ridership-decline cycle.

Commuting by automobile offers its own problems. Too many automobiles on too few streets and highways cause traffic jams. Cars carrying a single occupant represent the highest priced form of commuting and use an excessive amount of gasoline at a time of petroleum shortages and high prices.

Add the difficulty of finding a parking space, the high price of parking when it can be found, and other assorted problems, and the commuter is left with the need for a transportation program combining some of the best features of public transportation and the private automobile.

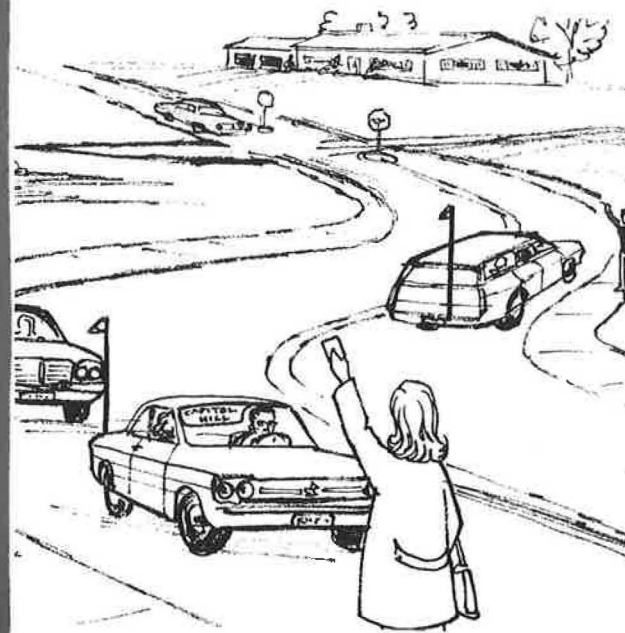
Car pooling is a popular solution, but it is limited by inflexibility, by the need to find people going to approximately the same destination from the same point of origin at the same time. Too many people have too many different time demands to make car pooling a universal answer.

A concept developed by the Mitre Corporation of McLean, Virginia, is based on a simple idea: turn some of these commuter automobiles into minibuses that pick up and discharge passengers on relatively fixed routes.

The system is called Community Auto Rapid Transit System (CARTS). Basically this is how it works, although the process is obviously much more complicated in terms of organization and implementation.

Drivers who want to participate in the CARTS program are first screened for their safety record, police record, and insurability. They are then issued a decal and flag for their cars to identify them as CARTS carriers. The decals are color coded to indicate the vehicle's destination for both home-to-work and work-to-home trips. The drivers then make a 1-pass cruise of a designated pickup route in their neighborhoods or job locations to search for passengers. Passengers flag any vehicle heading for their destinations. Fares are paid directly to the driver but are fixed by a local regulatory agency. A fixed-schedule traditional bus service picks up "straggler" passengers.

Possible benefits derived from a CARTS program could be extensive. Gasoline conservation—perhaps as much as 3 to 4 percent of national consumption, if the system



CARTS drivers are randomly flagged down for passenger pickup on residential arteries. Payment of a fixed fare is made by cash or coupon.

were widely used—is an obvious one. Traffic congestion and air pollution could be reduced. Extra income (as much as \$2,000 per year is estimated) would be available to those drivers participating in CARTS. The riders would benefit from low-cost, convenient, and speedy travel to and from work. Their savings, in terms of parking fees, gas prices, and other costs, would be substantial.

Another beneficiary of CARTS would be the public transit system, typically buses in most American cities. A well-organized CART System would help spread out the peak demand for bus service, which means fewer buses, lower capital expenditures on equipment used only 4 or 5 hours a day under the present system, and fewer bus operators. Mitre officials estimate that the number of buses needed to provide the straggler service could be as few as 10 percent of the number now used for rush-hour

service since fewer repeat departures would be necessary.

By serving as a feeder system for bus and subway service, CARTS allows the public transit facilities to be used more efficiently in other ways as well. Route lengths for buses can be shortened, reducing deadheading time from distant suburbs, providing faster bus turnaround, and increasing bus load factors. With shorter peak-hour commuter routes, buses can provide more frequent and more profitable service within the central business district and close-in suburbs.

The picture is not entirely positive; CARTS has its limitations. CARTS will have to serve a minimum population of 20,000 to have an impact on traffic conditions and to be economically feasible. It has to serve a central business district or other area that is the employment destination of a sufficient number of people.

Where those conditions exist, another worry likely will crop up: the crime potential. When a potential CART System is set up every effort would be made to see that the possibility of crime is kept as low as possible. CARTS drivers would be checked for police records, and identification cards would be issued to both drivers and passengers. Mitre officials point out that the possibility of crime is probably lower in a CARTS type of operation than in current bus and subway systems.

CARTS, despite its apparent advantages, is still a relatively new and untested idea. However, several urban areas in Virginia have expressed an interest in experimenting with the idea, and the state's regulatory agency has indicated that there are no legislative obstacles to its implementation. Several local jurisdictions in California and Washington State are also interested. Mitre officials are currently preparing the details of a feasibility study proposal for the Urban Mass Transportation Administration and are optimistic that CARTS will be in operation on an experimental basis soon.

Information on CARTS may be obtained from Kenneth J. Stetten, Mitre Corporation, Westgate Research Park, McLean, Virginia 22101.

One method of making passenger pickups is by the use of bus-stop lanes. Studies show surprisingly limited interference with bus operations, for the number of stops needed to fill a car is small, as is the percentage of CARTS vehicles in a given area.

