

# Mobility for the Elderly and Handicapped in a Totally Accessible Full-Sized Bus

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This paper describes the planned expansion of limited service for the handicapped to a five-bus system serving the elderly and the handicapped.

Information is perhaps most useful when it assists in decision making. It will therefore be most helpful to each of us to have a program description that does one or more of the following:

1. Tells where there are current successful programs and describes how and why they are successful;
2. Describes, from experience, problems and mistakes to be avoided (including the issues raised); and
3. Informs others about the bases on which decisions of interest were made.

The decision that Metro has made that is apparently of interest is to expand our program of service to those of limited mobility by purchasing five full-sized buses. This decision was based on

1. Our experience in operating a vehicle that served residents of an apartment complex of physically handicapped persons (Center Park),
2. Our perception of special service experiments elsewhere,
3. Current operations practices within Metro, and
4. Available technology.

## BACKGROUND

Metro's service area is King County, Washington. The county covers about 9100 km<sup>2</sup> (3500 miles<sup>2</sup>) and has a population of about 1.2 million people; about 500 000 of these reside in the city of Seattle, 400 000 reside in small to medium-sized urban and suburban areas, and about 300 000 are scattered throughout the rural areas.

Within this service area, Metro is the sole operating authority for the public transportation system. Metro has taken the position that, for the foreseeable future, conventional bus operations are and will be the backbone of this system. We are of course aware that this commitment leaves certain problem areas, the solutions for which may involve other forms of public transportation.

For example, in many instances the conventional bus system cannot be immediately or readily (if at all) adapted to provide an adequate public transportation option to people with limited mobility.

Like many other transit operators, Metro is faced with numerous theoretical alternatives for rendering better service to these people. These alternatives range from making the whole bus system accessible by putting lifts on all buses to establishing a complete and separate special service system, such as a small-bus dial-a-ride system. That neither alternative has been adopted elsewhere to date and that in-between experiments have been small in scale indicate the complex planning and operational issues involved, from the standpoints of both the user and the operator. With numerous untested options available, Metro is taking a conservative position in order to avoid making costly and embarrassing mistakes that would be a disservice to operator and user alike.

At the same time, Metro is keenly aware of the great importance to the elderly and the handicapped of some service as soon as possible. In this connection, Metro was fortunate to have the benefit of a small ongoing successful experience in serving the handicapped in our Center Park operation. Therefore, while we proceed with a full planning effort to develop our service program for all those of limited mobility, we are also developing a program to put five specially equipped full-sized buses into service for the group. These buses are being purchased, pending approval by the Urban Mass Transportation Administration (UMTA), from Eagle International in Texas, though the buses themselves are manufactured in Belgium by Bus and Car, Inc. Vehicle modifications will be made in the United States to specially equip the bus for services to the handicapped.

## DECISIONS

Why did we opt for the big bus ?

1. We do not believe that the small buses are capable at this time to stand up to the demands of public transportation operations.
2. Metro has established large-bus experience. Our operations, maintenance facilities, and procedures are

set up to handle large buses.

3. Most of the successful aspects of operating our Center Park service would not be improved by the operation of large buses. On the other hand, many of our problems with the Center Park operation can be attributed to the small bus.

4. It was our feeling that the capacity of the large bus could be more cost effective than other options.

Why did we select Eagle buses ?

1. The Eagle buses were immediately available from the manufacturer.

2. There were no alternative buses in the United States, nor would there be for at least two years.

3. The Eagle bus had many features important to operations in our service area, such as a small turning radius. Furthermore, the Eagle bus was the most readily adaptable to service for the handicapped, e.g., options for lift installation in the large front door and more interior space for maneuvering wheelchairs.

#### CURRENT STATUS

Much of Metro's confidence in moving forward with buying the Eagle bus came from our successful Center Park experience, from which we could expand and make modifications. Since the inception of this program, however, other new systems have been developed and tested. Because UMTA approval of the bus purchase is still pending, Metro is using this delay to take a closer look at other options or modifications to the Center Park operation. We wish to ensure that, while we cover ourselves from a technological or operational point of view, we use the service plan that maximizes the service potential of the selected technology.