The Ultra PRT system

The Ultra PRT system uses small electric vehicles automatically controlled on a dedicated guideway. Maximum speed is typically 25 mph (40 kph), but this can be increased where appropriate. The vehicle is based on conventional automotive technologies and is battery powered. The vehicle has level entry from the station and can carry wheelchairs, shopping carts or pushchairs.

The innovative design of the PRT system provides many operational, economic, and environmental benefits, including:

- Low capital and operational costs
- Flexible routing
- 24-hour availability if required
- On-demand service, with no transfers
- Greater privacy
- Zero on-site emissions
- Extremely low overall energy use
- Minimal visual and acoustic impacts

Ultra is an automatic on-demand transport system that has been designed to be both cost-effective and environmentally friendly. It is in essence a personal automatic taxi. All stations are off-line, so that vehicles operate non-stop from origin to destination and maintain average speeds well above that of road traffic in an urban environment. Vehicles are available on electronic demand as the passenger arrives at a station. For most passengers there will already be a vehicle waiting, but if there is not the nearest empty vehicle will be called up automatically, so that average waiting times are very short.

The system has completed extensive development funded by the UK Government and BAA, and the application at London’s Heathrow Airport (the world’s first commercial PRT system) is now operational.