opic Sheet No. 2

FIC MANAGEME

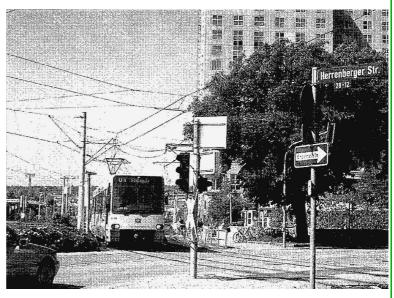
IN THE STREET, trams need other traffic to be managed carefully in order to run smoothly and reliably. At the same time, trams are an ideal complement to traffic management, geared towards restraining traffic for environmental and economic reasons.

1 - Traffic management to assist trams

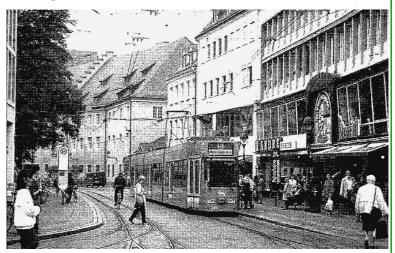
- Trams are very efficient users of road space. The rationale of traffic management is here to prioritise efficient vehicles (trams) over inefficient ones (cars). To introduce a tramway into tight urban environments, traffic management is vital the alternative of demolition to provide off-street routes is no longer acceptable. A variety of measures can be used to benefit trams, some of the most important of which are listed
- Road space can be removed from use by general traffic and given over to the tram. Where space allows, a fully segregated right-of-way can be provided in the street by taking over two traffic lanes. Streets can be closed to through traffic or even pedestrianised, so giving trams priority and improving the environment for pedestrians and cyclists.
- In mixed-traffic situations, tram tracks can be placed in the centre of the carriageway, allowing trams to dominate traffic flows, maintain higher speeds and avoid conflicts with cyclists at the kerb.
- Tram stops can be extended out into the carriageway, making boarding and alighting easier and quicker, and ensuring traffic flows at the tram's speed, to its advantage.
- Traffic signals can be programmed to give priority to trams by means of Selective Vehicle Detection. Lights turn to green exactly when a tram needs them. Also traffic queues can be relocated from narrow sections of road to places where a reserved tram lane can be provided.
- Junctions can be redesigned for tram priority. For example, roundabouts can be replaced with signal-controlled cross-roads, benefiting pedestrians and cyclists.

2 - Trams as a Complement to **Traffic Demand Management**

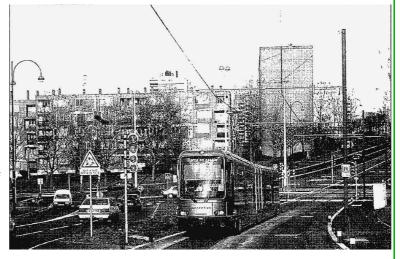
- More and more people today realise that traffic has to be reduced in order to solve pollution, health and ecological problems, and to improve safety, make cities more attractive places to live and restore community and prosperity
- > There are many ways of reducing traffic ('sticks'), which need to be complemented by attractive alternative options ('carrots'). High-quality public transport is one of the main 'carrots', and the most attractive kind is the tram. It is not the only 'carrot' and trams must complement the other elements of a sustainable transport system (e.g. buses, trains, cycling, walking, car pools, planning for reducing the need to travel, local services and home deliveries.
- All the traffic management measures listed in section one can be used as part of a traffic restraint programme. There are others which can be used too, such as lowered speed limits, traffic calming, reduced parking provision and, if implemented carefully, park+ride.
- Cities and towns which have set out to restrain traffic have found economic benefits as well as environmental and social gains. Indeed, the building of a new tramway, linked to traffic restraint measures, can be the catalyst for other improvements to the public realm.



Simple technology gives priority over road vehicles at highway Michael Taplin crossings.



The dominant position of trams in the streets of Freiburg is clear from this view of Bertoldsbrunnen. Michael Taplin



Large traffic roundabouts are now being used in France and this view in Rouen shows how trams are kept free of the traffic flow. Michael Taplin

CHRIS WOOD