

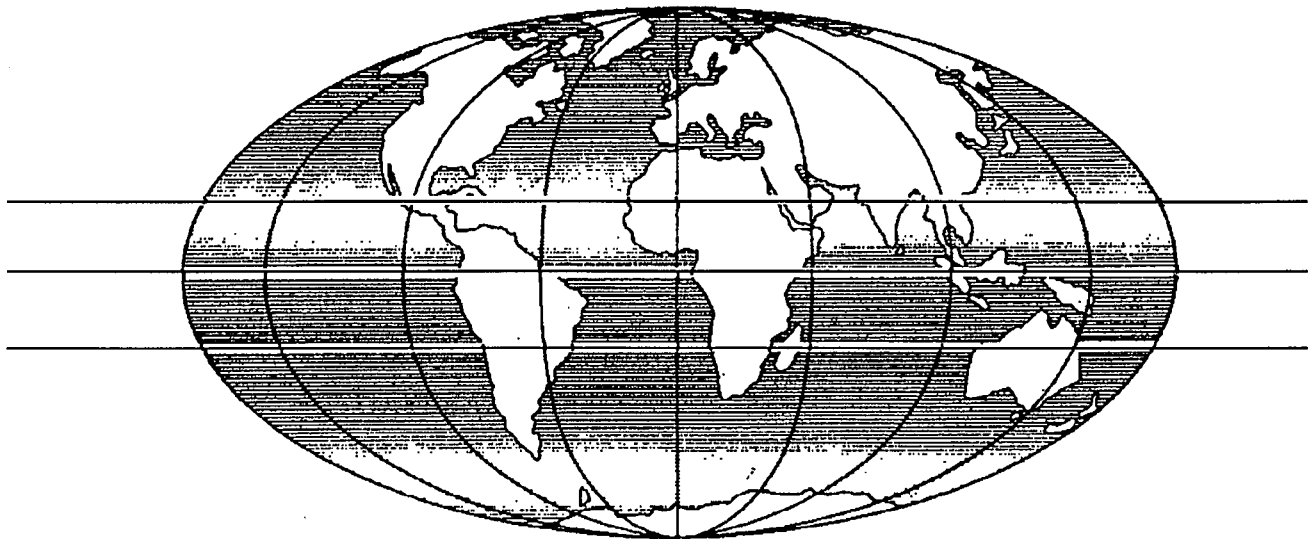


ODA

Reprint

TITLE "Sudden Impact" : Assessment of the initial effects of introducing commmuter omnibus services in Harare, Zimbabwe

by D A C Maunder and T C Mbara



**Overseas Centre
Transport Research Laboratory
Crowthorne Berkshire United Kingdom**

MAUNDER, D A C and MBARA T C (1995). "Sudden Impact": Assessment of the initial effects of introducing commuter omnibus services in Harare, Zimbabwe. In: *The Chartered Institute of Transport in the UK*. Autumn 1995.

Sudden impact?

T C Mbara (University of Zimbabwe) and D A C Maunder (Transport Research Laboratory) assess the initial effects of introducing commuter omnibus services in Harare, Zimbabwe

Over recent years, a major topic of discussion within the bus industry in both the developed and developing worlds has been the desirability or otherwise of regulating the supply and provision of stage bus services. Proponents of deregulation or free competition seek the complete relaxation of controls, arguing that this induces an increase in, and diversity of, the provision of market-oriented services best suited to meet demand characteristics. Opponents of deregulation seek varying levels of control and government involvement, believing market forces may lead to increasing imperfection and imbalances in the provision of services. In addition, opponents of deregulation believe that this leads to a wasteful use of scarce resources with environmental disbenefits.

Recent research findings by a joint team comprising University of Zimbabwe and Transport Research Laboratory personnel during 1993/94 adds to the debate by examining the effects of the government of Zimbabwe's decision in August 1993 to partially deregulate the sector by allowing the introduction of privately operated commuter omnibuses to compete with the existing stage bus operator. Prior to 1993 the stage bus operator, the Zimbabwe United Passenger Company (ZUPCO) enjoyed a monopoly in Harare, the capital of Zimbabwe. Clearly it is too

soon to make a definitive assessment — that is only possible after a much longer time period has evolved. However, an initial assessment has been made by comparing factors and case study material 'pre' and 'post' August 1993.

Background

Historically, the provision of conventional stage bus services in Harare can be divided into four distinct phases: (a) pre-1980; (b) 1980 to mid-1988; (c) mid-1988 to mid-1993; (d) post mid-1993.

Prior to 1980, services were provided under a franchise agreement by a subsidiary of the UK United Transport Overseas Services Company. After independence in 1980, the government of Zimbabwe regarded urban public transport services as a key sector of the economy, and acquired a 51 per cent shareholding in ZUPCO during 1988.

Following government participation, operational performance and service levels improved. However, the financial viability of ZUPCO's Harare Division deteriorated, constraining its ability to renew or expand its fleet during 1992/93 to keep abreast of demand. Finally, in August 1993, the government liberalised the sector by allowing privately-operated commuter omnibuses to compete with ZUPCO.

Despite liberalising the sector, quality controls continue to be enacted by the government to ensure vehicles are road-worthy and passengers are insured when travelling. Operators are at present granted the routes they wish to operate by the Controller of Road Motor Transport, and no quantity restrictions on the number of vehicles per route are enacted.

Most routes operated are to, or from, high population density areas which has meant that emergency taxis (operating as shared taxis) have been displaced and the latter now operate mainly on short routes or intrasuburban routes. Fares for commuter omnibuses are set (maximum) by government.

Results

Following the liberalisation process, there has been a rapid growth in the commuter omnibus fleet as Figure 1 of the report (Maunder, Mbara 1995) illustrates. The fleet grew by 118 per cent between January-September 1994, and by September commuter omnibuses represented 30 per cent of the public transport fleet operating in Harare. Passenger carrying capacity varies greatly (see Figure 2) with the smallest vehicles having a seating capacity of eight passengers and the largest 88 but the latter are capable of transporting 118 passengers.

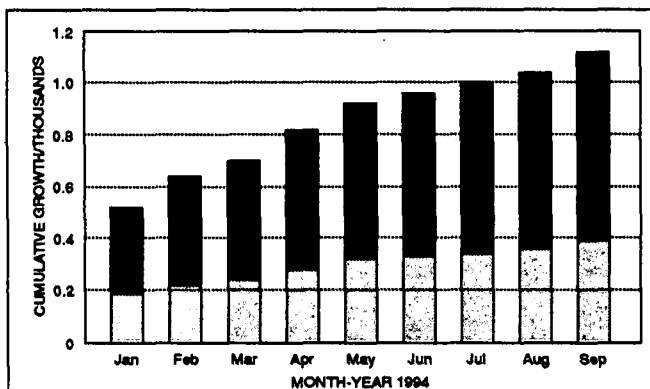


Fig 1: Monthly growth of the commuter omnibus fleet

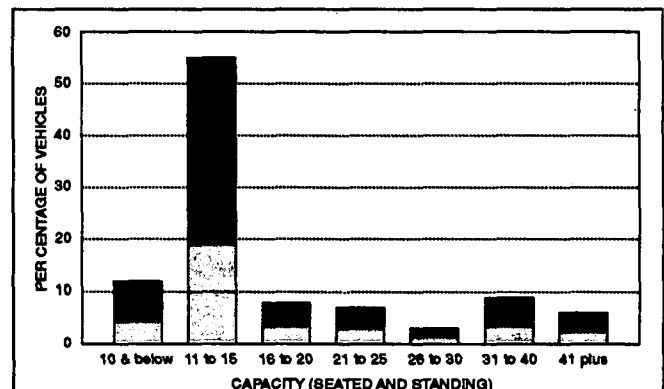


Fig 2: Commuter omnibus passenger carrying capacity



Limited household surveys show that 16 per cent of all trips made by household members are now undertaken by commuter omnibuses. As a consequence, trips by emergency (shared) taxi have halved to nine per cent and by ZUPCO have declined to 20 per cent. Trips on foot at 34

per cent are still the dominant mode in Harare.

Despite the considerable demand for commuter omnibus services, the substantial increase in fleet and passenger carrying capacity has led to a situation where the total public transport passenger capacity



Privately-operated commuter omnibuses are becoming more popular but walking is still more common

has increased faster than the total demand. This has led to a situation where fares may be discounted during the off-peak period but as demand is heavily focused during the peak, fares are at times being set higher than the maximum permitted by government. In addition, in many corridors, ZUPCO appears to have reduced its passenger carrying capacity, which if continued may lead to a lack of modal choice in the long term for passengers.

Within a corridor studied by the team, passengers were monitored in respect of waiting times and household members were interviewed over a 14-month period to identify travel trends. Waiting times have been reduced by 33 per cent from an average 18 to 12 minutes as a result of the introduction of commuter omnibuses, which is a major benefit for all public transport travelling passengers.

Perception of residents and passengers in the corridor highlight improvements in service quality resulting from the introduction of commuter omnibuses with the rating of 'good' increasing from eight to 24 per cent over the July '93-September '94 period and 'very poor' decreasing from 37 to 10 per cent over the same period.

Effects

The introduction of commuter omnibuses in Harare was undertaken to liberalise the sector rather than to totally deregulate the market environment. Operators cannot legally compete on fares as these are officially determined and controlled by government. However, at the moment, the system is flexible and due to a lack of enforcement, commuter omnibus fares have tended to rise at certain times of the day when demand is high. Thus, increased competition has not led to a reduction in fares as many proponents of deregulation have suggested.

Secondly, although operators have generally been granted routes of their choice, the present regulations stipulate >

Commuter omnibuses have become popular

that these should be designated by the Minister of Local Government, Rural and Urban Development. Plans are already underway, however, for local authorities to undertake the responsibility to determine the absolute number of commuter omnibuses as well as the routes to be operated. Currently, the local authority is concerned that as the commuter omnibus fleet increases, so a build-up in traffic congestion will ensue, which will be exacerbated by a lack of off-street parking facilities for commuter omnibuses in the city centre. As a consequence, the local authority may well try to limit the future growth of commuter omnibuses in the capital.

Notwithstanding the point that the market has not been completely deregulated, but liberalised, it is evident from the study that the introduction of commuter omnibuses has substantially improved the level of service in Harare. The fleet expansion and increase in passenger carrying capacity has ensured that passenger waiting times have decreased, and the expansion of routes has benefited passengers who previously were not provided with a service. The redeployment of emergency taxis on shorter routes as well as on intra-suburban routes has meant that these services now penetrate areas which previously were not supplied with a good quality service.

At present, it is difficult to determine the likely effects that commuter omnibuses have had on the conventional bus services provided by ZUPCO. However, taking the scenario of a continued marginal growth in the commuter omnibus fleet, it is likely that the future expansion of the ZUPCO conventional bus fleet and services will be curtailed. This has happened in other cities such as Nairobi where the unprecedented growth in the Matatu fleet has captured at least 50 per cent of the urban stage bus market and so constrained the growth and level of service provided by the conventional bus fleet. It is likely that ZUPCO may operate a smaller route network than of present, allowing them to operate a higher service frequency on the reduced network. With the fare advantage and constrained growth in personal incomes, ZUPCO will continue to have a substantial market for the foreseeable

future. In addition, ZUPCO is likely to provide additional services such as private and company hires to maximise its fleet utilisation throughout the day.

The actual growth of commuter omnibuses has shown that the majority of vehicles operating in Harare are small minibuses with 11 to 15 seats. Despite an improvement in the level of service attributed to commuter omnibuses, it can also be argued that the mushrooming of smaller vehicles results in an overall inefficient use of resources, smaller vehicles being less efficient in terms of cost per passenger carrying capacity than conventional buses. As the city of Harare continues to expand, the future public transport system cannot be sustained by small capacity vehicles alone. Conventional buses as operated by ZUPCO will continue to play a significant role. Commuter omnibuses in Harare operate in a different manner to ZUPCO conventional buses. They provide 'a hail and ride service' and do not operate to a schedule. The combination of these two factors has enabled commuter omnibuses to offer a frequent and convenient service to its patrons.

Congestion

Environmental issues are a subject of worldwide concern. The growth of commuter omnibuses in Harare has contributed to the growth in congestion within the city centre. As there are no official areas for the vehicles to take passengers on board, certain roads are frequently blocked with commuter omnibuses waiting to load with passengers. Clearly, off-street parking sites need to be provided by the local authority at key locations within the city centre for the loading and unloading of commuter omnibus passengers. The attractiveness of some parts of the city and general aesthetic appeal have been adversely affected. Current evidence also shows that commuter omnibuses are more prone to accidents than emergency taxis. In short, the growth of commuter omnibuses may have already had negative impacts on the environment which is likely to deteriorate still further, as the number of commuter omnibuses continues to increase. Hence the present moves by the local authority to try to regulate both routes and fleet growth in the future.

Conclusions

Although 18 months from their introduction is not sufficient time to make any definitive conclusions on the commuter omnibuses, results indicate that:

- ◆ The introduction of commuter omnibuses increased both the supply and capacity of the public transport system in Harare.
- ◆ The level of service improved, as shown by the reduction in passenger waiting times.
- ◆ Generally, passengers perceive the introduction of commuter omnibuses positively and acknowledge the improvement in public transport services which has ensued.
- ◆ The additional routes which were opened have considerably expanded the network.

On the negative side;

- ◆ Following the introduction of commuter omnibuses, fares have tended to rise especially during the busiest times of the day.
- ◆ Along certain corridors conventional services provided by ZUPCO have diminished thereby constraining modal choice and leaving passengers increasingly dependent on commuter omnibus services.
- ◆ Congestion at major boarding locations in the city centre appears to have increased, thus adversely affecting other road users and the environment in general.

It is evident from the study that passengers have benefited from changes that have resulted in an improved service. In the long term, however, the continued increase of commuter omnibuses, if allowed, is likely to erode ZUPCO's revenue and increase congestion and pollution of the urban environment to the detriment of all Harare's residents. Clearly, in the future, a balance will be required on the need to improve the level of public transport service and hence its sustainability on the one hand and the wider community costs on the other. ◆

Mr T C Mbara and Dr D A C Maunder are Fellows of the Chartered Institute of Transport and Mr Mbara is Hon Secretary of the Harare Section.