ABSTRACT: The quality of public transport in Ghana currently leaves much to desired, even by locally known previous standards. Following deregulation and withdrawal of subsidies in the mid-eighties an efficient public bus transport system gave way to congested streets filled by private cars, shared taxis and rickety privately-owned mini-buses (tro-tro). In Accra and Kumasi, Ghana’s foremost cities, taxis, for example, constitute as much as 26 and 50 per cent respectively of vehicular traffic whilst high occupancy buses correspondingly account for only 2.1 and 1.5 per cent of vehicle-trips. The best average ratio of the proportion of vehicle to person-trips for the dominant modes (0.5), is offered by the popular mini-bus (trotro) as against 0.25 for buses and, in Accra, average turnaround time is in excess of 2 hours. The overall consequences of deregulation in Ghana and the implications for sustaining the recently introduced government-sponsored urban bus transit initiative are discussed.

RÉSUMÉ: La qualité du transport public au Ghana laisse beaucoup à désirer actuellement, même par des niveaux précédents connus localement. Suite à la déréglementation et au retrait de subventions au milieu des années quatre-vingts, le système de transport d’autobus public efficace a cédé la place aux rues encombrées, remplies par des voitures particulières, des taxis partagés et des minibus bringuebalants privés (tro-tro). À Accra et Kumasi, les villes principales du Ghana, les taxis, par exemple, constituent respectivement bien 26 et 50 pour cent de la circulation automobile alors que les bus de grande capacité représentent seulement 2,1 et 1,5 pour cent des voyages en véhicule. Le minibus populaire (tro-tro) offre le meilleur rapport moyen de la proportion de véhicules aux voyages de personnes pour les modes dominants (0,5), contre 0,25 pour les bus et, à Accra, le temps moyen de rotation est de plus de 2 heures. Les conséquences globales de la déréglementation au Ghana et les implications pour soutenir l’initiative, récemment présentée et sponsorisée par le gouvernement, de transport par autobus urbain font l’objet de discussions.
1 INTRODUCTION

A functional transport system is an essential prerequisite for sustaining the socio-economic foundations and other needs of urban communities. This is even more so in modern or rapidly expanding cities where most people need to travel in order to reach places of work or education, to purchase goods and services and to take part in a wide variety of social and leisure activities outside their homes (IHT 1997).

In Ghana, transportation is almost exclusively by road as this sector accounts for about 98 per cent of all transport of goods and services (MRT 1999). This notwithstanding, vehicle ownership levels remain low at about 10 automobiles per 1000 population (MOTC 1996) and most city dwellers have little or no alternative but to rely on public transport, cycling or walking to meet their transport needs.

From the middle to late seventies, the Omnibus Services Authority (OSA), a quasi-government agency ran a scheduled and efficient public bus transport service in all the major cities of Ghana. By the early eighties, however, this service, which was highly subsidized by government, had almost ground to a halt as poor management and national economic decline led to drastic cutbacks of government support. Subsequently, the City Express Service, another government-ran service was set-up to provide affordable inter-city and urban transport. This latter service was founded on a pool of tata buses imported from India under a concessionary arrangement with the Ghana Government. By the mid-eighties the City Express Service had also all but collapsed.

Following the adoption of the World Bank-sponsored Structural Adjustment Programme (SAP) in the mid-eighties government deregulated the provision of transport services to enable private sector participation. The expectation was that the resulting competition will lead to a broader range of choice of service types and quality and more competitive, hopefully affordable, fares. The immediate result was that taxis and mini-buses (tro-tro) easily became the most dominant modes of public transport and the quality and reliability of service improved but only in the short-term and subsequently dipped.

Towards the end of the year 2002 the government introduced yet another bus transport service provided by the newly formed Metro Transit Authority (MTA) in response to public concerns about increasing traffic congestion and transport fares following hikes in the ex-pump price of petroleum products. The objective of this paper is to review the overall impact of the policy of deregulation on urban traffic and transport and the challenges this poses to the sustainability of the latest government effort to re-establish a functional and affordable public transport service.

2 DEREGULATION AND THE STATUS OF URBAN TRAFFIC AND TRANSPORT

2.1 Deregulation of the transport sector

The thrust of the policy on deregulation was to get government out of the business of transport service provision and to concentrate on the provision of the physical infrastructure like roads and terminals whilst strengthening its capacity to play the role of regulator of service providers (MOTC 1996). Thus, mainly through donor support projects were designed (e.g. Transport Rehabilitation Programmes I & II and Urban Transport Project) the government invested billions of dollars in the rehabilitation of run-down road infrastructure, building of new facilities and capacity building within the road agencies.

In the process, however, it appeared that the focus on what the desired long-term transport modal mix ought to have been, if any, was lost as infrastructure development merely strove to provide for ever-increasing demand for road space by a vehicle fleet whose growth and character were completely left in the hands of the private sector.

On their part private transport service providers, operating as individual owners and operators and without access to capital could only afford to provide taxi or minibus services. This inevitably led to severe congestion on critical parts of the urban road network, which further dictated the introduction of even more taxis and other smaller vehicles that could manoeuvre through the congested roads by new service providers.

Without any cap on the number of new entrants or other restrictions of the operational environment the number taxis and other small passenger vehicles continue to grow and create even more severe congestion. The absence of planning for long-term travel demand management, based on the development of more efficient transport modes and coordination of such a plan with the programme of infrastructure provision and upgrading has been, probably, the biggest flaw in carrying out the policy of deregulation. Clearly, if government had remained an active and consistent provider of bus services throughout the years it would have been
easier, for example, to plan for the provision of bus-only lanes and other priority mechanisms to guarantee sustainability of the mass transport service. Buses provide, even as the general level of traffic and congestion grew.

2.2 Composition of traffic

Since 1988 to 2000 overall traffic levels have increased substantially in all urban areas, particularly, in the foremost cities of Accra and Kumasi. In Accra, for example, the number of vehicles registered has risen six-fold from just under 42000 to 250000 (MOTC 1995, DVLA, 2003). Similarly, the composition of traffic over the same period has also seen a drastic change. As can be seen from Table 1, in the years 1988, 1995, 1996 and 2000, when the relevant data was available, although private cars still have the single largest share of vehicle-trips in Accra, the changes have consistently shifted from private cars in favor of taxis and minibuses (tro-tro).

Table 1. Traffic composition trends by mode of transport in Accra

<table>
<thead>
<tr>
<th>Vehicle-type</th>
<th>Share of vehicle-trips in given year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cars</td>
<td>61</td>
</tr>
<tr>
<td>Taxis</td>
<td>13.5</td>
</tr>
<tr>
<td>Mini-buses</td>
<td>7.9</td>
</tr>
<tr>
<td>Buses</td>
<td>8.9</td>
</tr>
</tbody>
</table>


Thus, whereas in 1988 private cars accounted for an average of 61 per cent of vehicle-trips, by the year 2000 this share had shrunk to 35 per cent. Meanwhile, over the same period taxis and minibuses had doubled and more than tripled their shares respectively. Clearly, the effect of deregulation, which virtually transferred service provision from government agencies to the private sector is evident in these changes.

It is noteworthy that the share for buses (high occupancy) dipped in the intervening period but appreciated in the year 2000.

Perhaps this is a reflection of how the remnants of the para-statal bus service providers initially struggled to cope with competition and the arrival later of a few privately-owned buses.

2.3 Person-trips delivered by the modes

Since transport is about moving people and goods, a key indicator of efficiency of the various modes is the amount of person-trips they account for relative to their share of vehicle-trips or amount of road space occupied. In this connection, it is significant to observe, though hardly surprising, that for having the largest share of vehicle-trips (37.2%) in Accra in 1996 private cars could only account for 13.1 per cent of person-trips. The corresponding figures for taxis, minibuses and buses were 20.4 and 11%, 23.6 and 53.1%, and 3.3 and 15.6% respectively. Thus if the ratio of the proportion of vehicle-trips to person trips could be used as the yardstick of performance, the smaller the figure the better would the performance, and the private car would be the most inefficient by far. In addition, among the public transport modes the bus would be 200% and 800% more efficient than the minibus and taxi respectively.

Table 2. Performance characteristics of the various modes in Kumasi in 1996

<table>
<thead>
<tr>
<th>Vehicle-type</th>
<th>Share (%) of</th>
<th>Ratio of proportion of vehicle-to person-trips</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vehicle-trips</td>
<td>Person-trips</td>
</tr>
<tr>
<td>Cars</td>
<td>14.5</td>
<td>6.2</td>
</tr>
<tr>
<td>Taxis</td>
<td>49.6</td>
<td>32.4</td>
</tr>
<tr>
<td>Mini-buses</td>
<td>23.2</td>
<td>48.9</td>
</tr>
<tr>
<td>Buses</td>
<td>1.6</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Incidentally, by the same performance indicator (i.e. ratio of proportion of vehicle- to person-trips) the private cars and taxis in Kumasi (see Table 2) appear more productive than their counterparts in Accra, whilst the reverse is true for mini-buses and buses. Overall, however, the superiority of the large occupancy bus in moving people en masse in both cities is without question. Considering that this happens in congested traffic conditions in which the smaller vehicles have a crucial advantage in
maneuverability, it goes without saying that the performance of the bus could be further enhanced in a dramatic way by the introduction of various priority measures in its favor.

3. THE METRO BUS TRANSIT INITIATIVE

This initiative was launched with an initial pool of about 100 used-buses imported from Italy. The objective was, supposedly, to bring instant relief to travelers within the urban areas. The buses do not run according to any schedule and operate along the same routes as other public transport modes. The main problem of the particular type of bus in use is that there are only a few seats and most passengers have to stand. Considering that most people travel the entire length of the routes (MOTC 1995) this could prove a handicap in favor of the minibuses and taxis in which there are seats for everyone.

In a way this latter initiative, aimed at promoting the use of large occupancy buses for public transport at reasonably affordable fares seems to share a lot in common with the immediate past effort which launched the City Express Services. Both projects had strong political motivation, sponsored by a democratically elected civilian government and made possible through a bilateral concessionary agreement with another country for the supply of the initial rolling stock.

Perhaps, the only difference between the two is that the City Express buses were new whilst the ones being imported now from Italy are used, some of them in fairly poor condition. The crucial commonality, however, is that the ownership and management of both City Express Services and the Metro Mass Transit Ltd. are in the hands of a quasi-government institution.

Given these similarities, one of the first challenges of the metro bus transit initiative, therefore, is how to tackle some of the problems that accounted for the failure of the previous schemes that went before it, i.e. the omni-bus and city express services. It is said that, like most publicly-ran businesses, poor management, revenue leakage and operational losses, and poor worker morale were the main reasons for the virtual collapse of both the Omni-bus and City Express Services (Amstrong-Wright 1993).

These issues have to be tackled to enable the enterprise succeed. It appears that a better management/ownership option would have been for the Government to transfer all such rights to a private-owned group of entrepreneurs. To maintain an influence and ensure that the service performs a social role by catering for the needs of the urban poor the Government could also go into partnerships.

It might be argued that some subsidies will still be required for the service, whatever the ownership, however, subsidies need not be direct handouts for the payment of expenses, for example. Subsidies can be offered in terms of ensuring that buses gain priority access through congested areas, that way operational costs can be manageable to a large extent.

The biggest challenge to the success of the latest bus transport service lies in the consequences and nature of the deregulation of transport service provision. For example, without an effective strategy, through traffic or licensing restraints, for example, to control the number of small vehicles, from private car use to taxis and mini-buses, it will be difficult to see how congestion levels on the road network in the cities can be reduced in any significant manner. There just has to be a limit on the number of taxis that can receive licenses to operate.

The manner of their operation too can be controlled, such that newcomers will be permitted to operate only on call and in a more regulated regime. Whilst the shared basis on which most taxis operate may be dictated by the economics of operation, it is definitely not in the interest of passengers. For those who are already licensed, immediate impact may be achievable if individual taxi and mini-bus owners can be encouraged to give-up their smaller modes and pool resources to float high occupancy buses. This can be done with some credit guarantees by the Government.

Fortunately, it appears that public goodwill for pursuing aggressive policies to change the modal mix of urban transport in favor of higher occupancy buses is substantial. In a survey conducted in 1995 (MOTC, 1995), when asked what intervention was required in terms of service, in order to improve urban transport in general, 77.2 percent of respondents asked for more buses that can run to a fixed and reliable schedule.

In the same survey the overwhelming majority of respondents who used public transport (taxis and mini-buses) said their most important consideration for mode choice was economy and availability, with speed coming in a distant second. Speed was most critical for those using taxi services, which were generally about three times more expensive than the minibuses. For minibus users, probably, the most likely to switch to bus services, the consideration is undoubtedly that of affordability.

Thus if the bus service can offer reasonably cheaper fares as intended there is a very good chance
that the majority of urban commuters will patronize it. One opportunity that exists here for a public bus service is that the private owners, instead of competing on fares and quality of service have constituted themselves into “trades unions”, whose operation are more like cartels, since they fix fares for services provided by their members. This is not in the interest of the traveling public.

Clearly, patronage will be even better when the buses can compete on journey times as well. Average peak-hour turnaround times for taxis and minibuses in Accra, in particular, exceed two hours along certain critical corridors. The situation could be worse during off-peak hours as vehicles spend a lot of time at terminals before obtaining their full loads.

The challenge for improving journey times, for buses is how to address one of the serious oversights in the implementation of deregulation namely, the lack of coordination of infrastructure provision with planning for the needs of more efficient high occupancy public transport modes like the bus.

Thus whereas the road infrastructure in the cities have been extensively developed over the last fifteen years or so, most of them are not in a condition that can facilitate to productive deployment of buses. For example, there are no bus lay-bys and carriageways are often such that no provision can easily be made for bus lanes. The result is that the roads remain clogged up with traffic and there is little or no scope for granting special access to buses, although that is most desirable in the circumstances.

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4. CONCLUSION

This study has reviewed the situation of urban traffic and transport in Ghana against the background of deregulation of transport service provision in the mid-eighties. The initial experience of the latest bus service initiative in the form of the Metro Bus Transit has been examined and it is argued that the biggest impediments to sustainability of the initiative lies in addressing some of the consequences of deregulation, namely, severe congestion, brought about by the proliferation of taxis and minibuses and the absence of facilities to encourage the use of high occupancy buses. It has been observed that potential patronage for a scheduled bus service is substantial and exists to be exploited by a properly managed service provider.