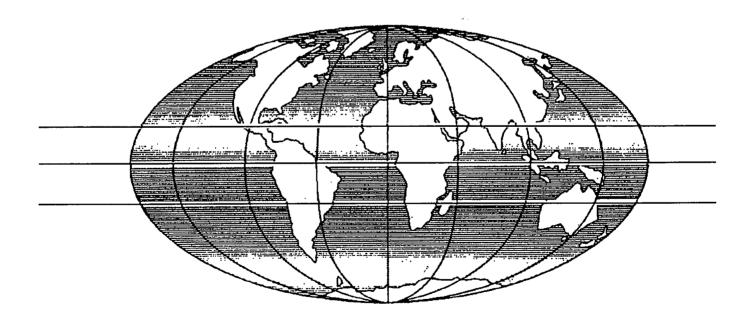




# TITLE Public transport in Ghanaian cities - a case of union power

by PR Fouracre, EA Kwakye, JN Okyere and DT Silcock



Overseas Centre
Transport Research Laboratory
Crowthorne Berkshire United Kingdom

PA 3196/96 FOURACRE, PR, EA KWAKYE, JN OKYERE AND DT SILCOCK (1994). Public transport in Ghanaian cities - a case of union power. Transport Reviews, 1994 Vol. *14,No 1,* 45 - 61.

# Public transport in Ghanaian cities—a case of union power

By P. R. FOURACRE

Transport Research Laboratory, Old Wokingham Road, Crowthorne, Berkshire RG11 6AU, U.K.

E. A. KWAKYE

Planning Department, Ministry of Transport and Communications, Ghana

J. N. OKYERE Comptran, Ghana

and D. T. SILCOCK

Ross Silcock Partnership, U.K.

The performance and development of urban public transport in Ghana are examined and an explanation is sought of the role of unions and how the attempts of Government to develop its own public transport organization have failed. The public transport development options that the Government is now considering attempt to make the best use of the unions' capabilities, while reducing dependence on union powers. The trotros of Ghana have been the mainstay of Ghana's public transport system for many years, despite concerted attempts by successive Governments to develop and maintain publicly organized stage-bus services. A characteristic of this sector is the very powerful influence of the Owner and Driver Unions. Their power is exerted through control of the terminals from which services are operated. Through their control of the terminals, the Unions have effective quantity control of the public transport sector and hence control of service quality. Under its Economic Recovery Programme (ERP) the Government of Ghana is considering divesting itself of its public investment in bus operations. Attempts to use the State-owned transport companies to provide a viable alternative to the trotros have foundered in the usual pitfalls of state ownership. At stake is how to relinquish completely the responsibility of running bus services to the private sector, without the users suffering the imposition of the unions' restrictive practices.

#### 1. Introduction

The famed trotros of Ghana have been the mainstay of Ghana's public transport system for many years, despite concerted attempts by successive Governments to develop and maintain publicly organized stage-bus services. Trotros are based on a range of vehicle types, but have commonality in their purpose and mode of operation. In more recent times the trotros have been augmented by purpose-built mini-buses (following the ban on their use for long distance journeys) and saloon-cars used as shared taxis. This 'intermediate' sector of public transport accounts for the majority of vehicular trips in the major cities.

All trotros, including mini-buses and shared taxis, are owned by the private sector. There are no market entry controls but a characteristic of this sector is the very powerful influence of the Owner and Driver Unions. Some of the unions have derived

0144-1647/94 \$10.00 © 1994 Taylor & Francis Ltd.

their power through the patronage of earlier Governments which encouraged their organization and development. Their power is exerted through control of the terminals from which services are operated. Without access to a terminal, independent operators have limited opportunities to generate custom. Through their control of the terminals (which are referred to as lorry parks), the unions have effective quantity control of the public transport sector and hence control of service quality. For the most part service to the user is poor.

Since the financial rewards inherent in the control of lorry parks is high, rivalries have developed between and even within unions. Monopoly access to its lorry parks is jealously guarded by each union branch. The situation is partially analogous to the rivalries between airlines for limited landing slots at an airport. These disputes have had a further restrictive impact on the sorts of service which can be provided to users.

Under its Economic Recovery Programme (ERP) the Government of Ghana is considering divesting itself of its public investment in bus operations. Attempts to use the State-owned transport companies to provide a viable alternative to the trotros have foundered in the usual pitfalls of state ownership. They are characterized by poor productivity resulting in poor financial returns. The policy issue at stake is how to relinquish completely the responsibility of running bus services to the private sector, without the users suffering the imposition of the unions' restrictive practices.

This paper examines the performance and development of urban public transport in Ghana; it seeks to explain the role of unions and how the attempts of Government to develop its own public transport organization have failed. It also sets out the public transport development options which the Government is now considering, in an attempt to make the best use of the unions' capabilities, while reducing dependence on union powers.

# 2. Demand for transport

# 2.1. Growth in urbanization

The last population census of Ghana in 1984 estimated that the national population ws 12·3 million. Thus between 1970 and 1984 the national population grew at a rate of 2·6% per annum. Of the total population, about 30% lived in urban communities, where recorded growth rates were generally higher than the national average. As shown in table 1, about 17% of the 1984 total population lived in the six major towns, where growth rates ranged between 2·5 and 3·4% per annum.

# 2.2. Vehicle ownership

The actual size of the motor vehicle fleet is not precisely known. The Vehicle Examination and Licensing Department of the Ministry of Transport and Communications (MOTC) publishes half-yearly data on vehicles presented for the roadworthiness test which all vehicles are required, by law, to undergo every six months. It is known that some private vehicle owners do not present their vehicles for the test. The rate of evasion is estimated by MOTC to be around 20%. Many Government-owned registered vehicles are not examined after first registration; the size of the fleet of government-owned vehicles was estimated to be 10 000 in 1991. Table 2 shows the growth in the mean number of roadworthy vehicles (excluding those not presented for examination) between 1984 and 1991.

Available statistics from MOTC show that the fleet size had remained largely static between 1979 and 1983, with some years showing marginal decline. However, the

Table 1. Urban population growth in the major cities.

Town	Growth rate 1970–1984 (% pa)	Population (millions)	
		1984	1992
Accra	3.3	1.188	1.540
Kumasi	2.5	0.402	0.490
Tema	3.3	0.182	0.237
Tamale	3.4	0.136	0.178
Takoradi	3.0	0.125	0-158
Amasaman	3.3	0.028	0.037
National	2.6	12.30	15-10

Source: 1984 Population Census of Ghana, Statistical Service of Ghana and projections based on continuing 1970-84 trends.

Table 2. Growth in vehicle population.

	Vehicles (thousands)		Growth rate 1984–1991
Vehicle type	1984	1991	(% pa)
Motor cycles	2.3	5.3	12.7
Cars/taxis	20.2	70.5	19.5
Buses	5.7	23.0	22-1
Trucks	2.7	10-1	20.7
Tractors	0.8	0.4	- 0.9
Total	31.7	109-4	19-4

Source: Ministry of Transport and Communications, Vehicle Examination and Licensing Department, February 1992.

Table 3. Vehicles in main urban centres, 1991.

Town	Vehicles (thousands)	Growth rate 1987–1991 (% pa)	Vehicles per 1000 pop.	Growth rate 1987–1991 (% pa)
Accra	53.9	10-1	36-2	6.5
Kumasi	18-5	10-3	38.7	7.6
Tema	9-1	12.6	39-9	9.0
Takoradi	5.5	14.6	35.9	8.8
Tamale	2.4	2.6	13.9	- 1.0
National	109-4	10.8	7.4	7.7

Source: Ministry of Transport and Communications, Vehicle Examination and Licensing Department.

fleet size increased remarkably between 1984 and 1991. The high growth in vehicle numbers between 1984 and 1991 seems to coincide with the ERP. The growth in vehicle numbers has clearly been in excess of population growth over the same period. On a national basis the number of vehicles per thousand head of population has increased between 1984 and 1991 by 16.4% per annum, from 2.6 to 7.4. The rate of growth has slowed in recent years as shown in table 3, which also shows that the majority of vehicles (over 80% in 1991) are concentrated in the main urban centres.

Estimates of total expenditure on public transport in Accra are shown in table 4. These estimates indicate a range of between c110-180 millions per day (US \$0.25-0.4 million). Individual households are estimated to be spending between c430 and c700 per day (US \$1 and US \$1.6) on public transport. Earlier estimates by Howe and Barwell (1987) indicate that urban households spend about 9% of their total monthly expenditures on transport. The Accra Urban Transport Options Study prepared by Armstrong-Wright (1989) indicated that public transport users spend between 7 and 15% of their income on transport. The picture is not clear, however; in a small survey undertaken by Comptran (1992), individual users of public transport were spending, on average, around c2000 per week on buses and taxis. This represents around 40% of typical average income. We have no evidence to show that lower income households spend proportionately more of their incomes on transport than high income households. Evidence from other Third World cities would support this view, however, and evidence from Kumasi indicates that low-income groups travel longer distances than high-income groups.

#### 3. Institutional framework

MOTC has responsibility for the regulation and control of the public transport sector through its Planning and Implementation Division. Until recently the main task was to set fares, there being no quantity control or route licensing. The Vehicle Examinations and Licensing Department (VELD), a non-enterprise arm of MOTC, is responsible for vehicle quality control. There are three State-owned bus enterprises which come within the ambit of the MOTC. They are responsible for their investment programmes and operating budgets.

While not currently involved directly in the urban transport sector, the Ministry of Local Government (MLG) has been given responsibility (1990) by the National Economic Review Committee to set up pilot municipal bus services in the main cities of Accra, Kumasi and Takoradi. Negotiations are well advanced to acquire 50 vehicles for each city. There is no evidence of any preliminary planning or preparation for maintaining or operating these vehicles, though the view seems to hold that each municipal assembly will establish an autonomous transport operating body.

The MLG is also responsible for the Municipal and District Assemblies which themselves own the public transport terminals. Management of these terminals has been devolved to the main transport union, GPRTU, through the issuance of a Government Circular by MLG.

It is evident that within the central government and local administrations, there is no clear responsibility for urban transport planning and development. This is becoming an increasingly serious omission, as the cities grow and the problems of travel become more onerous.

Quite clearly, urban transport development is an urban issue being an integral part of general urban planning and development. Many cities throughout the world

Table 4. Estimated expenditure on public transport in Accra, 1991.

	Av. monthly cost c000	Av. fare per passenger, c	Total daily expenditure, c million
Taxi	220–380	125–215	65–110
Trotro	280–430	35–55	47–73
All vehicles	; 	_	112–183

Source: Comptran surveys of public transport, and study estimates.

Table 5. Public transport vehicles in main urban centres, 1991.

				PSVs per 10000 pop	
City	Taxis	Light buses	Heavy buses	Taxis	Buses
Accra	10 279	8745	709	69	63
Kumasi	4248	3536	519	89	85
Tema	1368	1373	234	60	64
Takoradi	1115	1422	93	72	98
Tamale	211	212	29	12	14
National	21 116	20911	2099	14	16

Source: Ministry of Transport and Communications, Vehicle Examination and Licensing Department.

Table 6. Performance of OSA and CES, 1991.

	OSA	CES
Fleet size Roadworthy buses	198 145	194 112
Staff	1324	736
Annual km (millions) Annual pax. (millions)	9·104 16·1	12·99 19·8
Annual revenue (c millions) Annual cost (c millions)	2023 3356	1099 1015†
Staff per roadworthy bus Annual km per bus (000)	9·1 63	6·6 116

Source: Transport and Communications Bulletin, July-December, 1990, Ministry of Transport and Communications.

† No provision for depreciation included.

Table 7. Estimated performance of private sector of Accra public transport.

	Taxis	Trotro	King of Kings
Vehicle fleet in use	6500	3200	30
Daily km. per vehicle	100	150	180
Daily pax. per vehicle	80	380	1700
Daily vehicle cost, c	11 000	13 000	Not available
Daily vehicle revenue, c	14 000	19 000	85 000

Source: Comptran surveys and study estimates based on comparative data from other third world cities. Vehicle cost data excludes depreciation.

organize their own transport policy and development, usually with a measure of supervision by the relevant Urban Affairs Ministry, who control the budget. While this approach provides the best hope for integrated urban planning, it depends critically for success on two components: the creation of a professional cadre of urban transport planners (in both local and central government administrations) which can command status and the availability of staff who are qualified to establish and maintain the cadre. Neither of these two requirements presently exist in Ghana, and are unlikely to exist for some time.

Some urban transport expertise does lie with the MOTC, though it is not given expression in a formalized manner. Expertise also lies with the private sector (i.e. transport planning consultants) and academia, though this expertise can only be channelled effectively by a well-informed Government client. In the short term the best way to organize urban transport planning within Ghana would seem to be to build on the experience of MOTC, and using the private sector, as and when required, through the offices of MOTC.

# 4. Urban public transport

The numbers of public transport vehicles located in the major cities of Ghana are shown in table 5. However, not all of these vehicles are for urban use. Estimates for Accra suggest that about 90% of taxis and 50% of buses are available for use in the city. The comparative proportions for the smaller cities are likely to be smaller. The only recent published corroborative evidence comes from two sources: the Ofosu-Dorte energy report (1992), which estimates the Accra urban trotro fleet at 400 and that of Kumasi at 700; the TDP Consult parking study for Accra (1991), which identified almost 7000 public transport vehicles of all types, and on all routes, being operated from the terminals. Ofosu-Dorte also noted that in 1989 a restriction was imposed on all minibuses (up to 23 seats), limiting their operations to routes of 50 km and below; as a result an estimated 10 800 minibuses were switched to urban operations.

Taxis have a legal seating capacity of four passengers, while the trotros and minibus seating capacity range in size from 12 to 30 seats. (In this paper the terms minibus, light bus and trotro are used synonymously.) On this basis the available seats on offer in Accra are about 720 per 10 000 population. This would seem high, but must be offset against a daily vehicle output which is probably quite low (under 150 km).

Public transport accounts for just over 80% of total motorized trips in Accra (from ADTMIS, De Leuw Cather 1989). The majority of these trips are by trotros and minibuses (48%), with taxis and big buses carrying 23 and 11% respectively. All the taxis and small buses are privately operated while the large buses are a mix of private. own-account and state-owned vehicles.

## 4.1. State-owned operators

There are three state-owned bus companies: State Transport Corporation (STC), Omnibus Services Authority (OSA) and City Express Service (CES). Of the three the STC has no mandate to provide urban bus services; STC is responsible for providing inter-urban services, principally between regional capitals, but also serving other large urban centres as well as cities in neighbouring countries. OSA was constituted in 1969, under the Ministry of Local Government, to provide services previously provided by municipalities. In 1972 OSA was further empowered to operate in any other areas

prescribed by the Commissioner for Local Government. Currently OSA operates mainly country-wide urban-rural services. CES was formed in 1981, as a special Department within the Ministry of Transport and Communications, following delivery of 600 new Tata buses. They also operate urban-rural services and, like OSA, make only a very small contribution to urban transport. (Urban mileage for CES in January, 1992, was less than 10% of total.)

Table 6 shows the scale of operations of OSA and CES. With an increasing commitment to profitability both companies have been retrenching employees and concentrating activities on urban-rural routes. There is some evidence that this approach is working; an earlier study by TecnEcon (1987) indicates much worse staffing levels of 14 and 27 per available vehicle for CES and OSA respectively. Furthermore, the current annual kilometrage output of CES buses is high by any standards.

# 4.2. Own-account buses

Both private companies and Government offices operate their own buses, with the main purpose being to provide easy commuting access for their employees. During working hours these vehicles are unlikely to be used. There is no recently recorded estimate of numbers in use; the TecnEcon study in 1987 indicated that as many as 30% of buses in Ghana would constitute own-account vehicles, but that their utilization is much lower than other big buses. A survey which they conducted of 25 organizations showed that most buses are used for between 50–130 km per day over a five day week. The Bus Operations Survey (LTI 1989) noted that a small number of organizations, such as the Volta River Authority and National Lotteries, own fleets of more than ten vehicles. Government offices are now expected to divest themselves of own-account buses.

The TecnEcon study noted that the cost of use of own-account buses is higher than that which would be charged for using taxis to provide a service. Employees are charged no more than a nominal fare and many organizations look upon the service as essential to ensure that staff attend work on time.

#### 4.3. Private sector operators

Within this sector there are three main groups: the owner-drivers of taxis and minibuses; the entrepreneurs who hire out taxis and minibuses to drivers; the entrepreneurs who employ drivers. There is only one company, King of Kings, in the latter category. The TecnEcon study reported that as many as 60% of the main transport union's membership were owner-drivers; more recently the smaller Co-operative Union has indicated that of the 1476 vehicles under their control less than a quarter are owned by members.

King of Kings operate a fleet of about 30 roadworthy vehicles in Accra. The vehicles are large capacity buses, which are distributed over 10 urban routes. Costs are minimized by using rehabilitated vehicles, purchased mainly as write-offs from OSA, and keeping tight control over staffing levels. One crew of two staff is used to operate a bus throughout its 14-hour working day.

The majority of urban taxis are operated on fixed routes which have developed over time under the control of the transport unions and co-operatives who regulate access to the route terminals. Vehicles are 'held' at terminals and not released until they are full. This practice is specified by the union constitution and violations of the queueing principle are a serious offence. (The TDP Consult report mentions, however, that some

union officials use their privileged position to 'jump' the strict queueing principle. Some vehicles are also sent out empty, or 'wa-wa', in order to service *en-route* passengers, but few drivers would volunteer for this duty.) This system ensures full loads for each driver, but relies for its success (to the drivers) on the absence of competing groups.

Minibuses are also operated on fixed routes within the urban centres by the same transport unions and co-operatives. The same loading principles are also enforced. Terminals are usually shared by both taxis and minibuses. Both trotro and taxi routes are mostly radial, focusing on groups of terminals; for example in Accra Central and at Nkrumah Circle in Accra. For this reason, cross city travel usually entails one or more interchanges; an earlier study in Kumasi indicated that 42% of workers using public transport made one interchange and 27% made two interchanges.

Table 7 shows some estimates of the performance of the private sector in Accra's urban transport. Evidently it is profitable to operate taxis and trotros, though proper provision for depreciation would account for most of this profit. Many vehicles in urban use are very aged and have effectively been written off. New vehicles can be more profitably employed on urban-rural routes, being withdrawn to urban services towards the end of their lives.

Average fares charged for use of taxis are significantly higher than those charged on buses (of all types and operators). This is reflected in the average income levels of the users of each mode. There is no quantitative evidence to demonstrate this, but Ofosu-Dorte (1992) notes from travel surveys which he undertook in Accra that minibuses and buses accounted for 80%, or more, of motorized work trips from the lower income areas in his sample. Furthermore, taxis are used to provide a higher level of public transport services to high income areas.

# 4.4. Regulation and control

No bus route licensing system is operated in Ghana. However, legislation exists, under the Omnibus Services Decree, 1972, which provides for such a system, but has never been implemented. The legislation provides for the establishment of the Omnibus Licensing Authority which can decide routes and parking places (covering both public and private operators), as well as fares to be paid by passengers. As the Authority has not been established, road transport regulations currently in force are based on the Road Traffic Ordinance, 1952 and subsequent amendments. Under this arrangement, and until recently, fare levels have been prescribed by the MOTC. The Ministry has only recently de-controlled fares, although few in the industry, whether parastatals or unions, have been officially notified. Some fear has been expressed that such a move would create a chaotic and cut-throat situation, though others have welcomed the opportunity to increase fares since cost of inputs is rising. There has been no Government imposed quantity control of public transport. Quality control takes the form of the six-monthly vehicle inspection.

A number of transport unions and co-operatives exert strong control over the organization and operation of the private sector; though there is no evidence to suggest that they restrict access to the market, their control of route terminals (and who can operate from the terminals) is a form of quantity control which can be, and often is, imposed in the interests of their members. The three main organizations representing private sector owners and drivers are the Ghana Private Road Transport Union (GPRTU), the Ghana Co-operative Transport Association (GCTA), the Progressive Transport Owners Association (PROTOA) and the Ghana National Transport Owners

Association (GNTOA). Drivers and owners become members on payment of a membership fee, and register with one of the 'locals', which controls a terminal and the organization of its routes. A vehicle registration fee is levied according to local rules, and other fees, dues and taxes are raised as appropriate. In Accra, for example, these include a booking fee, welfare dues, Accra Municipal Assembly (AMA) tolls (which are paid only at a few terminals), daily income tax (collected on behalf of the Internal Revenue Service), and fines. Non-membership loading fees are levied on 'floating' drivers who do not belong to the union or the local, but who wish to make use of the terminal. These fees are often prohibitive and, as such, a strong incentive to join a union. The fact that the unions collect income tax on behalf of the Government is indicative of their historic closeness to the centres of political power and their ability to control their members.

The unions have purchased some vehicles from their own funds, but the numbers are thought to be small. The GCTA, for example, has 13 out of the total fleet of 1476 under its control. The Transport Operators Unions are not a major source of funding or loan guarantee for vehicle and spares purchase, or the development of maintenance facilities.

#### 4.5. Terminals

The purpose of the terminals (or lorry parks) is to provide the main loading point for public transport services at the ends of routes. The ownership of all terminals rests with the Municipal Assemblies, who have firm and unambiguous statutory powers to establish, maintain and control parks and terminal facilities. However, management is assigned to the unions and the bus companies. Each terminal consists of a number of parks; of 156 minibus and taxi parks spread over 33 terminals (95% of the total in Accra) surveyed by TDP Consult, GPRTU administered 128 (82%) while GCTA administered the rest. Management of the parks is clearly a sensitive issue between the unions because it gives the union a monopoly catchment area. Because of the operational procedures at terminals (queuing and holding) unions compete for the terminals rather than the routes. Passengers have learned from experience that there is little prospect of boarding a vehicle other than at the terminals which have thus become the main foci of passenger demand.

A circular on the administration and use of lorry parks from the Ministry of Local Government (addressed to the Metropolitan and District Secretaries in 1989) recognized the GPRTU as the sole organization to control, regulate the movement and operation of all vehicles at lorry parks. At the same time it attempted to safeguard the right of access to any terminal by all transport operators. In practice the circular has polarized the split in management of the parks between the GPRTU and the other unions. None will allow the others to operate from the terminals which each has managed to 'wrest' control of. This is clearly visible in Accra where the conflict is between GPRTU and GCTA, while in Kumasi, PROTOA is in conflict with GPRTU.

The two public bus companies, OSA and CES share facilities at three terminals in central Accra. OSA claims management responsibility for these terminals because of its former association with the municipalities. They impose a management fee on King of Kings who use the Opera Square terminal.

According to the TDP Consult report on parking in Accra, AMA tolls are collected at only 11 of the 33 terminals. These tolls, which vary between c60 to c400, were estimated to be levied on less than 35% of vehicles. AMA would seem to have little

power to enforce their revenue collecting potential; they have no cadre to enforce the toll collection, and their authority has been somewhat undermined by the unilateral recognition of one union in the role of terminal operators. The bus companies do not pay any tolls to AMA.

# 4.6. Problems for public transport

The main problems experienced in the public transport sector concern the low quality and high cost of service to the user, as well as the difficulty which operators experience in investing in modern, safe, high-capacity vehicles which can be used to provide low-cost service. There is no strong evidence of an insufficient number of public transport vehicles, but what is clear is that much of what exists is poorly used and of the wrong type, particularly in the case of Accra.

The poor quality of service is most noticeable in Accra, exemplified by the lengthy waiting times experienced by travellers, long in-vehicle travel times and poor access to bus services (Comptran). The practice of holding buses and taxis at terminals until they are full has the effect of withholding the availability of a reliable service and spare capacity to *en-route* passengers and hence restricting access to the service except at the terminals. This focus of travel patterns around the terminals must inevitably involve long walking access times for some. Poor journey times are attributable to city congestion; it is quite evident that the most highly congested roads have a high proportion of taxis. On some links taxis comprise 50% of vehicles; at a representative sample of sites in Accra they comprise one third of the traffic flow. Journey times are also adversely affected by the poor condition of many of Accra's secondary roads.

As already noted, the route structure of public transport in Accra generally provides good access to the downtown area from the suburban centres, but there are poor orbital linkages from east to west. Cross-town journeys require at least one interchange. It will also be clear from the earlier discussion about terminals and union rivalries that route integration can only exist within each union's sphere of influence. Interestingly, the Ofosu-Dorte study suggests that almost 45% of taxi users are captive, having no immediate access to a minibus alternative.

The high cost of public transport in Accra is directly attributable to the large-scale use of small vehicles (i.e. shared taxis) to provide services. Doubtless, the fact that taxis continue to flourish indicates that a majority of public transport users can afford the higher taxi fares; it remains clear, however, that a shift to use of larger vehicles on high demand or congested routes would reduce real costs, and have a positive impact on congestion. The disadvantage would be a less frequent service and hence increased waiting times for those who can afford the higher fares.

Investment in the private sector of public transport seems buoyant, though much of the funding is probably coming from small private investors who have no direct interest in the organization and development of the industry. This creates an inertia in which the status quo of small vehicles, second-hand and aged buses and restrictive operational practices are maintained. Because of the terminal queueing procedures, vehicle productivity is poor and there is an incentive to invest in old vehicles which incur low standing costs. There are no funds available (or they are difficult to secure) to the private sector for larger-scale experiment such as the use of bigger vehicles, provision of scheduled stage-carriage services, development of high-quality services, etc. Where large-scale funds have been available in the public sector, they have been squandered in mismanagement and poor labour productivity. Public sector operators

are improving rapidly, but it is quite evident that the improvement is at the expense of any attempts at providing urban service.

Commercial banks provide various credit facilities for the purchase of vehicles and spares, which may include hire purchase and leasing agreements. However, it is difficult for private sector bus operators to take advantage of these because they have few assets and find it difficult to meet the criteria for commercial bank loans. Bankers have an aversion to small enterprises which lack substance; lending to them is associated with relatively higher administrative costs and risks, and a lack of adequate collateral and guarantees. Banks have also had their own liquidity and risk problems and have preferred to operate on the short-end of the market, largely because of the short-term nature of their deposits and their aversion to the risks of long-term financing. There is also a technical loophole which deters banks; they have no legal title to the vehicle for which the loan is made, because in traffic law the registered owner is recognized as the person who keeps and uses the vehicle. Thus the banks have little power to repossess a vehicle in the event of default on repayment (Raman and Halm 1990).

On some occasions the banks have assisted a group of bus operators by making loans, guaranteed by the Operators' Union or Co-operative; typical terms for such loans are a 30% down-payment and repayment within 24–30 months at 25%, with full value collateral (fully insured fixed structures or land) or a banker's guarantee. Though the interest terms are severe they are not impossible for most bus operators to meet; it must be emphasized, however, that it is the high down-payment and the collateral requirement which is the main deterrent to obtaining a bank loan. Other factors which deter would-be borrowers are the onerous paper-work and the limited windows of opportunity inherent in the ordering process and the time expiry limits on import license and foreign exchange titles.

#### 5. Future development

### 5.1. Framework

The objectives for the sector would seem to be the development of an effective, efficient and economic service within the general framework of the Economic Recovery Programme and the National Transport Policy and Strategy (Ganguli 1991). Some of the points made by the latter in respect of the urban public transport sector are given below.

- (a) the main policy thrust should be aimed at encouraging the private sector to expand and improve passenger services through various means of assistance. In this regard, a clear credit mechanism should be established possibly through the development of a joint Government—commercial Transport Financing Corporation (TFC).
- (b) Maintenance and rehabilitation of basic minimum facilities should form the core of the parastatals investment activities. Loss-making transport activities must be phased out, and it would be prudent to consider a mixture of piecemeal sale and lease of certain assets to avoid further losses. The option of divesting management to a majority private sector shareholder should merit immediate consideration.
- (c) The Government should encourage full commercial freedom to operators to set market-oriented tariff rates.

- (d) In co-operation with the existing Agencies, an integrated route network and service schedules for road services (including city services) should be developed.
- (e) In order to increase and improve operation of bus terminals, the Municipal and District Councils should devise ways and means so that their use are open to all transport operators and they receive equitable treatment.
- (f) The Government's policy of free entry into the road transport market is sound and the Government would best protect the public interest by continuing the present system.
- (g) The Government should try to reduce the dominance of the centrally oriented movements system to a more efficient intra-city transportation system linking major employment and activity centres under a more decentralized land-use structure.
- (h) Strong emphasis needs to be given to the development of public transport as compared to private car facilities.

Within this framework, and taking account of the specific problems currently experienced in the public transport sector, there are three main public transport development aims which seem worth pursuing. These are to:

- (i) improve vehicle productivity and hence reduce transport costs, mainly by the improvement of the operating environments;
- (ii) improve the productivity of the whole transport sector through better management and labour practices, and investment in the most appropriate vehicles and facilities;
- (iii) improve the quality of transport services and their quantity at the point of demand, through encouraging more scheduled services which clearly reflect the travel patterns of the city, as well as retaining choice in the range of quality and price of service.

To meet these aims the MOTC is currently considering a number of policy options, which if implemented may see a new direction for the development of public transport in Ghana's cities.

# 5.2. Improving vehicle productivity

The main options concern how to improve the operating environment through techniques for increasing operating speeds of vehicles. These traffic management practices and improvements to road infrastructure can be directed at traffic generally or public transport specifically. Bus priority measures could be used to promote the use of larger vehicles, by restricting their use to non-taxi public transport. This would require strong and continued enforcement.

#### 5.3. Improving sector productivity

The development of better management and labour practices is largely concerned with training programmes and investment in appropriate maintenance facilities; these are both areas which the MOTC must address.

Cost cutting in the industry may be advanced through investment in local support services, like bus-body building, vehicle rehabilitation and tyre retreading. Investments of these kinds need detailed analysis, but it is encouraging to note the experience of two operators: CES is currently recycling old bus bodies, using them to

fit out new Tata chassis to produce a bus costing them some \$20000 less than an imported finished bus; King of Kings on the other hand has rehabilitated 'written-off' buses at a cost of c40 millions (a saving of more than \$30000 on import price).

One important aspect of improving the transport sector productivity concerns the question of organization and the extent to which efficiency is impaired by certain organizational models; the poorly performing parastatals, and the restrictive nature of the unions. Given that the parastatals play little part in urban transport, their future may seem of little relevance. However, as argued earlier, there is a need to encourage the urban operation of large vehicles, as well as encourage a range of services and operators. Hence the future of OSA and CES is of concern to MOTC because of their significant fleets, part of which could be profitably deployed (given the right operating environment) in urban centres. The National Transport Strategy has recommended the privatization of these companies. Based on experience from many other countries, there is no doubt that OSA and CES could be operated more cost-effectively by the private sector. There are, however, various ways in which private investment could be channelled and it is not immediately apparent as to the best way forward; the value of the companies to private investors and their interest in acquisition needs to be established (and hence the need for capital injection and restructuring). There is no need to break up these two companies because they would provide the basis for strong competition with the union-controlled fleets and also the basis of scheduled services if equipped with an enlightened management team. External investment in OSA and CES from professional transport operators should not be ruled out; neither should a phased divestment, in which a minority equity stake is maintained by Government as a way of influencing the service development.

It may also be appropriate to make it a condition of sale that a proportion of output is directed at urban services during an initial period, say 5 years. This would inevitably affect the sale price downwards, but would show a strong Government commitment to the development of urban bus services.

The restrictive practices of the unions, in the way they control access to the terminals and the operational procedures they enforce (routeing and queueing) need addressing. The routeing and queueing problem is seemingly intractable; queueing is a particularly long-established practice enshrined in union rules, which would be difficult to break in a unilateral way. However, this tends to result in poor service for users.

In line with the national transport strategy, access to terminals, owned by the Municipal Assemblies, must not be controlled and restricted by one operator. They must be open to all operators and the way to achieve this is to place the management of the terminals with the Municipal Assemblies. The latter are not presently equipped to undertake this task, but they have the option of contracting out this service, with the prospect of generating much needed revenues which are currently forgone.

It would be important, however, to maintain some stability in the route systems emanating from particular terminals and to enforce some basic and fair rules of operation. At present, the unions and bus companies provide this stability, but they do this largely in their own interests or those of their members, and not necessarily in the interests of the users. One option for shifting the balance of welfare more towards the users is to impose a route licensing system on the operators, and/or quantity licensing, and guidelines on operational practices. But in line with the national strategy, it may be better to continue to work through the free enterprise of the competing unions,

companies and any other driver associations (being groups of drivers who want to operate a common route service) who might wish to register with the Municipality. This can be done by giving the Municipality the authority to allocate the scarce city centre terminal space in the interests of the users.

One suggestion is that driver or owner associations (which are taken to include existing unions) and bus companies should register their interest in operating specified routes from specified terminals. They would also indicate proposed fare levels and numbers of vehicles to be used. The Municipalities would endorse all applications except in the cases where there are too many associations competing for too little terminal space. In this event, terminal places would have to be allocated on the basis of municipal priorities. The criteria might set higher priority on providing low-priced capacity, or meeting the demands of high-demand routes. The Municipalities would also be empowered to introduce special restrictions on vehicle size where it was considered that taxis, for example, need to be discouraged in the interests of congestion relief.

An annual registration fee for use of the terminal would be payable by the group registering their route; it would be the responsibility of the group to collect individual contributions from their members. In return each route association would be allocated its own terminal space, which would be properly delineated and signed for public information. The space allocation would be strictly limited and sufficient for only those vehicles which are legitimately resting (allowing, say, a 10 minute turn-round time per vehicle). This would be aimed at clearing vehicles from the terminals quickly, and hence avoiding the queueing system.

The Municipalities would negotiate terminal registration renewals on a regular basis (say every year) and could reject groups which have performed poorly by comparison with their route application specification (e.g. consistently they have not provided sufficient vehicles, or have exceeded their fare schedules, or deviated away from their designated route, or defaulted on their registration fees). Clearly the Municipalities would need to undertake their own surveys to assess performance, but they could concentrate on associations which attract most public criticism. The Municipalities could also advise operators, either associations or companies, of possible new routes which they might consider.

In reality, the Municipalities do not yet have the capabilities of undertaking these terminal control and performance monitoring tasks. They will need guidance on both counts from MOTC.

Investment options cover the mode of transport and types of vehicle which should be bought, and the methods of encouraging this investment. The AUTOS study (Armstrong-Wright 1989) argued clearly for a continued reliance on road-based public transport because current and medium term demands do not warrant investment in a rail-based system. This situation has not changed. It is suggested, however, that for longer term planning and future needs, appropriate early action should be taken in respect to protecting potential rights-of-way for the development of a suburban railway system.

Investment in larger vehicles can be encouraged through investment incentive and/or gearing the investment process more to the conditions of the average transport operator. Investment incentives can take the form of providing cheap finance for larger vehicles or giving priority loans to buyers of buses. In either case there is a clear need to make funds more accessible to the public transport sector. In this regard the proposed establishment of a Transport Finance Corporation, as recommended in the

National Transport Policy and Strategy document should be promoted, since it is an option which has the potential merit of highlighting the specific needs and problems of the transport sector. Where funds can be targeted at purchasers of larger vehicles, guarantees would have to be sought concerning the urban use of the vehicle; painting the vehicle in a distinguishing city livery might resolve this problem. Guarantees can be provided through Mutualist Credit Guarantee Schemes which could be extensions of existing union services or new associations of drivers (i.e. those who come together to register for operating a route from a terminal) who want to save, invest and work together.

## 5.4. Quality of service

As already indicated, a trend towards use of larger vehicles on the higher demand routes will improve the quality of service: more *en-route* seats will be available, travel speeds in central areas will be enhanced and there will be a greater availability of low price seats. There is no guarantee that the service will be any more reliable, but if investment in new vehicles can be encouraged then there will be more incentive for operators to increase their vehicle output and hence avoid the terminal queuing procedures. The quality of service may also be enhanced through the central terminal space allocations discussed earlier. Vehicles will be discouraged from lengthy turn-rounds at these terminals.

## 6. Conclusions

:.;

Urban public transport in Ghana is dominated by the private sector and the use of small vehicles. In the eyes of a free market lobby this would seem to be an ideal situation. However, the way that public transport has evolved in Ghana's cities has not been entirely satisfactory for the community. Where Government has abrogated most responsibility, and local government has been too weak to take any responsibility, the unions have stepped in with Government encouragement to take strong powers of controlling the organization and operations of the sector. In spite of this, the unions cannot be said to have acted in the public interest and service quality is poor.

Private investment in the sector is also hampered by weak financing capacity because little institutional money is available for what is seen as a risky market. Such monies as are available are on a very small scale, only good for purchase of small and old vehicles. This perpetuates the continued reliance on trotros and their modern derivatives, the mini-buses and shared taxis. The use of small vehicles in the crowded city centres adds to congestion and the cost of travel.

The Government needs to take some action to break the strictures of union control, while maintaining some of the benefits of private enterprise. Some form of regulatory intervention would seem inevitable. Interestingly, it is the control of the lorry parks which will dictate the future development of public transport in Ghana's cities.

#### Acknowledgments

This paper is based on the substance of a report to the Ministry of Transport and Communications, prepared by the Ross Silcock Partnership. The authors are grateful to the Government of Ghana for its permission to publish this paper.

# Foreign summaries

Dans l'examen de la performance et de l'efficacité du transport public urbain au Ghana, cet article souligne le rôle des syndicats de petits exploitants, rôle jugé négatif et largement

responsable de l'échec des pouvoirs publics dans leurs efforts pour développer leur propre système de transport public. Sont également présentés les termes de l'option à laquelle ces pouvoirs publics se trouvent confrontés dans leurs efforts pour utiliser au mieux les pontentialités des syndicats, tout en réduisant leur dépendance à leur égard. Les 'trotros' ont constitué l'essentiel du système de transport public au Ghana, en dépit des efforts répétés des gouvernements successifs pour créer et maintenir en vie un système d'autobus réguliers contrôlé par eux. C'était sans compter avec la puissance des syndicats de propriétaires et de conducteurs. Leur pouvoir repose sur leur capacité à contrôler les dépôts: en agissant sur le nombre des véhicules qui en sortent, ils contrôlent efficacement la fréquence et la qualité du service. Dans le cadre de son programme de rétablissement économique, le gouvernement envisage de privatiser ses propres entreprises de transport public. Les tentatives de recours à ces entreprises publiques pour offrir une alternative réelle aux trotros se sont heurtées aux difficultés habituelles de la gestion publique. Le problème est donc maintenant de remettre complètement cette gestion au secteur privé, sans livrer pour autant les usagers aux pratiques restrictives des syndicats d'exploitants.

Dieser Artikel untersucht das Angebot und die Entwicklung im öffentlichen städtischen Personenverkehr in Ghana; er versucht, die Rolle der Gewerkschaften zu erklären und zu zeigen, wie die Versuche der Regierung, ihre eigene Organisation des öffentlichen Personenverkehrs zu entwickeln, gescheitert sind. Es werden weiterhin die Optionen aufgezeigt, die die Regierung in bezug auf die Entwicklung des öffentlichen Verkehrs andenkt, um den größten Nutzen aus den Fähigkeiten der Gewerkschaften zu ziehen und gleichzeitig die Abhangigkeit von der Macht der Gewerkschaften zu reduzieren. Die Trotros von Ghana sind seit vielen Jahren die Stütze des ghanesischen öffentlichen Verkehrssystems gewesen trotz konzertierter Versuche vieler Regierungen in Folge, ein öffentlich organisiertes Bus-System zu entwickeln und zu unterhalten. Ein Charakteristikum dieses Sektors stellt der Einfluß der mächtigen Gewerkschaften der Besitzer und Fahrer dar. Deren Macht besteht in der Kontrolle der Terminals, von denen die Verkehrsmittel abfahren. Durch diese Kontrolle der Terminals haben die Gewerkschaften eine wirksame Übersicht über die Mengen im öffentlichen Verkehrssektor und folglich auch über die Qualität der angebotenen Leistung. Im Rahmen ihres Economic Recovery Programme (ERP) überlegt die Regierung von Ghana, sich aus der öffentlichen Finanzierung von Bus-Diensten zurückzuziehen. Versuche, die staatseigenen Transport-Unternehmen einzusetzen, um eine brauchbare Alternative zu den Trotros anzubieten, sind in den üblichen Fallstricken von staatlicher Eigentümerschaft gescheitert. Unklar ist, wie man die Verantwortung für ein Leistungsangebot an Bus-Diensten der privaten Hand überlassen kann, ohne daß die Nutzer unter den Auflagen der restriktiven Praktiken der Gewerkschaften leiden.

Este trabajo examina el desempeño y desarrollo del transporte urbano colectivo en Ghana; busca explicar el rol de los sindicatos y porque han fallado los intentos del gobierno por desarrollar su propia organización de transporte público. También se señalan las opciones de desarrollo para el transporte colectivo que está considerando el gobierno en la actualidad, a fin de hacer el mejor uso posible de las capacidades de los sindicatos y al mismo tiempo reducir la dependencia del poder sindical. Los trotros de Ghana han sido el sotén principal del sistema de transporte colectivo del país por muchos años, a pesar de los intentos concertados de sucesivos gobiernos por desarrollar y mantener un servicio de buses organizado por el estado. Este sector se caracteriza por la poderosa influencia ejercida por los sindicatos de dueños y de choferes. Su poder se ejerce a través del control de los terminales desde donde operan los servicios, ya que con esto logran controlar la cantidad de servicios ofrecidos por el sector público, y por ende obtienen control de la calidad del servicio. El gobierno de Ghana, a través de su Programa de Recuperación Económica, está considerando abandonar sus intereses en la operación de buses; esto se debe en parte a que los intentos por utilizar las compañías de transporte gubernamentales para proveer una alternativa viable a los trotros, han fracasado debido a los usuales escollos asociados a la propiedad estatal. El problema es como traspasar completamente la responsabilidad de operar los servicios de transporte público al sector privado, sin que los usuarios deban sufrir la imposición de las prácticas restrictivas de los sindicatos.

### References

ARMSTRONG-WRIGHT, A., 1989, Accra urban transport options study (AUTOS). The Ministry of Transport and Communications.

DE LEUW CATHER, 1989, Accra district traffic management and improvement (ADTMIS) study. For the Ministry of Transport and Communications.

COMPTRAN, 1992, Field survey observations. Contribution to the Urban Transport Policy Action Programme prepared by Ross Silcock Partnership for the Ministry of Transport and Communications.

GANGULI, M. K., 1991, Transport policy and strategy study. Final Report to the Ministry of Transport and Communications.

Howe, J., and Barwell, I., 1987, Study of potential for intermediate means of transport. The Ministry of Transport and Communications.

LTI, 1989, Bus companies restructuring study. For the Ministry of Transport and Communications.

OFOSU-DORTE, D., 1992, Options for using mass transportation facilities to reduce vehicular fuel consumption and traffic congestion in urban areas. Report for the Ministry of Energy.

RAMAN, G. K., and HALM, W. H., 1990, Study for amendments to road traffic laws and regulations to facilitate leasing in road transport. Final Report to Ministry of Transport and Communications.

TDP CONSULT, 1991, Parking policy study for Accra. For Accra Metropolitan Assembly.

TECNECON, 1987, Road transport subsector study. For the Ministry of Transport and Communications.

# Editorial suggestions for further reading

MAUNDER, D. A. C., 1990, The impact of bus regulatory policy in five African cities. Transport and Road Research Laboratory, RR 294.

The regulation and control of the bus industry is a long debated topic. Proponents of free competition seek complete relaxation of controls on the grounds that market forces will generate an efficient and effective service. Others seek varying levels of control and government involvement because of perceived imperfections in market forces, and loss in social welfare. This report examines the extent to which variation in the level of regulation affects public transport performance, and any resulting effect on travel patterns. The case-study material comes from five African cities, in the population range 0.4–1.5 million, whose public transport demonstrates a range of regulatory controls and development options. (Author)