

# Does Urban Transport Have Future?

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**ABSTRACT:** In the recent past, in the developing countries, traditional urban transport has ceased to exist as a viable industry. It has been taken over by what is called “informal transport”. Informal transport, normally provided by minibuses or cars, legal and illegal, has become the dominant mode of urban transport in many developing country cities. It also is a substantial provider of urban employment.

In the developed world, urban transport has also undergone change, but because of strong capacity to enforce regulations, reasonably low unemployment, strong labor unions, and an ability to subsidize urban transport, traditional urban transport has survived—so far. But, even in the developed countries informal transport is making in-roads. That is not the concern in this paper; the concern is urban transport in developing countries or countries in transition.

The paper first reviews the salient features of informal transport in developing country cities. The core of the paper discusses, without providing a solution, the problem: does the traditional urban public transport have a future? The question is profound, especially in cities with a metro. Its operation and safety requires large sums of money—and there is no money. Should the tram, and trolley, and the bus be abandoned? Should the provider-side subsidies, which now benefit the people employed by the traditional modes, be changed to user-side subsidies? In many cities in developing and transition countries where the users of the traditional modes are beneficiaries of the provider-side subsidies, the user preference might switch to minibuses—and that certainly would be the death knell of the traditional modes. This certainly would not be without political consequences.

The paper suggests a four-stage process to begin developing home-spun solutions to the urban transport problem, which solutions should have widespread support, a consensus, and also be financially possible.

**RÉSUMÉ :** Dans un passé récent, dans les pays en développement, le transport urbain traditionnel n'est plus une industrie viable. Il a été remplacé par ce qui est appelé "le transport informel". Le transport informel, normalement assuré par des minibus ou des voitures, légales et illégales, est devenu le mode dominant de transport urbain dans de nombreuses villes de pays en développement. C'est aussi un fournisseur substantiel d'emplois urbains.

Dans les pays développés, le transport urbain traditionnel a également évolué mais a survécu grâce à la bonne application des règlements, au chômage raisonnablement bas, à la puissance des syndicats et aux possibilités de subventions. Même dans les pays développés, le transport informel fait une percée. Mais ceci n'est pas l'objet de la communication qui est celui du transport urbain dans les pays en développement ou les pays en transition.

La communication passe tout d'abord en revue les particularités saillantes du transport informel dans les villes des pays en développement. La partie centrale de la communication discute, sans fournir de solution, la question : « Les transports publics urbains traditionnels ont-ils un avenir ? », question importante, particulièrement dans des villes pourvues d'un métro ; son exploitation et sa sécurité exigent d'importantes sommes d'argent et il n'y a pas d'argent. Doit-on abandonner le tramway, le trolleybus et l'autobus ? Doit-on transformer le financement par les fournisseurs, qui profitent maintenant aux personnes employées par les modes traditionnels, en financement par les usagers ? Dans de nombreuses villes des pays en développement et des pays en transition où les usagers des modes traditionnels sont les bénéficiaires du financement par les fournisseurs, la préférence de l'utilisateur pourrait se tourner vers les minibus ce qui sonnerait probablement le glas des modes traditionnels. Ce ne serait certainement pas sans conséquences politiques.

La communication suggère un processus en quatre étapes pour commencer à développer des solutions simples au problème de transport urbain, lesquelles solutions devraient avoir un large soutien, un consensus et être également financièrement possibles.

## 1 INTRODUCTION

Urban transport and urban transport planning are experiencing remarkable changes to which the profession has difficulty to adjust. The topic is, of course, huge. No attempt is made in this paper to cover urban transport issues observable at varying levels of country development. The focus is on transition and developing countries. The developed countries, because of their wealth, managerial capacity, adequacy of the rule of law, competence of institutions and the high level of subsidies to public transport, have a different set of problems. However, deregulation and privatization have occasioned major changes in the delivery urban transport services also there. Pressures for change will continue everywhere as the public demands better value for money. Suffices it to say that the process of change articulated toward the end of the paper is applicable regardless of the stage of development.

Based on examples and experiences in developing and transition countries the paper first reviews salient features of urban transport in transition and developing countries as we observe them today. The paper then provides conceptual explanation on the failures of recent urban transport policy measures and initiatives, and advances a neo-institutional economics perspective on the two forms of competition: competition *for* the market (competitive contracting) and competition *in* the market (often from informal transport). The paper argues that while competitive contracting has several noted features, many factors makes the approach less suitable, especially for developing and transition countries: high transaction costs; inadequate government capacity; undeveloped private sector; a myriad informal operators that interlope on the formal provider's operation. The paper suggests to strengthen the already existing private operation by establishing property rights on curbs and terminals to minimize interloping and destructive competition; and by strengthening route and bus associations to overcome the collective action dilemma of the individual owner-operators. It also outlines a participatory and evolutionary approach to design a sustainable institutional framework for the operation of public transport by considering the prevailing initial conditions, the institutional capacity and the extent of the rule of law.

Over the past thirty years, cities have been growing at an unprecedented rate. The urban population of developing countries has doubled since 1975, and more than 100 cities have populations of over one million. By 2020, more than 60 percent of the world's population will be living in urban areas. The

rapid urbanization of developing countries has meant that basic services (housing, water and power supply, sewerage, transport) frequently fail to keep up with demand. Moreover, cities continue to lure people from the rural areas, creating pockets of poverty and contributing to political, economic and environmental ills. Despite these problems, cities remain as the center of productivity, contributing 50-70 percent of GNP.

Urban growth and expanding income inevitably lead to *motorization* of cities, consequently increasing the demand on urban infrastructure. As cities spread and their populations grow, both the number and length of journeys increase, so that vehicle-kilometers traveled rise faster than the population, multiplying demands on urban infrastructure. Yet urban growth makes the building of transport networks more expensive, congestion increases the costs of provision of public transport, and land becomes scarce and its use competed for many purposes.

## 2 CHALLENGES IN URBAN TRANSPORT

Although developing and transition countries have relatively low levels of motorization, they have disproportionately high incidents of accidents, and are more vulnerable to problems of air quality, congestion, and lack of equity in mobility. The following problems exist nearly in every city in a transition or developing country:

- *Inadequate road infrastructure:* in developing countries the road infrastructure is characterized by poorly designed street networks and inadequate maintenance. Roads and streets in the suburbs are often unpaved and in poor condition; those in low-income neighborhoods are no better than narrow paths. There is no hierarchy to classify streets by their function as arterial, collector, and local streets, providing mobility, access, or both. Cities may have high land-use density, as in Sao Paulo, or low, as in Delhi, but their street network density is very low, at 0.4 - 0.8 meters of street length per person. Hong Kong, at the extreme, has only 0.23 meters per person. This compares with 2 to 3 meters per person in typical European cities and 5 to 9 meters per person in US and Australian cities. In the transition countries, the lack of street hierarchy and parked cars reduce capacity—both on the streets and sidewalks. Poor road conditions increase *vehicle operating costs*, which in turn puts a stress on the balance of payment.

- *Ineffectual traffic management:* the problems in the urban transport system in the transition and developing countries are further exasperated by lack of adequate traffic management. The street networks have inadequate traffic control at intersections, deficient and poorly enforced traffic laws, virtually non-existent traffic facilities for pedestrians, and inadequate urban land-use planning. Often pedestrians, street vendors, and motorized and nonmotorized traffic and parked vehicles share the same space, each moving at different speed, without much traffic control. The deficiency in suitable traffic management contributes to worsening of auto related *externalities*, such as congestion, air pollution and accidents.
- Inattention to the role of *non-motorized* transport as a mode of transport in many developing countries. Although recent Bank-financed projects in some countries (e.g. Peru, Ghana and Kenya) have addressed the issue, it is often neglected in policy and project designs. Pedestrian and bikeways are narrow, often non-existent. Moreover, many traffic management and road infrastructure improvement programs displace pedestrian, bicycles and rickshaws; and traffic enforcement are designed to favor the motorists. Bicycle ownership varies by region -- in Asian countries 40 percent or more of the population own bicycles, while the percentage in Latin America is half of that and in Africa it is a mere 3-4 percent -- and is affected by cultural mores.
- *Weak institutions:* Many municipalities in developing countries lack adequate organizational and financial capacities to plan, design, procure, and implement physical and operational improvements in urban transport. Organizations responsible for urban transport are fragmented and their responsibilities and duties not clearly delineated. Regulatory, licensing, decision-making practices and financial arrangements are weak and lack transparency. Moreover, there is a scarcity of financial resources and lack of access to affordable credit, which in turn limits the municipal government's ability to pay for a share of project costs and to maintain assets.
- *Unfavorable policy and regulatory framework:* like in most sectors, policy decisions in urban transportation is notably constrained by political considerations. The beneficiaries of urban public transport projects are oftentimes the poor, but they are numerous and can wield significant political power. Consequently, desirable policies regarding pricing, cost recovery, street rationalization, agency downsizing and restructuring are often postponed or never instituted. Similarly, many municipalities do not adequately enforce traffic regulations and licensing rules. Informal operators, for example, are often outside of the regulatory framework.
- *Cities in Eastern Europe* pose new issues: transport needs in those countries are comprehensive and problems pervasive. Institutions, managerial practices, equipment, and even the infrastructure, in many cases, need to be overhauled. Transport systems are handicapped by highly centralized decision-making and sole-source procurement systems, state ownership and operation of all urban public transport, extensive free ridership privileges, and unsafe and pollution-causing facilities.
- *Inadequacy of public transport.* In most transition and developing countries public transportation is inadequate. It is often provided by monopolistic operating entities, operating antiquated, poorly maintained equipment. Maintenance facilities are in deplorable conditions. However, these deficiencies are oftentimes ameliorated by *informal transport* operators, albeit with operating practices that tend to be chaotic and disrupt traffic.
- *Growth of privately owned minibuses services.* Private bus service providers operating without direct subsidies have largely replaced the publicly owned, subsidized public transport services. For example, in an Eastern European city trips on minibuses nearly tripled in a three-year span while trips on the publicly owned modes declined 30 percent or more. The minibus dominated public transport with 75 percent market share.
- *Dissatisfaction with the quality and.* Focus group discussions indicate that the travelers in the transition countries are very dissatisfied with street condition and maintenance, vehicle comfort, public transport and traffic information, and security on public transport. The travelers are dissatisfied with traffic safety and the level of crowding. Routes, ticket prices, frequency, and comfort at stops and stations were considered satisfactory or at least tolerable.
- *Lack of capital and access to reasonably priced financing.* Money is required to improve the physical facilities. However, the cities are poor. In some cities to keep the aging metro operating is consuming (almost) all available subsidies. Often a question arises should such metros be closed down or at least "mothballed" for a period in order to improve urban public transport. Buses break down and only a fraction of the (publicly owned) fleet is available, typically much less

than 50 percent. The poor condition of the infrastructure, the numerous challenges enumerated above, and the practical impossibility for the cities to purchase used buses or metro cars with IFI financing, are key variables in a seemingly unsolvable equation.

### 3 LESSONS OF EXPERIENCE

A review (Talvitie and Reja, 1997) of World Bank urban transport projects led to the following summary conclusions:

- *Physical components* were successfully implemented, but the sustainability of benefits is still precarious. Government "ownership" for physical component is often strong.
- *Traffic improvement* measures are more likely to succeed in cities with strong rule of law and organizational capacity to implement the measures. The benefits from TSM often get dissipated shortly after the completion of the project, particularly in a rapidly growing city. Government ownership for traffic management is often low.
- *Institutional objectives* were more difficult to achieve but some progress was made, particularly in procurement and services. Projects were less successful in achieving their goals of staff training and financial management.
- *Policy objectives* were rarely met. Actual financial performance was usually much poorer than planned. Often, investments that were expected to pay for themselves did not. Cost recovery targets were rarely achieved.
- *The re-estimated average economic rate of return* of the evaluated urban transport projects was slightly less than at appraisal, but still satisfactory (ERR>20 percent).

### 4 PROMOTING COMPETITION AND SUSTAINABILITY

The successes and failures point toward the following directions of finding a better future for urban transport: competition, better pricing (also of car traffic and parking), private provision of service delivery, and access to reasonably priced capital.

As mentioned, policy components directed at public transport restructuring and improving the financial viability of the urban transportation system have principally utilized targets for cost-recovery and pricing, and private sector development. Both policy measures on the whole, however, have not fully met their objectives. Governments are lukewarm to

suggestions on cost-recovery and "getting the prices right", but they do like investments on infrastructure and rolling stock—and this correlates with public desires as the focus group results indicate.

There is an important nuance here. Policy failures resulted because crucial institutional and sectoral issues were not incorporated in the project design and policy formulation. An example illustrates this. A project was to provide capital and technical assistance to the public bus and tram companies, with the objective of improving their operational and financial performance. However, instead of bringing improvements, the situation of the two public firms worsened. The unfavorable outcome resulted because the private sector operators dominated the service provision in the city. It would have been more pertinent to let the public firms fizzle and strengthen the private operators. Instead, the project provided capital investment to the public firms and sought to reorganize them and institute a policy of fare increase to cover costs. But, in spite of new buses, the public firms failed to cover their costs—new buses are very expensive—and continued to lose their share of passenger trips to the private sector. On the other hand, the private sector operators were covering their costs at the same fare levels.

In the presence of a willing private sector operation, policies should "get the institutions right", strengthen the private sector and find the public sector its appropriate role in urban transportation. Some recent projects in Eastern Europe and other parts of the world have sought to privatize state-owned bus companies, and enhance the institutional capacity of municipal governments to oversee public transportation. Although the World Bank's experience on promoting competition in public transport is still narrow for conclusive lessons, important insights are gained by examining current literature on the topic.

Two types of institutional framework are often recommended to bring competition and entrepreneurship to public transportation. In the first, known as competition *for* the market, potential service providers are allowed to bid competitively for an exclusive right to operate on a given route or jurisdiction. In the second, competition *in* the market, private operators are allowed to provide comparable services on the same route as the formal transit provider.

#### 4.1 Competition for the market: competitive contracting

Under competitive contracting, the regulatory authority or the parastatal transit agency delegates the operation of transit services—the franchise—to private providers but retains planning and policy deci-

sions. This is considered to be a middle ground between complete privatization and monopoly provision of transit services. Competitive contracting, as a form of privatization, can bring competition and entrepreneurship to an otherwise publicly-owned and regulated industry.

Franchise bidding has three outstanding features:

- The operations and planning of transit service are separated. A government department plans for services and takes charge of drafting and monitoring the contract. In some cases, the government owns the assets, while operations remain in the hands of cost-conscious private entrepreneurs. This approach lessens labor union pressure and induces innovative services and the use of fewer capital-intensive vehicles.
- Franchising allows the government to provide subsidized contract services without setting up a public agency to carry out the operation. Complete privatization might leave some areas without service, as some markets may be too thin for private providers to recoup their investment.
- A sustainable transit system may need an anchor service with established routes and schedules, as well as services in new markets. Formal scheduled operations require special managerial skills and organizational capacity, and access to credit for running services. Few private bus companies in developing countries have the capacity or access to credit to establish such a system. In such cases, the government may want to intervene to establish the anchor service and delegate its operations to private operators.

Several factors, however, lessen the appeal of competitive contracting. First, the transaction costs and the government institutional capacity requirements for competitive contracting are high. The contracting agency must stipulate the quality standards of the service (e.g., specify routes, schedules, type of vehicles), the forms of compensation, and general responsibilities of the private contractor. After contract award, it must monitor and enforce the contract, both of which tasks require institutional capacity. In one city a disappointing outcome of bus franchising scheme resulted from the Transport Authority's lack of resources and the absence of the underlying political will to enforce the franchise agreement.

Second, in many countries competitive contracting is not competitive but a "beauty contest". There are cases where the award of franchises is not transparent. Common is the award of route licenses on the basis of personal relationships; in many cities, the route license holders are influential politicians who

obtain the route license free and hires driver not only to drive but also to provide the vehicle.

Third, many developing and transition countries have too few qualified private bus companies to make the bidding for area wide franchises competitive. In some cities contracts are awarded by "negotiations" between the city and a *single* provider, or the selection committee may find that none of the potential bidders meet the minimum requirement to compete for the franchise.

Fourth, even if it is possible to get enough bidders at the initial contracting stage, for instance, through a cooperative arrangement of individual owner-operators, or simply contracting each route separately, the arrangement may help the winner to develop a competitive advantage over the losers during the contract renewal stage. The contracting scheme may thus turn into a bilateral monopoly, where subsequent contracts or contract renewals are done through negotiations instead of competitive bidding. Moreover, contenders may initially bid low to win the contract in anticipation of achieving monopoly position later. Hence, competitive contracting schemes need to be carefully designed to guard against the formation of bilateral monopolies.

Fifth, in a rapidly growing city or changing demand and supply conditions, a government-controlled competitive contracting scheme may have all the bureaucratic pitfalls that inhibit responsive actions to changing market conditions. Getting route changes and additions to respond to new neighborhood development, for example, could be a long and intricate procedure if the responsibility is in the hands of a government institution.

Finally, competitive contracting assumes that there is no competition *in* the market. In many developing countries informal transit operates relatively freely, interloping on the activities of contracted firms and threatening their ability to sustain the market. In many cities informal minibuses operators have a large market share than the formal operators. This undoubtedly affects the viability of the franchising scheme. Most governments have laws against interloping, but where the rule of law is weak, interloping persists and corruption becomes a problem.

#### 4.2 Competition in the market: informal operators

In many developing countries, informal urban transport ranges from one-person rickshaws or motorcycles to 25-passenger minibuses. Their ubiquitous presence forms part of the urban landscape and increasingly of urban centers in the former socialist countries. Their existence alongside of formal ser-

vices creates competition in the market and puts competitive pressure on the formal operators.

Informal operators enjoy certain market advantages. They have the flexibility to change their schedule in response to changing market conditions. They can negotiate traffic more easily and deviate from fixed routes. Hence they are often faster and run more frequently, while charging a fare comparable to that of the scheduled services. But the formal scheduled services, the anchor of the transit system, provide the focal point for passenger congregation and develop the transit market. Without them as anchor, the market for transit services could not be sustained.

Notwithstanding their advantages, informal operators also pose problems. They headrun on the scheduled services, taking riders from them, and they disrupt traffic by lingering at the curb to collect passengers. Informal transport is dominated by an owner-operator (or his agent) who only seeks to maximize his profit with little regard to his actions on the rest of the operators and the system as a whole.

Many governments try to curb their operation but with little success. The better approach—one that brings order to the operation and draws on the full benefit of the competitive pressures introduced by the informal sector—is to integrate the informal operators into the formal sector by establishing curb rights to minimize interloping and destructive competition, and strengthening and involving route and bus associations deal with the collective action dilemma.

#### 4.3 Curb rights and the rule of law

The establishment and protection of curb rights—that is, *property rights of the formal transport operators* to the waiting passengers on a given curb zone—are fundamental to establishing a sustainable formal bus service and a competitive transit service. When curb rights are established and policed against interloping, private bus companies are not only more likely to invest in establishing routes and schedules, they are also more likely to invest in developing new markets because they have assurance of being able to appropriate their investment.

The government as the provider of the roadways and curb spaces (and the lawmaker) will have to establish curb rights, some exclusively for formal operators and others as commons for the (formerly) informal operators. There can be several different curb stop areas, perhaps designated by color. Once curb rights are established, the government, together

with curb right holders, will police against interloping. This can be difficult because, in many cities, the minibus operators stop where the passengers want them to stop. However, if the route licenses are auctioned or sold at a price, it is in the curb right holders self interest to police against interlopers.

The type of curb rights selected, however, will vary, depending on the country and the market, that is, whether the market is thick or thin and whether the rule of law enforces a system of property rights (Figure 1).

If the market is thick and the rule of law generally upheld, formal operators can be given exclusive curb rights and (now formal) minibus operators allowed to pickup and discharge passengers at designated stops, or commons. Since the law is respected, interloping and destructive competition are minimized. But if in the same market the rule of law is weak, interloping by informal operators will make exclusive curb rights irrelevant. Because the market is strong, however, informal minibus operators will continue to ply the routes confident of finding passengers, and passengers will congregate, confident of finding service. As a result, the scheduled service (as the anchor) may not be essential for sustaining the transit market.

In such situations, the route and bus operator associations will need to be strengthened to bring order to the transit service. In many cities, minibus operators form route associations to bring order and regularity to services. The collective action dilemma inherent in the owner-operator system of informal transport is often ameliorated by the incentive mechanism of the associations. Many route associations provide access to credit to members and protection from interlopers, as well as lobby governments for market-based regulations of fares and services.

Where associations are not well developed, they need to be legitimized and allowed to enforce their rules, such as imposing nominal fines on members that interlope or fail to adhere to schedules. To enable them to become viable, however, the associations will need access to credit or assistance in establishing their own financing institutions.

If demand is thin but the rule of law strong, formal operators can be given exclusive curb rights, but their routes must be kept separate from those of the minibus operators because demand may not be sufficient to sustain competition. Since the law is respected, interloping by (informal) minibus operators will not pose a problem; consequently, the anchor service will be preserved and transit service sustained.

But if both demand and the rule of law are weak, the government may be unable to enforce curb rights. Interlopers will transgress on the curb rights of formal operators, decimating the transit market. In such an environment, subsidizing fares to bring them at the level charged by the informal sector will discourage interloping, thus helping to preserve the anchor service, hence the transit market. At the same time, the government will need to strengthen the rule of law to stimulate the transit market.

Figure 1: Developing curb rights in different market and rule of law conditions

Market	Rule of law	
	Strong	Weak
<b>Thick</b>	The establishment of curb rights allows formal and minibus providers to operate on the same route in a relative harmony.	Interloping by minibus operators will dissolve scheduled service. But the minibus operators sustain the transit service. Prominent role should be given to route and bus associations.
<b>Thin</b>	Exclusive curb rights need to be established for formal operators; informal operators should not be allowed to operate on the same route.	Informal operation will dissolve anchor service; consequently transit service may altogether disappear. Government needs to subsidize transit fares to make informal services less attractive to sustain the transit market.

## 5 CREATING A POSSIBLE FUTURE FOR URBAN TRANSPORT

Providing adequate and efficient urban transport system with minimal negative externalities is an intricate undertaking. It not only requires investment in improving the road infrastructure and the vehicle stock, but it requires a strategic policy formulation that gives full considerations to the absorptive capacity and the rule of law of the specific country. Projects designed to bring improvement in traffic management and public transportation are particularly constrained by whether the country has the capacity and rule of law strong enough to support such initiatives.

In order to find the appropriate combination of policies and measures requires that a negotiation forum is established where the affected interest can find a solution, a consensus, that is workable and which

they are willing to support. Finding a sustainable solution is likely to take years, but urban transport, while inadequate, need not come to a halt while the solution is researched and searched.

To strengthen the rule of law and bring improvement to the urban transportation system, the government needs to create a negotiation forum. This forum should involve all the affected interest, transit providers, route and bus operators' associations, members of user groups and drivers, policy makers, and other interest groups (e.g., the business community), to safeguard against the government's tendency to over-regulate and arbitrarily enforce the transport rules and regulations, and increase the likelihood that the property rights and regulatory frameworks will be sustained.

The forum needs to be sustained for a long period and requires a process and a facilitator. This facilitator can be consultant, a city professional, or other professional who can intermediate consensus among different interests. Experience shows that the following four-stage process is useful.

In urban transport, as elsewhere, commitment to an improvement program begins with ownership. Building such commitment requires a well-sequenced process. Figure 2 illustrates a general framework for a gradual change process. It begins with an understanding of the initial conditions, after which changes are introduced gradually, drawing on affected interests for information in selecting and implementing interventions, observing effects and adjusting for undesirable and unforeseen consequences, and emphasizing continual person-to-person communication with relevant actors. Such a process evolves as follows.

- *Stage 1: contract to change.* Commitment is elicited from interested parties to improve programs and restructure the urban public transport industry. Commitment for change and participation of the citizens, service providers, and government authorities are essential for a meaningful change to take place. A forum and communication channel should be set up to exchange views and update participants on the ongoing process. No long-term plans or plans for substantial change are made at this stage.
- *Stage 2: object-oriented study.* Before proposing a policy approach, the affected interests need to examine the initial conditions. The existing organization of the transit industry, particularly the prevalence of the informal sector and the role of the route associations, needs to be fully studied and understood. Furthermore, the institutional and organizational capacity of both the private

and public sectors need to be examined. The client and the operator associations are fully involved in the studies.

- *Stage 3: institutional development.* The capacity of the public sector needs to be strengthened to bring competition and entrepreneurship to the sector. In particular, government officials need to be trained in drafting and monitoring contracts, assigning property rights, and enforcing regulations and policies. Route and bus associations should be legalized and strengthened. Training, appropriate for operating services or managing small companies, needs to be provided. Also, a mechanism should be set up to allow the associations to have access to credit and group insurance.
- *Stage 4: create a competitive framework and establish sustainable operations.* In this stage, curbside rights are established. Curbside rights should be both exclusive and commons to allow for both the formal and minibus service providers to compete. The operations and planning divisions of the public transit agencies are separated, and the operations are competitively contracted out. Minibus transport, even informal, is allowed to operate and route and bus associations are strengthened and enlisted to "regulate" both formal and informal the operations. Capacity development of the public agency is continued. The public transport agency is dissolved and its assets sold. There may be a need to provide subsidies in thin markets.

## 6 DOES URBAN TRANSPORT HAVE FUTURE?

Urban transport will of course have future. But, as the above short account, observable in many in-transition and developing cities, shows there are many difficult problems that can only be solved by gradually and by experimentation. The process will be long and demanding. There are no standard solutions. The details of the evolving solutions will be unique to a country, but they will consist from a combination of competition, pricing (also of car traffic and parking), private provision of service delivery, good traffic management, increased street infrastructure, access to reasonably priced capital, and improved rule of law and professional capacities to plan, operate, and manage urban transport.

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FIGURE 2: CHANGE PROCESS

