

## **CURRENT ISSUES AND PROSPECTS IN THE TRANSPORT SECTOR: URBAN TRANSPORT, RAIL TRANSPORT AND HIGHWAY MAINTENANCE**

**This edition of the FAL Bulletin tells of recent events and trends in urban transport, railways and highway maintenance in Latin America and the Caribbean.**

### **URBAN TRANSPORT IN 1999: THE STATE VIS-A-VIS THE OPERATORS**

**Urban traffic congestion persists.** In 1998 the number of cars in the main Latin American cities continued to grow at rates of between 6% and 10%, and the concerns of the city authorities about traffic congestion continued unabated. Effective measures for dealing with the congestion problem have yet to be implemented. In some cities building extra roads might be justified, such as the section of the proposed outer ring-road in the Lima Metropolitan Area between the Pan-American Highway (north) and Callao. A debate goes on about the pros and cons of charging tolls on that stretch of road. Tolls are definitely proposed for a series of concessioned urban highways planned for Santiago, Chile.

A system of peak-hour vehicle restriction was introduced in Santafé de Bogotá, based on the final digit of the number plate, motivated by previously applied schemes in Mexico City, Santiago and Sao Paulo.

In Medellín, where a surcharge was already added to gasoline prices, a restriction was imposed on vehicles travelling with only one person occupant. A similar measure was introduced in Santiago on the Avenida Costanera Sur, one of the main routes into the city centre, where enforcement has proved very difficult. Also in Santiago, several municipal authorities initiated a policy of tendering the building and operation of public underground car parks, with the aim of getting parked cars off the streets and into these new facilities. There are also plans to put out to tender the building of underground car parks in Lima and other cities.

A more innovative Chilean initiative is a bill before Congress to allow the charging for the use of congested urban highways (road pricing) is gradually making its way through the legislative process. In Cuba, urban passenger transport capacity continues to satisfy only about 50% of needs. Here a

Metrobus system is consolidating its position and carries some 350 thousand passengers per day over an average distance of about 9 km. The bicycle continues to be an important means of transport in Cuba, with about 2 million units sold in recent years, and a network of exclusive roads and lanes has been created for them in Havana.

**Too many taxis?** In several cities the authorities decided to do something about what they considered to be an excessive number of taxis, and the harmful effects they can have on traffic flow. The taxi service in Lima used to be considered one of the most deregulated in the world, but now vehicles operating as taxis in the centre of the Peruvian capital have to be painted yellow, and this means that private car-owners cannot simply decide spontaneously to provide taxi services whenever they need some more ready cash. In Costa Rica, meanwhile, the debate is between tendering the service or deregulating it.

**Buses to spare?** In Santiago, public transport routes in the zone inside the Américo Vespucio ring road were retendered, and this led to a modest reduction in the bus fleet. However, as only 311 bids were submitted for 308 routes, new doubts arise about the competitiveness of the auction process.

**Who pays for the benefits and externalities?** In the better endowed cities there has been a trend towards making public transport services less environmentally harmful and more accessible to disabled people. In Buenos Aires, for example, low-platform buses have been introduced with equipment enabling wheelchairs board and alight from them. Each route has had to incorporate at least one vehicle of this type. The authorities in Santiago, despite difficulties, have promoted the installation of automatic ticket machines on buses, so as to free the driver from having to emit tickets with corresponding benefits in tensions of traffic safety and the driver's own psychological well-being.

However, technical innovations come at a cost: in Santiago an 11% fare hike has been authorized in return for introducing automatic ticket machines, which means that the benefits generated by their installation will be paid for by passengers themselves.

**The difficult regulatory role of the State.** In many cities, such as Lima and Santiago, there are suspicions of the existence of collusion among public transport service operators, which governments prefer not to challenge. In Buenos Aires there is a trend towards increasingly more concentrated bus ownership, as well as significant involvement by public transport companies in the running of urban trains. The power of transport operators is an issue that Governments will have to address over the next few years.

**Few people consider privatizing metro systems.** State operation of metros continues to be the rule, with only limited moves towards concessioning systems. Neither in Chile nor in Mexico, where railway privatization in general is almost complete, has anyone seriously suggested doing the same with the metro system. In fact, 1998 saw significant progress towards private operation of urban trains only in Argentina and Brazil. In Rio de Janeiro, the Metrô Rio consortium took charge of operations at the beginning of April, launching a programme of improvements such as an increase in train frequency on Line 2.

In Argentina, the railway concessions in general including those in the Buenos Aires Metropolitan Region, were going through a phase of re-negotiation during 1998. In early December, Congress approved the new concession on the Mitre and Sarmiento suburban railways, awarded to the Trenes

de Buenos Aires consortium, which is required to invest some US\$ 2.5 billion over the next 25 years in rolling stock, signaling, electrical works and the elimination of level crossings.

**Metro networks expand again.** Significant progress has been made on metro extension works and projects in a variety of cities, including Brasilia, Mexico City, Rio de Janeiro, Santiago and São Paulo. However, this has sometimes been very slow, as in Brasilia, for example.

One observes that companies operating metro systems in cities like Mexico City and Santiago are working to ensure technical compatibility, such that a train running on line X today could be providing services on line Y tomorrow. In São Paulo, however, less importance is assigned to this, and in fact the electrical systems on the seven projected lines is set to provide power at three different voltages (750, 1500 and 3000) via a mixture of catenaries and third rails.

In Santafé de Bogotá, a city of some seven million inhabitants, there is no urban passenger train of any sort (apart from steam-powered week-end excursions). The government of President Samper, which left office in 1998, committed resources to start building a metro in the Colombian capital. However, the project is still stuck in a stage of analysis and deliberation by the City Council, and it is quite possible that not just Medellín but also Cali will have metro services up and running before the country's much more populous capital city.

## **RAIL TRANSPORT IN 1999: WILL THE MERGERS CONTINUE?**

**Problems with railway privatization.** In Colombia, railroad operations are made difficult by the country's hilly terrain and its very narrow gauge of one yard, which limits the capacity and the speed of trains. These circumstances complicate the concessioning of operations (and so doing is not considered viable without subsidies) and attracting the investment needed for infrastructure improvements. The Atlantic network was awarded in January 1998 to the Ferrocarriles de La Paz consortium, made up of Spanish, Colombian and other entities. However, the consortium was unable to set itself up formally and failed to sign the concession contract. A more encouraging outcome is expected in the case of tendering of the freight network, for which a sole bid was submitted at the end of August 1998 from a consortium, also comprising Spanish and Colombian interests.

In Ecuador, the damage caused to the railroad infrastructure by the heavy rains associated with the climatic phenomenon El Niño at the very least has meant postponing putting rail services out to tender, and quite possibly the complete abandonment of this mode of transport. Public finances have been badly hit by a combination of factors such as El Niño, the low price of oil and European Union restrictions on banana imports, and it will be difficult to finance repairs and subsequent rail operating subsidies. In Guatemala, railway operations, inoperative for several years, have been let to a private sector company and were expected to resume in November 1998, but it was not possible to meet this target due to the consequences of Hurricane Mitch.

In Argentina the transfer was announced of the Ferrocarril Belgrano to a group consisting of a railway workers federation and a foreign operator. In Brazil, the State of Sao Paulo railroad was successfully tendered, but half of the concessionaires of sectors of the old Federal Government owned railway system are not meeting their transport volume targets. The same had happened before in the Argentine case where the process of renegotiating concessions began in 1998.

**More encouraging results in some countries.** In Chile, where privatized railways were not set transport targets, traffic on the Ferrocarril del Pacífico has begun to pick up but not by as much as was hoped. So too has that reported by the company running the Chilean portion of the Arica-La Paz route, which is in a difficult negotiating position vis-a-vis the Empresa Ferroviaria Andina, operator the Bolivian section of the same railway.

**Mexican privatization completed, Peruvian privatization begins.** 1998 saw the signing of the concession contract for the last of the three major packets into which the Ferrocarriles Nacionales de México had been split. On the other hand, the tendering process in Peru was postponed till the end of the year due to a policy change by the government, which now favours a privatization model like that adopted in the United Kingdom, in which service operations are distinguished from track administration.

**Dead-end street for passenger trains?** In Buenos Aires Province and the State of São Paulo, passenger services, which are relatively intensive on the Buenos Aires-Mar del Plata route, are operated by state authorities. In Argentina the expected general resurgence of inter-urban passenger trains to other destinations has so far failed to materialize apart from some isolated initiatives: for example, one of the concession-holders for suburban services in Buenos Aires has started a daily service to Rosario. In Chile, the awarding of concessions on passenger train services was put off once again and there may now be heading for extinction.

**Railroad company mergers.** In 1998, a well established trend in the United States reached Latin America: namely, railroad company mergers. A group related to the Brazilian companies Ferroviária Sul Atlântico and Ferroviária Centro Atlântica made a bid to buy the concessions from the Ferrocarril Mesopotámico General Urquiza and Ferrocarril Buenos Aires al Pacífico in Argentina, both owned by the Pescarmona group. Assuming this takeover is approved by the Argentine government, and not counting the Sao Paulo network, there will be railroads effectively under the same management all the way from the northern Brazilian state of Sergipe to the Cordillera at Mendoza, gateway to Chile.

## **HIGHWAY MAINTENANCE IN 1999: CONTRACTORS GUARANTEE ROADS OF A PRE-DEFINED QUALITY.**

**Highway maintenance funds.** In 1998, significant progress was made on setting up highway maintenance funds in Latin America and the Caribbean. The Guatemalan fund continued to operate, and legislation was introduced to set up funds in Costa Rica and Honduras which are expected to

start functioning in 1999. Meanwhile, El Salvador and Nicaragua joined the list of countries passing laws to establish their own highway maintenance funds.

**Roads in acceptable conditions.** The Highway Maintenance Fund of Guatemala, special budget account, has been operating since 1997. This fund is composed of an earmarked part of the fuel tax, at a rate of 4 US cents per litre, the proceeds of which are deposited monthly.

The year 1998 was one of intense activity for Guatemalan highway network maintenance. The fund amounted to US\$ 65 million, and this was used to undertake a wide-ranging programme of maintenance contracts on the entire basic network not covered by rehabilitation contracts (some 3,000 km of paved roads), in addition to 1,900 km of important unpaved roads. As a result of this maintenance, the country's roads are now generally in an acceptable condition for users.

In mid-1998, the National Highway Council (CONAVI) Act was passed in Costa Rica, along with the corresponding by-laws. CONAVI will be responsible for the management of the national highway network, administering a highway fund financed by a special 15% levy on fuel prices plus half of the proceeds of the vehicle ownership tax.

In Honduras, following a long period of lethargy, at the end of 1998 the existing 1993 legislation was amended to specify the fraction of the fuel tax to be paid into the highway maintenance fund. As a result, the obstacles that have prevented the fund from operating so far will be removed.

**Participation by users.** The Guatemalan fund has a six-member consultative board, of whom three represent transport operators, farmers and contract suppliers. The board has been meeting twice a month, advising on everything related to the working of the fund and transmitting users' opinions on maintenance policies. In the equivalent seven-strong CONAVI board in Costa Rica, three of its members come from the private sector, while in Honduras the private sector also has three representatives on an eight-member fund committee.

In El Salvador and Nicaragua, meanwhile, the process of drafting legislation to establish their respective funds is at a very advanced stage. In each case, an autonomous body is expected to be set up to administer the fund, with a significant representation (at least 50%) of direct and indirect users on their boards. Here the fuel levy is defined as a charge for highway maintenance services rather than as an earmarked tax.

Moreover, the fund has to be managed in accordance with efficient and effective business principles.

In Nicaragua, the government has a majority in Congress and could have passed a law without great difficulty. However, it has preferred to obtain prior popular support and is running a wide-ranging campaign to explain the importance of the highway maintenance fund to the public. This could serve as an example to other countries that want to obtain public support.

**Performance specified maintenance contracts, also known as maintenance contracts,** are becoming increasingly accepted, to the point where they are gradually being seen as a normal contractual process. The Inter-American Development Bank and the World Bank are both promoting their use. As of the end of December 1998 seven Latin American countries (Argentina, Brazil, Chile, Colombia, Guatemala, Peru and Uruguay) had nearly 400 contracts of this type, covering some 30,000 km of roads. In 1999 they are expected to continue spreading, and it is intended to carry out

a preliminary general assessment of their results.

This type of contract means having a highway maintenance service that keeps roads in good state. Contractors are required to maintain the roads in a better condition than that stipulated, and it is their responsibility to schedule and undertake the actions needed to achieve this. Payments to the contractor are usually made via a fixed monthly sum, regardless of the amount of work actually carried out in the period, and this is a strong incentive to raise efficiency, cut costs and work in an essentially preventive way.

Given that the targets to be met are explicitly stated, users have a clear idea of the state of roads they can aspire to. The same is true for the highway agencies, whose officials usually lack guidance in this respect. There can be no doubt that this will lead to roads in better condition.

Performance specified maintenance contracts only began to be used experimentally as from 1996, so their types and scopes are still extremely varied. Most contracts cover only routine road maintenance, and the indicators defining the state of the road establish that there should be no potholes, that cracks should be filled and the drainage system kept unobstructed, sign-posting should be complete and visible, and the verges kept clean. In some contracts maintenance is limited to cleaning the drainage system and the verges, and excludes the paved roadway. A few contracts include periodic maintenance and have extra indicators relating to the smoothness of the road surface. Others involve refurbishment work or small-scale improvements payable on a piece-work basis.

**Viability of Micro-enterprises.** In Colombia, Guatemala and Uruguay, many kilometers of routine maintenance work is contracted out to micro-enterprises of 10 to 15 workers -- a fact that demonstrates the viability of such firms. Contracts normally run for one or two years and cover 40 to 60 kilometers, although there are some that exceed 150 kilometers. Contracts that include rehabilitation or periodic maintenance are generally given to construction companies for periods of two to five years, covering stretches of between 120 and 400 kilometers of road. Nearly all contracts correspond to inter-urban highways of a variety of traffic levels, although an urban one was started a year ago in Montevideo.

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