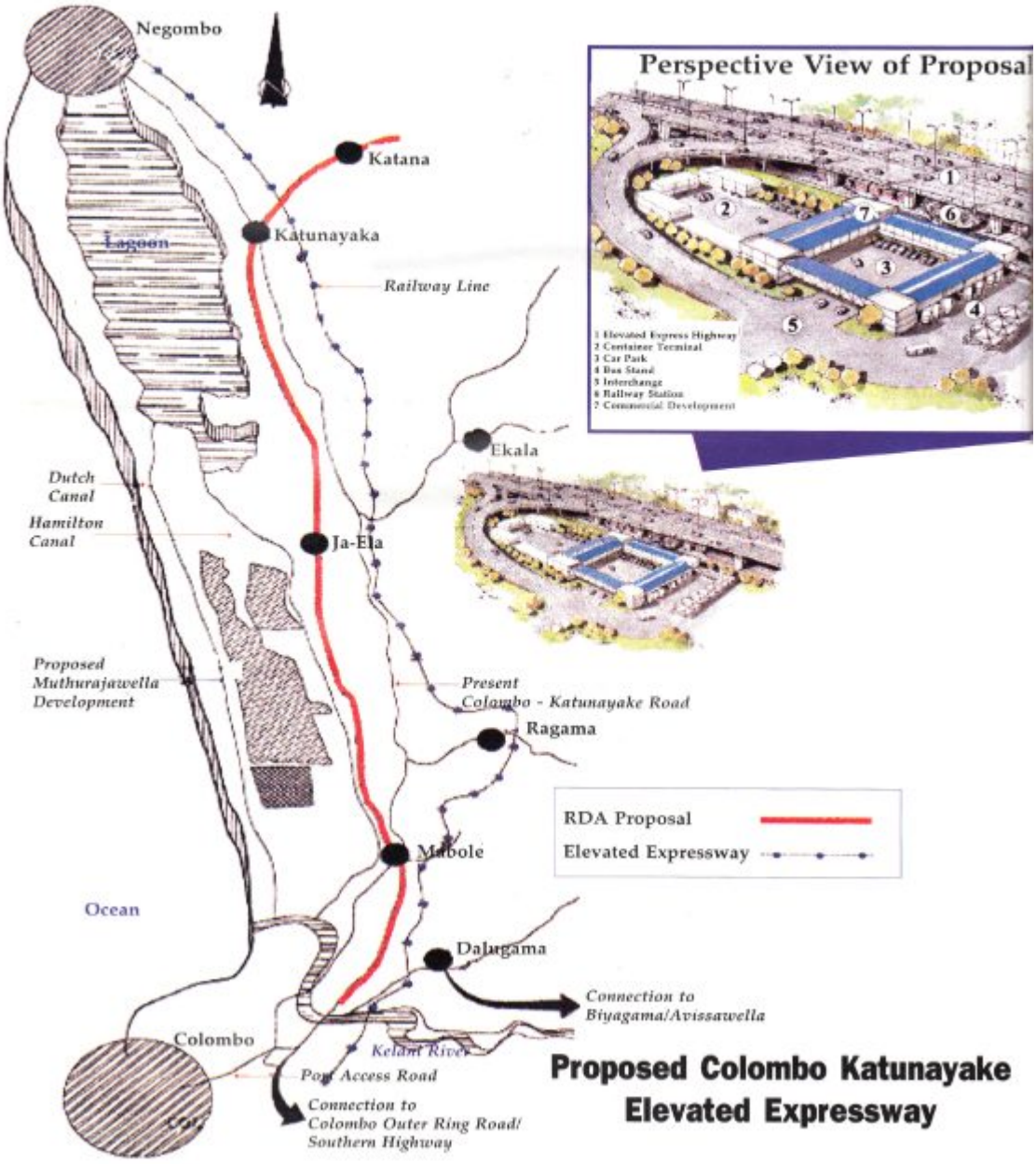
# Economy On Wheels




**Asiff Hussein takes a look at current ideas and trends in transport**

**infrastructure development**

EVER SINCE THE DAWN OF HISTORY THE WHEEL HAS played a pivotal role in shaping human destiny.

It has helped in the dispersal of peoples and ideas throughout the world and has contributed to the economic development of nations in no mean measure.

Indeed, it is today well accepted in the west that the economic progress of a nation is intimately connected to the state of its transport infrastructure. So much so that the concept of “Economy On Wheels’ constitutes the basis of any really significant infrastructure development project in these countries. For example, the role played by Germany’s strategic highway network (Autobahn) in the country’s economic progress in the post world war II era is only too well known to need any comment.

As for railways, we know how smoothly the opening up of America during the last century took place by means of the rail.

The advanced state of its roadways and railways has been shown to be a major contributory factor to the rapid industrialization and resultant economic progress of the highly developed South East Asian countries such as Malaysia and Thailand.

In contrast, Sri Lanka has been sadly lacking in a strategic road and rail network, a factor which has tended to retard its economic progress. A proper road and rail network would not only help in easing the prevailing traffic congestion in the metropolis and other urban and sub- urban areas, but would also pave the way for the rapid commercial and industrial development of outlying areas, especially the economically depressed regions such as the Mahaweli, Uva and the South.

Besides, a highly developed transport network facilitating the easy flow of vehicular traffic would also mean that the country would save on overall fuel costs and experience less environmental damage in the form of air pollution.

Further, economists point out that one of the major considerations taken into account by potential foreign investors is the state of a country’s transport network. It goes without saying that Sri Lanka stands to lose a great deal on this account.

The import of vehicles into the country continues unchecked and no significant remedial action save for the Marine Drive highway where work commenced but recently appears to have been taken by the authorities concerned.

In 1985, the total number of vehicles available in the country was 441,003. This included 148,586 motor cars, 161,378 motor cycles, 21,793 private coaches, 16,516 buses and 92,730 lorries and Vans

The following year, 46,974 more vehicles were added to this number.

As evident from the new registration figures of the Department of Motor Traffic, the latter half of the 1980s and the early part of the 1990s saw a significant increase in the number of vehicles added to our roads.

According to the Urban Development Authority (UDA) 275,000 vehicles enter Colombo city (CMC limits) daily at all points from 6.00 a.m. to 7.00 p.m.

In High Level Road alone it has been shown that 40,000 vehicles daily pass Maharagama to and from Colombo.

Whereas a vehicle in the highly commercialized areas of the metropolis (viz. the Fort and Pettah) travels an average of only 13 km per hour in off peak hours, the average speed at peak hours declines to as little as 10 km per hour.

As such it is imperative today that urgent action is taken to address our traffic conditions, especially in the metropolis.

| Year | Total No. of Vehicles | Motor cars | Private coaches | Govt. buses |
|---|---|---|---|---|
| 1987 | 46,884 | 7695 | 1151 | 85 |
| 1988 | 41,825 | 8031 | 863 | 245 |
| 1989 | 84,445 | 8772 | 444 | 260 |
| 1990 | 106,324 | 9831 | 1159 | 78 |
| 1991 | 84,446 | 6620 | 3259 | 189 |
| 1992 | 98,682 | 9346 | 2874 | 30 |
| 1993 | 84,469 | 7829 | 2110 | — |
| 1994 | 75,520 | 12,719 | 476 | — |
| 1995 | 82,401 | 18,867 | 1701 | — |
| 1996 | 79,433 | 17,664 | 1169 | — |

The authorities do have some major road and rail development plans. Unfortunately most of them are still on paper.

According to Prof. Willie Mendis, senior professor, Town and Country Planning, University of Moratuwa, and former chairman, UDA, the prevailing traffic problem is essentially a peaking problem and is restricted to metropolitan areas. He noted that one means of overcoming the problem is resorting to what is termed the ‘staggered hours’ solution wherein a significant time lapse between office and school opening times is introduced so as to avoid congestion at peak hours.

This may entail taking such steps as stipulating that schools open at 7.00 A.M. and offices at 10.00 A.M.

However, Prof. Mendis contends that although this is a good solution, it is not the ideal solution due to what he terms the culture of parent-child relationship that exists in Sri Lanka.

Parents prefer to drop their children in school on the way to work. Besides many cannot afford to hire vehicles which such a measure would eventually lead to.

He noted that although there exists no ideal solution, there is a ‘preferred solution’ and that is to distribute the location of major congestion activities such as education and employment by dispersing them.

Such a scheme would necessarily entail improving the standard of educational and commercial facilities. For example, he proposes that the state establish more Royal Colleges and Visakha Vidyalayas in outlying sub-urban areas so as to attract employment and commercial development in those areas.

Prof. Mendis notes that such a measure can be undertaken by initially shifting public sector activities into such areas.

The public sector, he emphasizes, should always spearhead such activity shifts to peripheral areas. He observed that the capital Sri Jayawardenepura, Kotte had been initially conceived of as an integral part of the Colombo master plan in the late 1970s and activated upto the mid-1980s during which time three major dispersals were effected viz.

1. The construction of Isurupaya and the shifting of the Ministry of Education.

2. The construction of Sethsiripaya and the shifting of a large number of government departments and state bodies such as the UDA and RDA.

3. The construction of the parliamentary complex.

He noted that the three major components of the master plan were the development of the Battaramulla township to the east of Kotte, the establishment of a high employment generation area upto the Katunayake Free Trade Zone to the north of Kotte and the development of the southern zone including Panadura, Athurugiriya, Maharagama, Kottawa, Homagama and Panagoda.

The plan however did not materialize as expected and is today not being given due attention.

The UDA had plans for the construction of residential, commercial and office complexes in these areas, especially in the Battaramulla township.

Prof. Mendis asserts that the master plan ought to be given




top priority and that all new activities such as the construction of educational facilities and commercial development be undertaken according to a plan wherein location has been taken into due consideration. Such a plan should cover transport infrastructure development including the design and layout of roads.

He noted that Croyden, a township bordering London which received much of the British state institutions has proven to be an immense success and that today educational facilities in this new suburb of London are well developed. Commercial development and a population drift to the area has been easily effected as a result.

Another viable means of combating the traffic problem is resorting to what is known as Transportation Systems Management (TSM) which envisages deriving the maximum utility from the available road network.

This scheme has found a proponent in MBS Fernando, chairman of the Road Development Authority (RDA).

Fernando contends that the country's traffic problem is not a serious problem, merely a management problem and TSM he believes, provides the ideal solution.

According to Fernando, over 50% of the country's available infrastructure is either unused or underutilized. This he attributes to badly-maintained roads and unnecessary space occupied by parked vehicles.

He is of the view that parking fees should be considerably increased in or der to discourage vehicle owners from resorting to public parking areas too of ten.

In a major move designed to provide relief to public transport users on the Galle Road, the RDA is presently carrying out its plan to establish special bus lanes in the areas immediately adjacent to the sidewalk from Colombo to Moratuwa during peak hours.

The scheme which is to be completed by the end of 1998 entails the delineation of a third lane in the area. adjacent to the seaside sidewalk which would be exclusively reserved for public vehicles during morning peak hours (7.00 A.M.-12 noon) in order to ease the traffic congestion for the public vehicles entering the city.

Similarly, an exclusive bus lane in the area adjacent to the landside sidewalk would be delineated in the afternoon/evening peak hours (12 noon -7.00 P.M.) so as to ease the traffic for the public vehicles leaving the city. Private vehicle travel in these special bus lanes, save for crossing purposes, would be made a penal offence.

Fernando noted that once the Colombo-Moratuwa bus lanes prove successful, he intends extending the scheme to cover other high congestion roads such as the High Level Road and the Colombo – Kandy Road and eventually all the major roads in the Western Province.

He noted that the establishment of special bus lanes is an integral component of TSM and is practiced in a number of developed countries including Singapore, UK and USA. In the US, the HOV (High Occupancy Vehicles) lane is reserved exclusively for vehicles carrying more than two passengers.

As for long distance travel, there do exist a number of viable proposals.

Many of the proposals envisage the construction of 'Expressways' or Rapid Transit Highways. These expressways are expected to considerably reduce the time taken for a journey on the existing highways (as much as by half) as they would be

restricted to traffic purposes alone. As such commercial development will not be allowed to take hold in the areas immediately adjacent to the expressways.

Since there would be no commercial activity anywhere near the expressways, the need for surface pedestrian crossings and junctions would also not arise

Instead of the conventional junction, expressways have exit and entry points at selected interchanges which ensure that traffic is not disrupted.

Besides halving traveling time, expressways also segregate long distance and short distance bound vehicles and so help lessen the traffic congestion in the metropolis and outlying areas.

So far, the expressway project that has been given serious consideration by the state is the proposed Colombo-Katunayake expressway mooted by the RDA.

The project is estimated to cost a maximum of Rs 6 billion and envisages the construction of an expressway from Colombo to Katunayake to the west of the existing highway.

The Government recently entered into a Memoran- dum of Understanding with a group of Malaysian investors keen on undertaking the project.

According to the R D A chairman, the Malaysian party would shortly be undertaking a feasibility study of their own. A prefeasibility study of the project (1997) states that the expected Internal Rate of Return in the case of it being undertaken by private enterprise is 8.51% (in 24 years).

The Kuala Lumpur-Penang expressway in Malaysia, the Seoul-Pusan expressway in Korea and the Bangkok-Chiang Mai expressway in Thailand have been cited as ‘catalysts’ that have helped trigger the economic growth of these countries. As such there is no reason why Sri Lanka should not benefit from these proposed expressways. The only drawback is of course the huge costs entailed in financing these grandiose projects. However this could be easily overcome once foreign investors as well as the local private sector have been convinced to invest in this sort of long-term return investment.

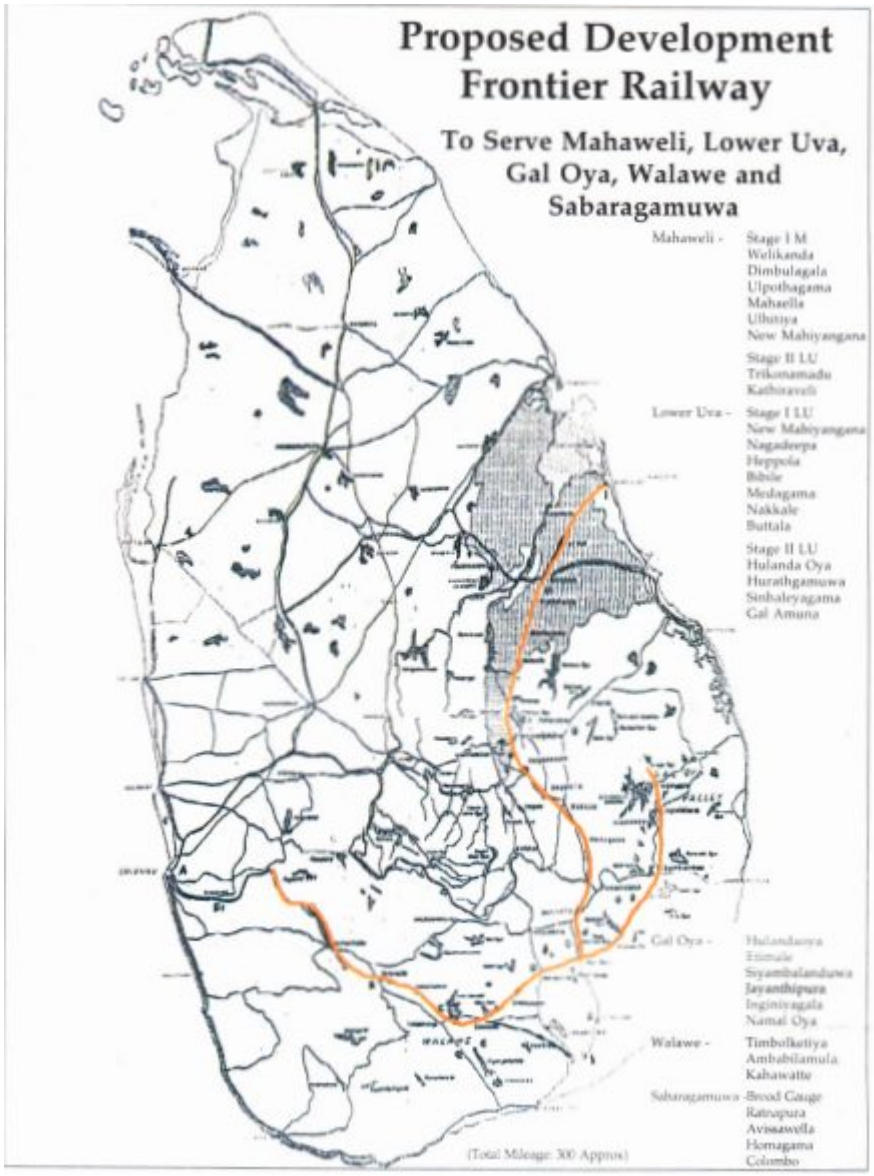
Another matter that is deserving of urgent consideration is the development of the country’s rail system.

Indeed it may be said that the quickest viable means of alleviating the prevailing traffic congestion in the metropolis and the Greater Colombo area lies in transferring goods and passengers to the rail.

In Europe, the railway remains the lifeline of economic development and is central to its transport infrastructure development with roadways taking second place.

In countries like the Netherlands, railways span a good part of the country beginning from the major airports.

Traveling by rail costs half the fare as that of traveling via bus and if a systematic arrival/departure schedule with more frequency (15-20 minutes) at peak hours (7.00-10.00 AM. and 4.00 6.00 P.M.) were to be formulated by the Railway De-




partment, there is no reason why more commuters should not resort to rail transport, more especially, light rail transport which would mean a swifter ride.

If we consider the expenditure on fuel (diesel) passenger transport via rail would cost roughly half to one third the amount as that entailed by bus transport for the conveyance of a similar load.

Such a measure would help the country save on considerable foreign exchange that would otherwise have gone to purchase fuel.

This is especially relevant in a context where the railway continues to be under state ownership and management, and diesel and other fuels continue to remain state-subsidized commodities.

Besides, more rail transport would also mean less environmental pollution due to lesser consumption of fuel.

More importantly, it would help to ease the prevailing traffic problem in no mean measure.

The UDA has proposed the establishment of a light rail system for the densely populated and highly commercialized areas of Colombo as well as for the fast developing peripheral townships bordering the metropolis.

The plan which has been based on the Mass Rapid Railway Transit System concept envisages the construction of lines for light rail trains (ie. trains with a few carriages usually 2- 5), tram cars or articulated (train-like) buses. Head of the Transport planning unit, UDA, Gunetilake Bandara said that the proposal has been accepted by the Board Of Investment