

AERIAL URBAN COMMUTATION

Urban transportation is of paramount importance for sustenance and development of cities, most of whose transport infrastructures are grossly insufficient due to highly inadequate road areas available.

Further, growth of auto-rickshaw population going up at a very high rate, is tending to fill in whatever little space that the metro streets are left with, and traffic congestion are going up steadily.

According to Pollution Control Boards, Auto vehicular transport sector is the major contributor to the air pollution in cities with pollutants namely CO, Hydrocarbons and Nitrogen Oxide being at alarming levels.

The annual rate of road accidents from motor vehicles in cities is growing at a rate of 5 percent per year. Pedestrians and cyclists fatalities large portion in cities.

Passenger mobility in urban cities having to rely heavily on auto vehicular transportation, its roads are becoming, more and more, subjected to life risks and increasing traffic problems. **An alternative public transport system therefore, is the essential need of the hour.**

For the future transport services, CRSPL offer the newly developed and patented Curvo Ropeway System, which has all the good and attractive features, being free of pollution, congestion and road accidents.

CURVO ROPEWAY

Curvo Ropeway is an answer to alternative urban commutation. It is adaptable to bends and can follow existing road routes, travelling overhead without consuming and interference with road space and current vehicular traffic as well. It is safe, pollution free, both in terms of emission and noise, and fully accident free having automated Drive System, instead of multiple human control behind the wheels as in case of Auto vehicular transportation system. The Curvo Ropeway is operable over congested serpentine city/metro roads.

Its enormous potential for congested cities as a safe, pollution free, environmental friendly, comfortable, accident free, continuous economic mode of transport, need to be exploited.

Its speciality is its ability to negotiate horizontal curves and deviations while moving at an online operating speed without the need for detaching or slowing down.

| Sl. No. | Vehicular Road Transport | Aerial Transport (Special Development) |
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| 01. | <u>System</u> Flexible, can negotiate road routes. | <u>System</u> Flexible, can negotiate road routes, overhead. |
| 02. | <u>Capacity</u> Dependent on road widths, congestion. | <u>Capacity</u> Single Track Double Track 2000 pph. 4000 pph |
| 03. | <u>System Control</u> Multiple Drivers behind the wheels. Prone to accidents from Drivers ability. Drivers' individual caution levels determine accident proneness. | <u>System Control</u> Automatic control. Human element hardly involved, except watch through CCTV and use of button, if necessary for stop. |
| 04. | <u>Congestion</u> Very prone to vehicular congestion, and disruption of traffic. | <u>Congestion</u> As vehicles/cabins are released with automatic time spacing, question of congestion do not arise. |
| 05. | <u>Pollution & Carbon Emission</u> HUGE | <u>Pollution & Carbon Emission</u> NIL |
| 06. | <u>Contribution to Global Warming</u> Considerable. | <u>Contribution to Global Warming</u> Negligible, almost Nil. |
| 07. | <u>Fuel Subsidy outgo from Govt.</u> Substantial | <u>Fuel Subsidy outgo from Govt.</u> Nil |
| 08. | <u>Casualties from Urban/Semi urban road accidents</u> Substantial, 70/80 per day, in India. | <u>Casualties from Urban/Semi urban road accidents</u> Expected to be nil with attentive maintenance. |
| 09. | <u>Capital Cost</u> None for existing road routes, but new facility in the form of Flyover to cost Rs. 60.00 Crores / km. and more. | <u>Capital Cost</u> For relieving road by 2000 pph. Approx. Rs. 10.00 Crores per KM For relieving road by 4000 pph. Approx. Rs. 20.00 Crores per KM |
| 10. | <u>Land</u> Existing, but hardly any scope for expansion. | <u>Land</u> Will occupy 1.0 m ² space on the kerb for each column support at approx. 90 / 100 M spacing |
| 11. | <u>Gestation Period</u> Existing road routes have very little scope for passenger capacity increase. New facility with flyovers etc will take 4/5 years on the same route. | <u>Gestation Period</u> Increase by 4000 passengers per hour over a stretch of approx 4/5 Km, in 16/20 Months. |
| 12. | <u>Existing Urban/Metro road surface occupation</u> 60 to 70 % of road surface during peak period by personal vehicles- cars and autos. | <u>Existing Urban/Metro road surface occupation</u> Nil |
| 13. | <u>Health Hazards, Accident</u> <u>Emission contribute to health hazards. Children even at tender ages, suffering from Asthmatic and respiratory problems, have surfaced. Introduction of NANO and the cheap version of private cars will multiply these hazards.</u> | <u>Health Hazards, Accidents</u> No emission, no contribution to health hazards. |

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| 14. | <u>Security</u> <u>Special Security not needed</u> | <u>Security</u> <u>Special Security needed to take care of equipments</u> |
| 15. | <u>Maintenance</u> <u>Existing Maintenance</u> | <u>Maintenance</u> <u>Special Line and equipment maintenance needed,</u> <u>Preventive maintenance during night hours need to</u> <u>be routine. Will be much less than annual</u> <u>maintenance cost per KM basis</u> |