## SAFETY OF THE SCHOOL TRANSPORT SYSTEMS

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Transportation and traffic problems are very much common in Sri Lankan cities like Kandy and Colombo. Development of road networks, junction improvements and arranging bypass roads can solve this to certain extent. But the excessive increment of vehicle ownership and deterioration in mass transport systems aggravate this.

Kandy is one of the major cities in Sri Lanka, which was developed over several centuries. Initial development of the city leads to consume high cost for road improvement programs and traffic control structures. Geometry of the city and preservation of cultural heritage restrict the physical improvement of highway traffic infrastructure. The best way to solve this kind of problem is to introduce proper Highway Traffic management system.

It is obvious that the traffic conjunction occurs during the following time intervals in a day; 6:30 to 9:00 AM, 1:30 to 3:00 PM, and 4:00 to 6:00 PM. Morning peak is the worst due to the merging of school traffic flow and office traffic flow. Separation of two traffic flows and introduction of mass transport services can help to solve this traffic problem to some extent. But, still the problem of school traffic flow is there. Unsatisfactory service and poor safety of the public transport service tends to make the parents to send their children by other safer means. School van service which is the latest trend in school transport service, has made a lot of traffic congestion problems, parking problems and social problems as well. This trend cannot be stopped and restricted. Therefore it should be controlled and organized. In this research we are trying to introduce organizational structures and control policies for the school van service.

The main characteristics of the school van service were obtained by the external quadrant traffic counting in Kandy city. It shows that the school van flow occur between 6:30 to 8:00 AM and it was about 19% of the total flow. The accumulation of school vans near schools always disturbs the incoming traffic flow. The roadside parking survey around the Kandy city shows that more than 400 vans were parked on most of the secondary roads and in some parts of the primary roads. The total length of the parked van queues was about 2 km long. The data on the quality of the school vans was obtained by interviewing school van drivers in selected locations. It shows that most of the vans do not have any helper and most of them are over crowded. Also by interviewing school children, the quality of the service can be obtained. As the last part of this research, drivers should be interviewed to investigate the social impact due to their gathering in one place, and identify their problems.

This is still an ongoing project. So, there are lot more details to be collected to complete this research. Many more investigations are required to identify the most accurate scenario of this problem. The information already collected can be helpful to make some suggestions for this problem. All the school vans should be registered and included into the public transport stream. In the registration, they can be limited to particular zone in the city and to particular routes. New traffic policies for the passenger limitations and for the vehicle condition should be introduced. On the other hand, school vans should be benefited by reducing taxes and providing proper parking places.

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