6. CONCLUSION

The analysis was carried out in the year 2012 and VKT was calculated for all the vehicle types in Sri Lanka for the year 2012.

Motor cycles have the highest Vehicle Kilometers travelled within the petrol Vehicles. That is about 15.41 billion kilometers. The second most highest is Three wheelers and it is about 8.1 billion kilometers and third, the cars and wagons and it is about 3.91 billion kilometers. It’s clear that the motor cycle usage in Sri Lanka is higher than the other vehicle types. Figure 3.4 shows the breakdown of the VKT for motor cycles. It’s well depicted that in Western Province and in North Western Province the motor cycle usage is higher than the other provinces.

VKT of diesel vehicles where the passenger van shows the highest VKT out of all the diesel vehicle types that is about 505.192 million kilometers.

Although motor cycle has the highest VKT in Sri Lanka When we consider the VKT per vehicle in the whole country, it reveals that most used vehicle in Sri Lanka is three wheelers where the second most used vehicle is motor cycles. This well depict that Sri Lanka is a third world developing country.

Highest usage of three wheelers is in Western Province and second highest in North Western Province. The minimum usage of three wheelers is in Eastern Province.

Highest usage of Cars and Wagons is in Western Province and that is comparatively higher by 5 billion kilometers than all the other provinces and second highest in North Western Province.

Considering the fuel sale in year 2010, 2011, fuel sale growth factor is calculated for the year 2013 and by assuming the vehicle factors that used for the year 2012 is same as the year 2013, then VKT is predicted for the year 2013 for all the vehicle types in Sri Lanka.

The vehicle factor was calculated for different vehicle type in District wise, Provinces wise and Island wide.

To predict the future VKT, vehicle factor, Fuel usage, Fuel consumption rate are required. In the current study in order to find vehicle factor, fuel sales data collected from randomly selected 500 fuel stations in island wide. However repetition of similar exercise in every year would not be economical. Hypothesis analysis was carried out to find the minimum no of survey points which has 95% accuracy. This study reveals that minimum no of survey fuel stations are represented the entire fuel station to the extent of 95% accuracy level.
As a sample calculation the possible number of stations were found for Colombo district for Motor Cycles is 8.

Similarly other vehicle types also can be tested for estimation of vehicle factor by hypothetically and can be found the minimum no of stations that can represent the entire fuel stations in District wise.