###### National Assembly

Question Number: 2755

**Mr S J Masango (DA) to ask the Minister of Transport:**

With regard to her reply to question 2495 on 14 July 2015, what (a) empirical evidence was used by her department to come to the conclusions stated in the reply, more specifically that (i) the overall economic impact was positive, (ii) delays on the road network has decreased, (iii) traffic growth of more than 20% in many instances could be accommodated and (iv) the development that took place in the immediate vicinity of upgraded interchanges such as Lynnwood, Atterbury, Garsfontein, John Vorster, Allandale, etcetera reflects the positive impact the road improvement project had on Gauteng and (b) economic studies is her department referring to in the specified reply when she indicates that the project renders a high return on investment and a B:C ratio of 8 to 1? NW3187E

**Reply:**

1. The information used in the formulation of the response to question 2495 on 14 July 2015, included the following:
   1. The positive overall economic impact was assessed from:
      1. The original traffic and transport planning studies regarding the travel time savings and how it is linked to economic spin offs (economic reports)
      2. The data recorded at the toll gantries
      3. The information from the toll gantries and SANRAL’s Comprehensive Traffic Observation (CTO) stations located on the freeways and interchange approach roads measuring the alternative road network.
   2. The measurement of travel time and hence delays for the entire network are obtained from traffic studies which includes a traffic model that was developed and used for this purpose. The original model was calibrated to the 2006 conditions and the current situation has been validated against the traffic data obtained from the GFIP traffic monitoring systems as well as independent data from TomTom. The reduction in the delays on the roads considers all time periods and takes into account the reduction in the duration of the morning and afternoon peak periods where higher traffic volumes are moving through the road network in a shorter time period.
   3. Traffic volumes and speeds on national and other roads are continually recorded through SANRAL’s Comprehensive Traffic Observations (CTO) programme, which has been in operation since the early 1990s. These consist of physical counting stations installed in the road surface. In addition, in 2006 when the traffic models mentioned above were developed a comprehensive exercise of additional traffic surveys were undertaken at interchanges in the GFIP network. The comparison of the 2006 and 2014 traffic data provided the evidence that there were many instances where traffic increases of more than 20% could be accommodated. At specific locations, i.e. the Malibongwe, William Nicol and Rivonia Interchanges increases in traffic volumes during the morning peak hour were 32%, 25% and 38% respectively. On the freeways, the highest increase in traffic has been on the Albertina Sisulu (R21) freeway, but also in the peak direction on the highly trafficked section of the N1 and N12.

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* 1. Arial photographs pre and post the upgrades of these interchanges reflects the development that has taken place in the immediate vicinity of upgraded interchanges. It should be noted that development rights are dependent on adequate road capacity on the freeways and through interchanges being available to accommodate the traffic generated by the proposed developments. In the past, many of these developments could not take place due to the lack of capacity available at these interchanges.

1. There are two economic studies:
   1. Studies performed by the Business School of the University of Cape Town and ARUP
   2. A study performed by economist Roelof Botha