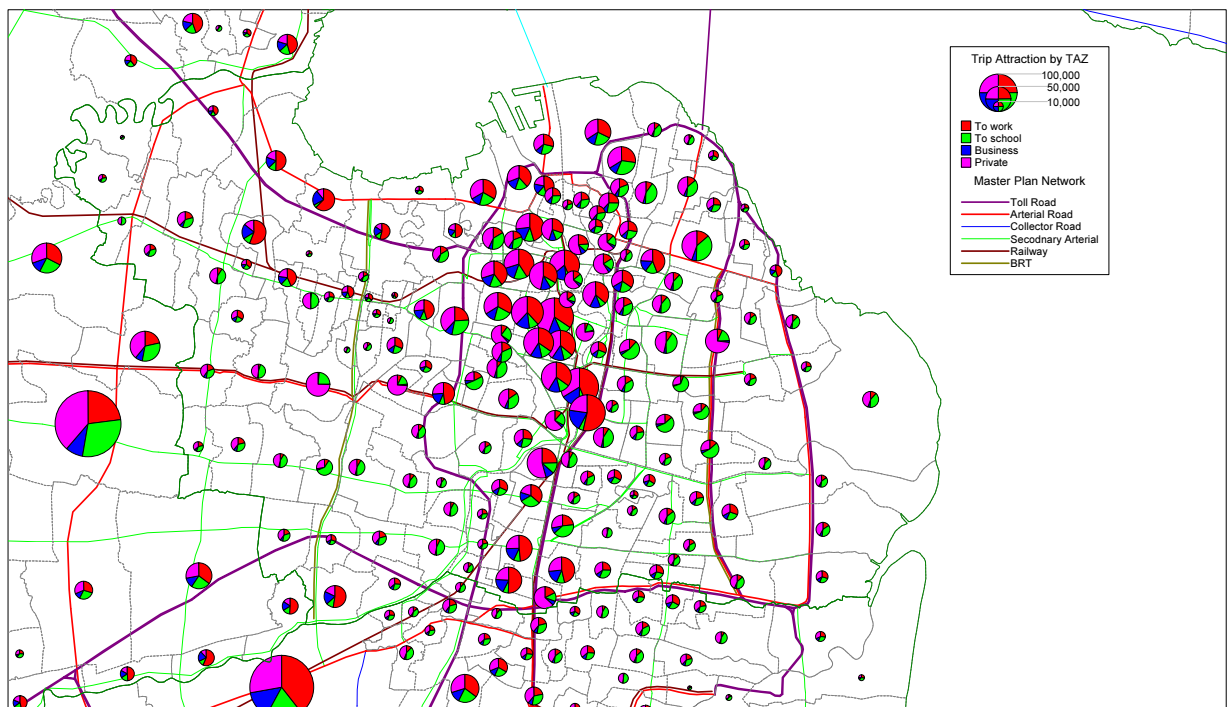


Source : JICA Study Team

Figure 6.2.3 Trip Attraction by Traffic Analysis Zone



Source : JICA Study Team

Figure 6.2.4 Trip Attraction in Central Surabaya by Traffic Analysis Zone

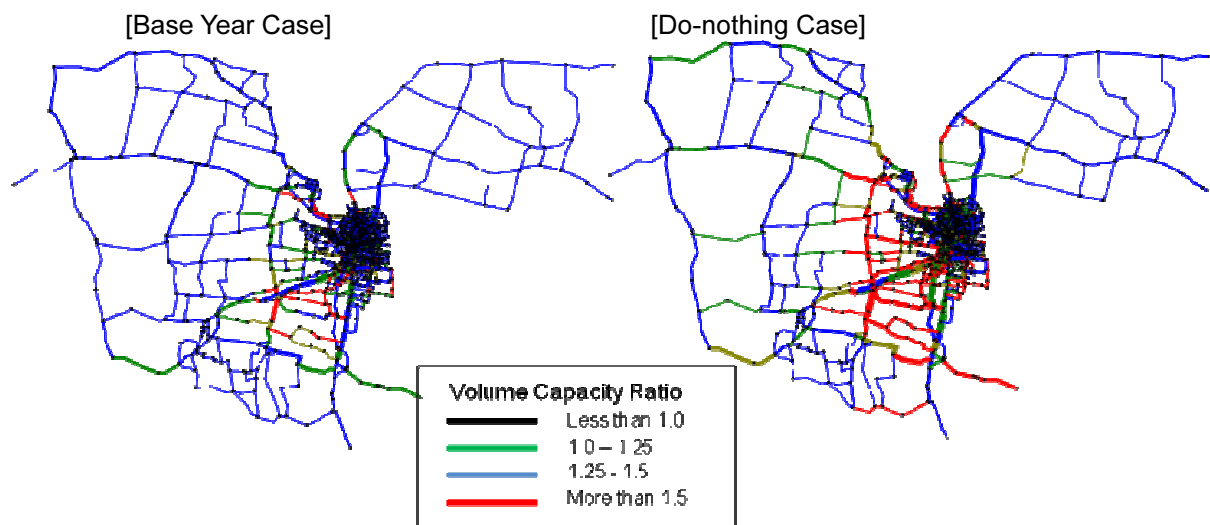
3) Traffic Assignment

When travel demand, which is called an OD matrix, is estimated and a network is developed, the traffic demand on the network can be forecast. This section shows the results of an estimation of the following cases:

- Base Year Case: Assigns the current travel demand on the base year highway network. This will be the basis for evaluating alternatives.
- Do-nothing Case: Assigns the future travel demand on the base year highway network. This is an imaginary case and it can reveal the necessity of road construction and improvement to meet the future demand.

The following two figures, Figure 6.2.5 and Figure 6.2.6 show the results. If no action is taken, traffic concentration with a volume–capacity ratio of over 1.5 is forecast to occur on many roads connecting central Surabaya and the suburban areas.

On the other hand, if the transportation network proposed in section 4.2 has been developed, traffic congestion for the target year of 2030 will improve as shown in Figure 6.2.7 and Figure 6.2.8. Since a significant number of OD trips will shift to public transportation due to the proposed public transportation system, traffic concentration will ease with a volume–capacity ratio of less than 1.0 on the developed road network.



Source: JICA Study Team

Figure 6.2.5 Estimated Traffic Congestion in GKS

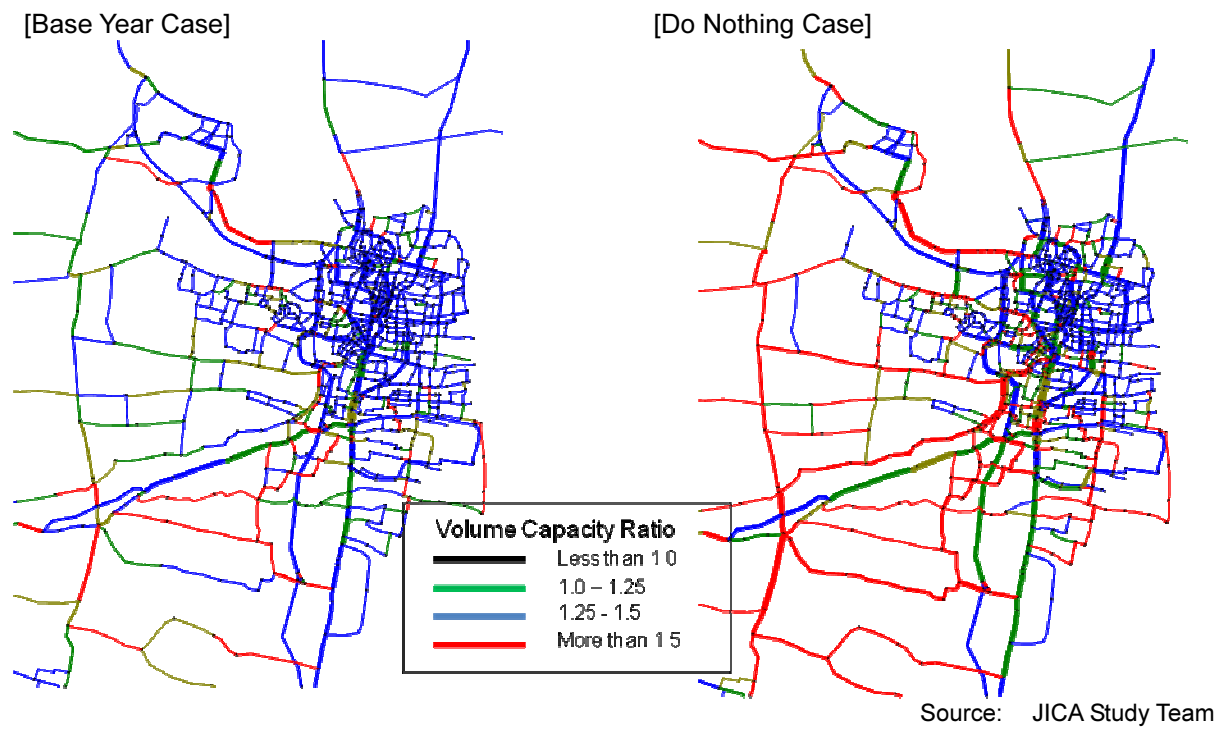


Figure 6.2.6 Estimated Traffic Congestion in SMA

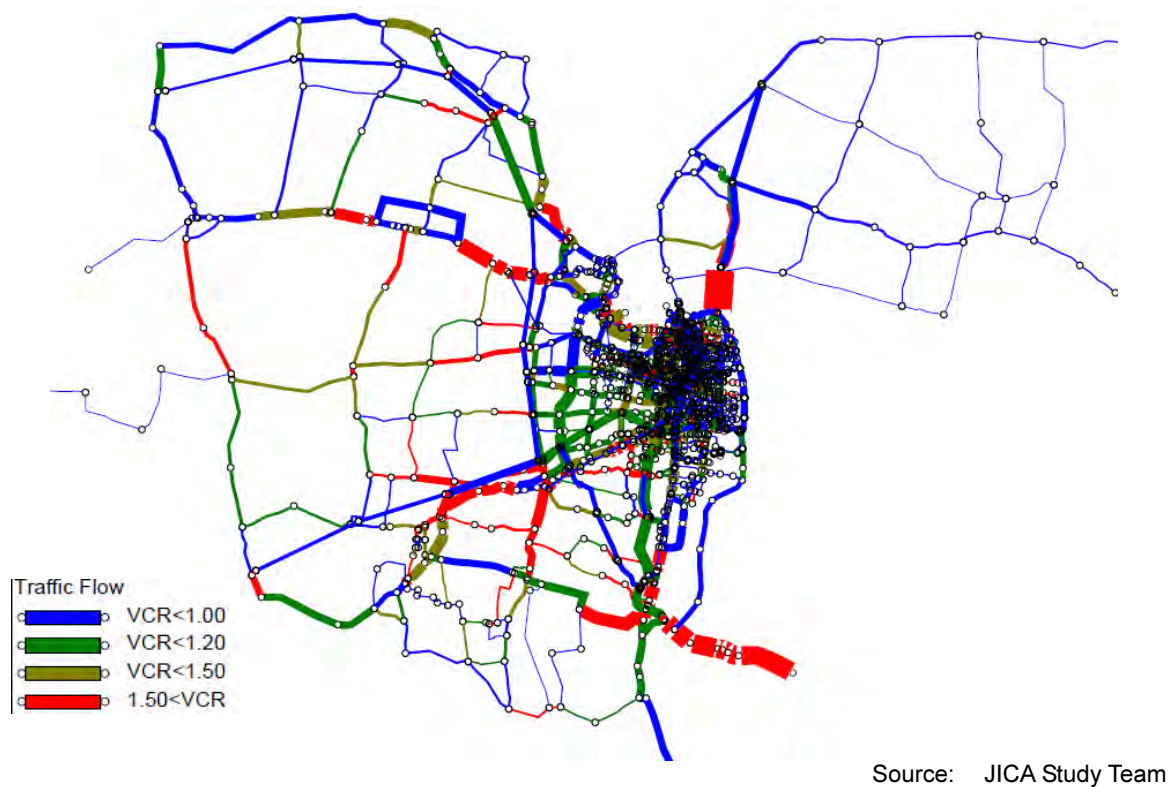


Figure 6.2.7 Estimated Traffic Congestion in GSK by 2030

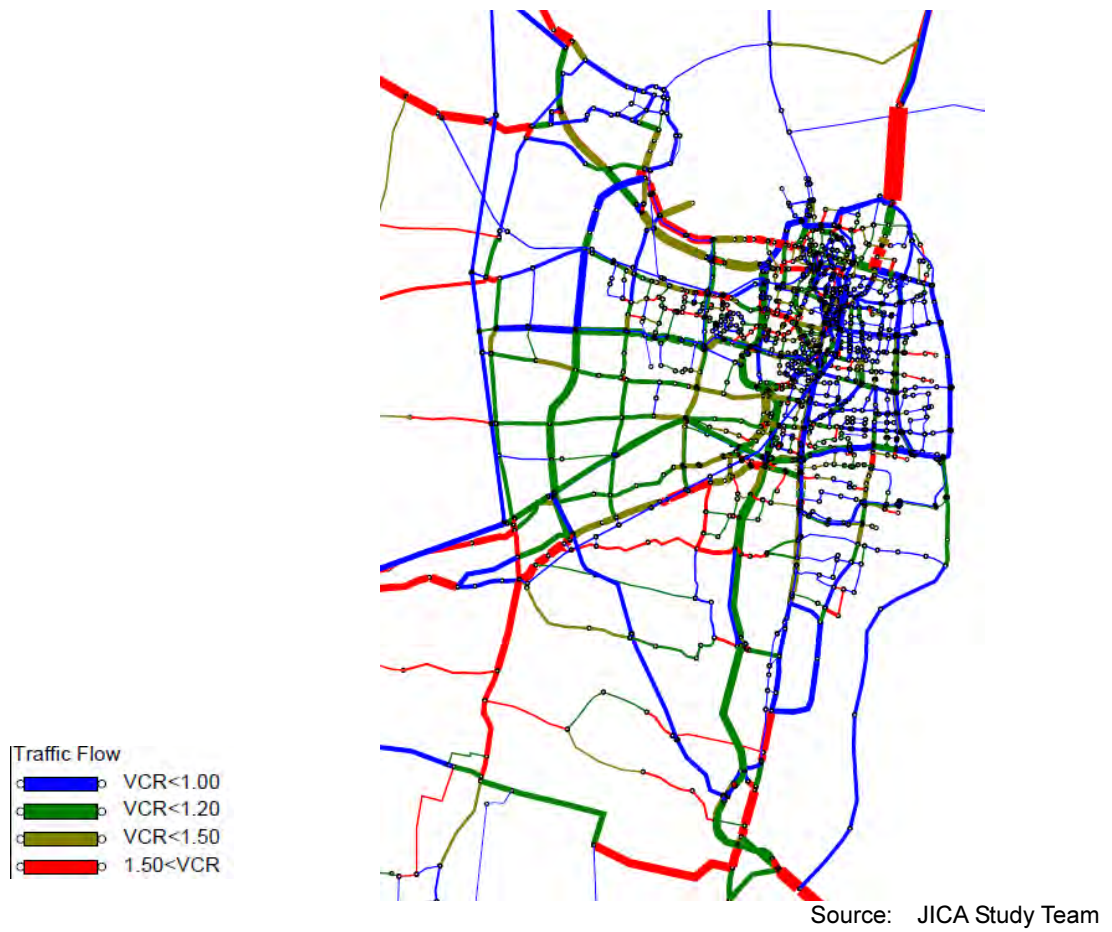


Figure 6.2.8 Estimated Traffic Congestion in SMA by 2030