

It should be noted that instead of providing additional traffic lanes, capacity could also be increased by changes to the road classification. For example, a vehicular lane along a mobility route can generally carry significantly more vehicles than the same lane on a lower order road. There are also fewer delays due to fewer intersections along a mobility route.

THE EASTERN LINK ROAD

The Eastern Link Road (previously incorrectly referred to as the eastern bypass) has been contemplated for a long time, but has never been formally adopted due to public and environmental concerns. However, the scale, nature and potential benefits of this project make it an ideal candidate for inclusion in the 2022 RMP.

The preliminary alignment was coded into the model as a single carriageway Class 4 collector road. This route involves the extension of Van Reede Road and a connection with Pastorie Road at the Theological Faculty with a new proposed bridge crossing over the Eerste River. Other alignment alternatives would include the widening of the Coetzenburg bridge near the CBD. However the modelling results, of alternative routes near the CBD, are expected to be of a similar order due to only marginal differences in travel time and distance.

Based on this limited modelling assessment, the following results are of interest:

- The term “bypass” is a misnomer, considering that very little traffic deviates from the R44 onto this route as an alternative access into the Stellenbosch CBD.
- The link road mainly serves as an internal connector, carrying a maximum of about 450 vehicles per hour in any given direction between the R44 and the proposed Van Reede extension.
- Traffic on the proposed Van Reede extension to Dorp Street (across the Eerste River) is however significantly higher (850 vehicles per hour), serving as an alternative to the congested Piet Retief Road.
- Traffic on the R44 near the Technopark intersection reduces as a result of local traffic using portion of new link road. Between Van Reede and Dorp Street, the reduction is more than 200 vehicles per hour, mainly as a result of the proposed Van Reede extension.

In terms of these findings, a strong case can be made for implementation between Van Reede and Pastorie Street. This should have immediate benefits, considering the lack of adequate river crossings and the present traffic demand patterns in this area.

The implementation of the Wilderbosch extension to Trumali Road and the Wilderbosch extension to (R44) Technopark would also have immediate benefits due to access restrictions on the R44 and proposed residential developments in the area.

THE WESTERN BYPASS

The concept of a western bypass (identified in the CITP) has been around for a very long time, but the actual alignment details have never been fully articulated. Generally, there is a perception that traffic conditions along the R44 have deteriorated to such an extent that an alternative high order bypass requires serious investigation.

There would be considerable long-term benefits for having a bypass to Stellenbosch, which include:

- Significant relief to motorists, especially along the R44
- Benefits to the town itself (less through traffic, congestion and pollution)
- Reduced urban creep
- Environmental benefits in the form of reduced car emissions
- The possibility of allowing future land use developments and new urban design initiatives.