

Introduction

Chichester By-Pass, A27, is inadequate for the amount of traffic wishing to use it. At most times of day, every day, congestion is severe, causing uneconomic delays, high levels of pollution, and unsafe driving behaviour by many trying desperately to “beat the jams”. The road forms part of the national Primary Route network and is the responsibility of Highways England (HE) whose proposals to improve the road over the last few years have met with fierce resistance from local people.

We cannot continue in a state of limbo! We need to produce **a positive solution very soon...** one which will cope with the traffic demand, but not decimate our beautiful surrounding countryside. The eventual solution must:

- produce a safer road system for vehicles, cyclists and pedestrians with freer-flowing traffic;
- provide a satisfactory economic benefit to ALL traffic (using the Primary Route and Local roads);
- cause least damage to the environment (Urban and Rural); and
- be economical in terms of its longevity.

Easy to Say, but How Can It Be Done?

With a constructive, positive view in mind, what follows is an argument for providing sufficient road capacity, all contained within the corridor of the existing A27, to cater for the **separate** requirements of **Local Traffic** (within, say, 10 miles of Chichester city centre) and **Through Traffic** (from/to West of Emsworth, to/from East of Tangmere).

The Nub of the issue

Through Traffic between Fishbourne roundabout and Portfield roundabout is delayed by local traffic using these roundabouts and the 4 intermediate junctions – 3 with roundabouts, 1 with traffic signals.

Looked at from a local viewpoint, **Local Traffic** is delayed at all these junctions by through traffic which has no interest in Chichester and is trying to pass through the area as quickly as possible.

Through Traffic on the Primary Route network is HE's responsibility, whilst highways for Local Traffic are the responsibility of the Local Highway Authority, in our case West Sussex County Council (WSCC). A27 at present carries a mixture of Through and Local Traffic and HE's recent proposals to improve their road for Through Traffic have appeared to many local people to be detrimental to Local Traffic and the surrounding rural areas. So, agreement between the two authorities has been almost impossible.

Possible solution

To unlock the problem, it would be advantageous to physically **segregate Through Traffic from Local Traffic**, so that each has its own separate carriageway, owned and maintained by the two bodies responsible – HE and WSCC. Please See ANNEX for details about segregation.

Flyovers at Junctions have already been proposed. Some people do not like their visual impact, but they are a very good method of segregating traffic in the way that is needed. Tunnels will also achieve this but are considerably more expensive to build, and to maintain in areas where the water table can be a problem. So, let's explore a little more, given that Flyovers are good traffic segregators, are preferable to tunnels, and in what follows will provide a solution which does not involve driving new roads through our beautiful, much loved countryside.

Let's start with flyovers for Through Traffic at Fishbourne roundabout, at Portfield roundabout, and all roundabout and signalled junctions in between. Through Traffic would travel on A27 between the flyovers on dedicated sections of road (more details below). Local Traffic would be carried on a separate “distributor” road (?A259/A285?) and have access to all junctions (under the flyovers) in

exactly the same way as now. Transfer between the “distributor” road and A27 would be at Fishbourne Roundabout – to and from the West ONLY, and at Portfield roundabout - to and from the East ONLY, leaving the intermediate junctions for local traffic ONLY (and any A27 traffic that has become “local” by transferring at Fishbourne or Portfield)

On A27, the flyovers at the intermediate junctions are fairly close together in terms of Trunk Road traffic speeds, so ramping up from ground level to the necessary height for a flyover – even at the maximum gradient permitted - would leave very little road at ground level between the junctions. For the safety of all traffic, and for complete segregation of Through Traffic, I believe that merging between Through Traffic and Local Traffic should be prevented. This could be achieved by **EITHER**:

1. **Widening the by-pass** to provide 3 lanes in each direction. The 2 central lanes would carry Through Traffic using the flyovers (A27) and would be maintained by HE. The single “outside” lane would carry Local Traffic, and would connect with the junctions under the flyovers in the same way as the existing road. This “distributor” road and the junctions would be maintained by WSCC. A barrier would separate it from A27 on all sections to prevent merging with through traffic on A27. This extra lane would require a swathe of costly(?) additional land on each side of the road. At most places this would not be a problem although some residential property may be affected at a limited number of sites. **OR**
2. **Maintaining the A27 lanes at the same level as the tops of the flyovers**, leaving the existing by-pass below it (2 lanes in each direction- ?A259/A285?) for Local Traffic without the need for major widening. A narrow strip of additional land may be required to accommodate the width of the pillars supporting the high-level road, but this would be much less costly than the extra land required in Option 1 above. Those concerned about the visual effect on the landscape may have a lot to say, but the new road would be no higher than the flyovers it links together, so would it be any worse than that created by the closely spaced flyovers? The promise of a line of tall trees each side of the road might go some way to allaying their fears. Pollution from vehicle exhaust would be minimized by the flatter road compared with the more undulating road between the flyovers in Option 1. Local Traffic would have 2 lanes in each direction instead of only the one provided in Option 1; and with no need for expensive major widening of the existing road, the extra cost of building the continuous high level road would be off-set to some extent. There would also be advantages at the Oving Road Junction with this method. In both options, a new bridge across the railway near Bognor Road roundabout would also be required (as it would be in nearly all options).

In Summary

If objections to its visual impact can be assuaged, and the economic assessment is acceptable, the proposal to build a high-level A27 over the existing by-pass (which would then become a distributor road for local traffic) would:

- 1 Maintain all traffic in the current A27 corridor without the need for additional roads in the surrounding rural areas;
- 2 Segregate Through Traffic from Local Traffic, allocating each to appropriate roads owned and maintained by the relevant authority;
- 3 Provide a solution with a good deal of longevity which
 - may serve it well in terms of cost benefit analysis, and
 - will avoid the need to re-address this problem in the near future.

This **IS** a bold proposal which will no doubt attract a good deal of unfavourable comment, but it is offered with the honest intention of satisfying the objectives set out in paragraph two of the Introduction, to achieve overall benefits for local residents, businesses, and long-distance travellers, and to produce a solution which is easier to manage for the authorities concerned.

Christopher Cheney, 22 Hunters Way, CHICHESTER
Mob: 07777-681292 **e-mail:** cnc22hw@gmail.com

A27 CHICHESTER BY PASS

Segregation of Traffic

Segregation can be achieved:

- by **vehicle characteristics**, eg Bus Lanes, HGV prohibition, width limits;
- by **time control**, eg traffic signals, reversible lane designation where for example the direction of flow in the centre lane of a 3-lane road is controlled by time of day; or
- **spatially**. where alternative roads provide relief from nearby congested roads, eg town centre by-passes.

Solutions for our By-Pass will most likely be based on Spatial separation which can be achieved by:

1. widening the existing carriageway;
2. providing a new road at ground level, either close to or more remote from the existing carriageway; we shall call this Lateral Duplication; or
3. providing a new road at a different level (lower or higher) on the same alignment as the existing carriageway, known as Grade Separation

Widening is useful where there are long stretches of road between junctions, or where additional lanes are required in conjunction with other measures such as flyovers.

Lateral Duplication is the basis for some of the A27 schemes already proposed by HE. These proposals move Through Traffic sideways, either to the North of Chichester or, in various ways, to the South. None, for various reasons have found favour with local people and Stake Holder organisations.

It should not be pursued as it does nothing to segregate Through Traffic from Local Traffic, and damages the environment unnecessarily

Grade Separation has been used - albeit minimally - in those proposals involving flyovers at junctions. It goes some way to segregating Through and Local Traffic, but many of HE's proposals have imposed serious unacceptable restrictions on Local Traffic movement.

I believe we should consider increasing the use of Grade Separation because it offers:

- the most scope for physically segregating Local and Through Traffic,
- an alternative to lateral separation with all its attendant difficulties; and
- a good method of separating the responsibility for, and financing of, the Primary Route and Local Roads

CNC

27/3/2018