

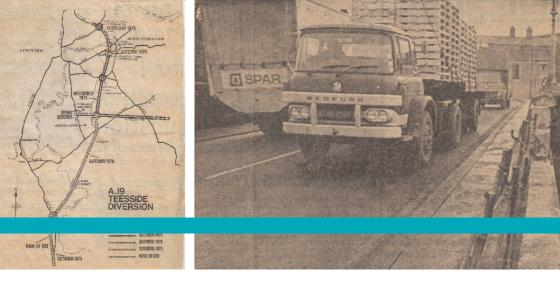


The A19 Trunk Road

The A19 tends to live in the shadow of the more well known A1 it runs more or less parallel with. However, it is no less important to the region, serving the heavy industry and associated ports of Teesside, Wearside and Tyneside.

Its journey from a single carriageway road linking coastal towns to modern day dual carriageway has been a painstaking process of over 45 years but has brought both economic and visual transformation to the North Fast





A Broad History

Today the A19 trunk road is a modern all-purpose dual carriageway running from the junction with the A1 at Seaton Burn, north of Newcastle, until it leaves the region south of Middlesbrough. It continues through North Yorkshire to Thirsk and, via a short link (A168), rejoins the A1 at Dishforth. The A19 itself continues as a non-trunk road to Doncaster.

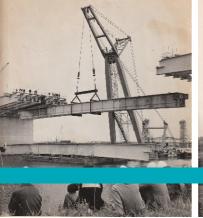
In 1952, the A19 was very different. It existed only south of the River Tyne and was a coastal route of single carriageway and relatively poor standard. Starting at South Shields it passed through Whitburn, Sunderland and Seaham, heading inland through Easington and then back out to the coast via Horden and onto Hartlepool. It then snaked its way through Billingham, Stockton, Eaglescliffe and Yarm.

The improvements in our region towards the route we know today began at the Tyne Tunnel in 1967/8. The tunnel (£13.4m) was built with approach roads from the A1058 Newcastle to Tynemouth Coast Road (£6.5m) in the north and the A184 Gateshead to Sunderland Trunk Road (£3.5m) in the south. This stretch was initially isolated and the Tyne Tunnel route was designated as the A1 until 1991, when the opening of the Gateshead and Newcastle Western Bypasses provided a toll-free alternative across the river. At this point the tunnel became part of the A19 route.

At around the same time, in 1967, the Wolviston to Sheraton dual carriageway (£7.0m) was opened north of Billingham. This was followed in 1971 by three schemes: the Castle Eden Bypass (£3.0m), the Easington Diversion (£7.0m) and the New Seaton to Seaham Scheme (£6.0m). In total, 18 miles of improvements enabled this part of the A19 route to be signposted away from the coast, south of Seaham via the western edge of Billingham.

By 1976 the dual carriageway had been extended a further 8 miles from Seaton northwardsto bypass Sunderland (£6.0m) and join the Tyne Tunnel approach road. The same year also saw the opening of the Teesside Diversion, a £70m scheme of improvements to existing roads and a new dual carriageway routes across the River Tees to connect previous improvements in North Yorkshire. The final piece of the jigsaw came in 1982 with the opening of the 6 mile Billingham Bypass (£16.0m), to the west of Wolviston and Billingham, which completed the A19 dual carriageway in the north east.







Further improvements have since taken place to a number of junctions in County Durham and the Teesside section, between Norton and Parkway, was widened from dual 2-lane to dual 3 and 4-lane in 1998, under the terms of the DBFO contract. Another milestone occurred with the opening of the second Tyne Tunnel in 2011. While the route is dual carriageway standard, some at-grade roundabout junctions remain north of Sunderland – Seaton Burn (A1), Moor Farm (A189), Silverlink (A1058) and Testos (A184). Grade separation of the A19 and the A1058 Newcastle coast road at the Silverlink junction, is scheduled to progress post-2015, and it is hoped the remaining upgrades will eventually follow to complete the continuous dual carriageway between the A1 at Seaton Burn and Dishforth.

Planning and Management

Prior to the 1970s, transport planning in the south of region was fragmented across 13 local authorities under the umbrella of Cleveland County Council and the Department of Transport. The formation of Teesside County Borough (TCB) and commissioning of 'Teesplan' brought about a more coherent strategy and rapid progress on highway improvements followed, including Stage 1 of the Middlesbrough Bypass, the A174 Teesside Parkway and culminating in 1976 with the completion of the A19 Teesside Diversion.

This period of road building however was relatively short-lived, when a further reorganisation in 1974 replaced TCB once again by Cleveland County Council as Highway Authority under a two-tier system. The 'Teesplan' still delivered the Billingham Bypass in 1982 but by then, with the economy in downturn and funding scarce, many road projects remained unfulfilled.

In 1996, the Highways Agency, then responsible for managing the A19 trunk road, let one of the first Design, Build, Finance and Operate (DBFO) contracts to a private consortium – Autolink Concessionaires (A19) Ltd. Over the life of the 30 year contract, the consortium is paid to manage, maintain and, where necessary, improve the route, between the Tyne Tunnel and the A1(M) junction at Dishforth. This arrangement delivered the widening scheme through Teesside in 1998, at a cost of around £40.0m.





A19 Wolviston-Crathorne

The most significant scheme on the A19 during the 1970s, the Wolviston to Crathorne improvement, upgraded roads on the western edge of Billingham and bypassed Stockton and Yarm. It included a new viaduct, crossing over Middlesbrough Road and the River Tees itself. Opened in November 1975, it marked the first new crossing of the river in over forty years, since the Newport Bridge was built in 1934. Today, as then, it dominates the skyline due to it being built so high to accommodate ships into and out of the port of Stockton. However by the time it opened, the port's days were almost over, making the extra elevation somewhat unnecessary.

The viaduct opened on the same day as another substantial piece of Teesside roadway – The Parkway – a four-way free-flow interchange with the A66, still one of the few today on the non-motorway network in the UK. Collectively known as the Teesside Diversion, the two schemes, at a combined cost of £21m was the biggest single local authority project ever completed in the area at the time. It improved the route across and south of the river considerably, giving congestion relief for the communities of Stockton, Eaglescliffe and Yarm.

Maintenance of the highways and structures of the Teesside Diversion, following opening, were to prove problematic. The effect of continuous salt corrosion, especially during the winter months, was severe on the box-girder construction of the viaduct, resulting in regular, expensive repair work. Eventually in 1988, the underside of the deck was completely enclosed in steel and glass-reinforced plastic, to protect the structure from further damage and allow easier access for future maintenance. Crossing the alluvial flood plain of the River Tees also proved problematic, with the poor ground conditions and large increases in heavy commercial traffic causing sections of the pavement to wear out much earlier than expected.

A19 Billingham Bypass

While the Teesside Diversion had opened up the route south of the river, travelling north still remained difficult as the A19 passed through the edge of Billingham on the old bypass constructed in the 1960s. Clearly this was now inadequate for the growing level of demand, especially in the case of heavy commercial traffic. This result was a new, 6mile stretch of 2-lane dual-carriageway to the west of the town. Opened in 1982, it was constructed by Dowsett and designed by the North East Road Construction Unit with Bullen & Partners. It included two grade-separated junctions at the A689 and Stockton Ring Road (Norton). The most significance structure however is the 500m long viaduct which carried the existing Billingham Road over the bypass and Billingham Bottoms. The viaduct was an early example of the use of weathering steel in a major bridge, whereby a protective but non-damaging rust coating is allowed to naturally form on the steelwork rather than preventing rust through continuous painting.



The main carriageway was laid as a continuous concrete surface, a subject of controversy in recent years due to the perceived noise levels. In 2003, the Highways Agency commenced a programme of concrete surface replacement or overlay, with modern quieter materials, on parts of the national trunk road network. However, the Billingham Bypass was not included in this initial programme and users of the road cannot fail to notice the relatively high tyre noise.

The Tyne Tunnels and Approaches

The Second Tyne Crossing opened in 2011, providing a dual 2-lane carriageway for both north and south movements across the river and relieving a significant bottleneck along the A19 route. Accommodating the new tunnel required major alterations to road layout.

The roundabout at the southern entrance was removed and a new interchange connecting the local road network was constructed to provide a continuous A19 through the tunnel. Extending the tunnel portals and highway works some 400m further south brought about significant environmental benefits in reduced noise, improved air quality and enhanced landscape for Jarrow and the immediate local area.

The existing tunnel and the existing toll booths north of the river now serve only northbound traffic. The roundabout at the north entrance was removed and all traffic out of the tunnel flows directly onto the A19. A new toll plaza was constructed for traffic travelling on the southbound carriageway and through the new second tunnel. A dedicated bus lane allows buses to bypass the plaza. All access for local traffic crossing the river was diverted onto the A19 further north at the A193 Wallsend to North Shields road junction.

In total this has produced a free flowing entrance and exit to the tunnels and experiences in the early days indicate that the once notorious queues have been eliminated.

Thanks to Tony Robinson of CIHT North Eastern Branch, for preparing this article. Tony is a Transport Planner at Jacobs UK Ltd, in Newcastle upon Tyne

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