

Country Mile investment for road safety improvements

Awaiting your turn in the 5mph convoy system, the kids start asking "What's that man over there doing..?" A quick glance shows he and his colleagues surrounded by stationary traffic, cones and barriers stretching ahead, yet little clear sign of what's actually happening. Familiar? Current users of the busy A396 south of Tiverton might think so, but although these may look like other roadworks, questioning kids and inquisitive drivers alike can rest assured... there's plenty more going on between Bickleigh and Tiverton than immediately meets the eye.

Underpinning this work is the DfT-funded Devon Country Mile project, which constantly seeks innovative ways to improve rural road safety. Its central theme is advanced use of data to develop new solutions to often intractable road safety issues - followed by investments for improvement. Incidents on Devon's roads are reviewed regularly by experts seeking to detect emerging patterns - and in the three years to July 2008, 13 collisions were reported between Bickleigh and Tiverton. Well over half occurred in wet conditions, 46% involved just one vehicle where the driver lost control, and 54% a collision with the vehicle ahead. Such "clusters" are often addressed by road resurfacing - but the Country Mile team recognised this as an unusual incident record, with some similarities to events on roads elsewhere in the county. Thus, safety improvements resulting from bespoke remedial work can help inform wider-scale accident reduction - and Department for Transport cash from Devon's Country Mile has boosted investment to £315,000 on this 1.8 mile (3km) stretch of road.

The work has sprung from two routine, vehicle-based surveys. 'SCRIM' is an annual 'Sideways Coefficient Routine Investigation Machine' survey of Devon's A roads, revealing the grip delivered by tyres on road surfaces: friction declines as ageing tarmac becomes shiny. 'SCANNER' looks at 'geometrical' data, the road's physical shape - its curvature and profile, how comfortably vehicles traverse it, whether ruts are developing, and its surface smoothness and texture. The Country Mile funding has extended this machine-gathered data by adding a painstakingly detailed, manually undertaken topographical survey, allowing the County's engineers to more fully assess the many imperfections discovered. These ranged from hidden culverts to serious undulations - of which plenty were found - and adverse crossfall (whether the road - and your car - leans left or right.)

Correlating this data with that from incidents and collisions revealed not just a road with an unenviable history, but a road actually from history, owing more to evolution than actual design. Thus, knowledge of the complex inter-related factors affecting this section of the A396 has allowed far reaching re-design to current standards, aimed at minimising the road's collision record. Several areas of reconstruction to improve profile, alignment, crossfall and drainage are under way, and new kerbing, a new surface and white lining will complete the current work by Christmas. Another phase - again part of Devon's County

Mile project - is planned for next year, involving new, safer, ways of signposting bends on this route.