LANGENFELD
HAUPTSTRASSE · GERMANY

CONTEXT

Langenfeld is a town of about 50,000 inhabitants between Cologne and Dusseldorf. The Hauptstrasse, or "main street", is the shopping and commercial centre and carries about 10,000 motor vehicles and 3,000 cycles per day as well as buses. Although it is a Lander (third tier) road, nearby autobahns mean that most of the traffic is generated by the town itself. The street is 1.2 km long.

OBJECTIVES

The street had a concentration of accidents, estimated to cost £500,000 per year, and traffic conditions generally created a poor environment for shoppers. The fairly straight and open aspect, with a carriageway width of up to 14m encouraged excessive driving speeds. The aim was therefore to reduce accidents while making the street more pleasant and convenient to use.

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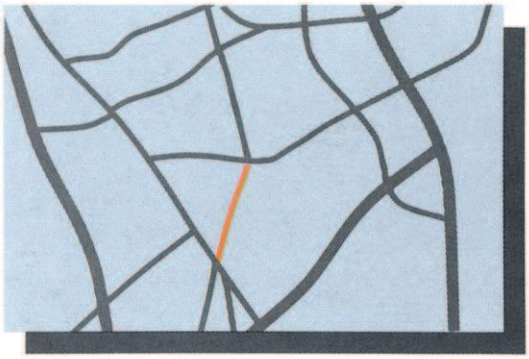

DESCRIPTION

The adopted scheme combines a number of measures to slow vehicle speeds and to make it easier for pedestrians to cross the street. Speed reduction is mainly achieved using cushions and to a lesser extent lateral shifts. The shifts have also allowed tree planting in a way which shortens the driver's forward view. Central islands with pedestrian crossing places

81: Cyclists are provided with a separate path to reduce conflict on the narrow carriageway. Although safer for cyclists, conflicts can arise with pedestrians and bus passengers at busy locations where space is scarce. (Photo: T. Pharoah)

82: Lateral carriageway shift produced by alternate build-out and central island. Cyclists are provided with a separate path at footway level but separated by lighting columns and a change of surface colour. Trees help to screen parked cars. (Photo: T. Pharoah)

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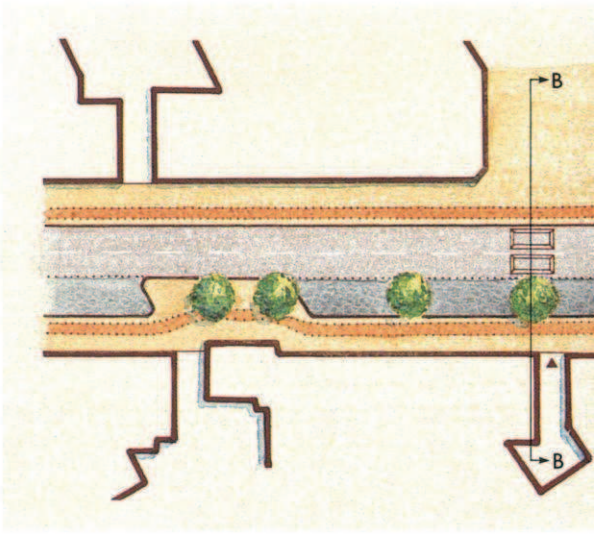

83: Central islands with areas flush with the carriageway help pedestrians to cross and provide "shelter" for turning vehicles. (Photo: T. Pharoah)

84/85: The carriageway alignment at this bus stop allows vehicles to pass, but makes it easy for the bus to rejoin the stream when ready. Note that the pedestrian crossing is defined with coloured bricks rather than paint. (Photo: T. Pharoah)

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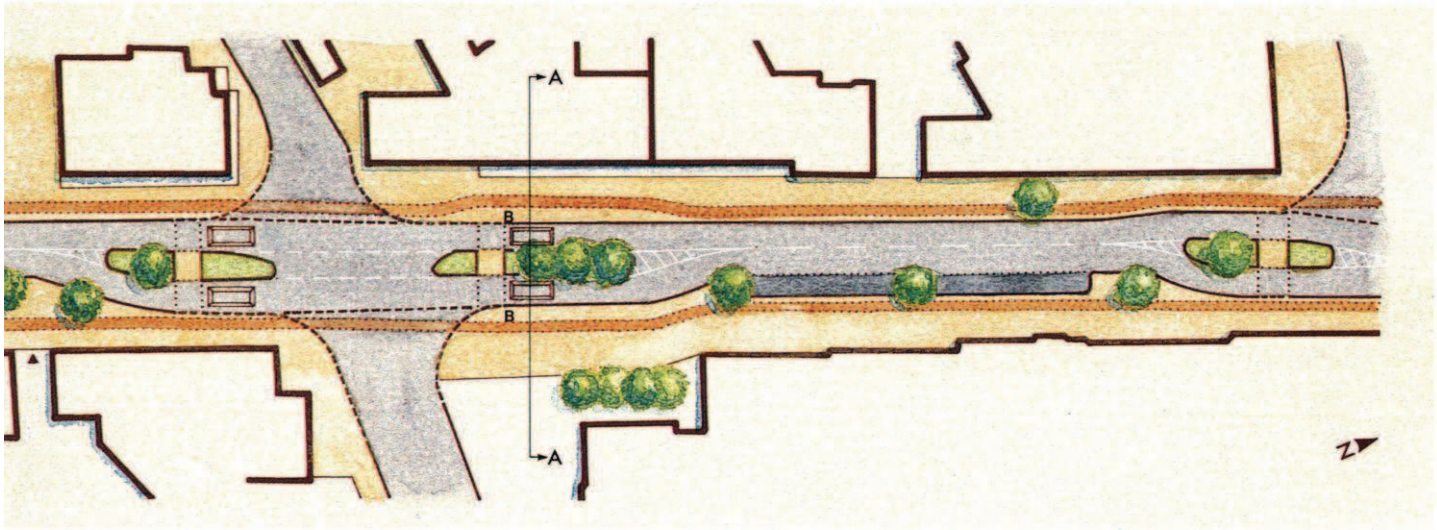
alternate with footway extensions and car parking, thus creating the lateral shifts. Separate cycleways have also been provided adjacent to or within the footway. Bus stops are designed to give priority to buses, either by preventing other vehicles from overtaking, or by giving immediate access back into the traffic queue. The cushions are 1.6m wide which allows buses to pass over them unaffected. Footways and cycleways are continued at the same level across side road junctions. A speed limit of 25 mph applies. The carriageway has been reduced in width, though not to the extent desired because of requirements laid down by the military authorities.



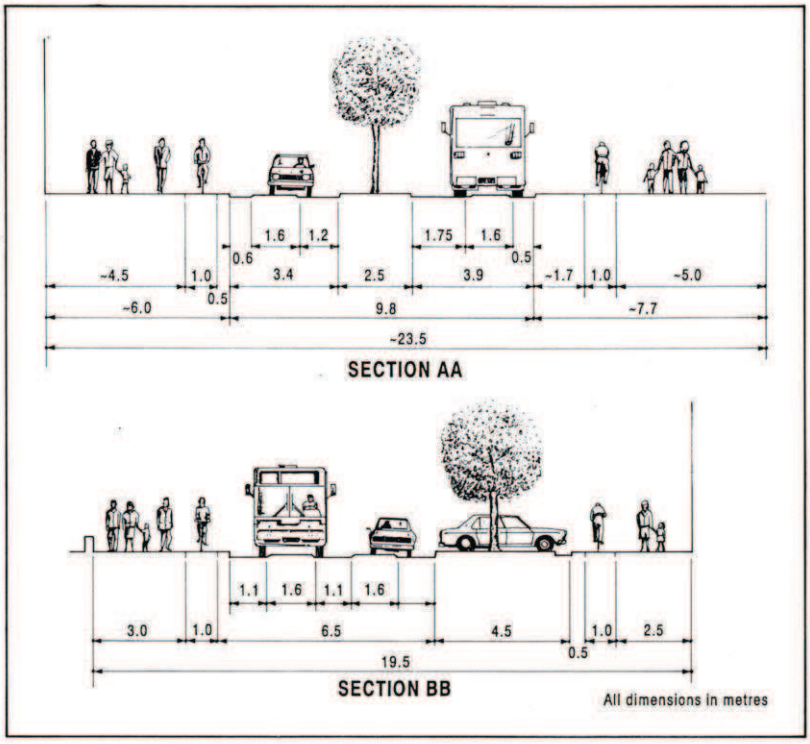
COST

Not known.

ASSESSMENT

Traffic speeds have been reduced to below 25 mph in the vicinity of the cushions. These are effective in encouraging drivers to stop for pedestrians at crossing places, especially those placed in advance of the crossing. Parking in the defined on-street spaces interrupts traffic flow and so also helps to keep speeds down. Crossing the street has been made easier for pedestrians, though they do not always use the specially designed crossing places. Planting at the side and in the central islands has softened the appearance of the street.

Pedestrians do not always respect the cycleways which causes some friction, but not danger. It would seem that the side road junctions have over-generous dimensions which means that pedestrians and cyclists



86: Cushions are of limited width so that buses can pass over without discomfort to passengers. (Photo: T. Pharoah)

86

87: A cushion immediately before a crossing encourages drivers to give way to pedestrians. (Photo: T. Pharoah)

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88: Central island provided at a pedestrian crossing and bus stops. Other vehicles cannot overtake a bus at the stop, and are slowed by a cushion. Note also planting on the central island, the lateral shift further ahead, the separate cycleway, the use of colour to define side roads (foreground) and footways, and the reminder 40 kph (25 mph) speed limit sign. (Photo: T. Pharoah)

are still threatened by turning traffic. The extra carriageway width required by military traffic in the north-bound direction has meant an over-large gap between the cushions and the kerb which allows drivers of smaller cars to avoid the cushions.

The accident and other research results are not yet available.

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