

RETHINK THE HIGHWAYS

Vincenzo Ricceri

Architetto Libero Professionista – Milano

ABSTRACT

This paper requires the debate and the evaluation of a layout concerning the project of new speedways, as an untested theorem.

The study of safer, more comfortable and faster speedways, starts here from a working hypothesis, in motorways design, based on the swap of the side on which the carriageways, and the flows of traffic supported by them, stand.

The exchange, that preserves – on each of two carriageways - the emergency lane on the right, and fast lanes on the left of respective traffic flow, obtains a better functional character relation between the two subsystems in a program of "prevention and cure" of incidents and/or disasters.

Mutual contact between the respective emergency-lanes; possibility of access from both the directions for means of aid, control and service; axial arrangement of the services, parking areas, etc., with consequent bidirectional use; full functionality of the installations in case of successive widening of the roadway; and other less important but not marginal improvements; all these are possible if we redesign the intersections, the main nodes and services.

The passage from the usual road-system to the new system can be made thanks to the overtaking through the overpass/underpass of a track over/under the other. The intersections equivalent to trumpet interchange, clover-leaf, etc. are developed in outlines that are not only possible but also desirable in some ways. Taking a closer look at the schemes (see relation) you can see that in comparison with junctions with more levels of overtaking lanes than usual, (certainly more expensive) more fluid shapes with remarkable reduction of nodes or loops can be obtained.

The use and functional effects seem to be amazing at first sight, and such to suggest the proposal is worthy of verification of the economic effectiveness in the wider sense of the term. In doing this not only the materially quantifiable costs and benefits have to be considered, but also and above all, the social, environmental costs and benefits etc..