

IPB – MOTORWAY INTERCONNECTION OF HIGHWAY ROAD SYSTEM PEDEMONTANA WITH THE DIRECT MOTORWAY JUNCTION BRESCIA-MILANO

CLIENT: *IPB Spa*

YEAR: 2008

ON BEHALF OF: *IPB SPA*

DESCRIPTION OF ACTIVITIES:

The study verified the traffic demand attracted by the new with fee Motorway Interconnection between “Pedemontana” and the direct Brescia-Milano (named IPB), in the road map scheme foreseen in the study 2003, according to the regional limitations (east of Boltiere route, closed collection system and reduction of the number of exits).

The role of the road is identified within the provincial territorial planning. The survey in support of the Province of Bergamo PTCP defines Trevigliese plan and municipalities of Isola as “the area with the higher territorial density, both residential and industrial, after Bergamo one” that, from the highway road point of view, includes for “the radial links which end in the main town SS 525, SS42, etc., critical junctions represented by Adda crossing, urban centres and Treviglio area cross”.

Modelling tool

The forecasts of travel demand were elaborated by applying the transport form of Meplan Model produced by Marcial Echenique & Partners (Cambridge, UK).

The relative analysis of supply and demand, in the current and future situation, with and without the project, aimed to test the attractiveness of the new infrastructure and its transport role in the area of the study.

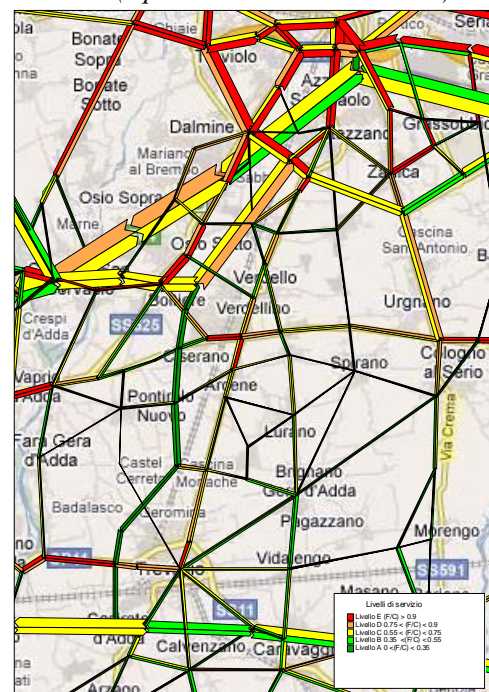
The regional simulating model was used by TRT for traffic studies in the main motorways in Lombardy.

The future traffic demand was estimated using appropriate growth rates for the expansion of origin-destination matrix and the future graph was implemented by including the main planned works at regional level (Brebemi, TEM, Pedemontana, Cremona-Mantova, etc.).

The traffic model provides graphically and numerically the load, the service levels of the networks with and without the project and the impact of new infrastructure, in terms of variation in the flow of traffic on ordinary roads and existent highways. The graphic findings in terms of traffic and service levels represent an extract of the whole developed transport ultraregional scale model, in order to make reading and in-

terpretation of data easier as the projected infrastructure is long about 13 km.

*Interconnection Dalmine-Treviglio:
Flows and service levels in Project Scenario – year
2023 (equivalent vehicles/rush hour)*



Economic analysis

The costs benefits analysis points out the benefits that community can have from the realisation of the infrastructure, comparing costs with total benefits of it, calculated for the whole time and updated. Costs assessment takes into account both the investment factor and operating costs. The economic benefits assessment consider resources saving that the project will cause, in particular in terms of time saving for motorists, vehicles operative costs and environmental costs.

The analysis results showed broadly positive profitability indicators that have remained like that also during the sensitivity analysis: capital and operating costs increased by 30%, transportation benefits calculated through the variation of the surplus fell by 30% and the combination of the two previous conditions.