

The research activities of the Highway Engineering Laboratory consist of research projects funded by Greek or European Union Organizations, Establishments or private companies. The research activities per thematic unity are :

Highways & Pavements

Optimization of geometric alignment and applications, Bituminous binders, Bituminous mixtures, Aggregate materials, Static and dynamic testing of bituminous mixtures, Alternative materials for road construction, Road safety and environmental studies, Pavement analysis and pavement evaluation, and Pavement management

- Some of the latest research projects executed are:
- Development of pavement design methodology for flexible pavements
- Road maintenance design manual
- Research for the development, production and use of new bituminous materials for road and building structures
- Use of by-products in road construction
- The use of slugs in wearing courses

Airports

Master plans, Geometric design of airports elements (runways, taxi ways, aprons, etc), Geometric design of airports, Runway obstacle studies, Airport business plans, Airport efficiency studies, and Airport noise.

-
- Master plan of Thessaloniki's International airport
- Master plan of Ioannina state airport
- Business plan of Thessaloniki's International airport
- Viability study and promotion procedures of additional projects in Thessaloniki's International airport

Railways

Dynamic behavior of railway vehicles, railway safety, management of railway transport, rural railway means of transport.

- Some of the latest research projects executed are:
- Transport of dangerous goods by rail
- Integrated system for evaluation of the quality of railway infrastructure
- Scientific support of the Hellenic Presidency in railway transport