

Seminario de Transporte de la Cátedra Abertis-UPC

24 de mayo de 2016

17:00h, en el aula B1-005 del Campus Nord UPC (BarcelonaTech)



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Analysis of car passing on two-lane rural roads: models for improving geometric design and marking

Summary:

On two-lane rural roads, car passing maneuvers allow faster drivers to drive at their desired speed, but jeopardizing safety: car passing may improve the level of service but it also may cause road crashes by temporarily occupying the opposing lane. The thesis reviews the current criteria to determine where passing is permitted, based on passing sight distance. More than 1,000 maneuvers were observed using video cameras installed on the road, and an instrumented vehicle which was driven on the road, acting as an impeding vehicle. These data were used to develop a passing maneuver model and to review existing criteria to determine the location of passing zones. Finally, a microsimulation model for two-lane rural roads was defined and calibrated.

Bio:

Doctor Civil Engineer. As researcher at the Highway Engineering Research Group of Valencia Technical University (UPV), Carlos Llorca worked on road safety and operation of two-lane rural roads. His work was based on traffic data collection and modelling of traffic events. The purpose of his PhD Thesis was to review design standards for car passing on two-lane roads. Since 2015 he is working on safety of sport cyclists on two-lane rural roads, among other projects.

Esta tesis doctoral obtuvo el **XIII Premio Abertis de investigación** sobre gestión de infraestructuras del transporte en España correspondiente al año **2015** y, a su vez, el **5th Abertis International Research Award** (ex-aequo).