KOULULIITU
- FOR SAFETY OF SCHOOL JOURNEYS

HISTORY OF KOULULIITU
ASSESSMENT METHOD

• In 1999 a calculation method for the assessment of safety of school journeys was created using the information of the Kuusamo Road Database.
• During the traffic safety planning phase the work was prompted by the thought “How can we objectively assess the safety of the journeys to school travelled by the students of different schools?”
• In 2000 the method was tested in 10 municipalities in the different parts of Finland, and then developed into a generally accepted calculation method named Koululiitu.
• The project steering group comprised representatives from the town of Kuusamo, Ministry of Transport and Communication, Finnish Road Administration, County Administrative Board and the Police.
• Experts from the Finnish National Board of Education, Association of Finnish Local and Regional Authorities, and Central Organisation for Traffic Safety in Finland joined to strengthen the group of experts.

OBJECTIVES OF KOULULIITU

• In order to answer the questions raised in Kuusamo a formula was created the use of which provides an index (= risk number) for every road section.
• The objective of the method is to classify the road sections in accordance with their safety.
• It is fair to all students.
• It is objective.
• Differences due to the various ages of the students can be taken into consideration.
• Easy to use and illustrative.
• Built on the most commonly used GPS software.

CORNERSTONES OF KOULULIITU

• The formula used is based on three complementary premises:
  • Statistical danger, i.e., the computational relevance of different factors in children’s traffic accidents.
  • Danger experienced by children, i.e., traffic psychologists’ opinion on the reciprocal weight of the variables.
  • Empirical knowledge of the municipalities and the police in assessing danger.

VARIABLES OF MATHEMATICAL METHOD

• Formula includes summary and coefficient variables with various weights.
• Summary variables are:
  • Traffic volume (AWDT & AWDT / heavy traffic).
  • Speed limit approx.
  • Shoulder width (paved & entire shoulder).
  • Sight distance percentage.
  • Surfacing.
  • Road’s status in the network.
  • Functional class.
• Coefficient variables are:
  • Maintenance class.
  • Lighting.
  • Pedestrian & bicycle lane.
• Variables are from road database.

For more information please contact:
Teemu Kinnunen, Kiviharjuntie 11, 90220 Oulu, Finland
Teemu.Kinnunen@ramboll.fi
Tel. +358 20 755 7079