

Associate Professor Florin Nemtanu

Transport Faculty – Politehnica University of Bucharest

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### TOPICS

- Why & How?
- What is a SUMP?
- The link between SUMP and Transport Master Plan
- KPI for mobility projects
- Safety
- Conclusions



## WHY & HOW?

- Why? accidents, road safety, pedestrians & vulnerable users
  - The main problem fatalities (pedestrians and kids)
  - Safe urban place (the target)
- How?
  - Collection of information
  - Strategies and plans SUMP
  - Action Plans
  - Implemented solutions Intelligent Transport Systems (ITS)





World Health Organization

### WHAT IS A SUMP?

- Sustainable Urban Mobility Plan a tool to apply strategies on urban mobility
- Objectives of SUMP reduction of accidents, pollution and negative effects of transport in urban area
- KPIs Reduction of the fatalities number, number of accidents etc.
- Focused on safety safety must be the main issue and all mobility solutions have to be conditioned by safety.
- Technical solutions for safety the key element could be ITS (it is not costly and the impact is major).



### SUMP AND TRANSPORT MASTER PLAN

- The ends of trips are in the city the trip has to be analysed from one door to another one. At least three segments: 2 urban and 1 interurban
- Source of complex traffic mix of all transport modes and all categories of vehicles and users. Focus on vulnerable users.
- Economic activities in cities separation of industrial areas and residential areas multimodal terminals
- Safety streets and roads these could be the most important target
- Heavy trucks and the city the correlation between industry and local administration in terms of safety



# KPI FOR MOBILITY PROJECTS

- Safety related indicators for infrastructure:
  - Reduction of accidents (vulnerable users kids)
  - Reduction of fatalities
  - Safety areas school areas zero accidents
- Safety related indicators for technologies
- Combined indicators:
  - Accidents and pollutions
  - Accidents and cost
  - Accidents and time
  - Safety & Time & Cost & Pollution costly but highest value of B/C ratio





Figure 14: Distribution of fatalities by mode of transport in the EU. 2015





### SAFETY

- External safety support ITS and othet technical solutions which are able to increse the safety level in urban area
- Safety in street infrastructure Make the mobility solutions / infrastructure safe from the start (design and implementation)
- Smart city and safety Smart safety means no accidents, nothing more.
- Modal shift based on safety the shift to safer urban transport modes
- Education on road safety the main force is the human mind
- Zero accident strategy in urban area



### INTELLIGENT TRANSPORT SYSTEMS

- Intensive approach of safety problems
- Close related to human behavior
- Based on new technologies existing technologies smartphones
- Multimodal approach and focused on mobility Mobility as a Service MaaS
- In-vehicle ITS pedestrian detection and active safety systems
- Road side systems signaling and intelligent infrastructure



### CONCLUSIONS

- Urban area pedestrian and vulnerable road users
- Safety as main issue for SUMP and Transport Master Plan
- Complexity of traffic in urban area
- Intelligent transport systems as main tool to solve the safety problem on urban roads
- Combined indicators for projects Safety Pollution Time Cost Efficiency
- Focused on socio-economic benefits instead of financial benefits



#### THANK YOU FOR YOUR ATTENTION! HAVE A NICE AND SAFE TRIP!

- florin.nemtanu@upb.ro
- www.tet.pub.ro
- www.upb.ro



