SELF-EXPLAINING, SELF-ENFORCING ROADS

Nikiforos Stamatiadis, Ph.D., P.E.
University of Kentucky
Roadway Design Objectives

A roadway environment that the user can

- Interpret correctly and safely
- Minimize their mistakes
- Minimize impact of their mistakes
Basic Idea

User gets **consistent** information from
- Roadway
- Roadway signs
- Environment
A Self-Explaining Road
What is the Issue?
Road User and Speed

- Provide a clear and consistent speed information
- Enforce speed
  - Physical means
  - Signs and markings
- Signs are frequently disregarded
- Need for novice means
Areas of Focus

- Rural areas
- Transition areas
  - Rural to built-up zones
  - Tangent to curve
Potential Problem Area
Another Problem Area
Some Background

- Concept initiated in Europe
  - Denmark
  - The Netherlands
  - Germany
- Focus on road type/function & desired operating speed
- Safety improvements
  - Travel speed reductions
  - Traffic separation
Some Ideas-Solutions
Some More Ideas - Solutions
Some More Ideas-Solutions
Some More Ideas-Solutions
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Some More Ideas-Solutions
What's Next?

- Increase applications and evaluate
- Evaluate potential applications for US roadways
- Reconsider
  - Functional classification
  - Design speed
The Big Question

Are we ready to trade speed for safety?