

# 6<sup>th</sup> annual PIN Conference

Claes Tingvall on behalf of Swedish Government,  
Swedish Transport Administration



- A proud Minister –  
Catharina Elmsäter-Svärd

## In Short

- We are very proud of the Award given to Sweden by ETSC PIN
- We think that targets and measuring progress is the key to success
- The number of fatalities in road traffic crashes went up in 2011, but 2011 was still the second best year we have had
- 2010 was probably where we had the luck on our side
- 2012 looks better than 2011, so far

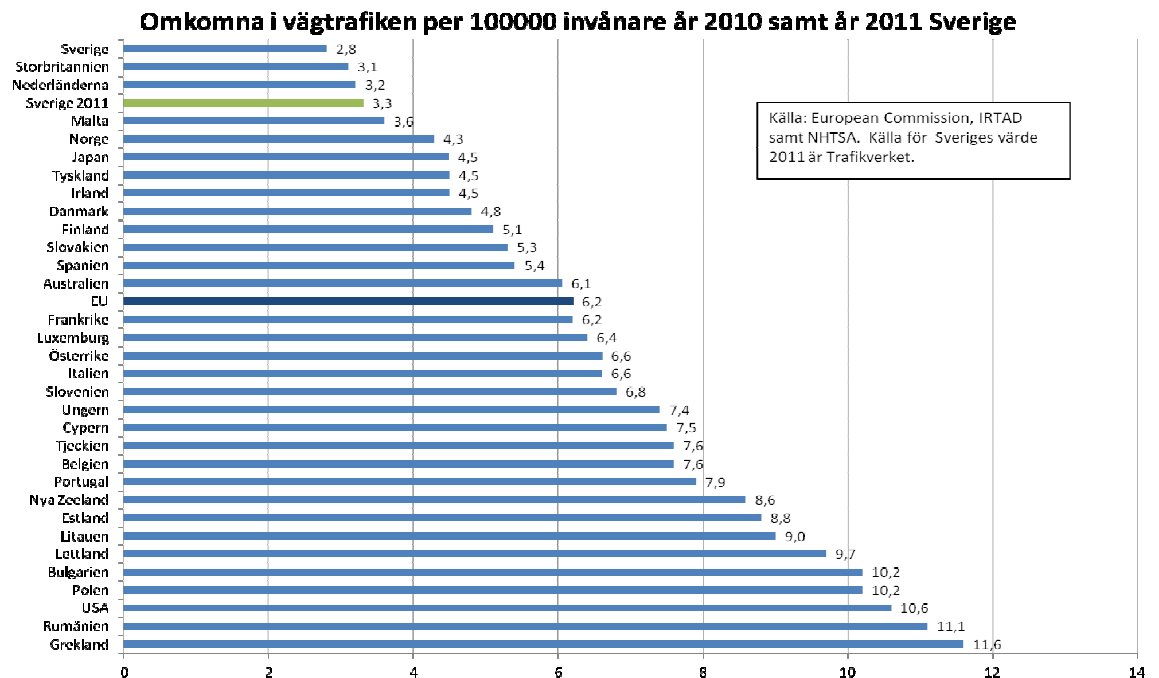
# What Sweden has done since last year

- We have concentrated on planning for 2020!
- We have some insights now that we did not have before

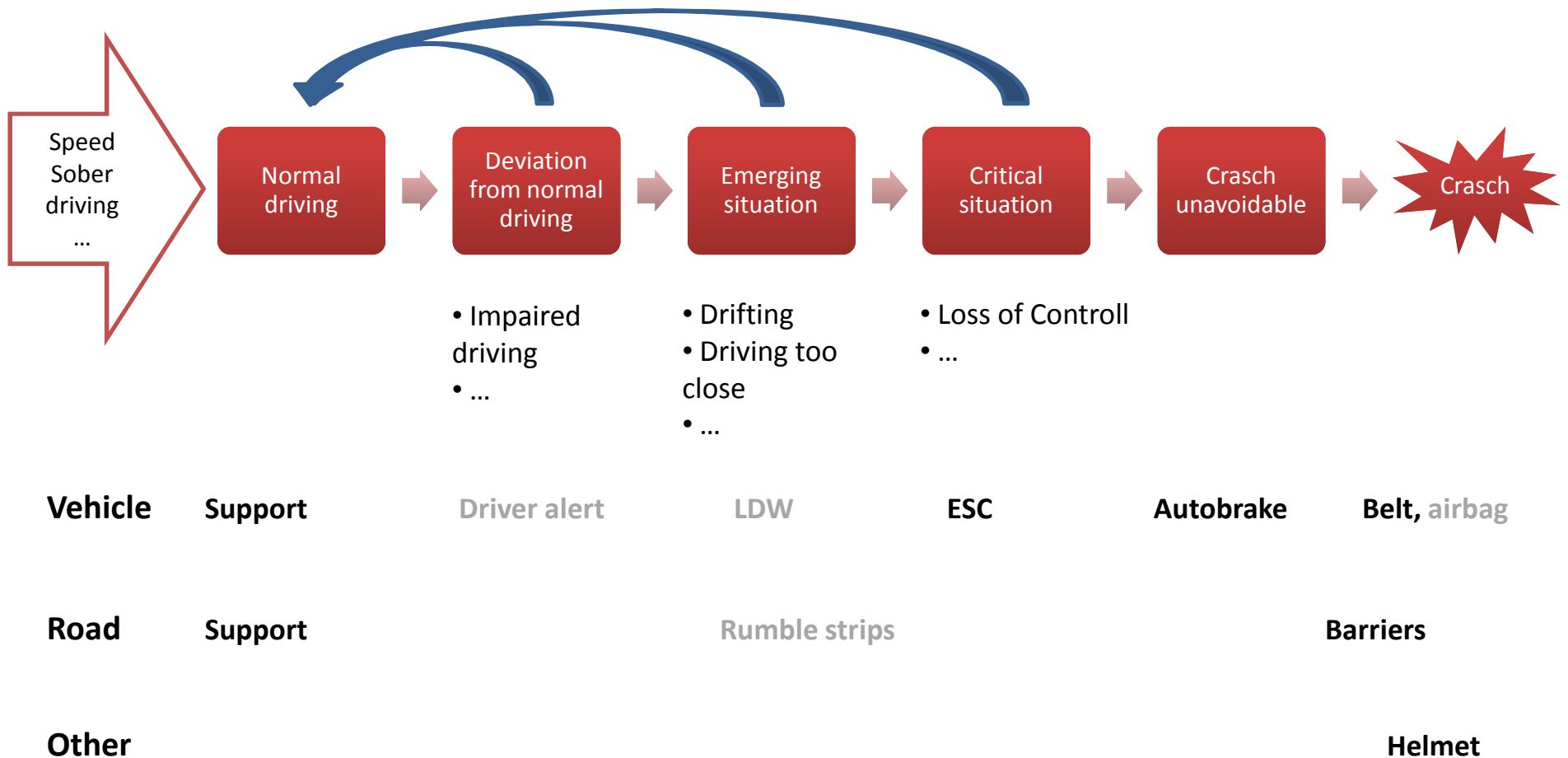
# Background - Can we sharpen the 2020 target?

Compared with 2010 figures:

- - 50% road fatalities
- - 40% (25%) severely injured



# The new approach



# The new approach

## **1. Reasonable assumptions on some SPI by 2020**

- Things we know or we reasonably assume are going to happen in the road transport system by 2020

## **2. Analysis of 2010 crashes based on these assumptions**

- How many and which crashes will be left then?

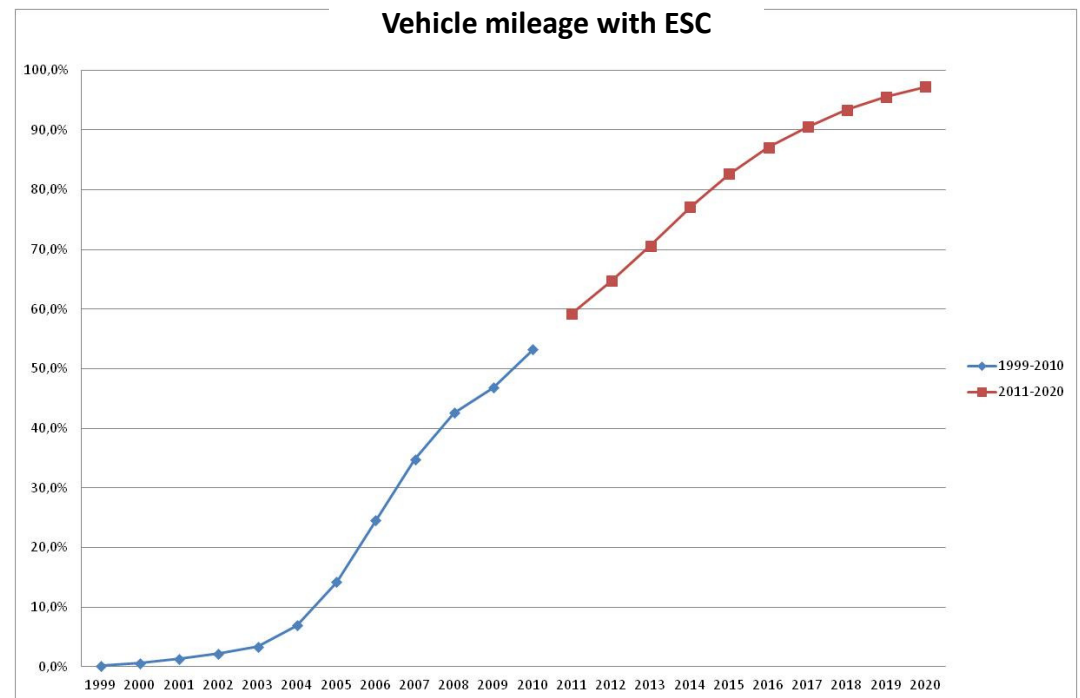
## **3. Analysis of residual (crashes left by 2020) and potential of other intervention areas**

- Is it possible to reach the new target?

# 1. Deeper knowledge about SPI by 2020

It is possible to make reasonable predictions for 2020 for different SPI

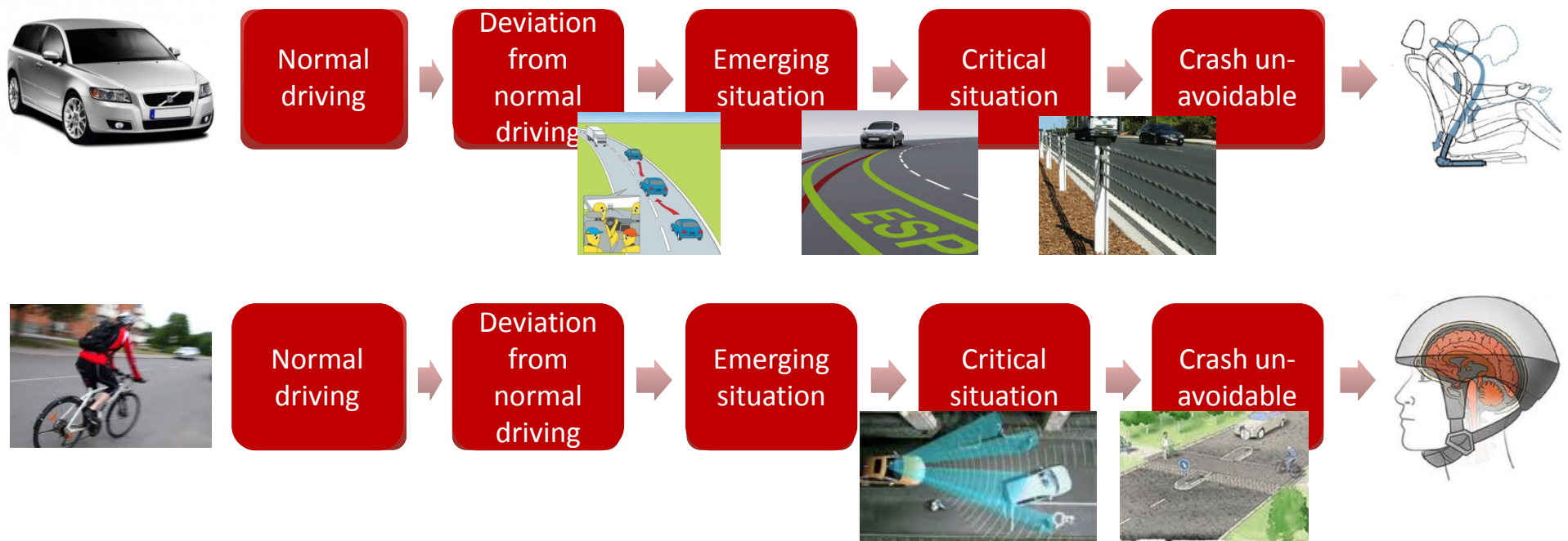
- Safe vehicles  
ie ESC, AEB, ABS mc
- Safe infrastructure  
ie median barrier





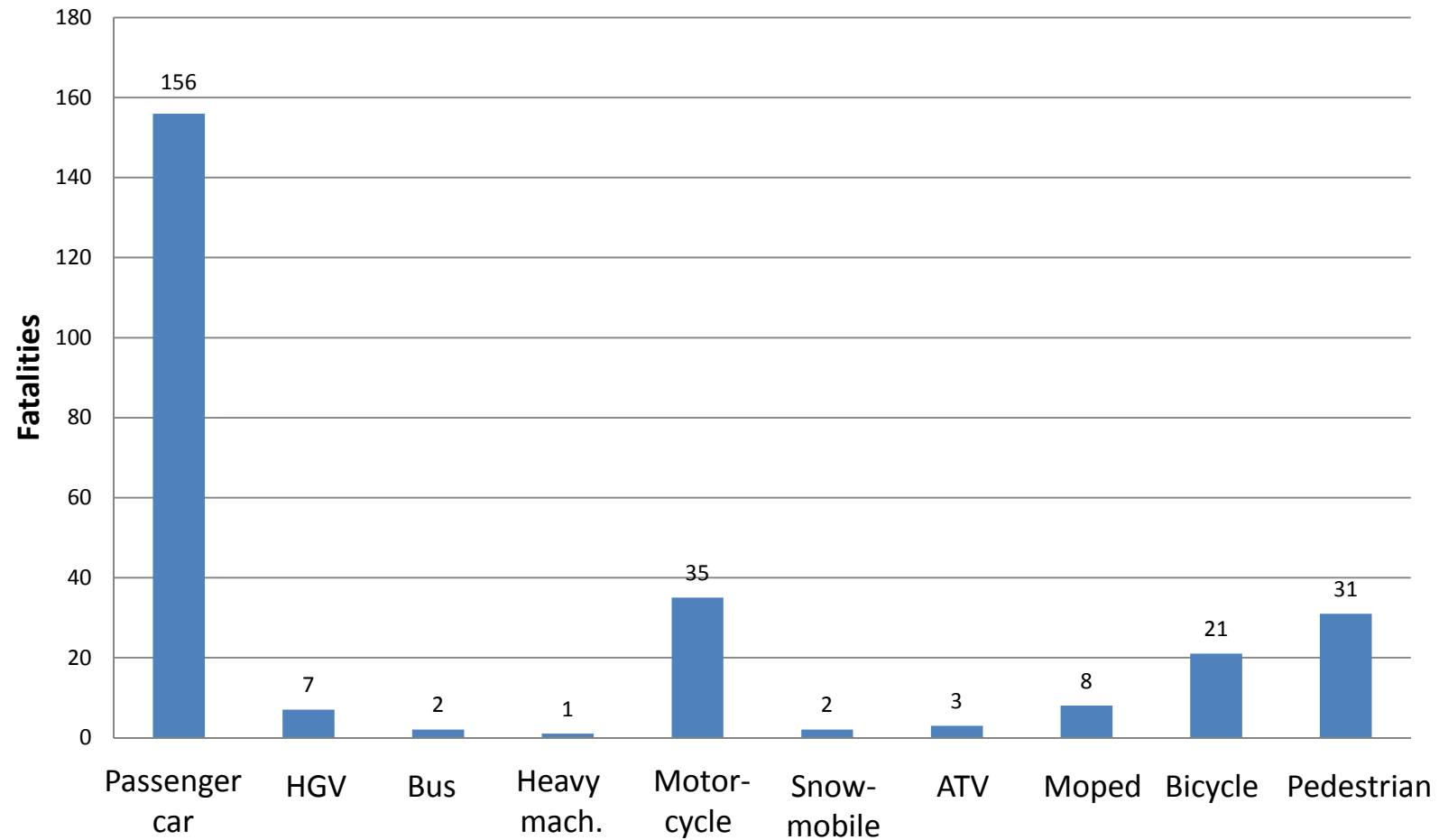
## 2. Analysis of fatal crashes

- STA's in-depth studies
- Every fatal crash in 2010 was investigated, case by case
- Chain of events in each crash was analyzed separately



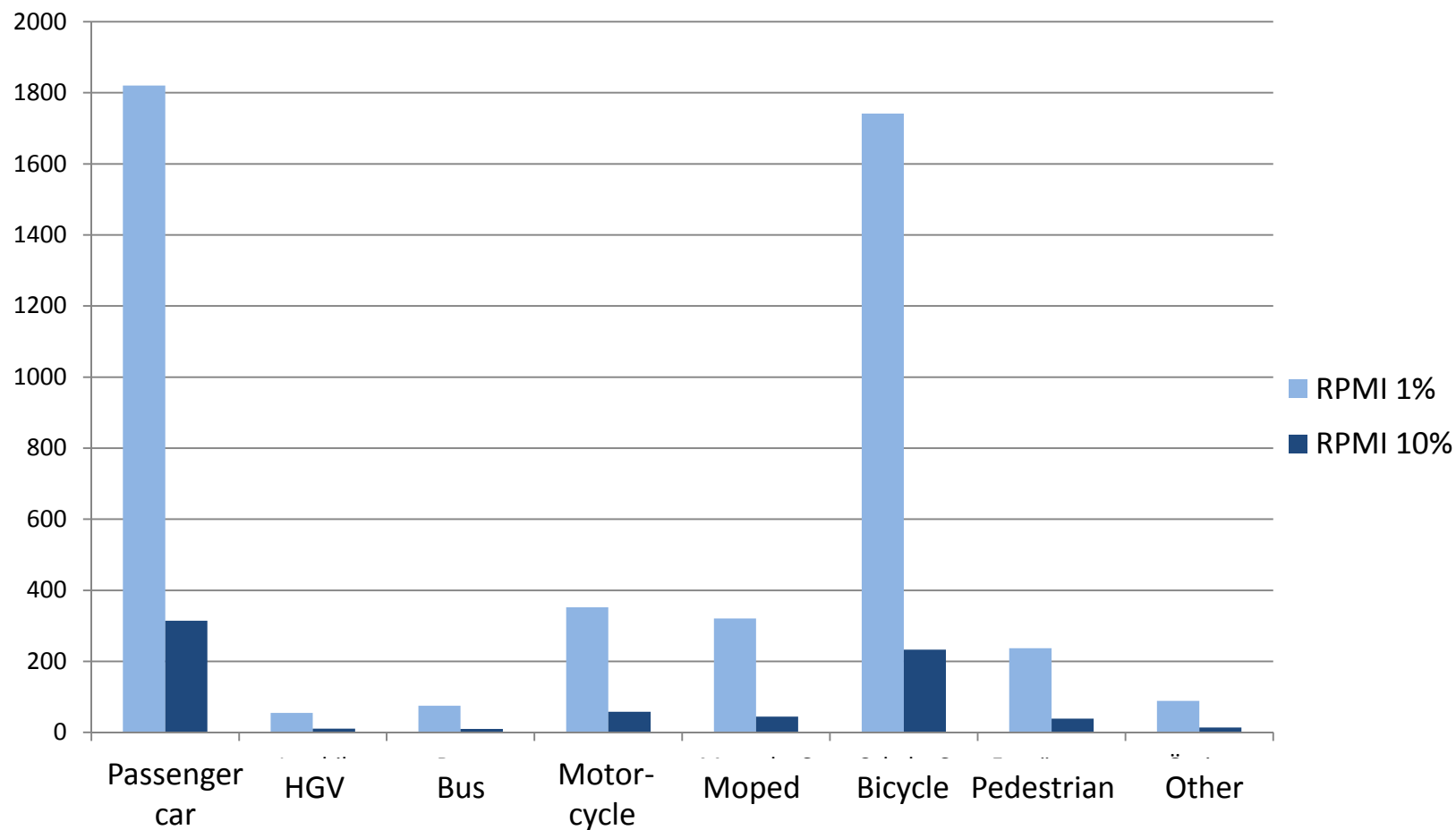
# Baseline for 2010

266 fatalities excluding suicide



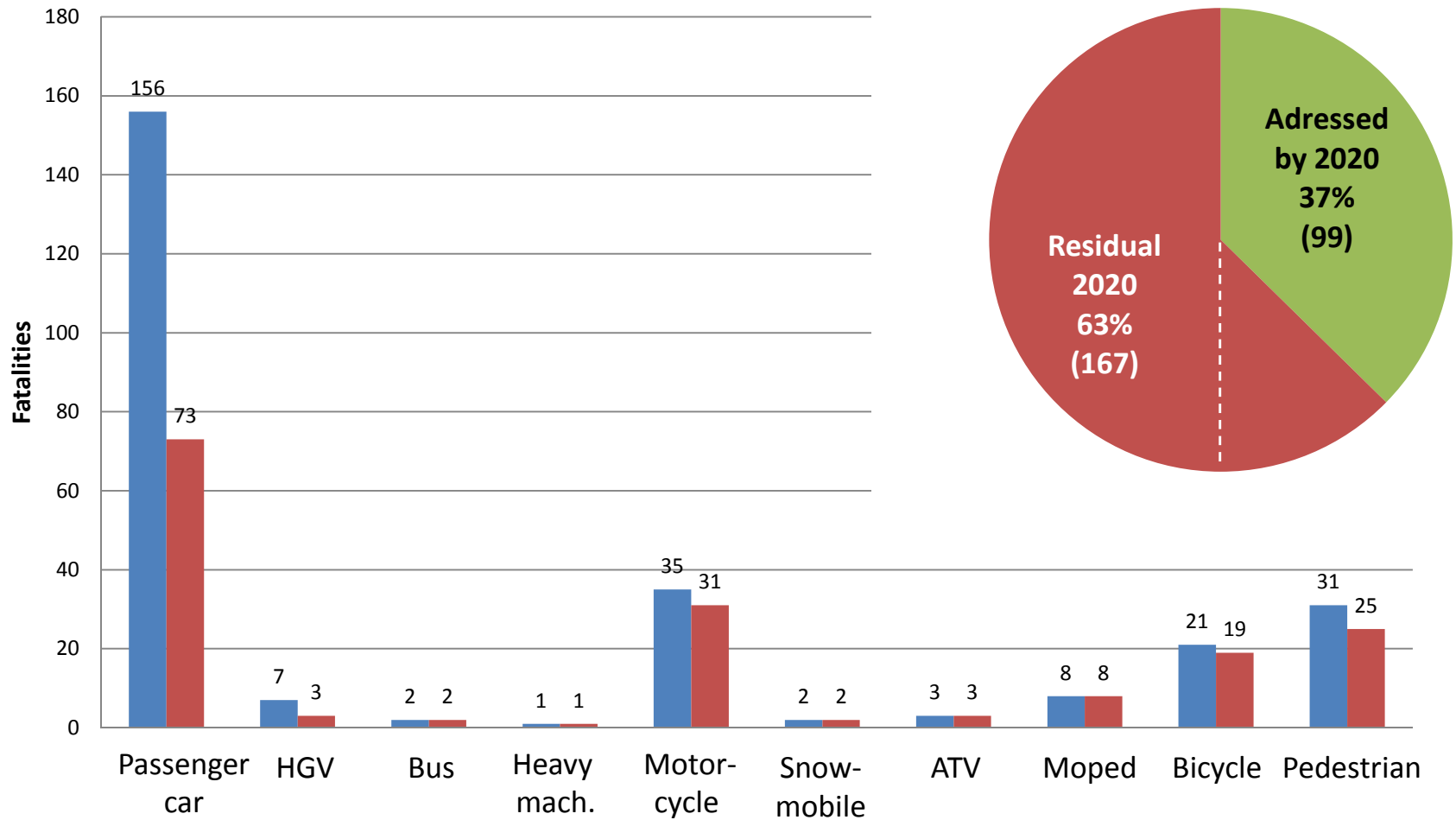
# Baseline for 2010

4690 persons with permanent medical impairment  $\geq 1\%$  (RPMI1%), 724 with RPMI10%

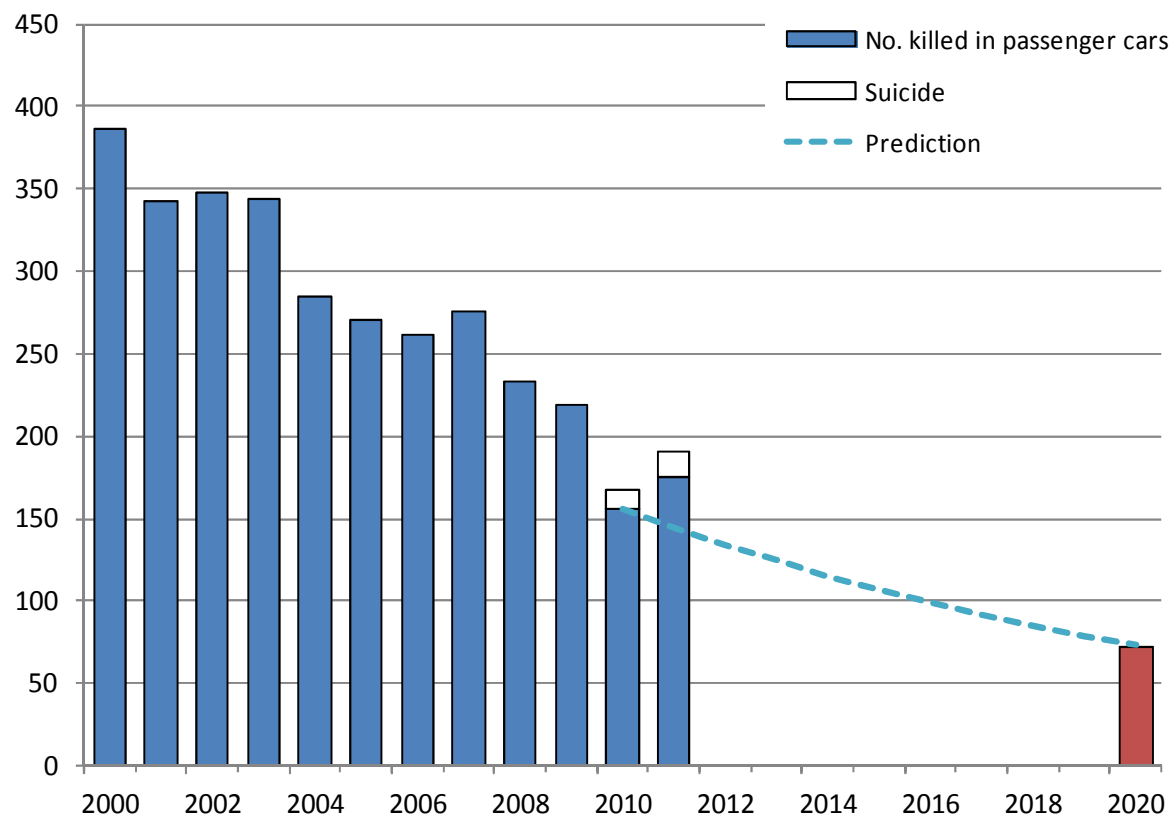


# Prediction 2020 based on assumptions

## Fatalities



# Prediction of reduced fatalities in passenger cars



## What type of fatal crashes are left in the residual?

- Crashes in intersection not prevented by reconstruction or better crashworthiness, n=15
- Loss-of-control by cars not equipped with ESC in the year 2020, n=12
- Rear-end collision with cars not equipped with FCW, n=4
- Lane departure scenarios by cars not equipped with LKA in the year 2020, n=13
- Loss-of-control with cars equipped with ESC, under-steer in high speed, n=6
- Loss-of-control due to disease, n=5
- Unbelted passenger in cars that would have survived with seat-belt, n=6
- Violations with excessive speeding and aggressive driving, n=8
- Others, n=4

# New Safety Performance Indicators

SPI	Baseline 2007	Baseline 2010	Earlier target	New target
1. Speed compliance, national road network	43 %	Ca 43 %	80 %	80%
2. Speed compliance, municipal road network	52 %	Ca 52 %	80 %	80%
3. Sober driving	99,71 %	99,74 %	99,90 %	99,9% / 100 %
4. Belt use	96 %	96 %	99 %	99 %
5. Helmet use				
- Bicycle	27 %	27 %	70 %	65 %
- Moped				
6. Safe passenger cars	20 %	35 %	Not defined	80%
7. Safe motorcycles (ABS)	9 %	18 %	Not defined	70 %
8. Safe roads	50 %	67 %	75 %	95 %
9. Safe passages for vulnerable road users	Ca 25 %	Unknown	Not defined	
10. Safe road surfaces for cyclists and mopeds		Unknown	Not defined	