



Safe driving for life:
changing attitude and behaviour
through education, training and testing.





Safe driving for life

Does education have a role in becoming a safe and responsible driver?



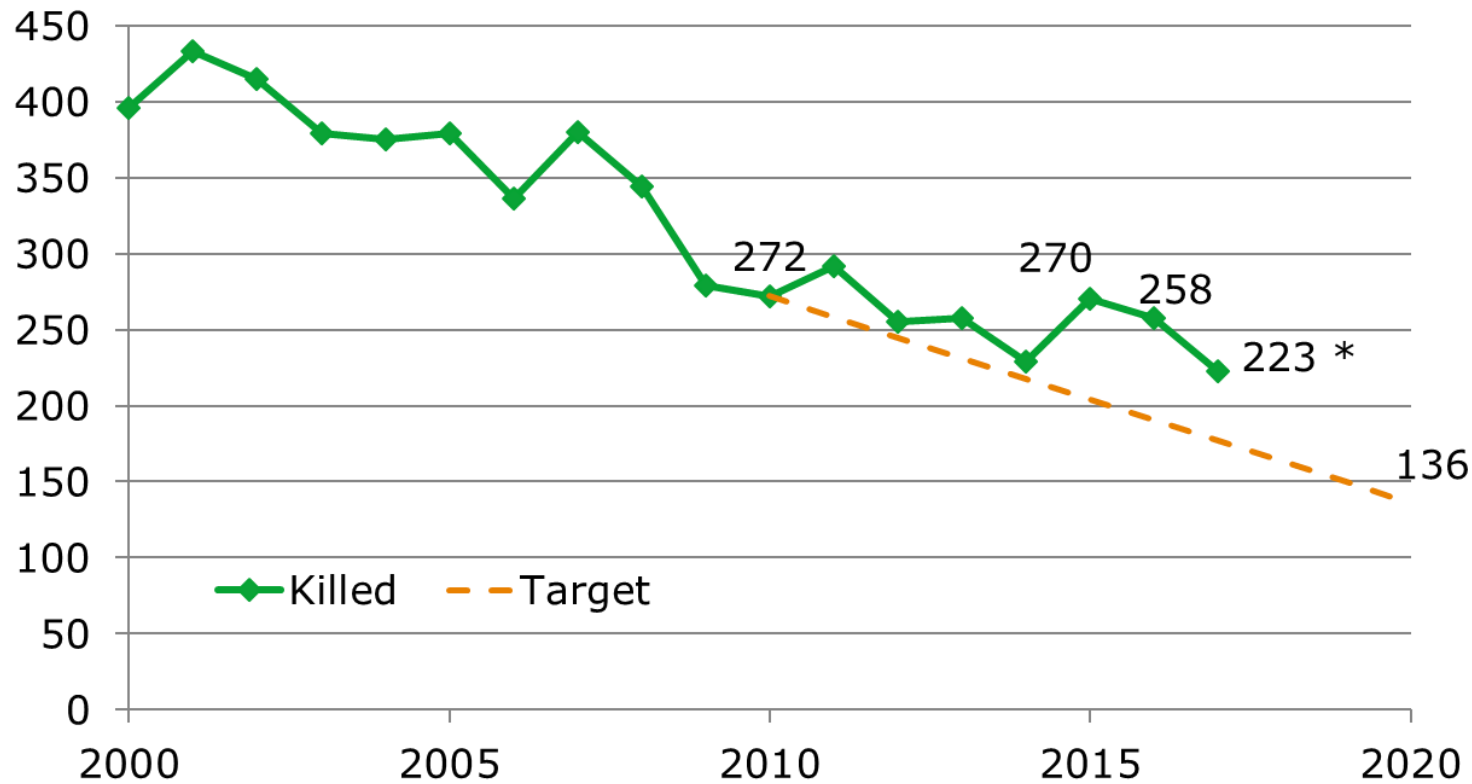
Subjects

- Traffic safety in general and among young drivers in Finland
- Who are our young drivers
- Index study
- Other research and development
- The main agents working towards safety
- Future



Traffic safety in Finland

Fatalities in road traffic in Finland

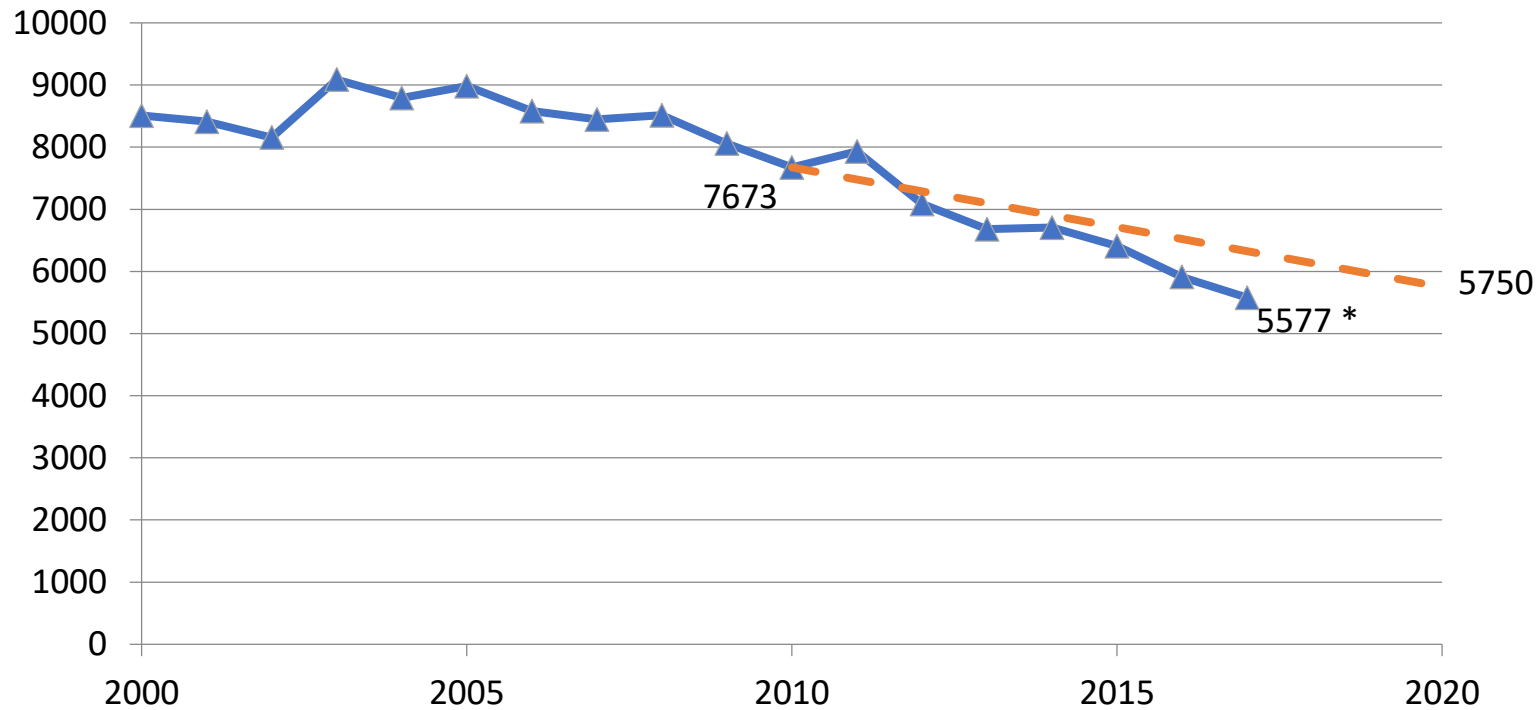


Source: Statistics Finland
* preliminary data



Traffic safety in Finland

Police-reported injuries in road traffic



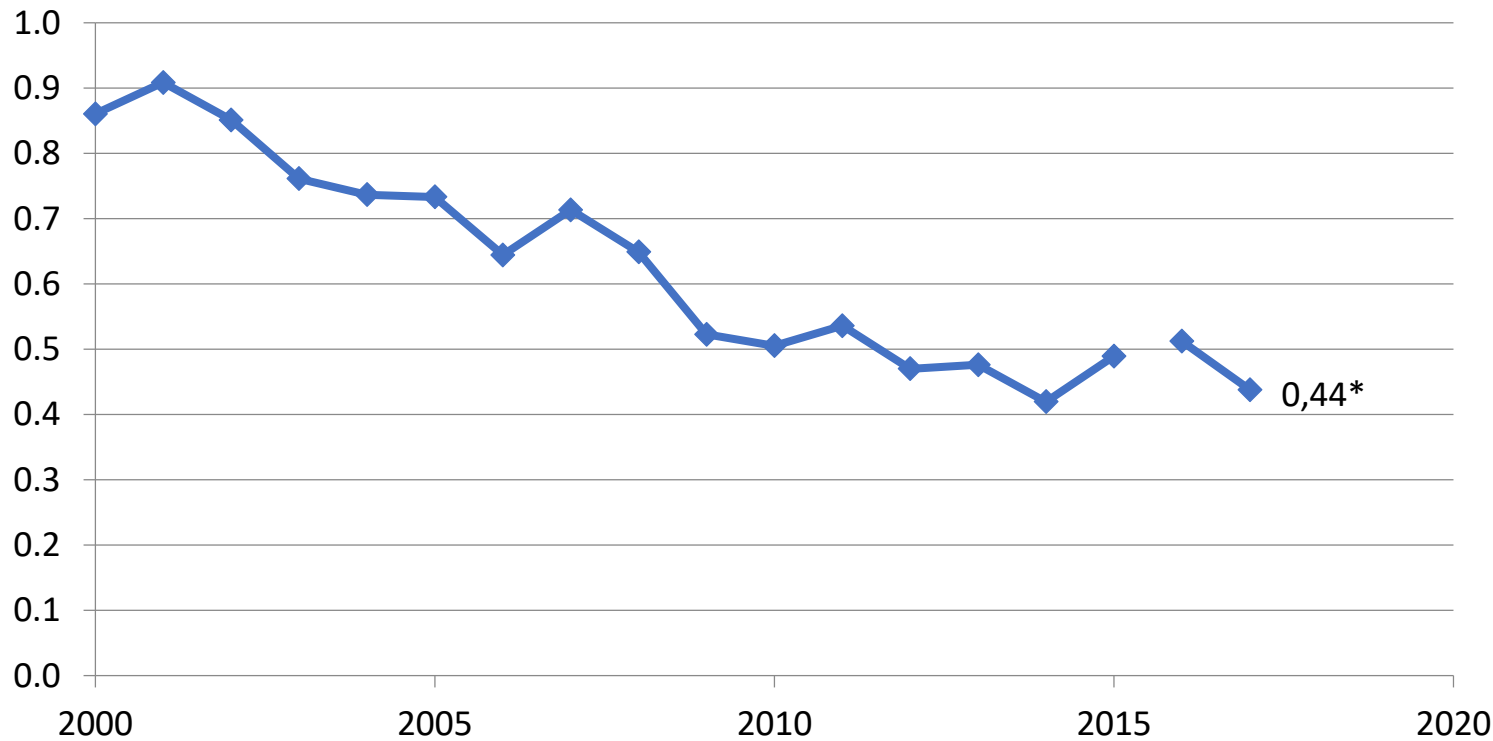
Source: Statistics Finland
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Risk in road traffic



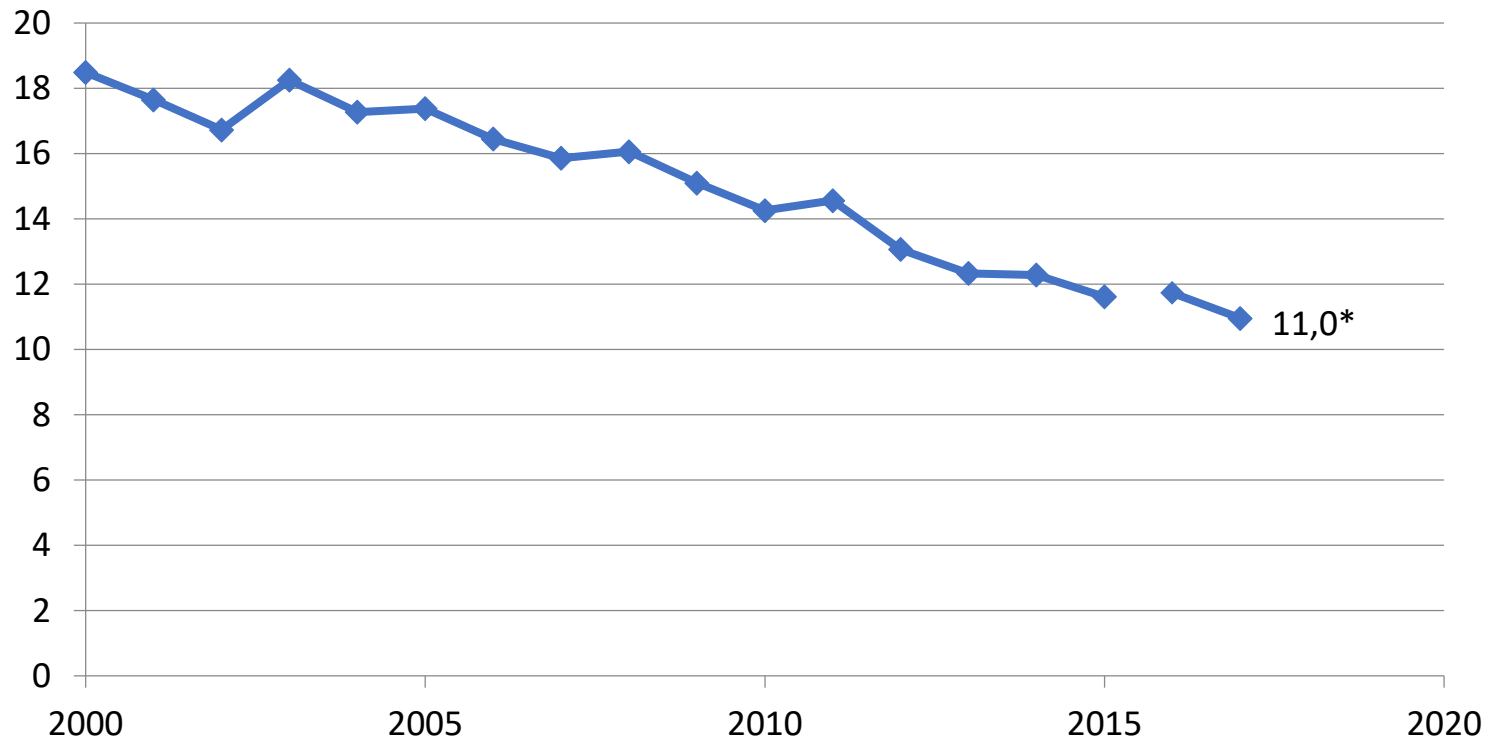
Fatality risk, killed / 100 million km driven



Source: Statistics Finland and Finnish Transport Agency
Mileage statistics changed in 2016
* preliminary data

Risk in road traffic

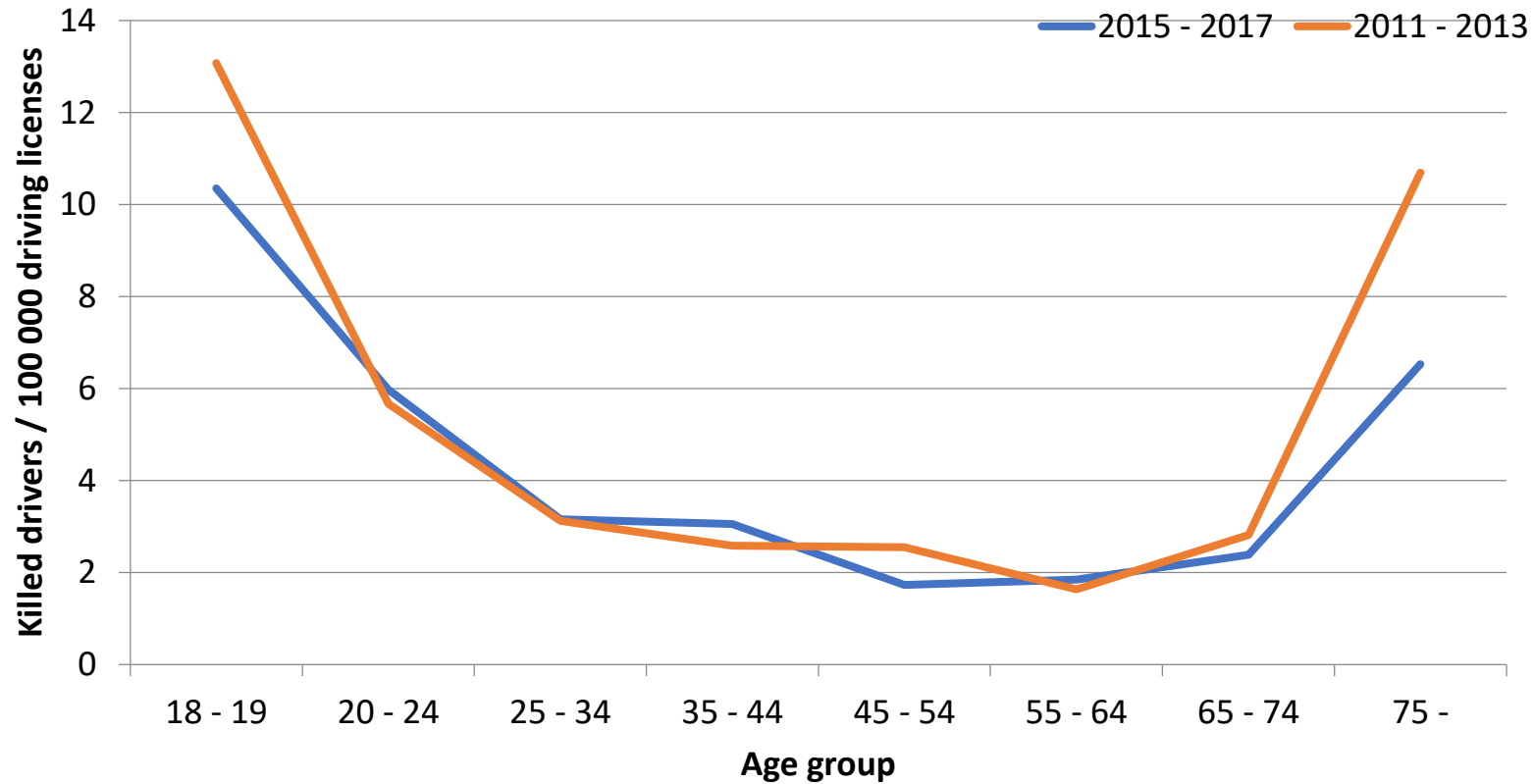
Injury risk, police-reported injuries / 100 million km driven



Source: Statistics Finland and Finnish Transport Agency
Mileage statistics changed in 2016
* preliminary data



Killed car drivers per 100 000 driving licenses by age group, 2011 – 2013 compared to 2015 - 2017

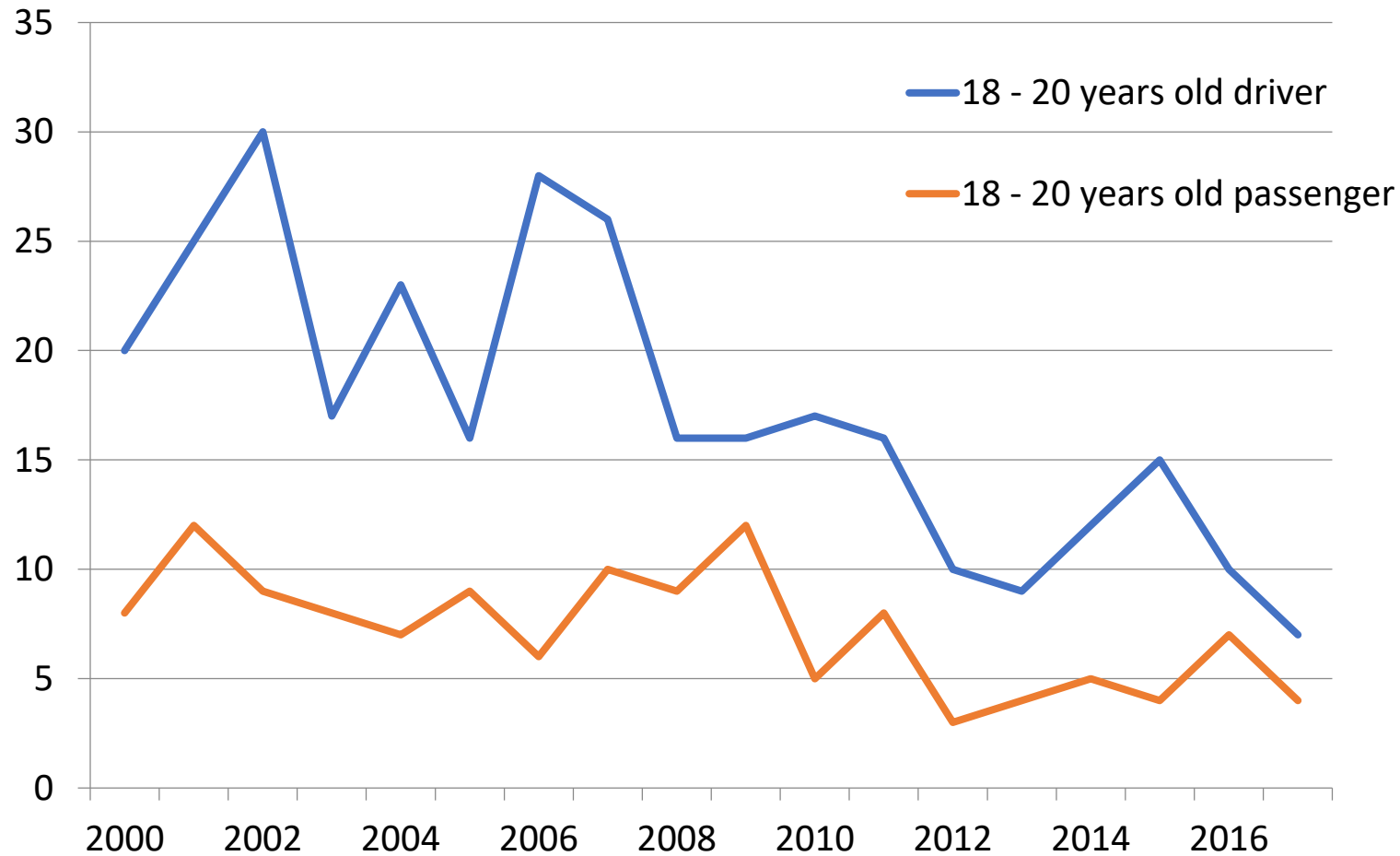


Source: Statistics Finland and Trafi



Young drivers safety

18 – 20 years old killed in passenger car



Source: Statistics Finland and Finnish Transport Agency

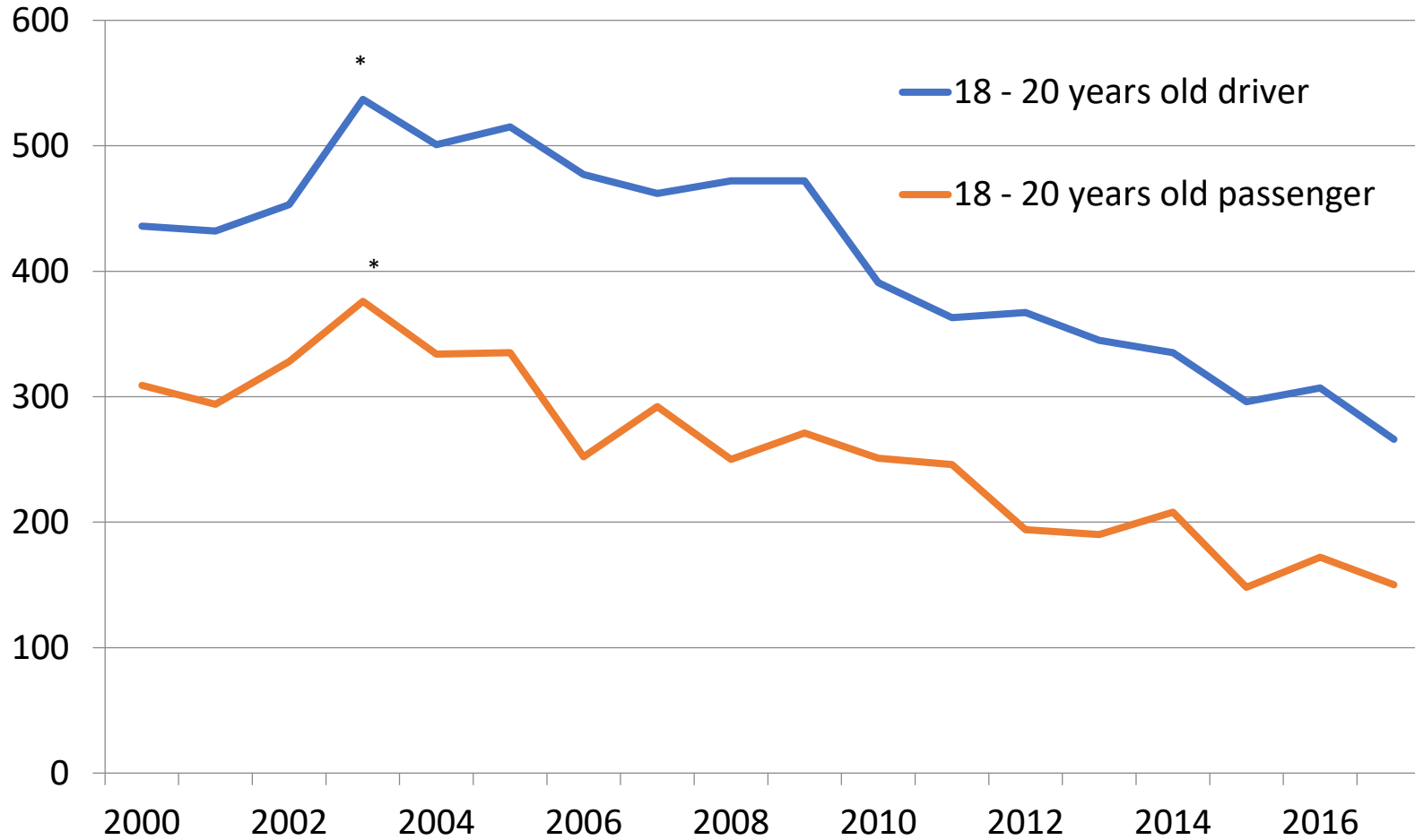
Mileage statistics changed in 2016

* preliminary data



Young drivers safety

18 – 20 years old injured in passenger car



* 2003 statistics changed

Source: Statistics Finland and Finnish Transport Agency

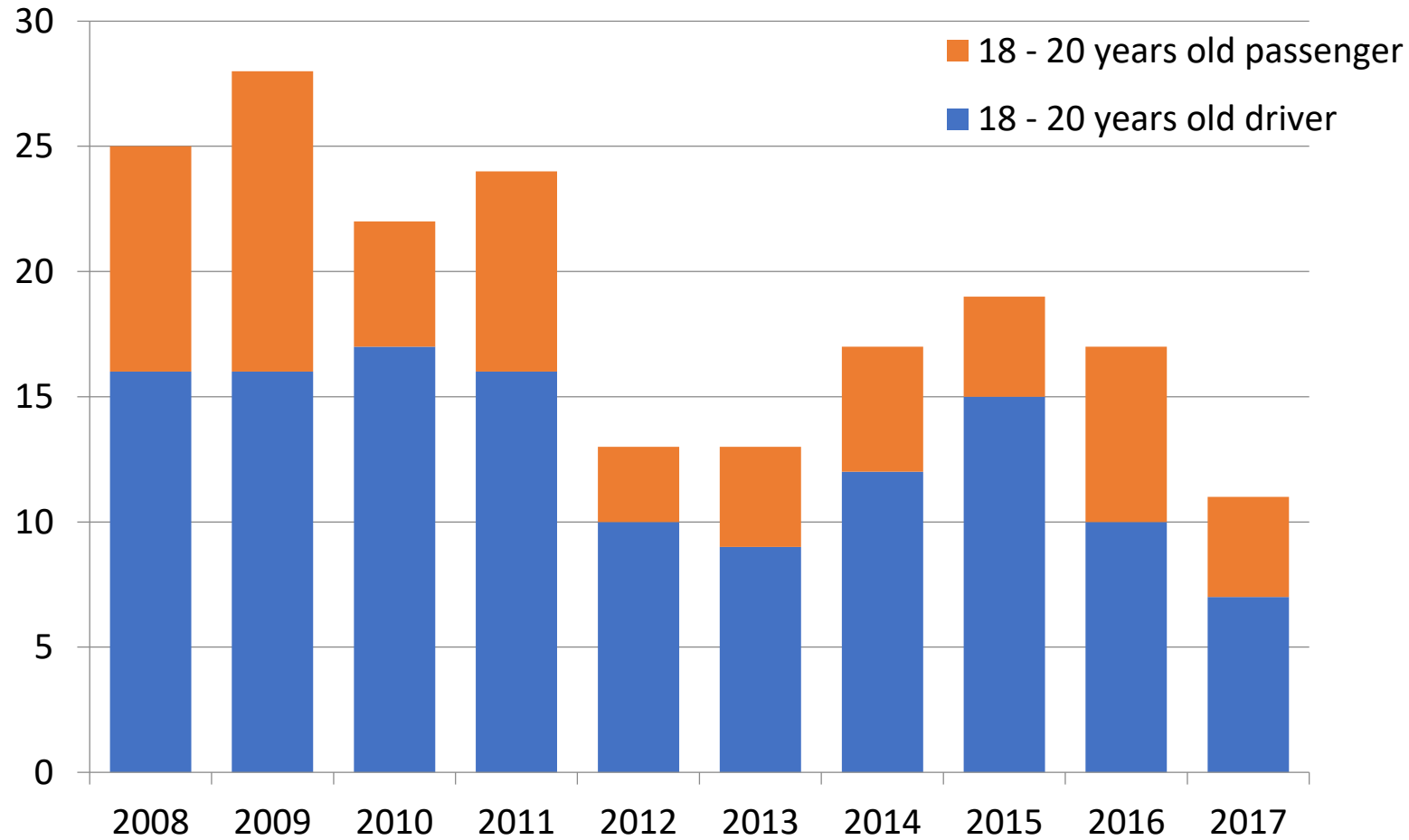
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Young drivers safety

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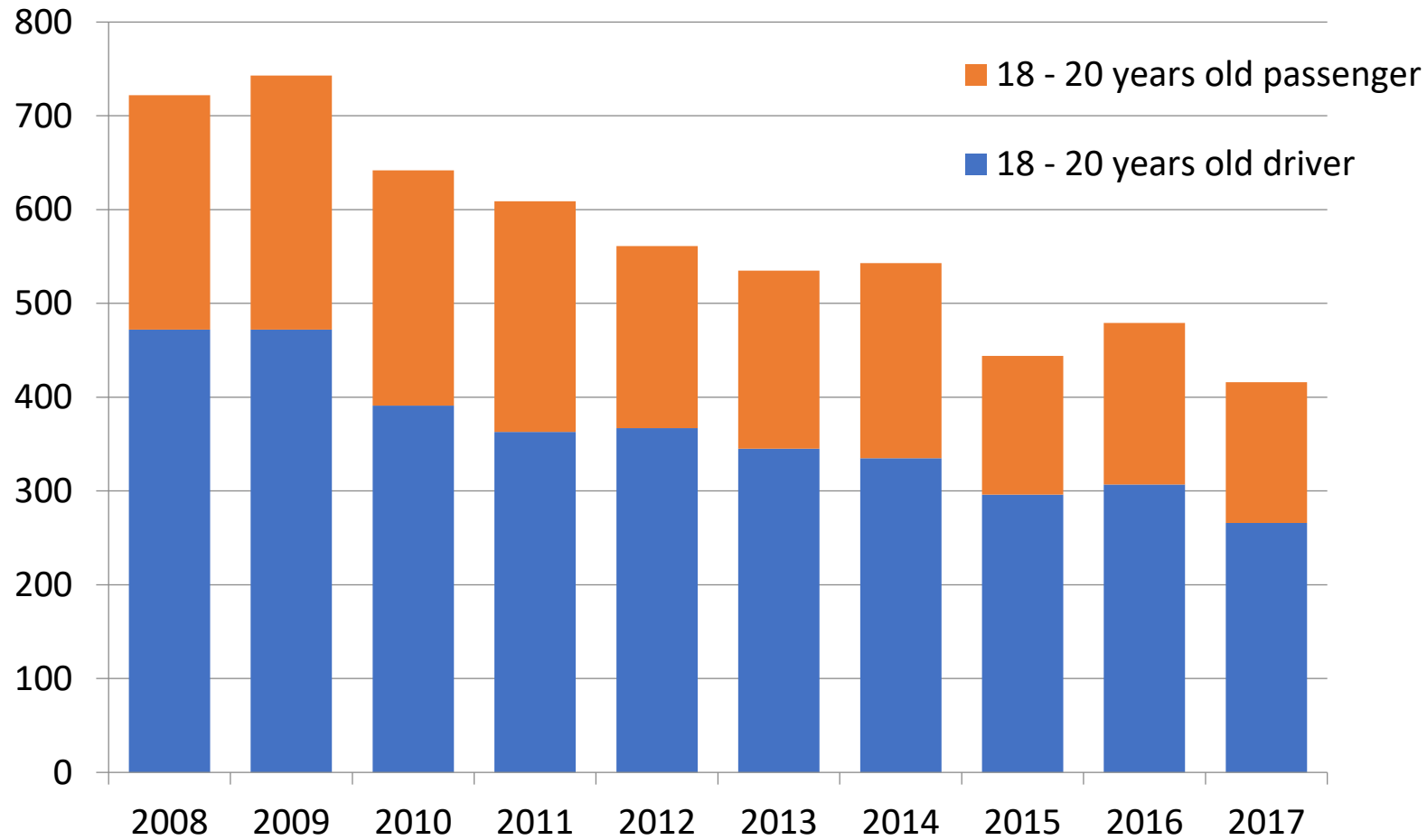
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Young drivers safety

18 – 20 years old injured in passenger car

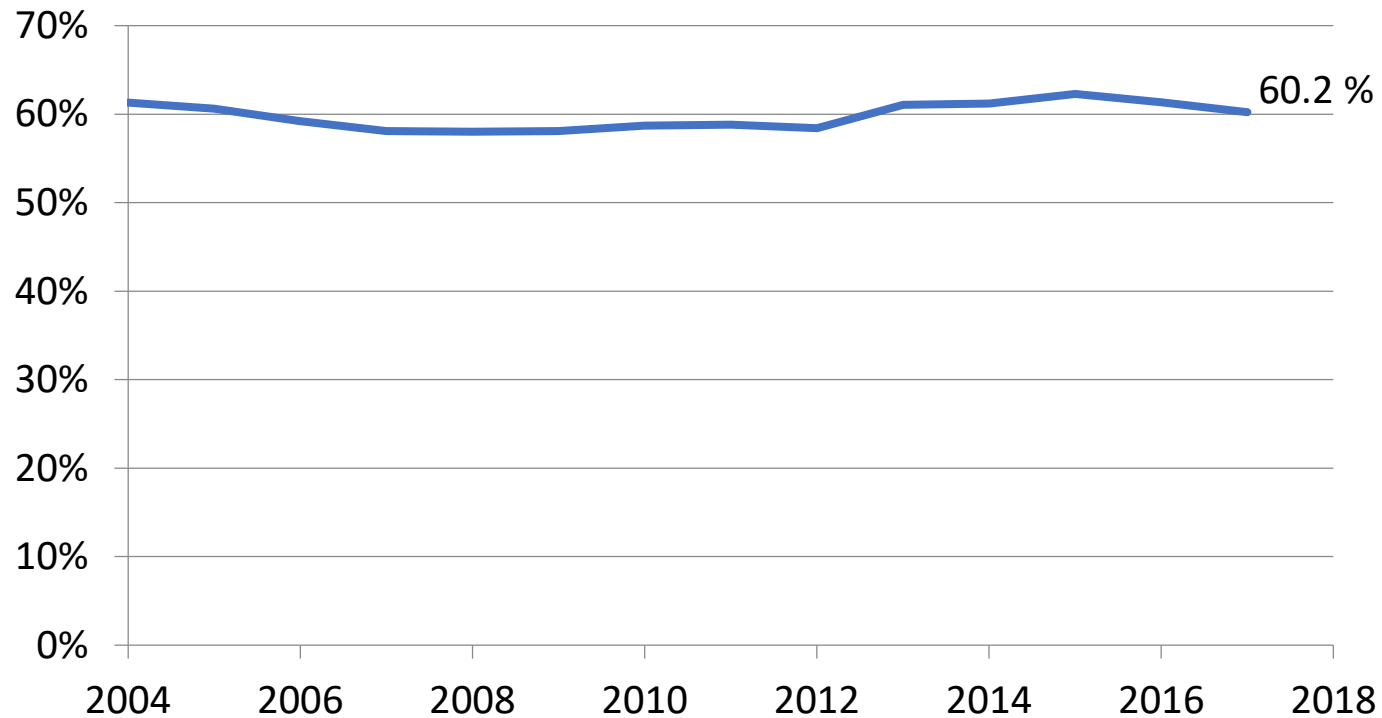


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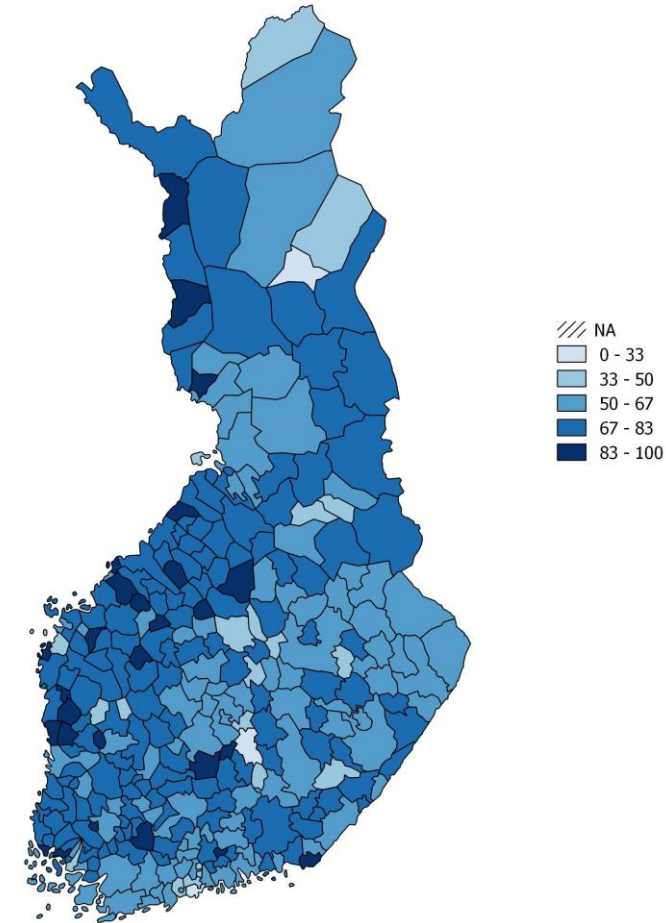
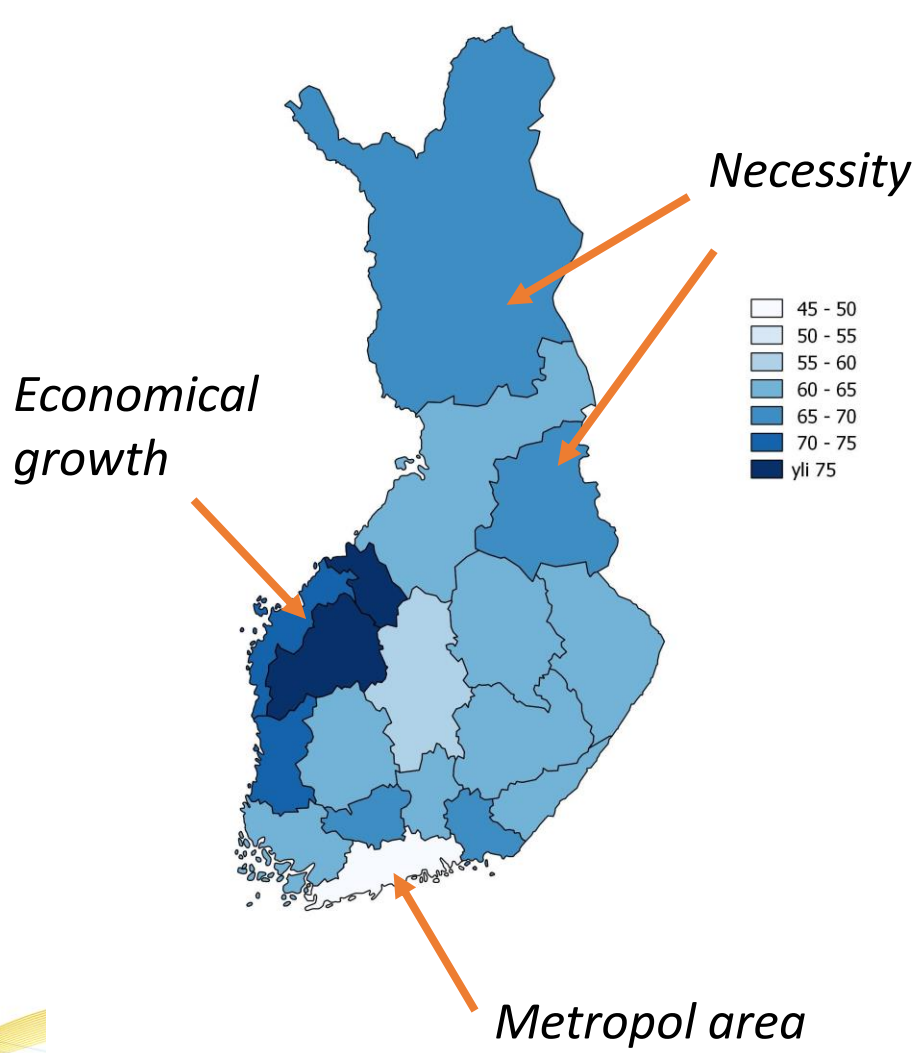


Who are our young drivers

Percentage of 18 years old with a B-category driving license



Percentage of 18-year-olds with category B driving licence 1.1.2018



Index study

The goal for this study was to find out

- How our new drivers are managing their first year as an independent driver
- How their training prepared them for examination
- How useful they feel the training was for preparing them for independent driving



Index study

The goal for this study was to find out

- How well does the system work in general
- To get first hand information and feedback from the system
- What are the development issues in driver training and testing



Index study

- Target group is new drivers who have had their license for one year
- This follow up of new drivers started in year 2000 already but the survey was more established in 2001
- The sample is 4000 new drivers twice a year, altogether 8000 new drivers



Index study

- The data is analyzed twice a year and reported once a year
- The survey can be answered either by mail or in the internet
- The answers collected in the survey are combined with the background information of individual respondents (database)
- The results are combined and presented as index values



Indexes are

INDEX 1 – Success in examination

- The points scored in driving examination proportional to the amount of lessons received and the professionalism of the teacher (professional instructor or layman)

INDEX 2 – Success in traffic

- The inverse of the number of accidents and sanctions occurred during the first year as a driver (factors based on the severity of the offence). This includes two measurements; per annum and per mileage

INDEX 3 – Evaluation of driving instruction

- The ex-post evaluation of respondent about how well the driving instruction prepared them for independent driving in general



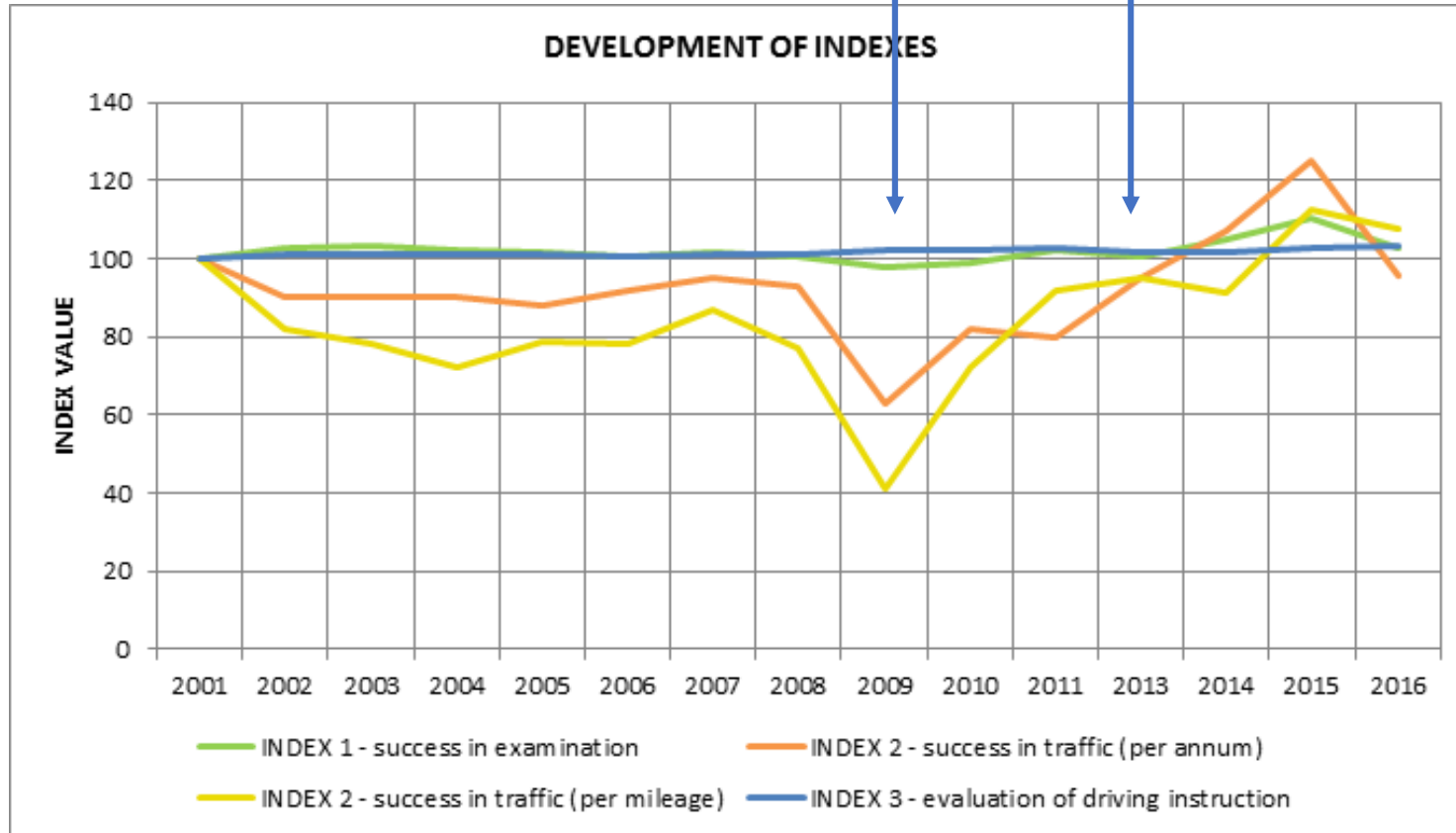
- Since a study is repeated every year, the results can be compared rapidly to the changes made in the structure of driving instruction system or examinations
- The functionality and the reactions to these changes are easy to find out because the feedback is collected directly from the new drivers
- As a result of this study different kind of analyses are made between different groups, for instance age, instruction, area, sex, purpose of driving, mileage
- Besides satisfaction factors, analyses are made concerning the number of potential risk situations and accidents experienced by novice drivers during their first year as a license holder
- For further analyses, the answers collected in the survey are combined with the background material of individual respondents. For instance, spatial analyses for different themes are made based on the information of home address of the respondents
- The survey gives also respondents a chance to give open feedback and suggestions related to current driving education and testing system



Development of indexes

Economic recession

3 stage system



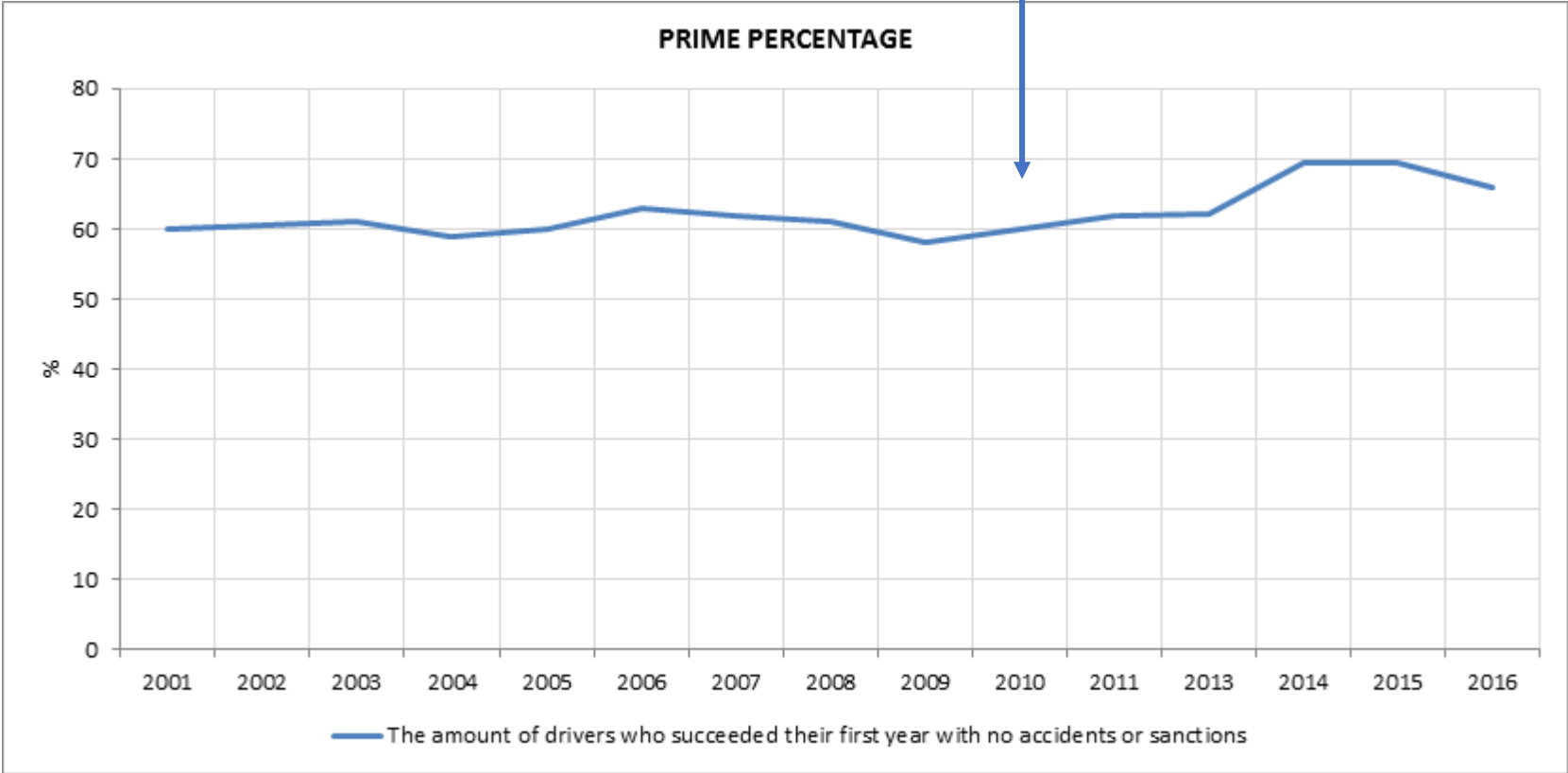
Prime percentage

The percentage of respondents who succeeded their first year as a driver with no accidents or sanctions



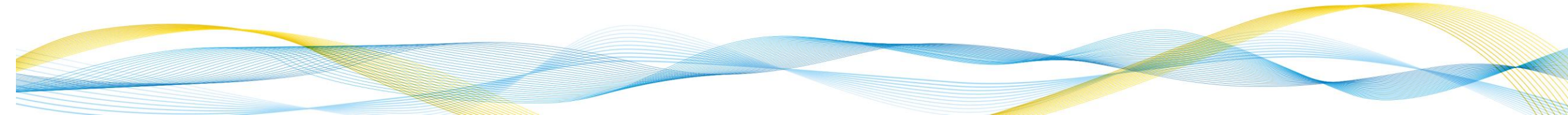
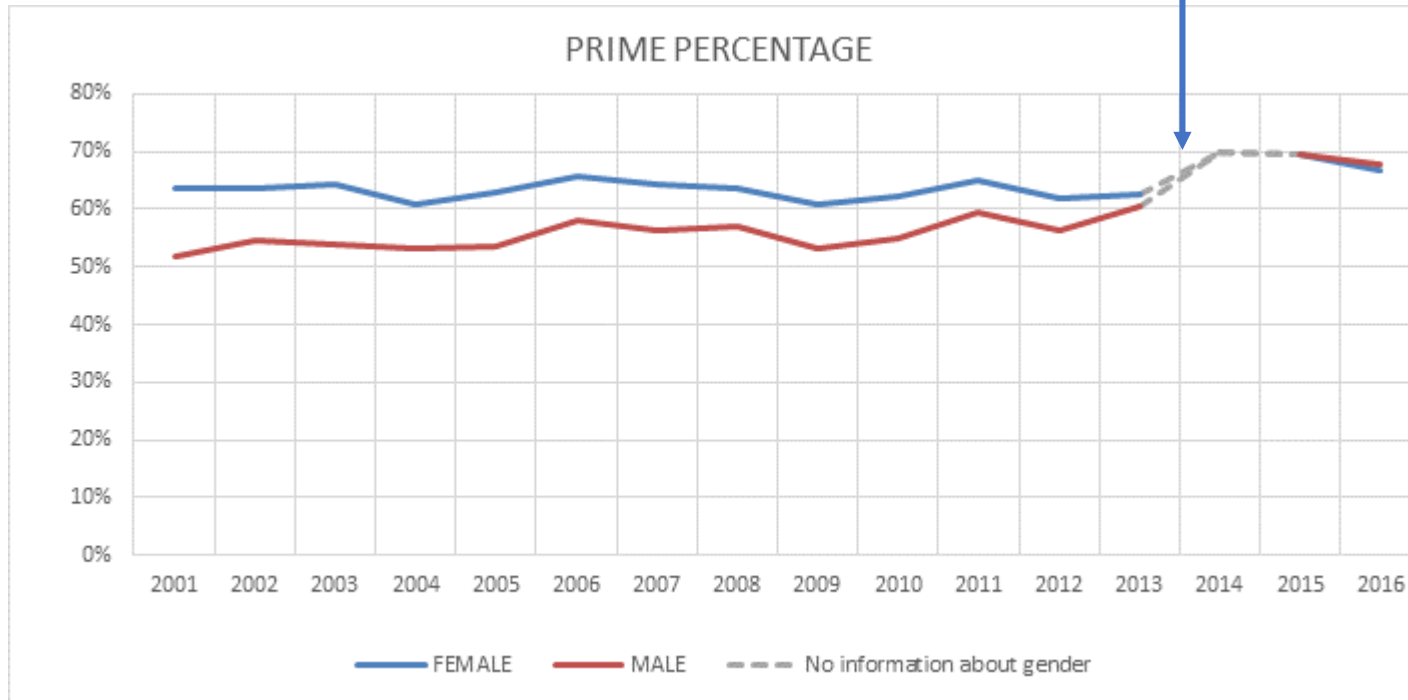
Prime percentage

Responsibility



Prime percentage - sexes

New teaching methods *3 stage system*



Other research

Whenever major changes in system are done we are doing a specific research to find out what impact the change had and to get more detailed results of different effects it had.



Other research

- 3 stage education system came in force 19.1.2013
- We completed a research in two stages
- A comparison of before and after the change
- Both research had the same target groups, same methods and analyses
 - Examiners, instructors, parents, students
 - Examination, education; content, methods, statistics, economical impacts



Results

- The results from that research supports the findings on the index study
- New methods and contents were implemented successfully
- More emphasis on risks within oneself
- The abilities of new drivers had improved especially with regard to social skills and interaction in traffic
- The abilities of new drivers had improved also in driving in highway, independent driving and driving in towns (urban area)



Results

- New drivers accumulated more mileage after licensing than before both male and female
- The reduction of accidents of 18 -19 year old drivers (17 %) and sanctions (23 %) especially among male drivers was evident. (per 100 000 license and per other age groups)
- Young male drivers benefitted especially from instruction in driving school (professional teacher) with new methods and contents
- The biggest affect was the implementation of new student centered methods and contents that dealt with risks relevant to their age group



Development

- Based on all the findings of research we are further developing our education and testing system
- We want to continue improving young driver's ability to hazard perception and understanding of risk
- We want them to have knowledge of how to avoid risk and risk behavior
- The examination will focus on how well candidate is able to observe and perceive hazards
- We will focus on how he will anticipate possible hazard and choose the proper action to avoid it or minimize it
- The length of the test will be 60 minutes
- The assessment is totally competence based and will focus on responsibility
- This will be in force 1st of July 2018



Facts

- We have to be realistic
- No system is perfect
- We all are part of our political and cultural system and that defines
 - What is perceived as important
 - How we see the world
 - How we value human life
- In a society as a society



The main agents working towards safety in general level

- Training - How do we see training?
 - What are we training?
 - What are we teaching for?
 - How are we teaching it?
 - How is the student seen?
- Testing – How do we see testing?
 - What are we testing?
 - How are we testing it?
 - What are we assessing?
 - How are we assessing it?
- Goal – What is the goal?
 - How do we define the goal?
 - Who defines the goal?
 - How do we describe it in documentation?



The main agents working towards safety in individual level



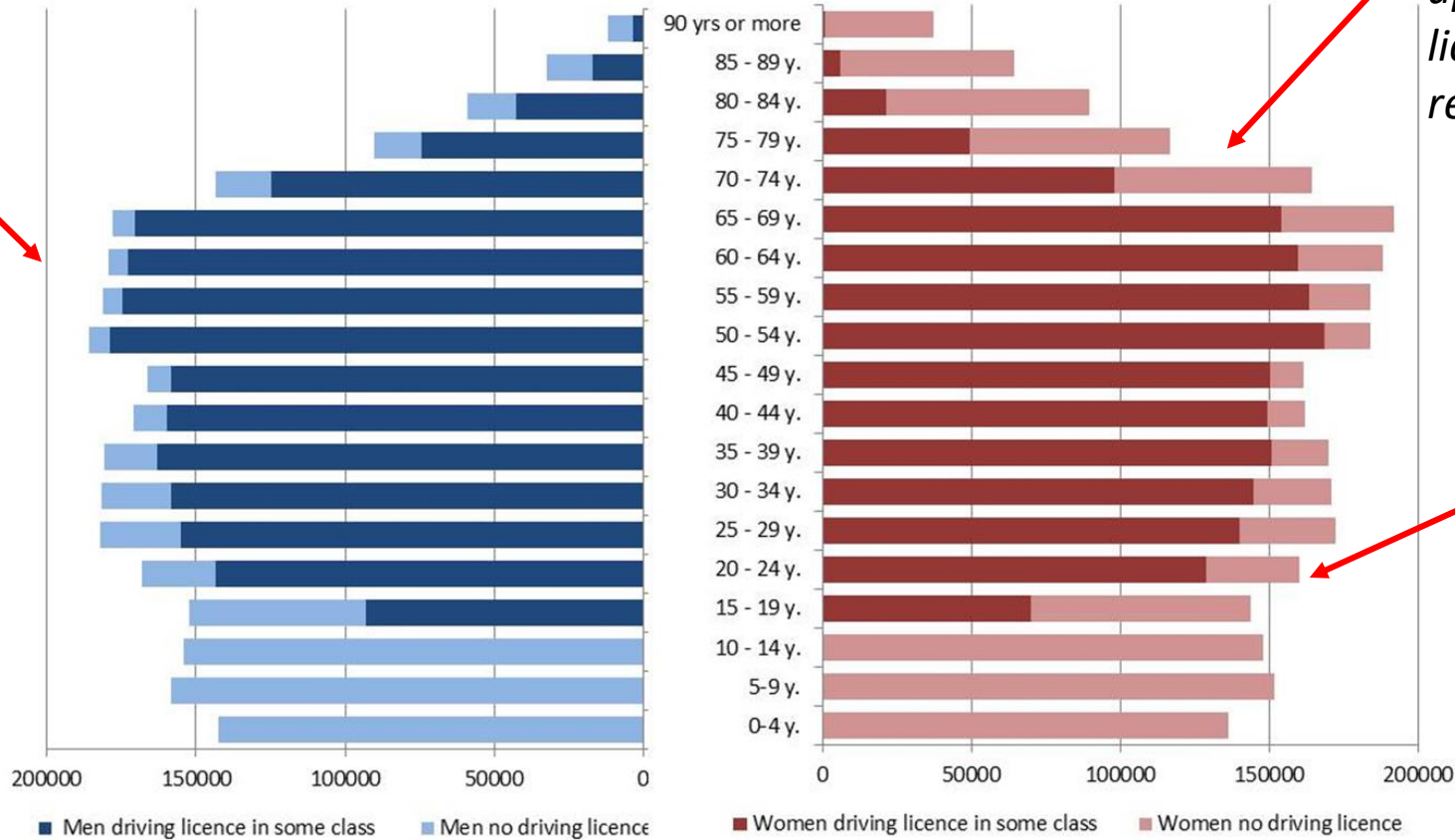
Future

Population pyramid with driving license (any) 1.1.2018

More male drivers

Women give up their license at renewal time

New drivers are older



Future

Will have an effect on driving culture

Will have an effect on safety

Role of automation



Thank your for your attention!

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