

# SITUATIONAL ANALYSIS AND IDENTIFICATION OF ROAD SAFETY (RS) PROBLEM AREAS

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April 5, 2018

# Traditional Approach

- Introduction of legal standards, focus on vehicle inspection, expecting changes in people's behaviour as a result of awareness campaigns – as key and fragmented RS measures
- Assumption: Human errors are the main reasons for crashes.

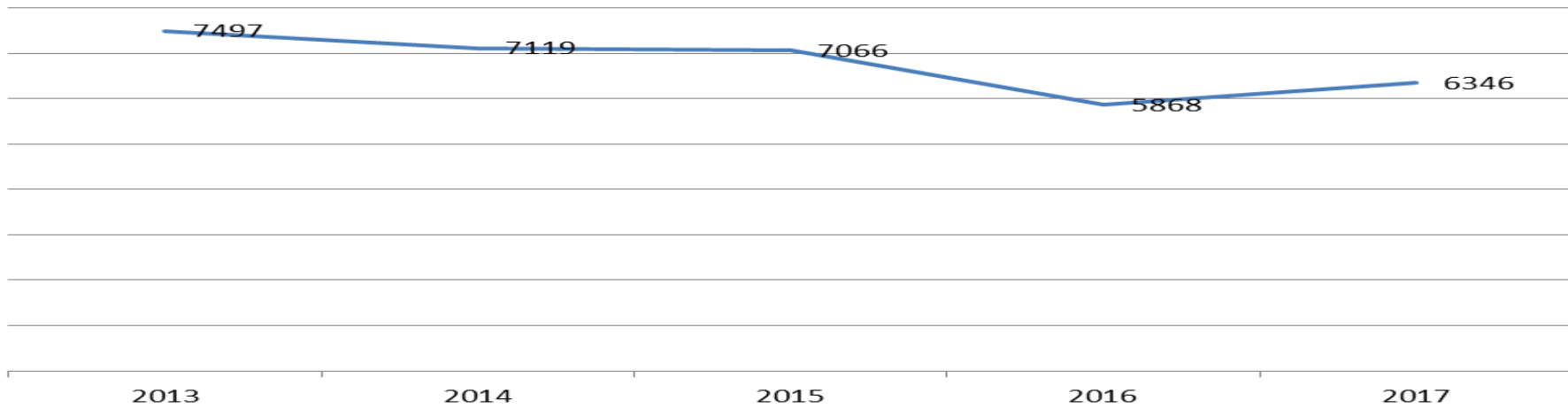
# Traditional Approach Fictions

- Low level of knowledge of traffic rules - the main cause of road accidents;
- Driving schools are responsible for the number of accidents as a result of poor training of drivers;
- Right-hand drive vehicles have a higher risk of getting into a car crash due to an organization of traffic in the Kyrgyz Republic that is left hand drive oriented;
- Women drivers present a greater risk of car crashes;
- Drivers with limited driving experience have a higher risk of getting into a car crash.

# Traditional Approach Fictions

- Technical malfunction of vehicles is one of the main causes of road accidents;
- Children and young people who tend not to follow traffic rules get into road accidents more often;
- The biggest number of fatalities as a result of a road accidents happen during car crashes;
- Direct correlation between population density and frequency of car crashes;
- The majority of car crashes occur at night time, before dawn;
- General dynamic: situation is improving; regional dynamic is worse
- The higher the fines for traffic rules violations, the lower the accident rate.

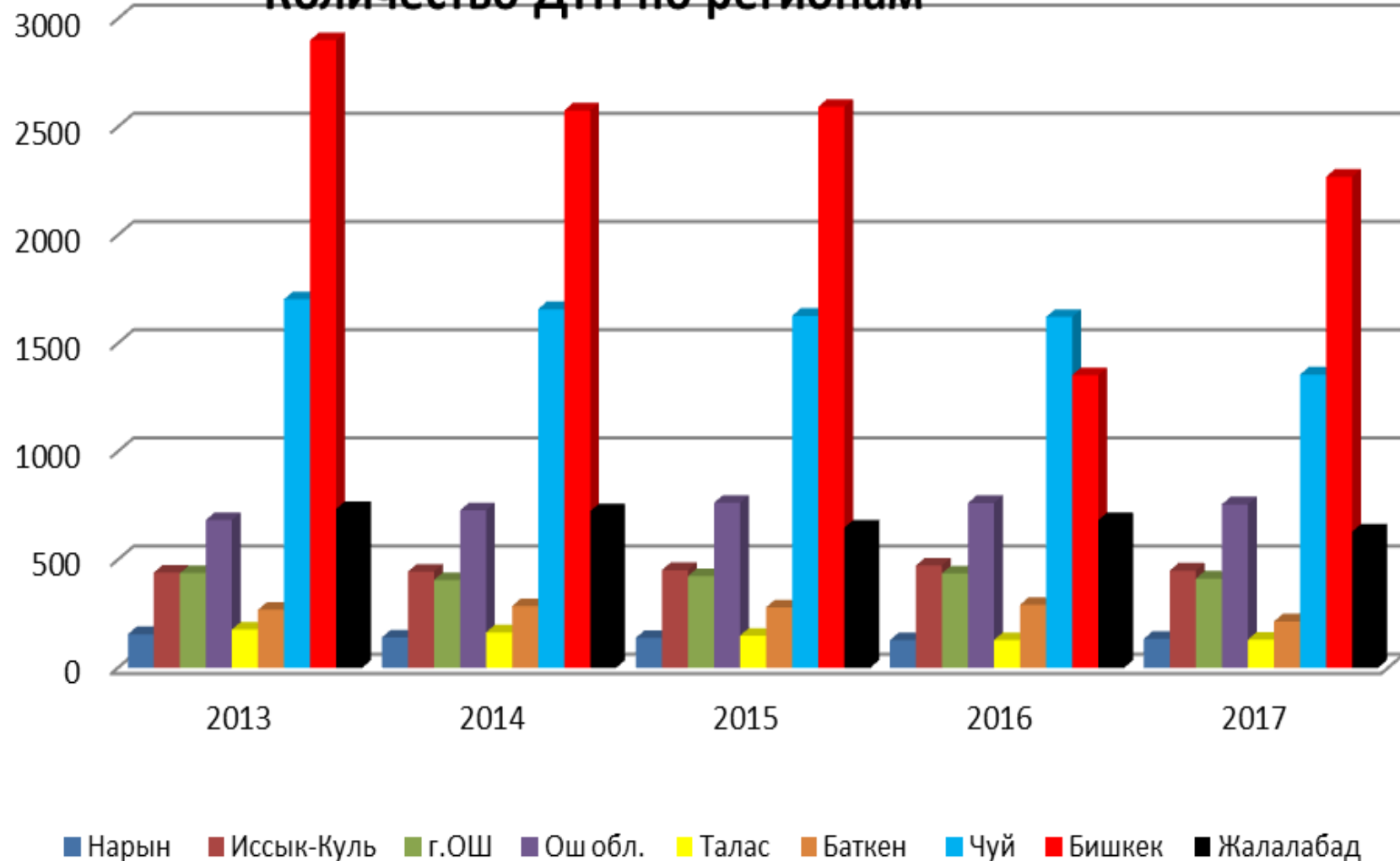
## Статистика ДТП по годам



## Динамика ДТП по годам и основным причинам



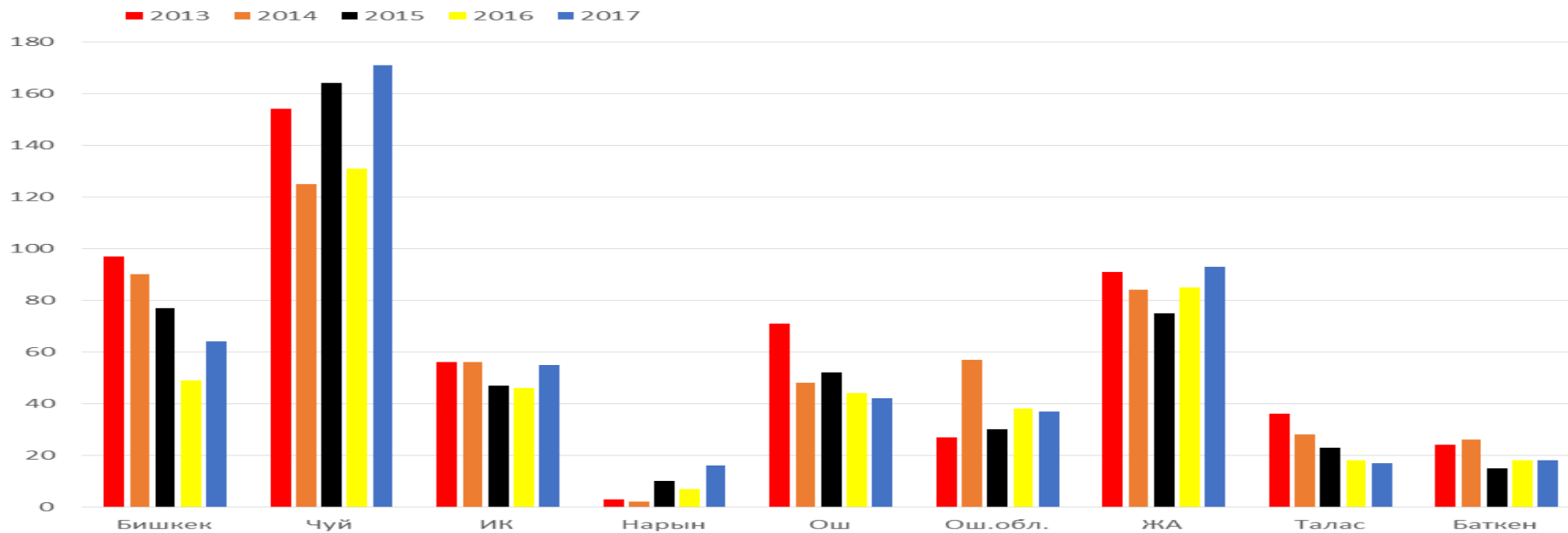
## Количество ДТП по регионам



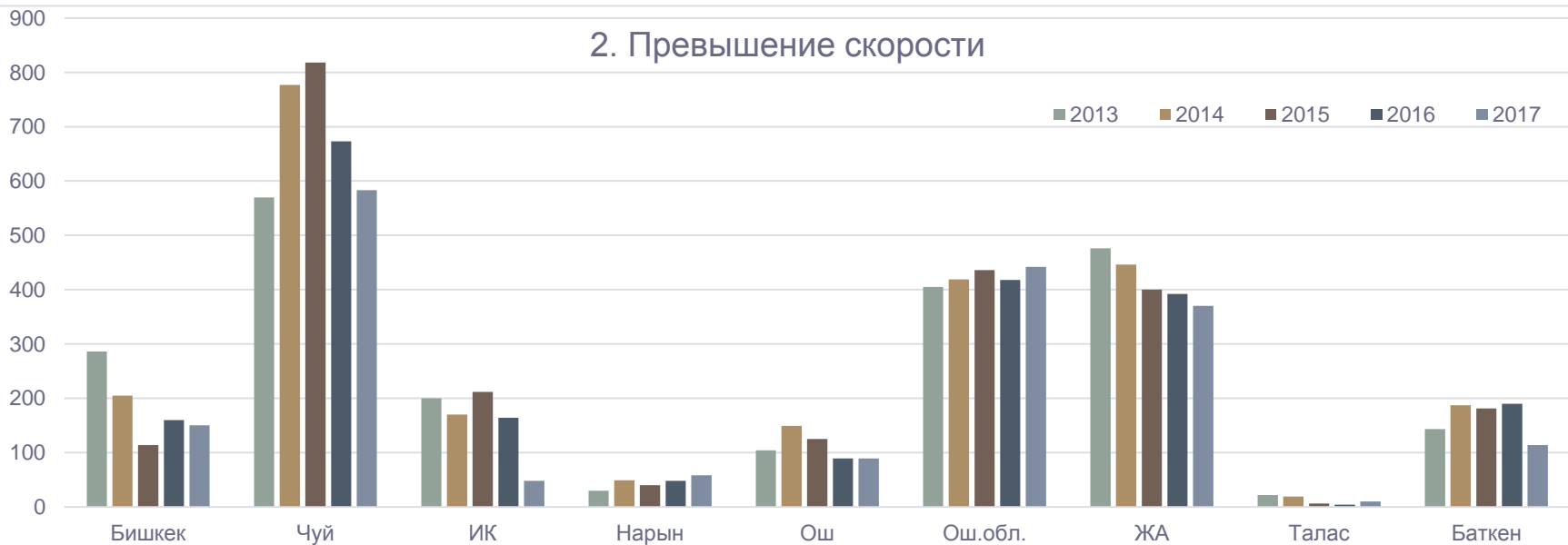
## "вес" основных причин ДТП



### 1. Управление в нетрезвом состоянии

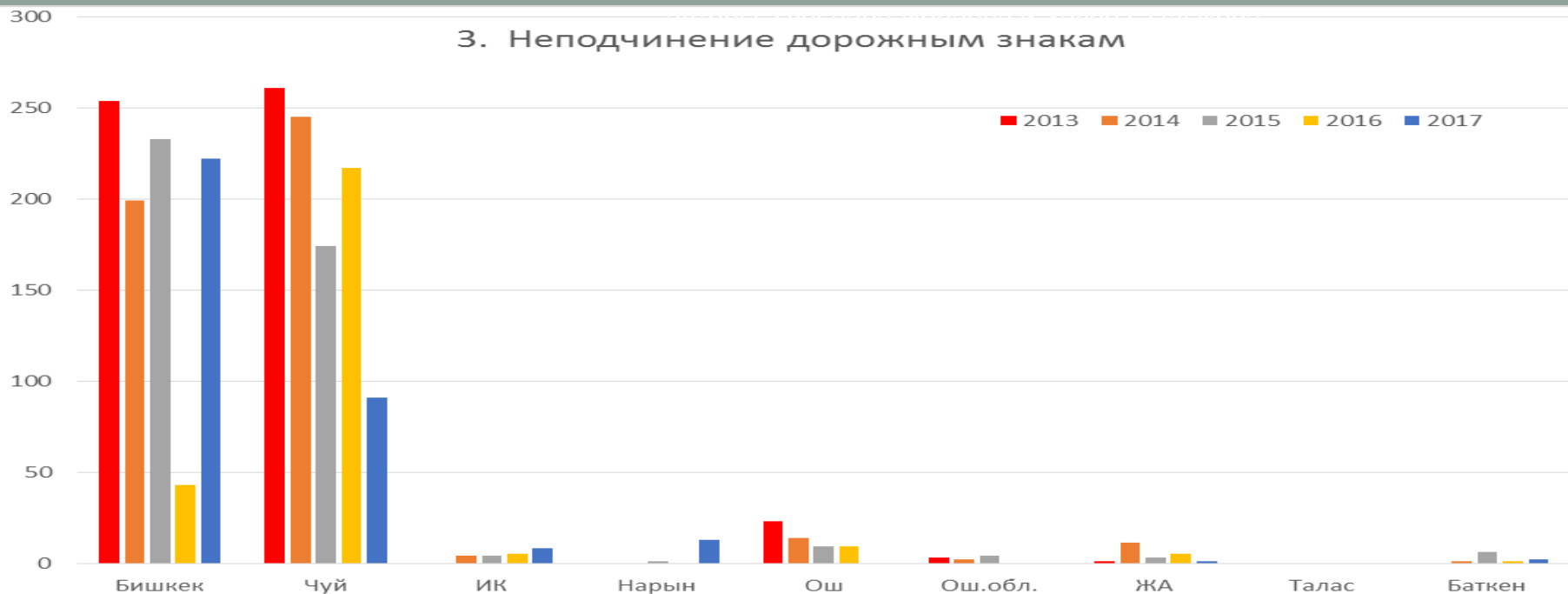


### 2. Превышение скорости

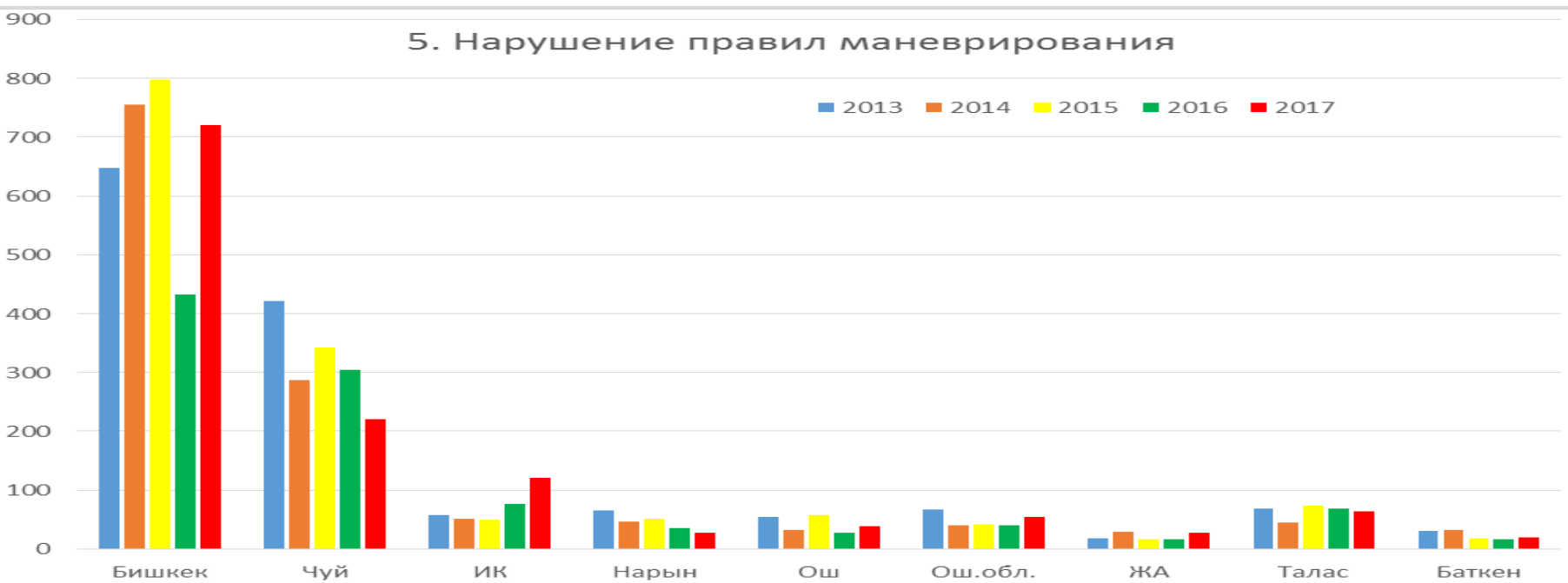




### 3. Неподчинение дорожным знакам



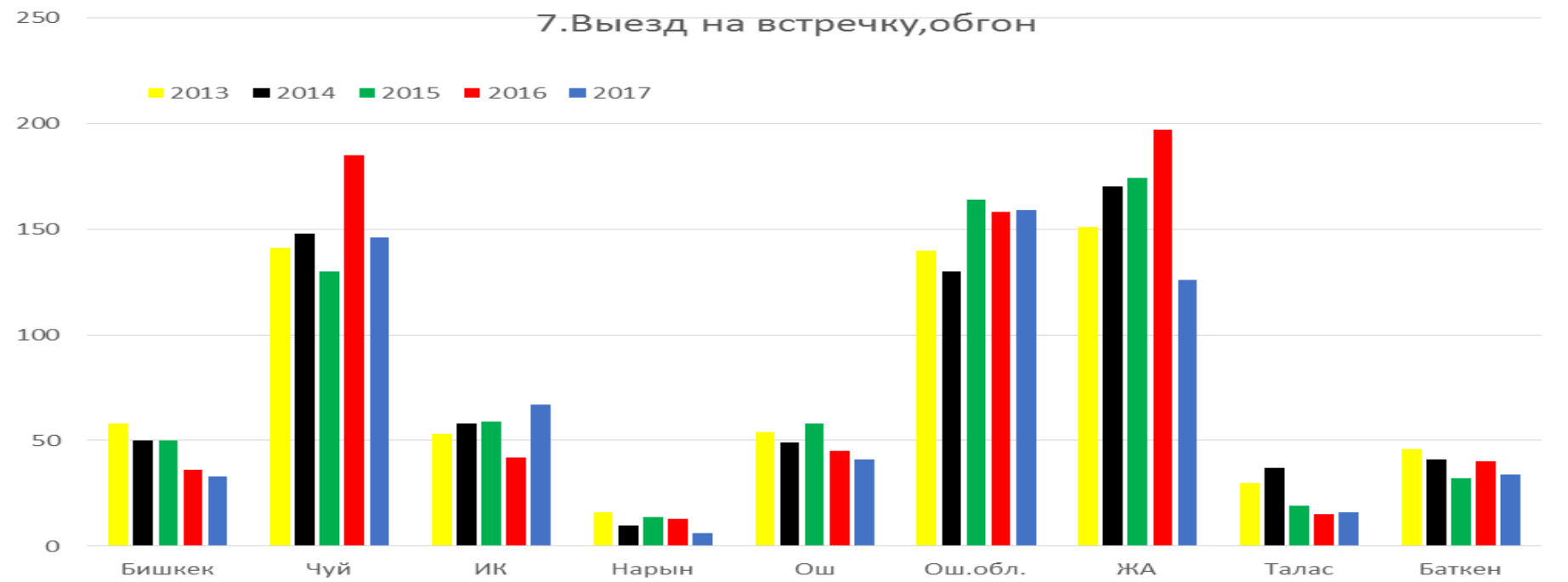
### 5. Нарушение правил маневрирования



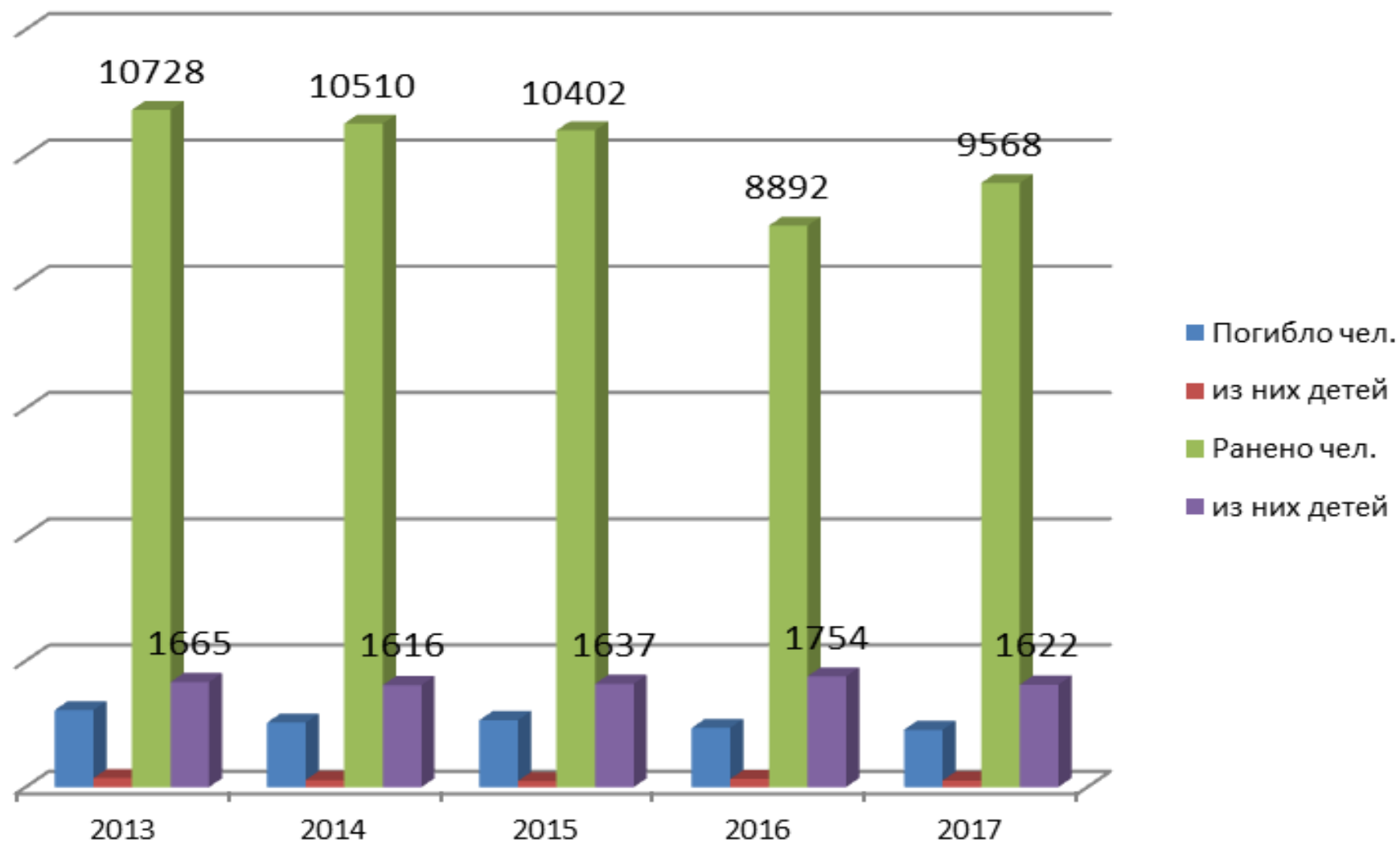
### 6.Нарушения правил проезда пешеходных переходов



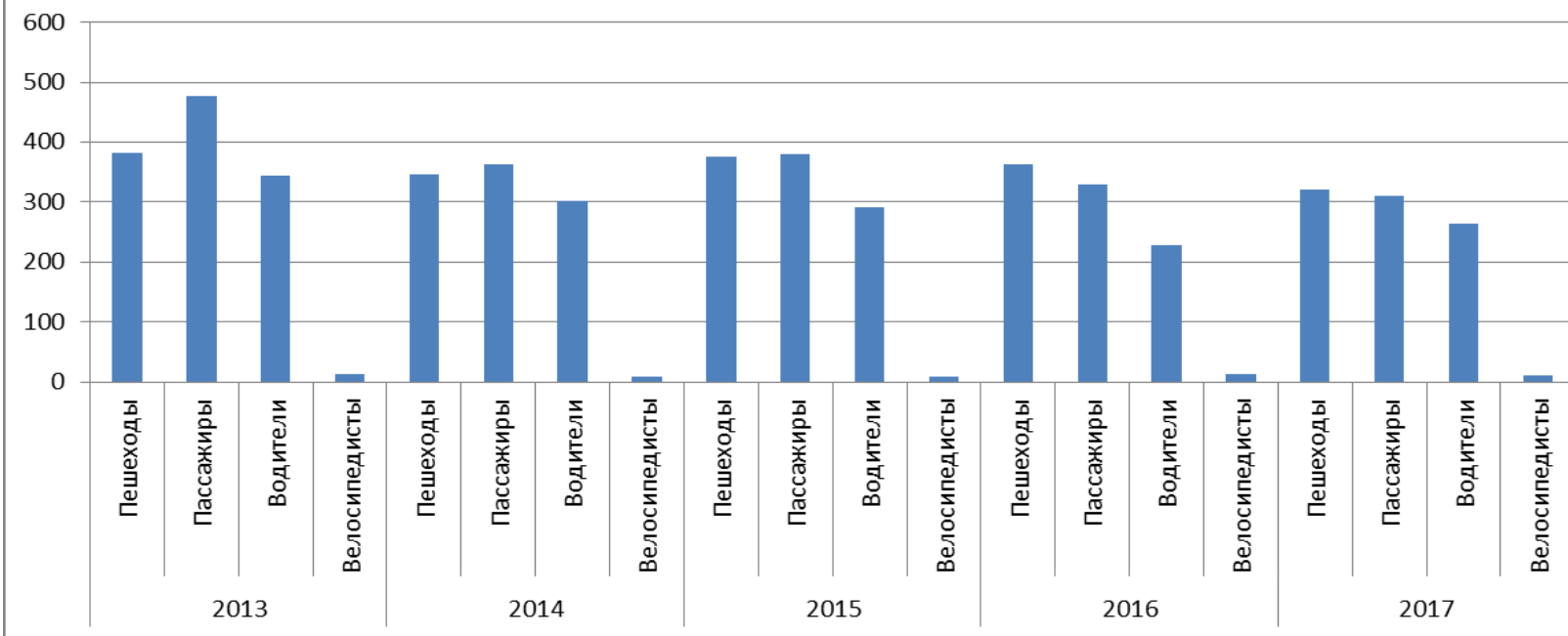
### 7.Выезд на встречку,обгон



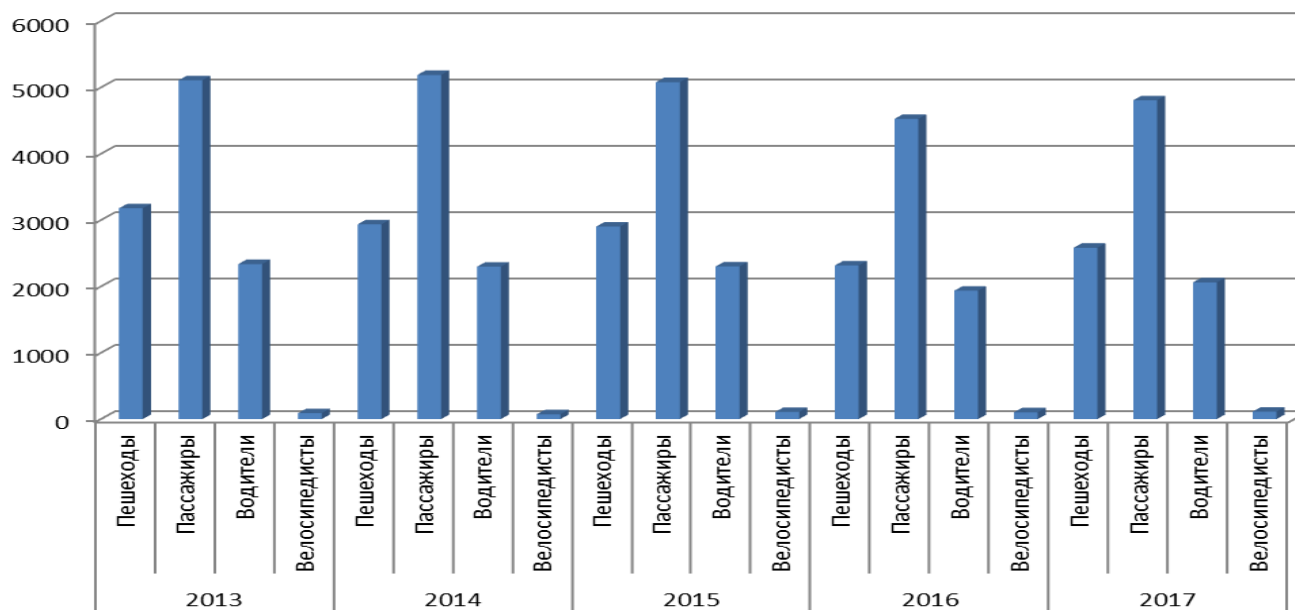
## Динамика статистики по пострадавшим в ДТП



## Погибшие в ДТП, по категориям участников и по годам



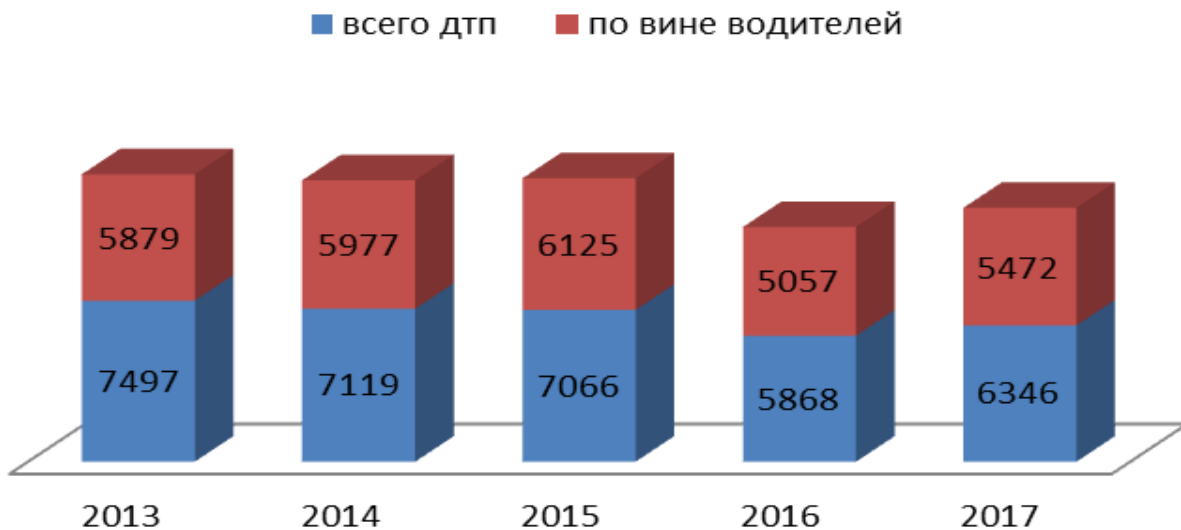
## Статистика по раненым в ДТП, по годам и категориям участников



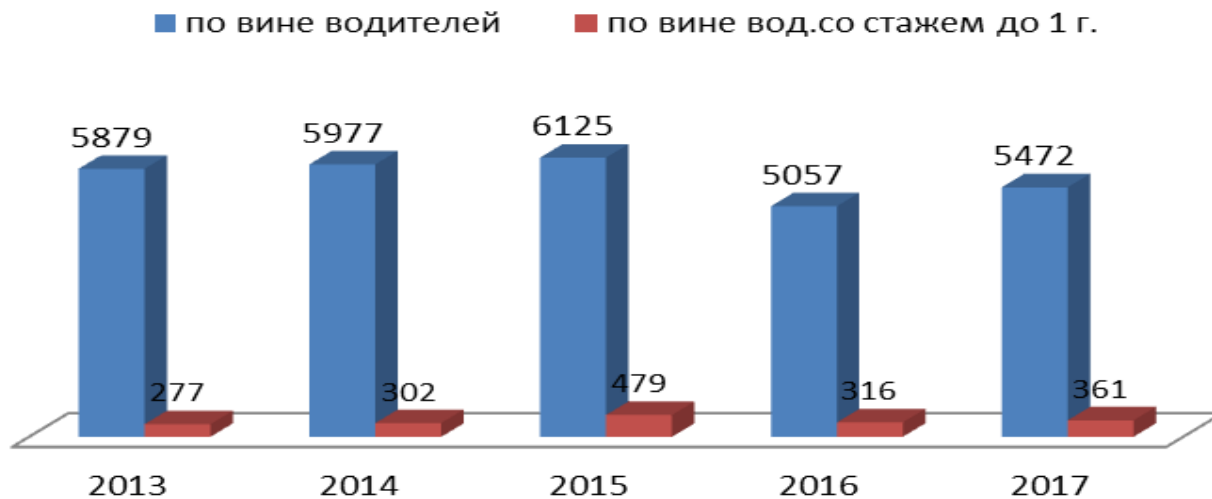
Таким образом, самыми уязвимыми участниками ДД являются пешеходы и пассажиры.



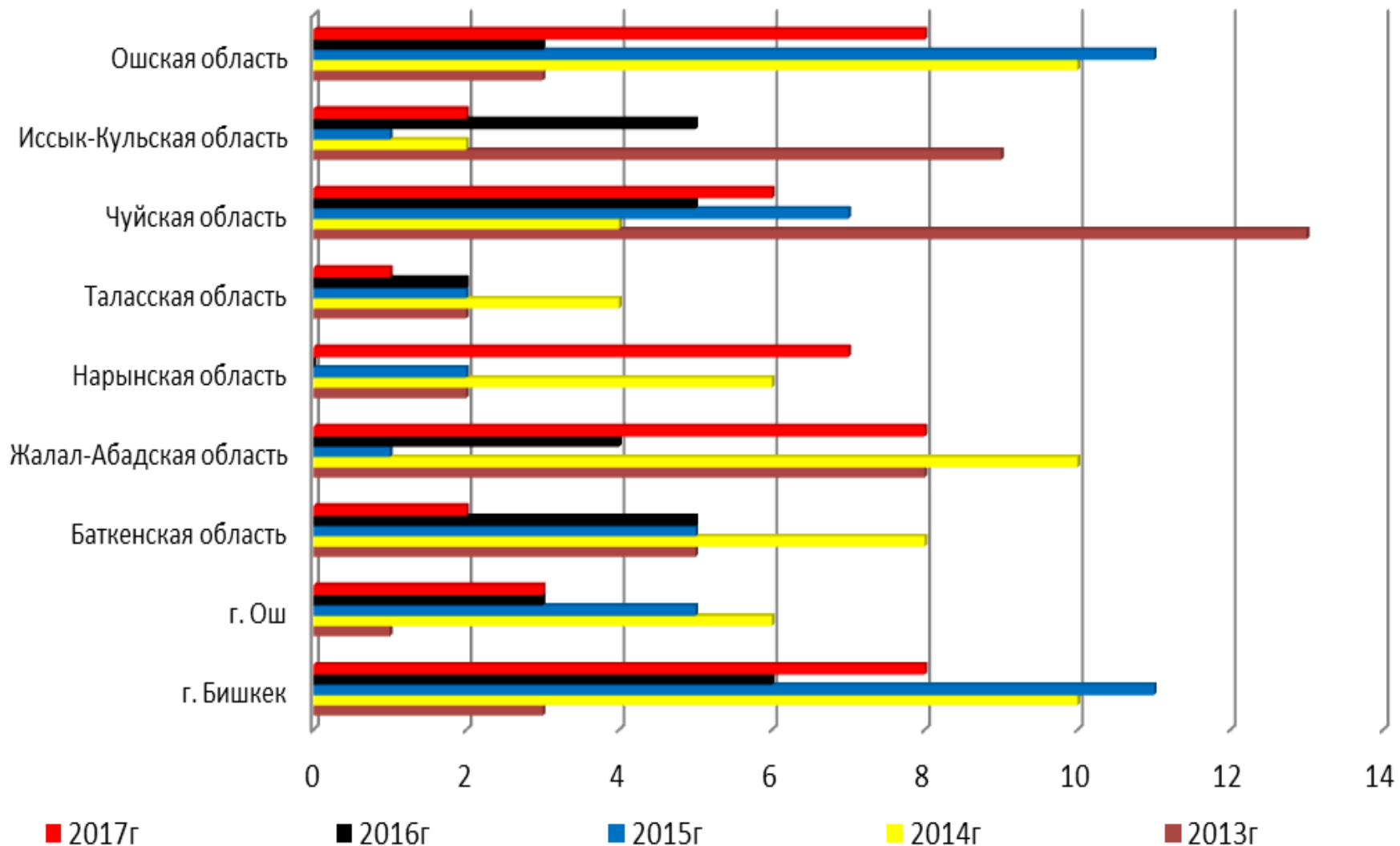
## Соотношение статистики ДТП и случаев, когда водитель признан виновным



## Доля водителей со стажем до 1 года в составе водителей, признанных виновными в ДТП



## Сведения по выданным лицензиям автошколам в региональном разрезе



# Information on licenses issued to driving schools in breakdown by provincial towns

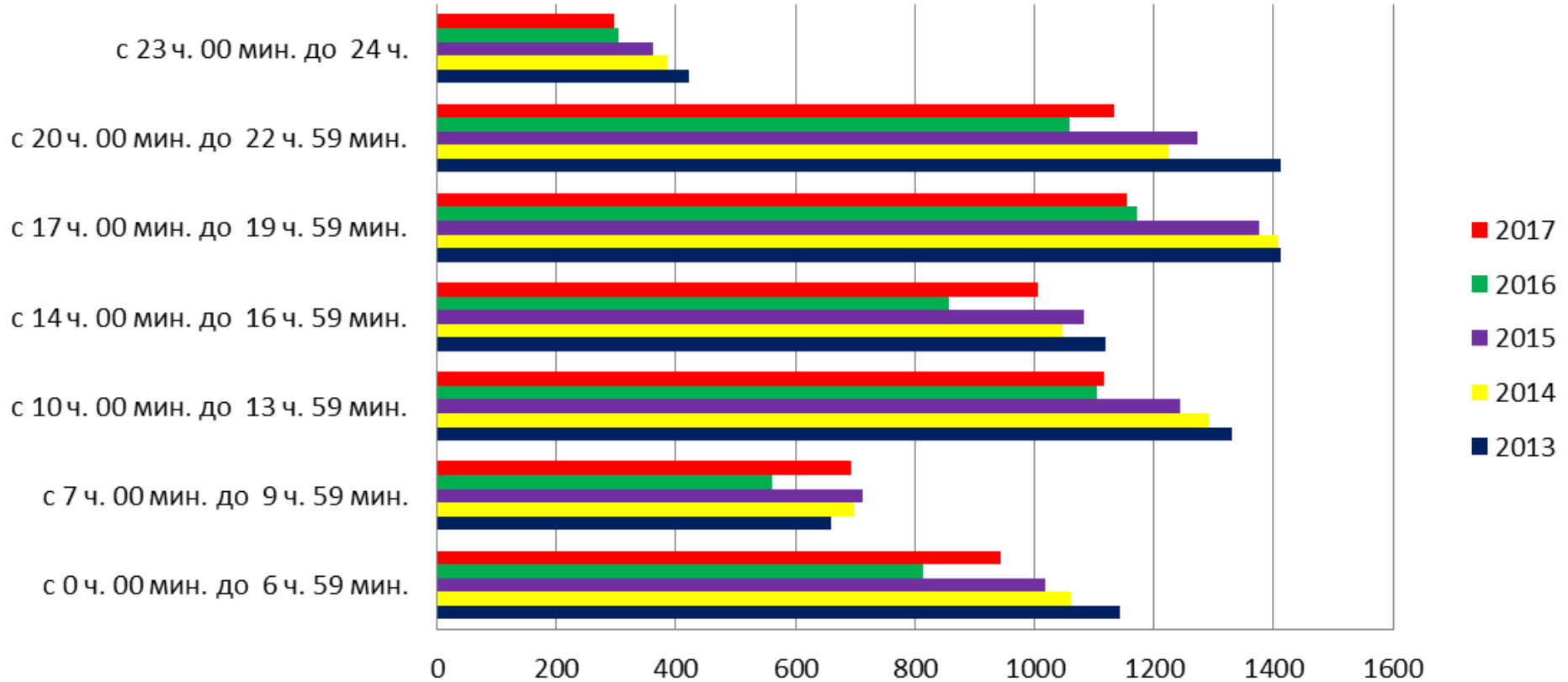
	Republic-wise	Bishkek	Osh	Batken Province	Jalal-Abd Province	Naryn Province	Talss Province	Chui Province	Issyk-Kul Province	Ясаль Osh Province
<b>2013</b>	46	3	1	5	8	2	2	13	9	3
<b>2014</b>	60	10	6	8	10	6	4	4	2	10
<b>2015</b>	45	11	5	5	1	2	2	7	1	11
<b>2016</b>	33	6	3	5	4	-	2	5	5	3
<b>2017</b>	45	8	3	2	8	<b>7</b>	1	6	2	8
<b>Total</b>	229	38	18	<b>25</b>	31	17	11	35	19	35



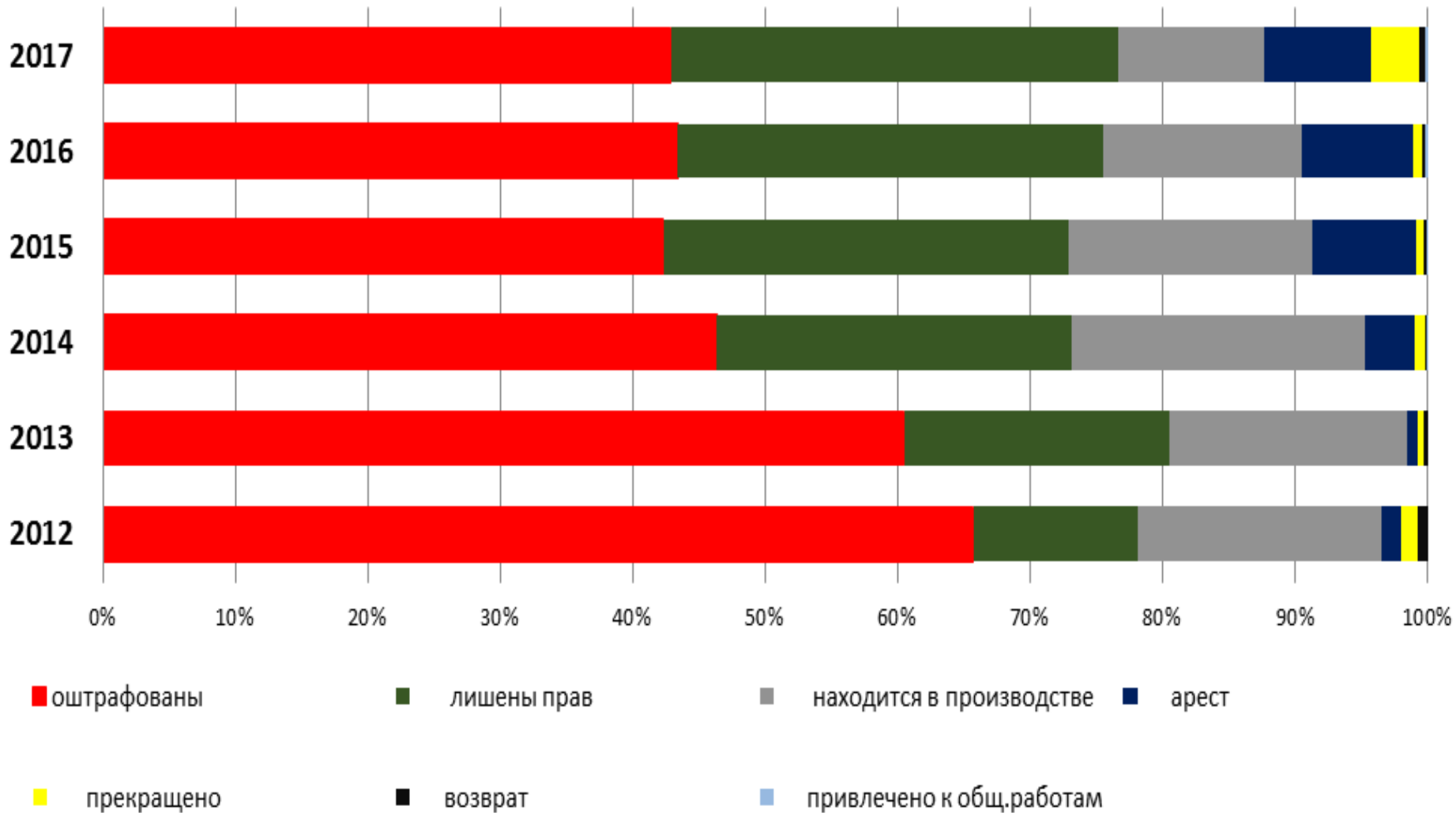
# The share of car crashes due to technical failure of a motor vehicle in the general statistics of road accidents

	2013	2014	2015	2016	2017
Total № of car crashes	7497	7119	7066	5868	6346
including technical fault of a motor vehicle	27(0,3%)	27(0,4%)	17 (0,5%)	25 (0,4%)	21(0,3%)

### Распределение ДТП по времени суток



## Санкции, примененные в отношении водителей, задержанных в НС



# Functional responsibility for road safety

Agency	Responsibility	Duplication of functions	Areas beyond responsibility
Main Road Safety Department	Road safety functions		
Department for Registration of Vehicles and Drivers at the State Registration Service under the Government of the Kyrgyz Republic	(Re)-registration of means of transportation and ensuring registration of drivers; information base on the examination activities of driving schools		
Ministry of Transport and Communication	Design and construction of roads and road-side infrastructure		

# Formulating the objectives of the strategy

- In Kyrgyz Republic, the death rate in car crashes is 14.65 (15.9, taking into account the migration of 500,000 people) per 100,000 of the population, while in the Russian Federation it is 13, in Germany this indicator is significantly lower - 3.7, in Denmark - 2.7;
- The Road Safety Strategy of the CAREC countries, which includes the Kyrgyz Republic, is to reduce the number of fatalities in the CAREC road corridors by 50% by 2030, compared to 2010.

# Modern Approach

Studies show that the likelihood of a pedestrian death increases 8-fold if the speed of a vehicle underrunning him/her increases from 30 km/h to 50 km/h. Structurally, the best vehicle available now ensures safety of passengers using seatbelts at the speed of up to 70 km/h in a head-on collision and up to 50 km/h in a side collision.

The threshold of injury survivability by a pedestrian if underrun even by the best constructed motorcar will be exceeded at a speed of more than 30km/h.

The culture of “blame the victim” gave way to another – “search for a guilty one in the transport system” with the new understanding that speed management and the limits of human capabilities, both physical and behavioural, are the key challenges to design and operation on traffic system due to the following reasons: first, the causal relationship between speed and safety of motion is explained by the laws of physics; second, thresholds of survivability are known for most parts of the human body.

# Modern Approach

Systematic approach that includes the following targets:

- Taking into account needs, errors, and vulnerability factors when using a road;
- Monitoring compliance with standards of tolerable levels of violent attack on human body without a fatal outcome (speed 30 km / h, rescue operation, etc.);
- Ensure minimization of severity of injuries due to the effectiveness of rescue services, medical care and rehabilitation

Assumptions:

- Car crashes can not be prevented completely, but it is possible to reduce and predict injuries;
- Accurate data and scientific approach are important;
- Systemic approach to road safety, including participation of health sector in prevention of road traffic injuries;
- Measures taken at local and national levels ensure efficiency and rapid response to local conditions.

# The proposed formulation of the purpose of the Road Safety Strategy

- By 2023, to increase the safety of all road users in the Kyrgyz Republic and to reduce the death rate and the level of road traffic injuries as a result of accidents by 30%.



# Subject Matter of Situational Analysis

- Road safety management
- Infrastructure safety
- Safety of modes of transport
- Safety of road users
- Post-crash response

## **Road Safety Management**

**(legislation and regulations, control and sanctions, supervision and development of road infrastructure, organization of emergency medical services)**

- Regulation of the regulatory framework with emphasis on (regulation of vehicles, transport, etc.) and enforcement methods;
- Functional fields and the authorized body as the coordinator of road safety;
- Ensuring adequate financing of road safety (decent salary - motivation of personnel responsible for safety);
- Availability of IT systems for storing databases required for analysis;
- Mobile road patrolling with necessary equipment and other resources
- Coordination and regulations of interaction of the involved structures;
- Information exchange and data bases
- Monitoring and assessment of road safety (civil control).

# Infrastructure Safety

- Technical regulations establish the minimum necessary safety requirements for roads and the processes of their design, construction, reconstruction, capital repairs and maintenance, as well as the forms and procedures for assessing compliance with these requirements.
- Hazard warning system in case of emergencies and control over Hazard notification systems in cases of emergencies and monitoring the implementation of safety rules in the emergency situation.
- Standards for separation of spaces for all road users, measures to reduce safety by road type - dividing lines, traffic lights, signs, etc.
- Monitoring and evaluation of car crash statistics to identify “black spots”.
- Fiscal measures to influence the loading level of motor vehicles.
- Safety of public transport (citizen participation) in monitoring and assessing the quality of services.

# Safety of vehicles

- Standards and regulations for technical parameters for import of motor vehicles (economic incentives for import of safe means of transport);
- Safety standards and regulations for technical inspection of vehicles for compliance with safety standards;
- Normative consolidation of the responsibility of inspection structures for cases of involvement of vehicles that have been inspected in road accidents;
- Standardization of licensing requirements for inspection stations (equipment, personnel, minimum mandatory inspection procedures).

## Safety of road users

- Development of training standards for drivers and trainers / instructors;
- Assessment of training (without conflict of interest), M & E of training and testing;
- Standardization of licensing procedures for driving schools;
- Training of participants in road safety;
- Training participants in providing first aid.