



МИНИСТЕРСТВО ТРАНСПОРТА  
РОССИЙСКОЙ ФЕДЕРАЦИИ  
Минтранс России

# About the state and perspective directions of development of the organization of traffic in the Russian Federation

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## Urbanization and motorization processes in the Russian Federation

Indicator	Годы		
	1990	2010	2015
Urban population			
- million	109,4	105,4	106,6
Total number of cities	1040	1100	1115
The number of cities with a population of more than 500 thousand people	<b>22</b>	37	<b>36</b>
The proportion of the resident population, % (from the urban population)	13%	45%	44%
The number of cities with a population of more than 1 million people	<b>12</b>	12	<b>15</b>
The proportion of the resident population, % (from the urban population)	23%	29%	30%
Number of urban <u>settlements</u>	2193	1286	1200
Number of the population living in them	12,5%	7,8%	-
Number of vehicles, million units	<b>12,7</b>	40,7	<b>53,4</b>
- including cars	8,6	34,4	46,3



## Problems of urban development transport system

### A consequence of the "instability" of the UTS::

- inefficiency of passenger and freight traffic;
- reducing the speed of the vehicle;
- the reduction in the reliability of delivery of passengers and cargo;
- increasing the cost of road transport;
- increased number of accidents, emissions of pollutants and traffic noise.

Traffic congestion not related to road accidents (15%)

Air pollution (15%)

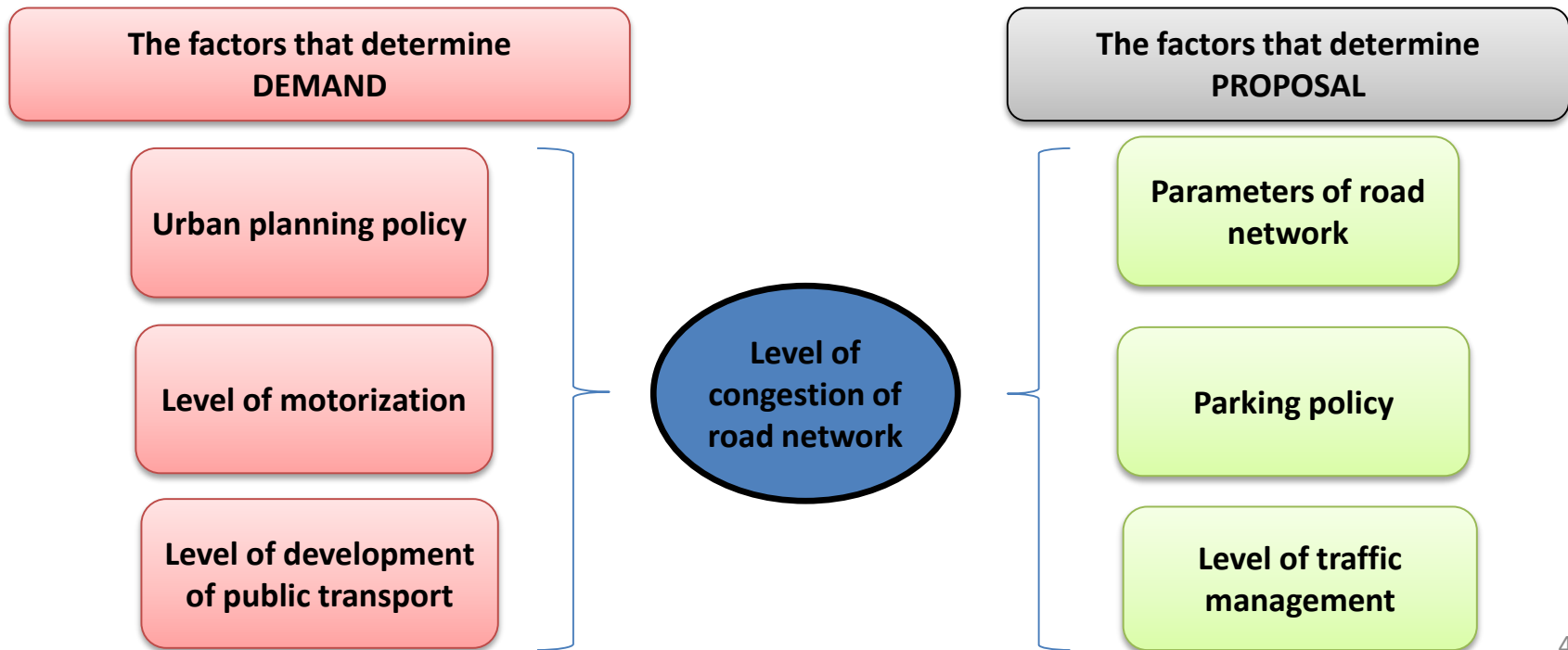
Noise (8%)

Traffic congestion due to accident (4%)



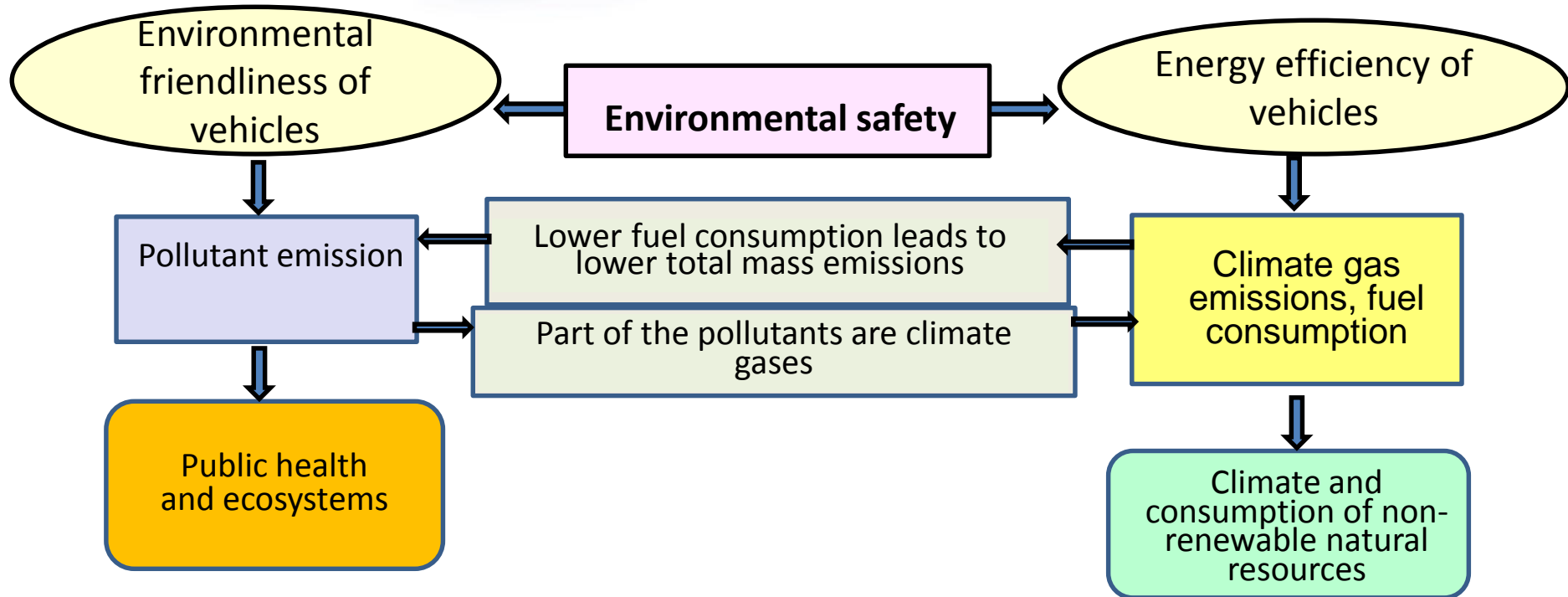


## TO ENSURE THE SUSTAINABLE DEVELOPMENT OF THE UTS = ensure a **BALANCE** between transport demand and supply





## Improving vehicle safety for the environment





## A MEANS OF ACHIEVING "SUSTAINABILITY" IS UTS: integrated transport planning and management

**Legal, regulatory, technical and methodological framework**

**Planning, design**

**Transport infrastructure development**

**Management (transport demand)**

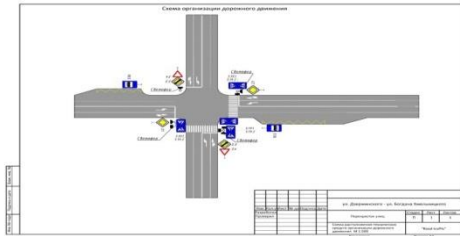
1. Improvement of territorial and transport planning;
2. Development of road networks;
3. Improvement of public passenger transport and non-motorized movement;
4. Organization of urban Parking space and Parking policy;
5. Introduction of restrictions on the movement of vehicles;
6. Improvement of engineering means and methods of traffic management;
7. Optimization of work of trucks.





# Developed or are in the stage of development and coordination of guidelines for the traffic management

Development of documentation in the field of traffic management



To assess the effectiveness of road traffic management

$$I_M = k_{JT} \cdot \sum_{r \in R_{JT}} k_r \frac{\bar{T}_{JT}^r}{L_r} + k_{OIT} \cdot \sum_{r \in R_{OIT}} k_r \frac{\bar{T}_{OIT}^r}{L_r}$$

On the use of software products of mathematical modeling



On the development of pedestrian and bicycle movements



On the development of transport hubs



On the organization of a uniform parking space





## Development of unmanned vehicles (UAV))

### In the field of road safety

A sharp reduction in the accident rate to 80-90% by eliminating the human factor (the cause of 80% of accidents).

### For carriers

1. Significant fuel economy and operating costs (up to 30%) due to the optimization of the speed mode;
2. The possibility of non-stop movement of the UAV up to 24 hours a day.



### In the field of road facilities

1. Increasing the maximum road capacity at the expense of the ordering of motion, the minimization of distances between vehicles, etc.;
2. With the full transition to the use of UAV there will be no need for: roadsides, dividing lanes, barrier fences, lighting, etc.





**Thank you for attention!**