

**CITY OFFICE OF SPATIAL PLANNING,
TOWN BUILDING, CONSTRUCTION,
UTILITIES AND TRANSPORT**
Transport sector

**MEASURES AND ACTIVITIES OF
THE CITY OF ZAGREB
IN SUSTAINABLE URBAN
MOBILITY**

**Krunoslav Tkalčić
Ante Nevistić**

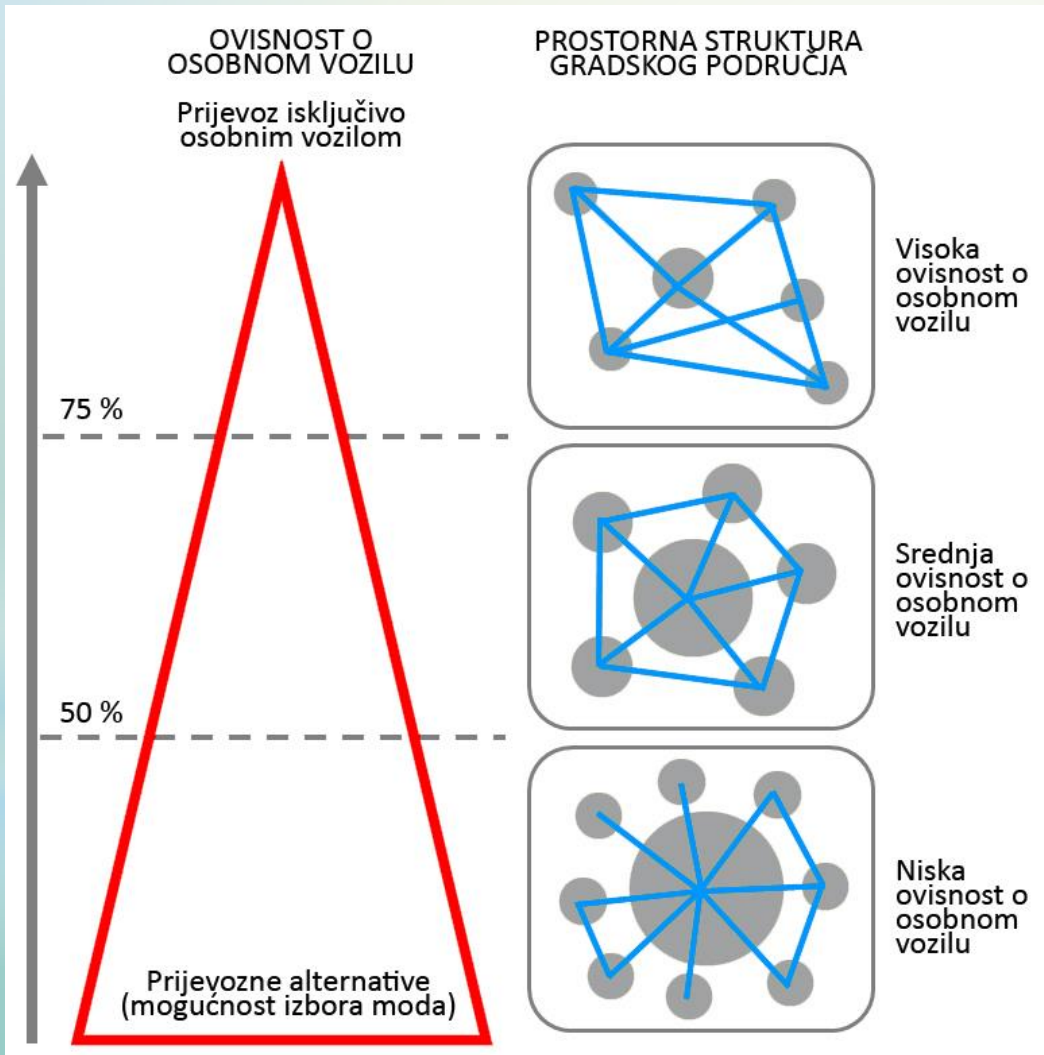
11.03.2016., Zagreb



WHAT IS SUSTAINABLE DEVELOPMENT OF TRAFFIC? (IMPORTANCE - DEFINITION)

The development of traffic that will allow for a desired –acceptable mobility of citizens, without diminishing the citizens' quality of life.

PROBLEMS IN THE REALIZATION OF THE SUSTAINABLE DEVELOPMENT PROGRAM?



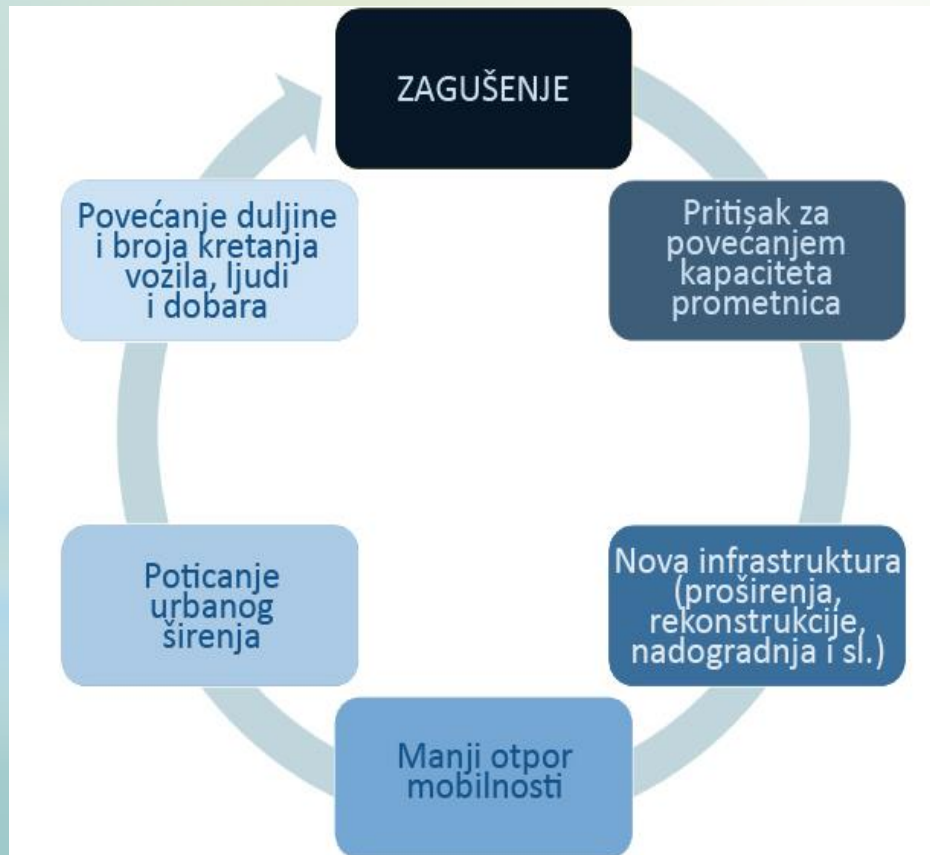
As is the case with most European capitals, the City of Zagreb is **burdened with intensive motor traffic, noise and pollution** that are a result of it.

Any form of urban mobility, regardless whether it's walking, private cars or public transportation, has its **sustainability level** in order to satisfy the need for mobility.

The image shows the dependence of the development of an urban city network and the use of personal vehicles.

Motorization and the spread of personal mobility is the current trend, linked to a significant drop in public transport in the city mobility.

The level of motorization which is usually measured through a number of citizens and the number of registered vehicles in the City of Zagreb is equal or even a bit higher than the level of motorization in European cities and regions ($\approx 1 : 2,5$).



Traffic jams occur when **traffic demand surpasses the traffic offer** on specific places in a specific time and a specific form of traffic.

In such conditions each vehicle **invades the mobility of another vehicle** (PV, PT, passers or cyclers or any other form of transport in traffic).

The number of registered motor vehicles in the city amounts to 450 – 500.000.

The so-called “Modal Split”, division that designates the ratio of the impact of individual and public transport is very unfavorable for the City of Zagreb. It is estimated to be (45 : 55) in favor of individual motor transport.

The lack of parking spaces has endangered the walkways, promenades and green areas, due to irregular parking.

In keeping with the above mentioned, the biggest problems for City of Zagreb as also most European cities include the traffic jams that are caused by increased level of motorization and result in difficulties in public transportation, difficulties of non-motorized traffic (cyclers and pedestrians), lack of parking areas, loss and inadequate use of public space, unfavorable impact on the environment, increased energy use, increased number of accidents, decreased security of traffic etc.

HOW TO REALIZE SUSTAINABLE TRAFFIC DEVELOPMENT?

- Decrease or imitation of environment and noise pollution
- Rational use of fuel energy and ecologically acceptable fuel sources: electrical energy, natural gas, biogass
- Rationalization – decrease of transport costs and fuel energy
- Using renewable energy sources
- Rational use of space
- Improved quality of transport service, especially in public transportation in urban and suburban areas
- Popularization of alternaive non-motorized forms of transport
- Adaptation of technical characteristics of traffic areas and transport vehicles to persons with special needs and disabled persons etc.

THE CITY OF ZAGREB - ACTIVITIES

The City of Zagreb is firmly oriented to the sustainable traffic development and environment protection.

Therefore, there are a set of measures and activities that can be characterized as measures of sustainable traffic development.

This especially includes the improvement of the urban and suburban transport, popularization of alternative forms of transport and discouraging (limitations) of intensive motor transport on roads.

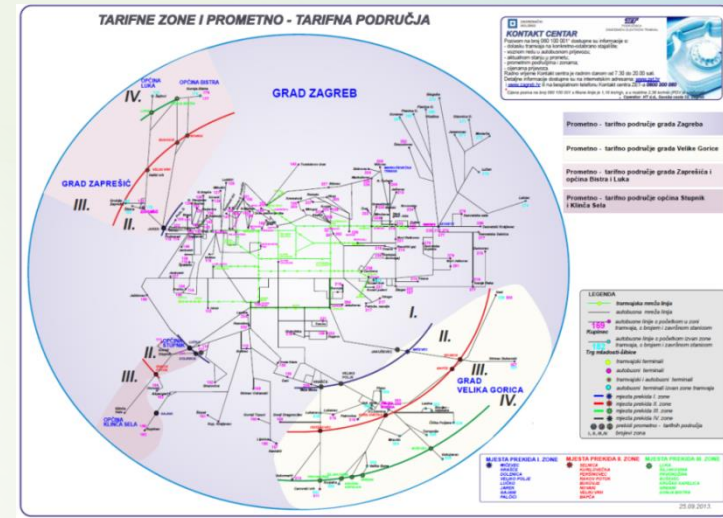
ACTIVITIES IN PUBLIC TRANSPORTATION

DEVELOPMENT OF THE PUBLIC TRANSPORTATION NETWORK

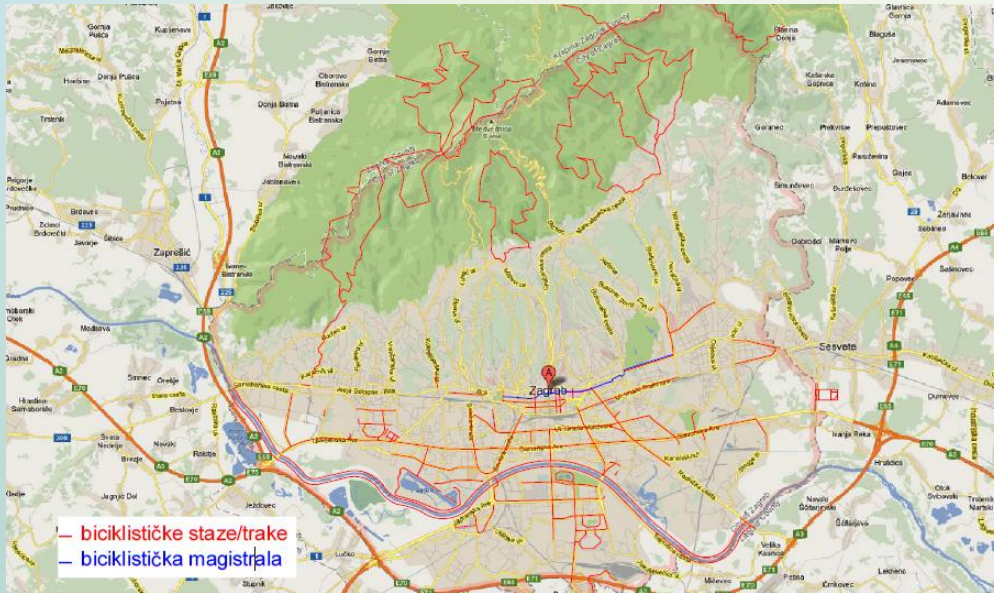
- Construction of street car joints
- Corridors along residential areas and business zones
- Widening the bus network to the wider urban area, especially to the north

MODERNIZATION OF THE VEHICLES

- Biodiesel vehicles (360) and CNG (60)
- Modern low floor vehicles
- Transporting disabled persons (21)
- School transport (24 busses)
- System for the monitoring and management of public transportation vehicles and subsystems for informing users ATRON. The system wants to allow automatic monitoring of the traffic process in the public transport of passengers in Zagreb.



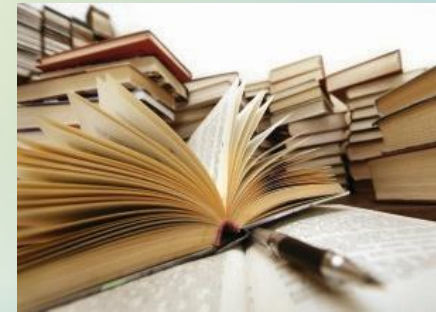
ACTIVITIES IN DEVELOPMENT OF CYCLING



- Creation of new and maintenance of the existing cyclist areas (currently, there exists a respectable network of cycling lanes of cca 251 km),
- Widening the cyclist brackets,
- Construction of bicycle counters (fixed: Ulica Grada Vukovara and mobile),
- The construction of the traffic polygon Travno is in preparation (stage of projection nad acquisition of the necessary documentation),
- Implementation of a set of promotional and educational activities in conenliction with encouraging the citizens to use bicycles for transport in daily mobility.

PRODUCTION AND CHANGING THE LEGISLATIVE

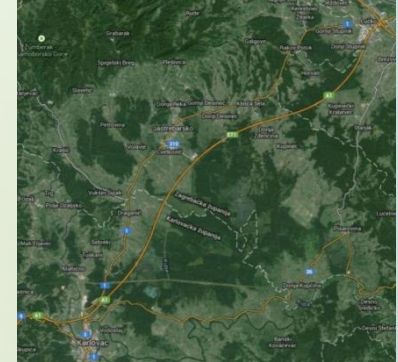
- New Decision on traffic (SGGZ 21/14, 09/15)
- A change of the Decision on the vehicle traffic in the centre of the City of Zagreb (SGGZ 21/15)
- Production of an internal guidelines for cycling parking spaces
- Cooperation with the Ministry of Maritime affairs, transport and infrastructure on the Rulebook on cycling
- **Preparation of the Masterplan for traffic in Zagreb, Zagreb and Krapinsko-zagorska county**
-



GOALS:

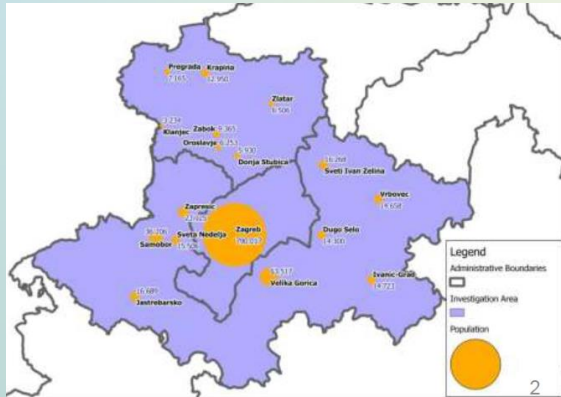
- Discouraging the influx of individual and cargo motor traffic in the central parts of the city
- Increasing the flow of the saturated road network
- Increase of the security level in alternative forms of transport (pedestrians and cyclists etc.)
- Detection of key lacks and bottlenecks in the traffic system

PRIORITY SHORTTERM PROJECTS AND ACTIVITIES IN TRAFFIC DEVELOPMENT



- improvement of the quality of public urban and suburban transport of passenger (speed, dependability, regularity)
- Widening the public transportation networks (busses and street cars),
- improvement of the urban and suburban railway,
- development of alternative forms of transport, especially cycling,
- widening the parking payment system,
- initiation of the Park & Ride system,
- construction or reconstruction of roads that can unload the overly burdened transport corridors (Šarengradska, Samoborska),
- Construction of corridors in the zones of new residential and business objects, for the purpose of optimizing traffic
- Activization of road police and traffic officers in granting priority to public transportation.

LONGTERM STRATEGIC PROJECTS OF SUSTAINABLE TRAFFIC



- integration of transport systems in urban and suburban transport of passengers and setting up a tariff transport union in the City and surrounding regions,
- metro system
- denivelation of the rails in the city centre,
- furnishing the system for automatic traffic management (AUP),
- construction of distribution road ring around the central city area and the northern bypass,
- construction of the Sljeme cable car
- Modernization of the urban and suburban railway.

Thank you!

Republic of Croatia
City of Zagreb
Trg S. Radića 1
tel: +385 1 610 0101
web: <http://www.zagreb.hr>

