Test mobility scenarios and their consequences in Banja Luka FUA

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| Project Number | DTP1-1-037-3.1 |
| Project Name | CompreHensive Elaboration of STrategic plaNs for sustainable Urban Transport |
| Project Acronym | CHESTNUT |
| Work package | WP3 - Transnational strategy |
| Activity | Activity 3.2 – Elaboration of Transnational Strategy (based on mobility scenarios) |
| Title of Working Document | Test mobility scenarios and their consequences in Banja Luka FUA |
| WP responsible partner | Pannon Business Network - PP8 |
| Dissemination Level | Public |
| Date of Preparation | October 2017 |
| This document must be referred to as | Test mobility scenarios and their consequences in Banja Luka FUA |
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| Contributors | Mr. Vladimir Gladanac |

**Document History**

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| Version | Date | Note |
| Template | 02.10.2017 | Template by Takeru Shibayama (VUT) |
| Scenarios finished | 31. 10. 2017 | Mr. Vladimir Gladanac |
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# 1. Information about this test scenario

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| FUA Name | Grad Banja Luka |
| Scenario Name | **Business-as-usual** |
| Date | October 2017 |
| Policy target year | 2030 |
| Contributor | Mr. Vladimir Gladanac |

# 2. Describe this scenario

* Max. in 10 lines

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| Continue current transport / mobility policy in the next 20 years. The traffic congestion in the city will be getting bigger. Traffic will adversely affect the environment and business activities. Bicycle traffic will not exist. Public transport will be of poor quality and will decrease the number of users. There will be an increase in the number of improperly parked vehicles, and a worsening of traffic safety. Vehicles will have an advantage over people. Integrated mobility will not exist. There will be a city in which people do not want to live. |

# 3. Assessment of consequences

How will the demographic structure of your FUA and the core city in it be in your planning horizon around 2025 to 2030? (No of population, age structure, etc.)

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| The total population in the city will increase by 10% and will be around 250,000. There will be significant changes in the age structure. The share of the population 0-14 and 15-39 and 40-64 will decrease in comparison with the previous years, and the share of the elderly population (65-84 and 85+) will increase. |

Which types of transport technology will have been diffused or will disappear in your FUA in your planning horizon around 2025 to 2030?

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| --- |
| There will be no changes. |

How will the share of transport mode change in your core city and FUA? Will there be higher share of journey with cars or less? Will it increase or decrease the share of public transport? Will there be more cyclists and walkers, or less?

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| Characteristics of transport:* the number of trips will not increase
* the rate of car ownership and driving license possession will drown in middle age groups, but increase in older age groups
* the use of public transport will be reduced
* the use of public transport to go to the doctor will increase
* the use of the bike will decrease
* the walk will remain the same
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Which part of your future prediction is not in line with upper-level transport policy (of region, country and EU)?

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| This scenario is a continuation of the current mobility policy from the City. The current mobility policy of the city does not feature sustainable development. This scenario is completely contrary to the upper-level transport policy region and the EU. |

Is the overall situation improving the living quality of your FUA?

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| --- |
| No |

What are the effects on particular demographic groups, such as children, elderly, low-income group, foreigners and migrants, students, mobility-impaired people, etc.?

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| Disturbing the health of all demographic groups due to the increase in carbon dioxide, nitrogen oxide and particulate emissions. |

How will the transport-related cost paid by each end user change? How will the transport-related cost paid by your municipalities or regional government change?

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| The number of public transport users will be reduced due to the lack of a policy of favoring public transport. Then there will be an increase in the price of tickets in public transport, which will lead to further reduction of the number of passengers. |

Will the overall change will lead to increase or decrease of transport-related energy consumption in your FUA?

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| There will be an increase in consumption. |

Will the overall change will lead to increase or decrease of transport-related CO2 emission in your FUA?

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| To increase. |

# 1. Information about this test scenario

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| FUA Name | CITY OF BANJA LUKA |
| Scenario Name | **Fostering „active“ transport modes (walking and cycling)** |
| Date | October 2017 |
| Policy target year | 2030 |
| Contributor | Mr. Vladimir Gladanac |

# 2. Describe this scenario

* Max. in 10 lines

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| Topographically, Banja Luka is very favorable for bicycle traffic. There will be a network of bicycle trails and tape in the city. On the street, where possible, cycling routes will be marked. Some streets will turn into one-way ones, and there will be space for marking bicycle tape. Along the streets, along the green surfaces and along the Vrbas River, bicycle paths will be built. Traffic signs for bicycle traffic will be set up. The bike sharing system will be implemented for the terminal for rent in every major part of the city. |

# 3. Assessment of consequences

How will the demographic structure of your FUA and the core city in it be in your planning horizon around 2025 to 2030? (No of population, age structure, etc.)

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| The quality of life in the city will be better. The city will attract young people to come to live in the city. The total population in the city will increase by 15% and will be around 260,000. The share of the population 0-14 and 15-39 and 40-64 will increase in comparison with the previous years, and the share of the elderly population (65-84 and 85+) will remain at a similar level. |

Which types of transport technology will have been diffused or will disappear in your FUA in your planning horizon around 2025 to 2030?

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| There will be more use of bicycles in everyday travel. Due to the transformation of some streets into one-way, there will be difficult movement of passenger vehicles, and there will also be increased use of public transport.  |

How will the share of transport mode change in your core city and FUA? Will there be higher share of journey with cars or less? Will it increase or decrease the share of public transport? Will there be more cyclists and walkers, or less?

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| Characteristics of transport:* the number of trips will increase
* the use of the bike will increase
* the use of public transport will increase
* the use of passenger cars will be reduced
* walk will increase
* awareness of health and non-motorized movements will develop
 |

Which part of your future prediction is not in line with upper-level transport policy (of region, country and EU)?

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| This scenario is complete with the upper-level transport policy of the country, the region and the EU. |

Is the overall situation improving the living quality of your FUA?

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| --- |
| Yes |

What are the effects on particular demographic groups, such as children, elderly, low-income group, foreigners and migrants, students, mobility-impaired people, etc.?

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| The use of bicycles by all inhabitants will increase, except for the older population. Simultaneously with the construction of bicycle trails along the Vrbas River and through the park (green) areas, the pedestrian track will be built and this will lead to increased movement of the older population. Tourists will be able to use a bike sharing system with a bike sharing system. |

How will the transport-related cost paid by each end user change? How will the transport-related cost paid by your municipalities or regional government change?

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| Local governments will find financing models. The end user will not pay. Using the bike sharing system will be free for the first hour. |

Will the overall change will lead to increase or decrease of transport-related energy consumption in your FUA?

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| There will be a reduction in consumption. |

Will the overall change will lead to increase or decrease of transport-related CO2 emission in your FUA?

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| --- |
| To reduce. |

# 1. Information about this test scenario

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| FUA Name | CITY OF BANJA LUKA |
| Scenario Name | **Making public transport more attractive (Group 1)** |
| Date | October 2017 |
| Policy target year | 2030 |
| Contributor | Mr. Vladimir Gladanac |

# 2. Describe this scenario

* Max. in 10 lines

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| This scenario is putting public transport in priority. Local authorities will co-finance the cost of public transport in large part. On the street will be marked special traffic lanes for buses. Modern technology such as an electronic map will be used, the stations will have bus time displays, wifi and lcd monitors for useful information. Buses will be used up to 5 years old. The parking cost in the central city area will increase. The use of passenger cars will be reduced. The number of passengers in public transport will increase. The negative impact on the environment will decrease. |

# 3. Assessment of consequences

How will the demographic structure of your FUA and the core city in it be in your planning horizon around 2025 to 2030? (No of population, age structure, etc.)

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| The quality of life in the city will be better. The city will attract young people to come to live in the city. The total population in the city will increase by 15% and will be around 260,000. The share of the population 0-14 and 15-39 and 40-64 will increase in comparison with the previous years, and the share of the elderly population (65-84 and 85+) will remain at a similar level. |

Which types of transport technology will have been diffused or will disappear in your FUA in your planning horizon around 2025 to 2030?

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| There will be the use of electric vehicles in public transport or electric buses. ITS will be used to inform passengers. The population will be able to use an electronic ticket in public transport that will be integrated with other communal services. With this electronic card, utilities such as water, heating, etc. will be able to be paid. Current buses that are over 20 years of age will not be used. |

How will the share of transport mode change in your core city and FUA? Will there be higher share of journey with cars or less? Will it increase or decrease the share of public transport? Will there be more cyclists and walkers, or less?

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| Characteristics of transport:* the number of trips will increase
* the use of public transport will increase
* the use of passenger cars will be reduced
* walk will increase
* we'll start thinking about the car sharing system
* there will be awareness of the use of other types of transport (bicycle)
 |

Which part of your future prediction is not in line with upper-level transport policy (of region, country and EU)?

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| This scenario is complete with the upper-level transport policy region and the EU. The problem is the lack of a transport policy at the state level that would give priority to public transport. For example, at the moment of registration of the bus, a fee for the use of the highway is paid and buses in public transport do not use the highway. For example. the state should co-finance the use of biodiesel. For example. public companies need to buy a ticket for public transportation to workers and not to pay funds to their account. |

Is the overall situation improving the living quality of your FUA?

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| --- |
| Yes |

What are the effects on particular demographic groups, such as children, elderly, low-income group, foreigners and migrants, students, mobility-impaired people, etc.?

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| Measures under this scenario imply cheaper tickets, free tickets for example, people older than 65 years, much cheaper tickets for student, LCD displays in cells with the ability to display in English, the greater use of low-floor buses and others. This will affect all demographic groups of the category of population as well as those who are for the first time in the city private use of public transport. |

How will the transport-related cost paid by each end user change? How will the transport-related cost paid by your municipalities or regional government change?

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| The end user will pay less the price tickets or for better service. The local government now does not provide funding for public transport. This scenario is envisaged to provide significant financial resources. |

Will the overall change will lead to increase or decrease of transport-related energy consumption in your FUA?

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| --- |
| There will be a reduction in consumption. |

Will the overall change will lead to increase or decrease of transport-related CO2 emission in your FUA?

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| --- |
| To reduce. |

# 1. Information about this test scenario

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| FUA Name | CITY OF BANJA LUKA |
| Scenario Name | **National road pricing on all roads (Group 2)** |
| Date | October 2017 |
| Policy target year | 2030 |
| Contributor | Mr. Vladimir Gladanac |

# 2. Describe this scenario

* Max. in 10 lines

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| This scenario is the implementation of a rigorous measure for the use of private passenger cars. All households will pay an annual fee for owning passenger cars regardless of their use. The analysis in Banja Luka showed that the average number of passengers in cars is about 1.5 passengers per car. This scenario will result in a reduction in the number of passenger cars, reducing the use of passenger cars to speed up the implementation of the car sharing system, reducing traffic congestion, increasing the use of public transport, etc. |

# 3. Assessment of consequences

How will the demographic structure of your FUA and the core city in it be in your planning horizon around 2025 to 2030? (No of population, age structure, etc.)

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| --- |
| The total population in the city will increase by 10% and will be around 250,000. There will be no change in the demographic structure. |

Which types of transport technology will have been diffused or will disappear in your FUA in your planning horizon around 2025 to 2030?

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| --- |
| The collected financial funds will be invested in new intelligent transport technologies in all areas of transport: public transport, stationary traffic, dynamic traffic, non-motorized traffic, etc.  |

How will the share of transport mode change in your core city and FUA? Will there be higher share of journey with cars or less? Will it increase or decrease the share of public transport? Will there be more cyclists and walkers, or less?

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| --- |
| Characteristics of transport:* the use of public transport will increase
* the use of passenger cars will be reduced
* walk will increase
* car sharing system will develop
* the use of the bike will increase
 |

Which part of your future prediction is not in line with upper-level transport policy (of region, country and EU)?

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| There is currently no state policy for this type of fee. |

Is the overall situation improving the living quality of your FUA?

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| --- |
| Yes |

What are the effects on particular demographic groups, such as children, elderly, low-income group, foreigners and migrants, students, mobility-impaired people, etc.?

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| --- |
| Measures under this scenario include cheaper tickets, free tickets for, for example, people older than 65 years of age, lower ticket price for students, lcd displays at points of view with the ability to display in English, increased use of low-floor buses, etc. This will affect all demographic groups of the category of population, as well as those who use the public transport for the first time in the city. |

How will the transport-related cost paid by each end user change? How will the transport-related cost paid by your municipalities or regional government change?

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| --- |
| The end user will pay less the price tickets or for better service. The local community will not allocate funds but will carry out the schedule of the collected funds. |

Will the overall change will lead to increase or decrease of transport-related energy consumption in your FUA?

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| --- |
| There will be a reduction in consumption. |

Will the overall change will lead to increase or decrease of transport-related CO2 emission in your FUA?

|  |
| --- |
| To reduce. |