**Mobility Scenarios of Prague 9 (PP4)**

# 1. MUST SCENARIO – Business as usual

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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 | Analysis Methodology for Concequences |
| WP responsible partner | Pannon Business Network - PP8 |
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**Document History**

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## 1. Information about this test scenario

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| FUA Name | Prague 9 |
| Scenario Name | **Business as usual** |
| Date | 23.10.2017 |
| Policy target year | 2025 |
| Contributor | Helena Kvačková, Pavel Pospisek |

## 2. Describe this scenario

* Max. in 10 lines

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| In the FUA Prague 9 district, we expect the development of alternative renewable resources of energy for individual and public transport. It also depends on the decision, which of these renewable resources will be financially supported by the state or the European Union. For example, the development of batteries for storing the energy. It is expected, that the fossil fuels will be slowly abandoned. Pedestrian and bicycle transport will become favored. It is also expected a development of bike-sharing and car-sharing.  |

## 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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| 0-14  |  | 2030 | 9,7 | 195 |  |
| 15-39  | 43,5 | 950 |  |
| 40-64  |  |  |  |
| 65-84  | 16,8 | 240 |  |
| 85+  |  |  |   |
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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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| Fossil fuels are disappearing, but they cannot disappear entirely due to the sustainability of transport. Alternative renewable resources of energy get supported, therefore more such vehicles (individual and public transport) will occur. Bike-sharing and car-sharing will diffuse due to new trends in city 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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| Within Prague 9 there will be less journeys with cars, because public transport becomes more accessible. Public transport will also expand into newly built inhabited areas. We expect more cyclists and walkers – also a little better conditions of pedestrian paths and cycling lanes. We expect a continuous development of car-sharing and bike-sharing companies. |

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

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| The planning of the Municipality Prague 9 does not comply with the planning of Prague city hall in many important matters. In the first place, it is the matter of diverting the traffic from the Blanka tunnel and also not finishing the construction of subsequent tunnel Blanka II. At this moment all the traffic will be lead on the roads of Prague 9. Another discrepancy/inconsistency between the Municipality Prague 9 and the Prague city hall is in planning of so-called “Blue parking zones”, which basically prevents parking of anybody else than the residents of Prague 9. This issue affects the people visiting, craftsman, family members etc. Prague 9 is prepared to address this issue with building parking houses.  The most problematic issue in this scenario is the discrepancy between P9 and PCH (Prague city hall) in the matter of subsidizing the means of transport with alternative fuels. There will be increased costs of the new public transport vehicles and implementation of the new technology. |

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

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| The situation in the Prague 9 is improving because of numerous factory shutdowns and expanding green areas. Unfortunately, due to the high rate of traffic the climate is still not ideal. In this scenario the quality of life will remain the same. |

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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| In Prague 9, there is a well-functioning education practice in transport for children. Other services for elderly (the public transport fare is for free) and mothers with children (low-floor buses). Public transport offers discounted price of fare for students. In the public transport you can find detailed English instructions/directions. The public transport in Prague is managed by The Prague Public Transit Co. Inc. Within this scenario the effects on particular demographic groups will be minor.  |

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 transport services are always largely subsidized, we suppose this trend will continue. The transport-related costs are the responsibility of the Prague city hall. The municipality of Prague 9 will co-finance some individual projects suggested by citizens of Prague 9.  |

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

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| In the near future, the decreasing of the energetic consumption of the public transport will be the main topic of the discussion between the Prague city hall and individual Prague municipalities/districts. Supported/subsidized will be not only renewable resources of the energy (solar energy, CNG buses, and trolleybuses) but also buses with smaller capacity. Within this scenario, there will be a higher transport-related consumption of energy, because the population of Prague 9 will increase.  |

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

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| Due to the facts mentioned above, the overall measures will lead to a decrease of carbon dioxide in the air. |

# 2. Scenario 2 Making public transport more attractive (GROUP 1)

## 1. Information about this test scenario

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| FUA Name | Prague 9 |
| Scenario Name | **Making public transport more attractive (GROUP 1)** |
| Date | 23.10.2017 |
| Policy target year | 2025 |
| Contributor | Helena Kvačková, Pavel Pospisek |

## 2. Describe this scenario

* Max. in 10 lines

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| The aim is to achieve better public transport network in the FUA through optimizing the connection of particular lines. Intensity/frequency of the lines will be extended and particular lines will be prolonged. The public transport will become more accessible to the inhabitants. There is a unified system of payment and discounts for the whole capital city Prague, neighborhood municipalities and Central Bohemian region. Prague 9 will also use new technologies- online applications. The public transport will operate also in excluded areas. For example retirement home Hejnická. Within this scenario, Prague 9 will involve mini-buses into the public transport.  |

## 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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| 0-14  |  | 2030 | 9,7 | 195 |  |
| 15-39  | 43,5 | 950 |  |
| 40-64  |  |  |  |
| 65-84  | 16,8 | 240 |  |
| 85+  |  |  |   |

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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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| Considering the technical progress which is growing rapidly, it is difficult to predict which technology is going to prevail. Let’s assume that also in the public transport the share of renewable energy is going to prevail (electric-powered, solar-powered). We also assume enhanced/increased accessibility of the public transport. Due to the raising prices of the fossil fuels, it will be less favorable to use individual transport also uncomfortable and probably old-fashioned.  |

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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| At the moment, the car-sharing is not developed at all. Due to the fuels savings the car-sharing will be developed and supported. Secondly, the bike-sharing will be developed much more than today. This scenario will be focused on rather smaller share of car-sharing and rather higher/bigger share of public transport. There will be less cyclists and pedestrians. Car-sharing would be more used weekend trips outside of the Prague city. As a well-functioning pilot project, Prague 9 has introduced trolley-bus serving one line for now.  |

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

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| The planning of the Municipality Prague 9 does not comply with the planning of Prague city hall in many important matters. In the first place it is the matter of diverting the traffic from the Blanka tunnel and also not finishing the construction of subsequent tunnel Blanka II. At this moment all the traffic will be lead on the roads of Prague 9. Another discrepancy/inconsistency between the Municipality Prague 9 and the Prague city hall is in planning of so-called “Blue parking zones”, which basically prevents parking of anybody else than the residents of Prague 9. This issue affects the people visiting, craftsman, family members etc. The most problematic issue in this scenario is the discrepancy between P9 and PCH (Prague city hall) in the matter of increased costs of the public transport and increased costs of implementation of the unified system with the Central Bohemian region.  |

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

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| The situation in the Prague 9 is improving because of numerous factory shutdowns and expanding green areas. Unfortunately, due to the high rate of traffic the climate is still not ideal. In this scenario the climate is also worsened by increased number of vehicles of the public transport and reduced security in the school areas.  |

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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| In Prague 9, there is a well-functioning education practice in transport for children. Other services for elderly (the public transport fare is for free) and mothers with children (low-floor buses). Public transport offers discounted price of fare for students. In the public transport you can find detailed English instructions/directions. The public transport in Prague is managed by Prague transport (dopravní podník hl.m. Prahy). This scenario is favorable for each group. |

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 fare price is decreased due to the political reasons, in some cases the students have their fare for free. The transport services are always largely subsidized, we suppose this trend will continue. The transport-related costs are the responsibility of the Prague city hall. Although in some cases, if there is a demand from the citizens, it is possible that special lines are subsidized from the budget of the prague 9 municipality (e.g. connection of the medical centres). In this scenario, the elevated costs will be covered from the public budgets. |

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

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| In the near future, the decreasing of the energetic consumption of the public transport the main topic of the prague city hall and individual prague municipalities/districts. Supported/subsidized will be not only renewable resources of the energy (solar energy, CNG buses, and trolleybuses) but also buses with smaller capacity. It is necessary to modernize the vehicle stock regularly. Within this scenario there will be a higher consumption of energy. |

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

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| Due to the facts mentioned above, the overall measures will lead to a decrease of carbon dioxide in the air. |

# 3. SCENARIO 3 – fostering active transport modes

## 1. Information about this test scenario

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| FUA Name | Prague 9 |
| Scenario Name | **Fostering “active” transport modes (walking and cycling) (GROUP 1)** |
| Date | 23.10.2017 |
| Policy target year | 2025 |
| Contributor | Helena Kvačková, Pavel Pospisek |

## 2. Describe this scenario

* Max. in 10 lines

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| Within this scenario will be built/realized 200 km of bicycle trails and pedestrian pathways. Pedestrian areas/zones will be build/established in all centers of Prague 9, however this will happen under condition that the public transport will work in the same quality in the future as it does today. |

## 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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| 0-14  |  | 2030 | 9,7 | 195 |  |
| 15-39  | 43,5 | 950 |  |
| 40-64  |  |  |  |
| 65-84  | 16,8 | 240 |  |
| 85+  |  |  |   |

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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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| Considering the technical progress which is growing rapidly, it is difficult to predict which technology is going to prevail. Let’s assume that also in the public transport the share of renewable energy is going to prevail (electric-powered, solar-powered). We also assume enhanced/increased accessibility of the public transport. Due to the raising prices of the fossil fuels, it will be less favorable to use individual transport and also uncomfortable and probably also old-fashioned. In this scenario, there will be no technology changes. The bicycle transport will scale up/expand. |

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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| At the moment, the car-sharing is not developed at all. Due to the fuels savings the car-sharing will be developed and supported. Secondly, the bike-sharing will be developed much more in the future than today. This scenario will be focused on increasing the number of shared bicycles and cars. / extending bike-sharing and car-sharing. |

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

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| The planning of the Municipality Prague 9 does not comply with the planning of Prague city hall in many important matters. In the first place it is the matter of diverting the traffic from the Blanka tunnel and also not finishing the construction of subsequent tunnel Blanka II. At this moment all the traffic will be lead on the roads of Prague 9. Another discrepancy/inconsistency between the Municipality Prague 9 and the Prague city hall is in planning of so-called “Blue parking zones”, which basically prevents parking of anybody else than the residents of Prague 9. This issue affects the people visiting, craftsman, family members etc. The most problematic issue in this scenario is the discrepancy between P9 and PCH (Prague city hall) lies in the matter of increased costs of building/constructing the bicycle trails/routes/paths/lanes, pedestrian paths and their maintenance/service. |

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

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| The situation in the Prague 9 is improving because of numerous factory shutdowns and expanding green areas. Unfortunately, due to the high rate of traffic the climate is still not ideal. In this scenario the climate gains in quality. |

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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| In Prague 9, there is a well-functioning education practice in transport for children. Other services for elderly (the public transport fare is for free) and mothers with children (low-floor buses). Public transport offers discounted price of fare for students. In the public transport you can find detailed English instructions/directions. The public transport in Prague is managed by The Prague Public Transit Co. Inc. This scenario will have positive effect on younger groups. For the group of elderly and less mobile, the effects of this scenario will be less advantageous, especially If the public transport would be affected.  |

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 fare price is decreased due to the political reasons, in some cases the students have their fare for free. The transport services are always largely subsidized, we suppose this trend will continue. The transport-related costs are the responsibility of the Prague city hall. Although in some cases, if there is a demand from the citizens, it is possible that special lines are subsidized from the budget of the Prague 9 municipality (e.g. connection of the medical centers). Due to savings, in this scenario, the number of lines will decrease and the intervals will prolong.  |

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

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| . In the near future, the decrease of the energetic consumption of the public transport will become the main topic of the negotiation between the Prague city hall and individual Prague municipalities/districts. Supported/subsidized will be not only renewable resources of the energy (solar energy, CNG buses, and trolleybuses) but also buses with smaller capacity. It si necessary to modernize the vehicle stock regularly. Within this scenario the energy consumption will become smaller/reduce/decrease. |

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

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| Due to the facts mentioned above, the overall measures will lead to a decrease of carbon dioxide in the air. |

# 4. SCENARIO 4 – population of the FUA increases by 50% between 2020 and 2050

## 1. Information about this test scenario

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| FUA Name | Prague 9 |
| Scenario Name | **Population of the FUA increases by 50% between 2020 a 2050 (GROUP 2)** |
| Date | 23.10.2017 |
| Policy target year | 2025 |
| Contributor | Helena Kvačková, Pavel Pospisek |

## 2. Describe this scenario

* Max. in 10 lines

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| Building up and covering the former factory areas cause the growth of population in Prague 9. In these places, it is hard to provide infrastructure – schools, roads, green areas, parking lots, maintenance of the area etc. On the other hand, the second part of Prague 9 (FUA) is getting old in the big residential complexes (housing estates), here the cycle (exchange) of the generations/ residents is not continuous but rather one – time. |

## 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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| 0-14  |  | 2030 | 9,7 | 195 |  |
| 15-39  | 43,5 | 950 |  |
| 40-64  |  |  |  |
| 65-84  | 16,8 | 240 |  |
| 85+  |  |  |   |

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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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| --- |
| Considering the technical progress which is growing rapidly, it is difficult to predict which technology is going to prevail. Let’s assume that also in the public transport the share of renewable energy is going to prevail (electric-powered, solar-powered). We also assume enhanced/increased accessibility of the public transport. Due to the raising prices of the fossil fuels, it will be less favorable to use individual transport and also uncomfortable and probably also old-fashioned. Within this scenario, it is necessary to raise the public transport capacity by using all accessible resources of energy. |

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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| At the moment, the car-sharing is not developed at all. Due to the fuels savings the car-sharing will be developed and supported. Secondly, the bike-sharing will be developed much more in the future than today. In this scenario there will be increased number of shared cars and using public transport, there will also be more cyclists and pedestrians.  |

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

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| The planning of the Municipality Prague 9 does not comply with the planning of Prague city hall in many important matters. In the first place it is the matter of diverting the traffic from the Blanka tunnel and also not finishing the construction of subsequent tunnel Blanka II. At this moment all the traffic will be lead on the roads of Prague 9. Another discrepancy/inconsistency between the Municipality Prague 9 and the Prague city hall is in planning of so-called “Blue parking zones”, which basically prevents parking of anybody else than the residents of Prague 9. This issue affects the people visiting, craftsman, family members etc. In this scenario there is a discrepancy between P9 and PCH (Prague city hall).  |

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

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| The situation in the Prague 9 is improving because of numerous factory shutdowns and expanding green areas. Unfortunately, due to the high rate of traffic the climate is still not ideal. In this scenario the quality of life in the new build up areas will increase because today this area is not inhabited. If a good strategy is selected, the quality of life of the older residents living on the housing estates should not be changed. |

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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| In Prague 9, there is a well-functioning education practice in transport for children. Other services for elderly (the public transport fare is for free) and mothers with children (low-floor buses). Public transport offers discounted price of fare for students. In the public transport you can find detailed English instructions/directions. The public transport in Prague is managed by The Prague Public Transit Co. Inc. In this scenario there will be no effects on *weakened* demographic groups.  |

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 fare price is decreased due to the political reasons, in some cases the students have their fare for free. The transport services are always largely subsidized, we suppose this trend will continue. The transport-related costs are the responsibility of the Prague city hall. Although in some cases, if there is a demand from the citizens, it is possible that special lines would be subsidized from the budget of the Prague 9 municipality (e.g. connection of the medical centers). In this scenario, the higher costs will still be covered by the public budget, although there is a possibility of raising fares.  |

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

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| In the near future, the decrease of the energetic consumption of the public transport will become the main topic of the negotiation between the Prague city hall and individual Prague municipalities/districts. Supported/subsidized will be not only renewable resources of the energy (solar energy, CNG buses, and trolleybuses) but also buses with smaller capacities. It is necessary to modernize the vehicle stock regularly. Within this scenario, the energy consumption will surely increase. |

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

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| Due to the facts mentioned above, the overall measures will lead to a decrease of carbon dioxide in the air. The rate of emissions doesn’t have to increase.  |