Test mobility scenarios and their consequences in KOPER FUA

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| Contributors | David Trošt, PNZ d.o.o. |

**Document History**

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# 1. Information about this test scenario

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| FUA Name | KOPER |
| Scenario Name | **Business-as-usual** |
| Date | 21st November 2017 |
| Policy target year | 2030 |
| Contributor | Lea Ružić, David Trošt |

# 2. Describe this scenario

* Max. in 10 lines

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| This scenario assumes continuation of the current transport policy in the next 20 years. This means that in FUA Koper travel habits are centred around car use. No new measures for supporting sustainable mobility are foreseen, only the continuation of the existing ones such as P+R, parking regulation, cycle tracks. Use of public transport continues to be minimal and the service remains uncompetitive compared to car use. Walking remains important on the local level but cycling does not build on it its potential. Regional, national and EU policies do not change. |

# 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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| Demographic projections show that the number of population will continue to rise (currently around 0,5% per year). This region is one of only three regions in Slovenia (out of 12 in total) which predict a population increase. The age structure will change significantly in favour of older people. Current ageing trends will continue and it is predicted that the proportion of old people will increase from 18 % in 2014 to 28 % by 2050, hence to around 23 % by 2030. |

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 main technology that will evolve in the FUA is an uptake of green vehicles. Their share will increase from less than 1% today to around 30%. Also, car sharing will likely evolve but it will not present a significant share in the transport system. |

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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| The modal split will not change significantly. The share of car use will increase by 3 percentage points to 80 %, mainly on the account of bike use and walking. Use of bus will remain on the same level.  |

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 country and EU policies advocate for move towards more sustainable travel and decrease of personal car use. Therefore, this scenario is not in line with these policies as it continues the existing trends of car reliance. It will also not fulfil the road safety goals as the number of accidents and fatalities will not decrease in line with them.  |

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

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| Some aspects will certainly improve quality of life. For example, due to the technological improvements and uptake of green vehicles air quality will improve (decrease PM, CO, CO2, NOx, VOC emissions) and noise emissions will also decrease. However, road safety will not improve significantly due to a higher share of car use which has an impact on the living quality. Also, transport expenditure per individual or household will increase. Already today Slovenia is at the top of European countries by households’ expenditure for mobility which certainly has negative impacts on quality of life. This is also linked to the predicted rise in already high motorisation rate. |

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 most negative effects will be on all people who are not able to drive either because of age, income, health or purely personal reasons. These groups may account for half of population; hence their social inclusion might be compromised due to limited mobility. Basic public transport will remain but the effects of ageing will probably reveal even more challenges in terms of mobility provision for elderly. In the urban area, walking and cycling can represent an important transport mode, particularly for young people, but mobility challenge for inhabitants in the outskirts and in the rural areas will be exacerbated.  |

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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| Individual expenditure for transport will increase due to increase of individual motorised mobility. On the other hand, the expenditures for transport by public administrations will not change; to the contrary, they might increase on the account of increased demand for parking. Transport social monetary costs decrease compared to today. |

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

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| In spite of increase of car use, this scenario predicts lower transport-related energy consumption due to uptake of alternatively-fuelled vehicles.  |

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

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| In spite of increase of car use, this scenario predicts around 16% decrease of CO2 emissions due to uptake of alternatively-fuelled vehicles.  |

| **Indicator** | **Baseline (2017)** | **Business-as-usual** | **Making PT more attractive** | **Fostering active transport modes** | **National road pricing on all roads** |
| --- | --- | --- | --- | --- | --- |
| Motorisation rate | 558 | **648** | 643 | 644 | 647 |
| Mode split (%) | Car: 77.3%Bus: 2.8%Bike: 2.4%Walk: 17.5%  | **Car: 80.4%****Bus: 3.0%** **Bike: 1.5%****Walk: 14.7%** | Car: 66.4%Bus: 19.3% Bike: 1.1%Walk: 12.7% | Car: 70.1%Bus: 1.3% Bike: 18.9%Walk: 9.2% | Car: 77.7%Bus: 5.0% Bike: 1.6%Walk: 14.6% |
| Travel distance per trip (km) | 3.2 | **3.3** | 3.4  | 3.2 | 3.3 |
| Average car speed in peak hours (km/h) | 45  | **43.4**  | 44.5 | 38.8 | 43.9 |
| Average bus speed in peak hours (km/h) | 18  | **17.7**  | 19 | 17.9 | 17.8 |
| Vehicles-km by car conventional vehicles | 258494000  | **205885000**  | 181116000 | 181334000 | 199379000 |
| Penetration of alternatively fuelled car vehicles | 0.5% hybrid electric0.0% battery electric0.0% fuel cells | **28.5% hybrid electric****0.9% battery electric****0.1% fuel cells** | 28.5% hybrid electric0.9% battery electric0.1% fuel cells | 30.9% hybrid electric1% battery electric0.1% fuel cells | 28.5% hybrid electric0.9% battery electric0.1% fuel cells |
| Penetration of alternatively fuelled bus vehicles | 0% | **6% hybrid electric****0.5% battery electric** | 21.3% CNG12.2% hybrid electric0.5% battery electric | 12.5% CNG6.1% hybrid electric0.5% battery electric | 12.5% CNG6.1% hybrid electric0.5% battery electric |
| CO2 emissions per year (tonnes) | 99484.4 | **83589.5**  | 79970.1 | 80463.1 | 82457.9 |
| PM emissions per year (tonnes) | 12.3 | **4.8**  | 4.6 | 4.6 | 3.8 |
| COemissions per year (tonnes) | 205.8 | **169.2**  | 160.3 | 162.9 | 145.6 |
| NOxemissions per year (tonnes) | 266.6 | **83.4**  | 80.85 | 79.8 | 72.1 |
| VOCemissions per year (tonnes) | 63.1 | **39.6**  | 38.17 | 38.1 | 35.4 |
| Total Accidents by severity | 110.6 serious4.6 fatal | **110.0 serious****4.6 fatal** | 97.3 serious4.0 fatal | 106.8 serious4.5 fatal | 107.5 serious4.5 fatal |
| Fatalities per 100,000 inhabitants | 4.97 | **4.57** | 4.0 | 4.6 | 4.5 |
| Transport expenditure per individual per year (EUR) | 921 | **963**  | 971 | 924 | 1012 |
| Transport expenditure of public administration  | 5660000 | **5660000** | 11936000 | 9059000 | 6856000 |
| Revenues of public administration(1000 Euro/year) | 14841000 | **16210000** | 20021000 | 14637000 | 24550000 |
| Transport social monetary costs (1000 Euro/year) | 29148000 | **26847000** | 30582000 | 28282000 | 27417000 |
| Net financial result for public administration (million Euro) | - | **110000000** | 74000000 | 46000000 | 134000000 |

# 1. Information about this test scenario

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| --- | --- |
| FUA Name | KOPER |
| Scenario Name | **MAKING PUBLIC TRANSPORT MORE ATTRACTIVE (GROUP 1)** |
| Date | 21st November 2017 |
| Policy target year | 2030 |
| Contributor | Lea Ružić, David Trošt |

# 2. Describe this scenario

* Max. in 10 lines

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| * + Public transport covers 80% of the FUA’s population and workplaces/schools by 2025 within 300m of stations/stops: bus network is extended by 100 km. New, green bus fleets are put in place.
	+ High frequency of the service and longer service hours is provided. 80% of network sees headway reduction by 5 min. Prioritization measures such as reserved lanes (20% of all network) are implemented.
	+ Introduction of integrated ticket system for all types of public transport (bus, tram, railway)
	+ Public transport fare is made affordable to everyone: already affordable price remains the same as today.
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# 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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| Demographic projections show that the number of population will continue to rise (currently around 0,5% per year). This region is one of only three regions in Slovenia (out of 12 in total) which predict a population increase. The age structure will change significantly in favour of older people. Current ageing trends will continue and it is predicted that the proportion of old people will increase from 18 % in 2014 to 28 % by 2050, hence to around 23 % by 2030.  |

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 main technology that will evolve in the FUA is an uptake of green personal vehicles. Their share will increase from less than 1% today to around 30%. The share of green vehicles in public transport will increase significantly from 0% to 33 %. More sophisticated integrated ticketing will be available and measures for prioritisation of buses will be implemented. |

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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| Car use will decrease by more than 10 percentage points; bus use will increase significantly from 3% to one fifth. On the other hand, walking and cycling will be less important due to a better public transport.  |

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

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| Predicted decrease of walking and cycling is not in line with the national and EU policy goals. |

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

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| Overall, quality of living improves a lot. This is related to the air quality improvements (decrease of PM, CO, CO2, NOx, VOC emissions) and noise emissions will also decrease. Also, road safety will improve significantly due to a higher share of public transport use which has an impact on the living quality. Social inclusion and accessibility will improve significantly due to improved public transport. However, transport expenditure per individual or household will increase. Already today Slovenia is at the top of European countries by households’ expenditure for mobility which certainly has negative impacts on quality of life. This is partly linked to the predicted rise in already high motorisation rate and due to high investments in to public transport. |

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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| Effects on such demographic groups are positive as the accessibility improves due to improved public transport and its financial accessibility. They have more opportunities to access jobs, services and free time activities. This is particularly important for the elderly, for low-income groups and for young people. |

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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| Major improvements of public transport require significant investments which means that public expenditure for transport increases both compared to Business-as-Usual scenario and today. However, also revenues are predicted to increase with increase public transport usage. Overall, the net financial result is positive but less so than in the Business-as-Usual scenario. Transport social monetary costs remain on a similar level as today. |

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

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| Due to decrease of car use, uptake of alternatively-fuelled vehicles and increase of (green) public transport, this scenario predicts lower transport-related energy consumption. |

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

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| Due to decrease of car use, uptake of alternatively-fuelled vehicles and increase of (green) public transport, this scenario predicts around 20% decrease of CO2 emissions. |

| **Indicator** | **Baseline (2017)** | **Business-as-usual** | **Making PT more attractive** | **Fostering active transport modes** | **National road pricing on all roads** |
| --- | --- | --- | --- | --- | --- |
| Motorisation rate | 558 | 648 | **643** | 644 | 647 |
| Mode split (%) | Car: 77.3%Bus: 2.8%Bike: 2.4%Walk: 17.5%  | Car: 80.4%Bus: 3.0% Bike: 1.5%Walk: 14.7% | **Car: 66.4%****Bus: 19.3%** **Bike: 1.1%****Walk: 12.7%** | Car: 70.1%Bus: 1.3% Bike: 18.9%Walk: 9.2% | Car: 77.7%Bus: 5.0% Bike: 1.6%Walk: 14.6% |
| Travel distance per trip (km) | 3.2 | 3.3 | **3.4**  | 3.2 | 3.3 |
| Average car speed in peak hours (km/h) | 45  | 43.4  | **44.5** | 38.8 | 43.9 |
| Average bus speed in peak hours (km/h) | 18  | 17.7  | **19** | 17.9 | 17.8 |
| Vehicles-km by car conventional vehicles | 258494000  | 205885000  | **181116000** | 181334000 | 199379000 |
| Penetration of alternatively fuelled car vehicles | 0.5% hybrid electric0.0% battery electric0.0% fuel cells | 28.5% hybrid electric0.9% battery electric0.1% fuel cells | **28.5% hybrid electric****0.9% battery electric****0.1% fuel cells** | 30.9% hybrid electric1% battery electric0.1% fuel cells | 28.5% hybrid electric0.9% battery electric0.1% fuel cells |
| Penetration of alternatively fuelled bus vehicles | 0% | 6% hybrid electric0.5% battery electric | **21.3% CNG****12.2% hybrid electric****0.5% battery electric** | 12.5% CNG6.1% hybrid electric0.5% battery electric | 12.5% CNG6.1% hybrid electric0.5% battery electric |
| CO2 emissions per year (tonnes) | 99484.4 | 83589.5  | **79970.1** | 80463.1 | 82457.9 |
| PM emissions per year (tonnes) | 12.3 | 4.8  | **4.6** | 4.6 | 3.8 |
| COemissions per year (tonnes) | 205.8 | 169.2  | **160.3** | 162.9 | 145.6 |
| NOxemissions per year (tonnes) | 266.6 | 83.4  | **80.85** | 79.8 | 72.1 |
| VOCemissions per year (tonnes) | 63.1 | 39.6  | **38.17** | 38.1 | 35.4 |
| Total Accidents by severity | 110.6 serious4.6 fatal | 110.0 serious4.6 fatal | **97.3 serious****4.0 fatal** | 106.8 serious4.5 fatal | 107.5 serious4.5 fatal |
| Fatalities per 100,000 inhabitants | 4.97 | 4.57 | **4.0** | 4.6 | 4.5 |
| Transport expenditure per individual per year (EUR) | 921 | 963  | **971** | 924 | 1012 |
| Transport expenditure of public administration  | 5660000 | 5660000 | **11936000** | 9059000 | 6856000 |
| Revenues of public administration(1000 Euro/year) | 14841000 | 16210000 | **20021000** | 14637000 | 24550000 |
| Transport social monetary costs (1000 Euro/year) | 29148000 | 26847000 | **30582000** | 28282000 | 27417000 |
| Net financial result for public administration (million Euro) | - | 110000000 | **74000000** | 46000000 | 134000000 |

# 1. Information about this test scenario

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| --- | --- |
| FUA Name | KOPER |
| Scenario Name | **FOSTERING ACTIVE TRANSPORT MODES (GROUP 1)** |
| Date | 21st November 2017 |
| Policy target year | 2030 |
| Contributor | Lea Ružič, David Trošt |

# 2. Describe this scenario

* Max. in 10 lines

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| * + Implementing 200km bicycle lanes in five years;
	+ Introduction of shared space or pedestrian zone in all of local centers within FUA (traffic calming measures in 40% of urban core area and 10-20% of other areas)
	+ Introduction of “Superblock” neighborhood model upon Barcelona model (access regulation measures based on emissions in 20% of urban core area, and up to 10% in other areas).
	+ Introduction of bike sharing in 20% of urban area.
 |

# 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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| --- |
| Demographic projections show that the number of population will continue to rise (currently around 0,5% per year). This region is one of only three regions in Slovenia (out of 12 in total) which predict a population increase. The age structure will change significantly in favour of older people. Current ageing trends will continue and it is predicted that the proportion of old people will increase from 18 % in 2014 to 28 % by 2050, hence to around 23 % by 2030.  |

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 main technology that will evolve in the FUA is an uptake of green personal vehicles. Their share will increase from less than 1% today to around 32%, higher than in the Business-as-Usual scenario due to access regulations. The share of green vehicles in public transport will also increase from 0% to 20%, also due to access regulations. Bike sharing will be introduced.  |

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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| Car use will decrease by 7 percentage points to 70%, bus use will also decrease on account of significant increase of cycling (to 19%). Similarly, share of walking will decrease, mainly because of major uptake of cycling.  |

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

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| Predicted decrease of public transport use is not in line with the national and EU policy goals. |

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

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| Overall, quality of living improves a lot. This is related to the air quality improvements (decrease of PM, CO, CO2, NOx, VOC emissions) and noise emissions will also decrease due to higher use of active modes. Also, road safety will improve (but not so much as in Scenario 2) due to a lower share of car use which has an impact on the living quality. Social inclusion and accessibility will improve due to improved cycling conditions which is one of the most inclusive transport modes. Moreover, transport expenditure per individual or household will remain roughly on the same level as today, the lowest of all scenarios. Namely, Slovenia is today at the top of European countries by households’ expenditure for mobility which certainly has negative impacts on quality of life, hence the reduction of mobility costs will be beneficial for inhabitants. Higher use of active modes will improve people’s health, which has an overall positive impact on quality of life. Larger public spaces for people instead of cars will also enable more quality spending of free time, foster social connections and improve liveability of the city.  |

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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| Effects on such demographic groups are positive as the accessibility improves due to improved cycling conditions and its financial accessibility. Most people can cycle and they will have more opportunities to access jobs, services and free time activities. This is particularly important for low-income groups, migrants, students and for young people. However, not everyone can cycle. Basic public transport will remain but the effects of ageing will probably reveal even more challenges in terms of mobility provision for elderly. In the urban area, walking and cycling can represent an important transport mode, particularly for young people, but mobility challenge for (particularly older) inhabitants in the outskirts and in the (hilly) rural areas will be exacerbated. Some mobility-impaired people will benefit in this scenario but not all of them.  |

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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| --- |
| Major improvements of cycling network require relatively significant investments, which means that public expenditure for transport increases both compared to Business-as-Usual scenario and today. Overall, the net financial result is positive but less so than in other scenarios. However, transport social monetary costs will decrease.  |

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

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| Due to decrease of car use, uptake of alternatively-fuelled vehicles and increase of (green) public transport, this scenario predicts lower transport-related energy consumption. |

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

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| Due to decrease of car use, uptake of alternatively-fuelled vehicles and increase of (green) public transport, this scenario predicts around 19% decrease of CO2 emissions. |

| **Indicator** | **Baseline (2017)** | **Business-as-usual** | **Making PT more attractive** | **Fostering active transport modes** | **National road pricing on all roads** |
| --- | --- | --- | --- | --- | --- |
| Motorisation rate | 558 | 648 | 643 | **644** | 647 |
| Mode split (%) | Car: 77.3%Bus: 2.8%Bike: 2.4%Walk: 17.5%  | Car: 80.4%Bus: 3.0% Bike: 1.5%Walk: 14.7% | Car: 66.4%Bus: 19.3% Bike: 1.1%Walk: 12.7% | **Car: 70.1%****Bus: 1.3%** **Bike: 18.9%****Walk: 9.2%** | Car: 77.7%Bus: 5.0% Bike: 1.6%Walk: 14.6% |
| Travel distance per trip (km) | 3.2 | 3.3 | 3.4  | **3.2** | 3.3 |
| Average car speed in peak hours (km/h) | 45  | 43.4  | 44.5 | **38.8** | 43.9 |
| Average bus speed in peak hours (km/h) | 18  | 17.7  | 19 | **17.9** | 17.8 |
| Vehicles-km by car conventional vehicles | 258494000  | 205885000  | 181116000 | **181334000** | 199379000 |
| Penetration of alternatively fuelled car vehicles | 0.5% hybrid electric0.0% battery electric0.0% fuel cells | 28.5% hybrid electric0.9% battery electric0.1% fuel cells | 28.5% hybrid electric0.9% battery electric0.1% fuel cells | **30.9% hybrid electric****1% battery electric****0.1% fuel cells** | 28.5% hybrid electric0.9% battery electric0.1% fuel cells |
| Penetration of alternatively fuelled bus vehicles | 0% | 6% hybrid electric0.5% battery electric | 21.3% CNG12.2% hybrid electric0.5% battery electric | **12.5% CNG****6.1% hybrid electric****0.5% battery electric** | 12.5% CNG6.1% hybrid electric0.5% battery electric |
| CO2 emissions per year (tonnes) | 99484.4 | 83589.5  | 79970.1 | **80463.1** | 82457.9 |
| PM emissions per year (tonnes) | 12.3 | 4.8  | 4.6 | **4.6** | 3.8 |
| COemissions per year (tonnes) | 205.8 | 169.2  | 160.3 | **162.9** | 145.6 |
| NOxemissions per year (tonnes) | 266.6 | 83.4  | 80.85 | **79.8** | 72.1 |
| VOCemissions per year (tonnes) | 63.1 | 39.6  | 38.17 | **38.1** | 35.4 |
| Total Accidents by severity | 110.6 serious4.6 fatal | 110.0 serious4.6 fatal | 97.3 serious4.0 fatal | **106.8 serious****4.5 fatal** | 107.5 serious4.5 fatal |
| Fatalities per 100,000 inhabitants | 4.97 | 4.57 | 4.0 | **4.6** | 4.5 |
| Transport expenditure per individual per year (EUR) | 921 | 963  | 971 | **924** | 1012 |
| Transport expenditure of public administration  | 5660000 | 5660000 | 11936000 | **9059000** | 6856000 |
| Revenues of public administration(1000 Euro/year) | 14841000 | 16210000 | 20021000 | **14637000** | 24550000 |
| Transport social monetary costs (1000 Euro/year) | 29148000 | 26847000 | 30582000 | **28282000** | 27417000 |
| Net financial result for public administration (million Euro) | - | 110000000 | 74000000 | **46000000** | 134000000 |

# 1. Information about this test scenario

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| FUA Name | KOPER |
| Scenario Name | **NATIONAL PRICING ON ALL ROADS (Group 2)** |
| Date | 21st November 2017 |
| Policy target year | 2030 |
| Contributor | Lea Ružič, David Trošt |

# 2. Describe this scenario

* Max. in 10 lines

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| * + The national government decides to introduce nation-wide road pricing for automobiles and trucks including all types of urban roads in 2025 (there is already nation-wide road pricing in Slovenia on motorways so this measure extends this to all national roads (20% of all road network) in the form of congestion & pollution charging measure).
	+ The pricing is 2% of average annual household income per automobile (the price amounts to 431 EUR per automobile or 1 EUR per trip for cars, 2 EUR per trip for LGVs, 3 EUR per trip for HGVs with a price differentiation by EURO standard.
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# 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.)

|  |
| --- |
| Demographic projections show that the number of population will continue to rise (currently around 0,5% per year). This region is one of only three regions in Slovenia (out of 12 in total) which predict a population increase. The age structure will change significantly in favour of older people. Current ageing trends will continue and it is predicted that the proportion of old people will increase from 18 % in 2014 to 28 % by 2050, hence to around 23 % by 2030.  |

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

|  |
| --- |
| The main technology that will evolve in the FUA is an uptake of green personal vehicles. Their share will increase from less than 1% today to around 30%. The share of green vehicles in public transport will increase from 0% to 20 %.  |

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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| --- |
| Mode share of car will remain the same, bus use will double whilst walking and cycling will both decrease.  |

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

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| Predicted decrease of walking and cycling and failure to decrease car use is not in line with the national and EU policy goals. |

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

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| --- |
| Overall, quality of living improves a lot. This is related to the air quality improvements (decrease of PM, CO, CO2, NOx, VOC emissions is the highest of all scenarios) and noise emissions will also decrease. Also, road safety will improve slightly due to a higher share of public transport use which has an impact on the living quality. However, transport expenditure per individual or household will increase the most out of all scenarios. Already today Slovenia is at the top of European countries by households’ expenditure for mobility which certainly has negative impacts on quality of life. This is partly linked to the predicted rise in already high motorisation rate and partly due to higher road pricing. |

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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| --- |
| As no improvements of sustainable transport modes are planned, the most negative effects will be on all people who are not able to drive because of either age, income, health or purely personal reasons. These groups may account for half of population; hence their social inclusion might be compromised due to limited mobility. Basic public transport will remain but the effects of ageing will probably reveal even more challenges in terms of mobility provision for elderly. In the urban area, walking and cycling can represent an important transport mode, particularly for young people, but mobility challenge for inhabitants in the outskirts and in the rural areas will be exacerbated, especially for low-income groups who already struggle to afford mobility.  |

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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| --- |
| Individual expenditure for transport will increase due to increase of price of individual motorised mobility. On the other hand, the expenditures for transport by public administrations will not change; to the contrary, they will increase on the account of increased road pricing and low investment in other transport systems. Overall, the public financial net result will be the most positive of all scenarios. Transport social monetary costs decrease compared to today. |

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

|  |
| --- |
| In spite of same levels of car use, this scenario predicts lower transport-related energy consumption due to uptake of alternatively-fuelled vehicles.  |

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

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| --- |
| In spite of increase of car use, this scenario predicts around 17% decrease of CO2 emissions due to uptake of alternatively-fuelled vehicles.  |

| **Indicator** | **Baseline (2017)** | **Business-as-usual** | **Making PT more attractive** | **Fostering active transport modes** | **National road pricing on all roads** |
| --- | --- | --- | --- | --- | --- |
| Motorisation rate | 558 | 648 | 643 | 644 | **647** |
| Mode split (%) | Car: 77.3%Bus: 2.8%Bike: 2.4%Walk: 17.5%  | Car: 80.4%Bus: 3.0% Bike: 1.5%Walk: 14.7% | Car: 66.4%Bus: 19.3% Bike: 1.1%Walk: 12.7% | Car: 70.1%Bus: 1.3% Bike: 18.9%Walk: 9.2% | **Car: 77.7%****Bus: 5.0%** **Bike: 1.6%****Walk: 14.6%** |
| Travel distance per trip (km) | 3.2 | 3.3 | 3.4  | 3.2 | **3.3** |
| Average car speed in peak hours (km/h) | 45  | 43.4  | 44.5 | 38.8 | **43.9** |
| Average bus speed in peak hours (km/h) | 18  | 17.7  | 19 | 17.9 | **17.8** |
| Vehicles-km by car conventional vehicles | 258494000  | 205885000  | 181116000 | 181334000 | **199379000** |
| Penetration of alternatively fuelled car vehicles | 0.5% hybrid electric0.0% battery electric0.0% fuel cells | 28.5% hybrid electric0.9% battery electric0.1% fuel cells | 28.5% hybrid electric0.9% battery electric0.1% fuel cells | 30.9% hybrid electric1% battery electric0.1% fuel cells | **28.5% hybrid electric****0.9% battery electric****0.1% fuel cells** |
| Penetration of alternatively fuelled bus vehicles | 0% | 6% hybrid electric0.5% battery electric | 21.3% CNG12.2% hybrid electric0.5% battery electric | 12.5% CNG6.1% hybrid electric0.5% battery electric | **12.5% CNG****6.1% hybrid electric****0.5% battery electric** |
| CO2 emissions per year (tonnes) | 99484.4 | 83589.5  | 79970.1 | 80463.1 | **82457.9** |
| PM emissions per year (tonnes) | 12.3 | 4.8  | 4.6 | 4.6 | **3.8** |
| COemissions per year (tonnes) | 205.8 | 169.2  | 160.3 | 162.9 | **145.6** |
| NOxemissions per year (tonnes) | 266.6 | 83.4  | 80.85 | 79.8 | **72.1** |
| VOCemissions per year (tonnes) | 63.1 | 39.6  | 38.17 | 38.1 | **35.4** |
| Total Accidents by severity | 110.6 serious4.6 fatal | 110.0 serious4.6 fatal | 97.3 serious4.0 fatal | 106.8 serious4.5 fatal | **107.5 serious****4.5 fatal** |
| Fatalities per 100,000 inhabitants | 4.97 | 4.57 | 4.0 | 4.6 | **4.5** |
| Transport expenditure per individual per year (EUR) | 921 | 963  | 971 | 924 | **1012** |
| Transport expenditure of public administration  | 5660000 | 5660000 | 11936000 | 9059000 | **6856000** |
| Revenues of public administration(1000 Euro/year) | 14841000 | 16210000 | 20021000 | 14637000 | **24550000** |
| Transport social monetary costs (1000 Euro/year) | 29148000 | 26847000 | 30582000 | 28282000 | **27417000** |
| Net financial result for public administration (million Euro) | - | 110000000 | 74000000 | 46000000 | **134000000** |