



Consequence analysis survey

Valencia: Assessing the impact of the city scenarios formulated in T3.1 (scenario 3)

1. Welcome to SPROUT's Survey

You are invited to take part in a European funded project called SPROUT, which aims at developing innovative policy responses to harness emerging urban mobility challenges.

We kindly ask you to fill in the following questionnaire.

It will take no longer than 10 minutes. You can withdraw at any moment.

By participating in the survey, you consent to use the data you provide in SPROUT and to make them publicly available in anonymous form. Your privacy will be respected in any case. For more information regarding SPROUT and the data you provide, please contact the project Data Protection Officer at privacy@zlc.edu.es.

Thank you very much for your collaboration!

Important Note:

When completing the survey, please consider only the existing urban mobility policy framework, assuming no policy change in the following years (do-nothing scenarios).



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2. Purpose of the survey and main instructions

The purpose of this survey is to identify the expected impacts of the urban mobility scenarios for 2025/2030 developed in Task 3.1.

These scenarios represent the possible development of the urban mobility system by taking into consideration that no new policies are introduced to harness transition. Three scenarios have been co-created with the involvement of local stakeholders.

The main question that the present survey would like to answer is: What is the expected impact of the scenarios developed in T 3.1?

In the following pages you will find a brief description of each scenario followed by a list of scenario consequences (impacts) and corresponding performance indicators (PI). The impacts have been grouped into three areas: Economy, Environment and Society.

You are kindly requested to access for each of three scenarios the extent of its impacts by selecting the appropriate response to each question.

ASSESSMENT INTRUCTIONS:

Step 1: Please read carefully each scenario.

Step 2: Read the main consequences (impacts) per each sustainability area, which are presented in the first question of each section.

Step 3: Choose the Variant State of each Performances Indicator (PI). The options you have are: Increase, Decrease, Not affected, Not applicable.

Step 4: Estimate the level of change of each PI in the following questions. If you have chosen the option 'Not affected' or 'Not applicable', then place the value.

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3. SPROUT future urban mobility scenario 3:

Growing political support for mobility will ensure the completion of line 10 of Metrovalencia, which will mean a transfer of users from private transport to PT option. It will also facilitate the transfer of current bus users to the new line, reducing the number of passengers on busses. Thanks to decreased corruption, investments are optimized, sustainable mobility will benefit, and participatory processes linked to transport policies positively affect policies and their transparency. Higher taxation in favor of sustainable mobility, but efficiency of services will increase, and lower cost of mobility. Ease of access to certain areas will increase. Packages will be developed for tourists' mobility that includes sustainable options, which provide new business opportunities.

An economic recession will lead to a decline in mobility, but online retail will grow strongly and become more efficient with the use of big data technologies. Increasing densification will lead to lower transport costs. Population increase will generate more opportunities for mobility. Strong growth in the electrification of mobility will lead to improved infrastructure. The growth of consumer and citizen-oriented digitalization will improve real-time information on transport options. More frequent extreme weather due to climate change means that private mobility will grow but personal mobility vehicles will be more difficult to maintain and local air quality will decrease.

Main take-away:

- **Political support for sustainable mobility, taxation, tourism, immigration, urban density, extreme weather due to climate change, population: increase**
- **New employment arrangements, new business models, (e.g. collaborative consumption, sharing economy: weak growth)**
- **Corruption, economic growth, people choosing not to own cars, local environmental quality: decrease**
- **Electrification of mobility, smart-city technology, consumer and citizen oriented digitalization: strong growth**
- **Labor and employment: more regulation**

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4. Impacts on the economy

4.1 Impacts on urban transport service structure/mix

Note: Q1 aims to define whether an increase or decrease of the share of a specific transport mode/service will occur until 2030. Then the following questions try to define the extent of such increase or decrease.

*1. How do you believe the following transport mode/service shares will change in 2030?

- Which transport mean will rile the streets? Will the citizens use more public transport (PT), their car or shared car, their own or shared e-scooter/bike or will they just walk? So, how do you believe the share of each mode will be affected?
- Are there e-scooters and shared bikes in your city? If yes, do you expect an increase in their number or not?
- Will the last mile operators use more environment friendly modes for the last mile deliveries? If yes/no, how do you believe the existing share of green deliveries will be affected?

	Increase	Decrease	Not affected	Not applicable
Share of public transport (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of car transport (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of micro mobility (i.e.: e-scooters, bikes) (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of active transport (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of car sharing transport (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of green deliveries (cargo bikes, e-tricycles, green automated means) (% of daily deliveries)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of next hour to same day good delivery services (% of daily deliveries)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of shared deckles bikes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of shared e-scooters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***2. Based on your answers in Q1, what do you estimate to be the amount of increase/decrease of the share of the different transport modes below?**

	<5%	5-10%	10-15%	>15%
Share of public transport (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of car transport (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of micro mobility (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of active transport (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of car sharing transport (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***3. Based on your answers in Q1, what do you estimate to be the amount of increase/decrease of the following urban freight services in 2030?**

	<10%	10-30%	30-50%	>50%
Share of green deliveries (cargo bikes, e-tricycles, green automated means) (% of daily deliveries)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of next hour to same day good delivery services (% of daily deliveries)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***4. Based on your answers in Q1, what do you estimate to be the amount of increase/decrease of the following new mobility services in 2030?**

	<30%	30-60%	60-100%	>100%
Number of shared deckles bikes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of shared e-scooters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4.2 Impacts on urban space allocation

Note: Q5 aims to define whether an increase or decrease of the share of a specific urban space category will occur until 2030. Then the following questions try to define the extent of such increase or decrease.



*5. How do you believe, **the city's urban space allocation will be affected?**

- Will the public transport lanes be more congested, so the share of urban space for public transport will increase?
- Will the private or shared cars rule the streets, so the share of urban space will increase or not?
- Will the cycling and scooter lanes be more crowded, so the share of urban space for such lanes will increase?
- Do you believe that there will be a need for dedicated lanes for autonomous vehicles?

	Increase	Decrease	Not affected	Not applicable
Share of urban space for public transport (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of urban space for private/shared car (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of urban space for cycle/scooter lanes (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of urban space for pedestrian areas (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of automated PT services on dedicated lanes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*6. Based on your answers to Q5, what do you estimate to be the amount of increase/decrease of the below mentioned aspects of your **city's urban space?**

	<5%	5-10%	10-15%	>15%
Share of urban space for public transport (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of urban space for private/shared car (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of urban space for cycle/scooter lanes (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of urban space for pedestrian areas (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of automated PT services on dedicated lanes (no)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



4.3. Impacts on urban transport service volumes

Note: Q7 aims to define whether an increase or decrease will occur until 2030. Then the following questions try to define the extent of such increase or decrease.

*7. How do you believe, the future trends identified in this scenario will affect **the city's urban transport service volumes**?

- Will the average number of cars entering the city daily, or the number of goods delivery trips, increase or decrease? Do you expect the streets to be more congested or not?

	Increase	Decrease	Not affected	Not applicable
Average number of daily urban freight trips	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average number of vehicles entering the city on a daily basis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*8. Based on your answers in Q7, what do you estimate to be the amount of increase/decrease of the below mentioned aspects of the city's **urban transport service volumes**?

	<5%	5-10%	10-15%	>15%
Average number of daily urban freight trips (no)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average number of vehicles entering the city on a daily basis (no)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4.4. Impacts on urban transport service level & cost

Note: Q9 aims to define whether an increase or decrease will occur until 2030. Then the following questions try to define the extent of such increase or decrease.

*9. How do you believe will the city's **urban transport service level be affected?**

Indicative questions:

- Do you expect the costs of (alternative to PT) transport modes such as bikes, e-scooters to increase?
- What about the urban delivery prices? Do you expect them to increase or decrease?
- Do you expect the frequency of goods deliveries within the city to be affected?
- Now, regarding the use of new technologies in Public Transport, do you expect more passengers to use smart methods for public transport services?

	Increase	Decrease	Not affected	Not applicable
Share of passengers that use a smart method to pay for or vehicles a PT ticket (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of PT vehicles that are equipped to provide real-time data that is released to passengers (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Costs of alternative modes (i.e. bikes, walking, e-scooters) of urban passenger transport (€)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urban deliveries prices (€/package)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goods delivery frequency (average number of weekly deliveries to consumers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*10. Based on your answers in Q9, what do you estimate to be the increase/decrease of the following **urban transport costs?**

	<5%	5-10%	10-15%	>15%
Costs of alternative modes of urban passenger transport (€)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urban deliveries prices (€/package)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*11. Based on your answers in Q9, what do you estimate to be the amount of increase/decrease of the use of **New Technologies in urban Transport?**

	<10%	10-30%	30-50%	>50%
Share of passengers that use a smart method to pay for or vehicles a PT ticket (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of PT vehicles that are equipped to provide real-time data that is released to passengers (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*12. Based on your answers in Q9, what do you estimate to be the increase/decrease of the **goods delivery frequency?**

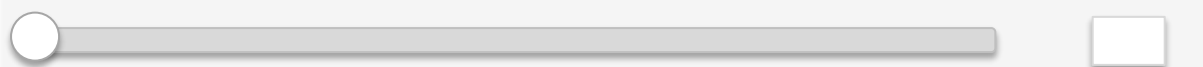
	<10%	10-15%	15-20%	>20%
Goods delivery frequency (average number of weekly deliveries to consumers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4.4 impacts on urban transport operational and capital expenditure costs (Opex & CapEx)

*13. How do you believe will the **city's urban transport private investment costs** be affected?
 - Do you expect these trends will require **additional private investments (% of existing annual investment costs) or not?**

*Please slide the bar below to the amount of increase (+) or decrease (-) of the additional private investments that will be required (% of existing annual investment costs), based on your opinion.

-15%
0
+15%



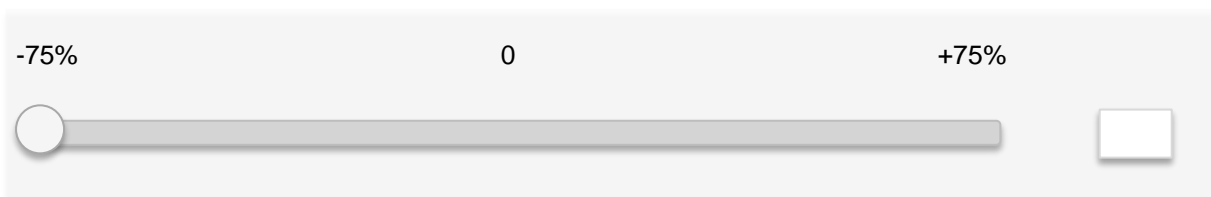
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5. Impacts on the environment

*14. How do you believe **climate change will be affected?**

*Please slide the bar below to the amount of expected increase (+) or decrease (-) of CO₂/GHG emissions, as a result of urban mobility.

-75% 0 +75%



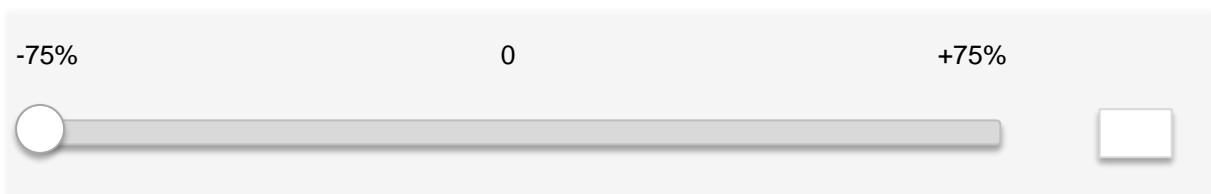
A horizontal slider bar with a circular knob on the left and a square button on the right. The bar is currently positioned at 0, between -75% and +75%.

*15. How do you believe the **city's air quality will be affected?**

*Please slide the bar below to the amount of expected increase (+) or decrease (-) of the Air quality index, as a result of urban mobility.

The air index (AQI) is a number used to report the quality of the air on any given day. The index is based on measurement of particulate matter (PM_{2.5} and PM₁₀), Ozone (O₃), Nitrogen Dioxide (NO₂), Sulfur Dioxide (SO₂) and Carbon Monoxide (CO) emissions.

-75% 0 +75%



A horizontal slider bar with a circular knob on the left and a square button on the right. The bar is currently positioned at 0, between -75% and +75%.

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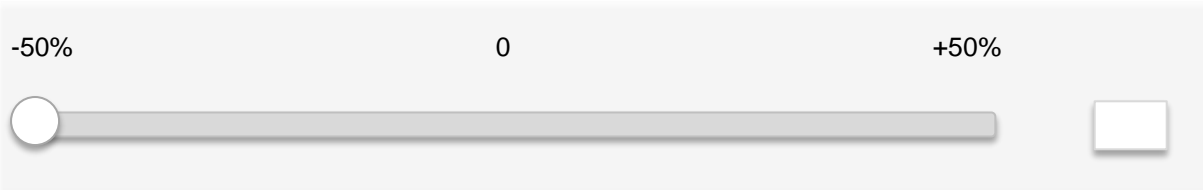
5. Social impacts

6.1. Impacts on employment & social security

*16. What will be the impact on **employment & social security**?

- Do you expect changes in the current types of employment and a transition towards Gig economy employment (i.e. independent contractors and freelancers)?

*Please slide the bar below to the amount of expected increase (+) or decrease (-) of the Gig economy (% of total employees) in urban mobility (both passenger & freight).



6.2. Impacts on safety

Note: Q17 aims to define whether an increase or decrease will occur until 2030. Then the following questions try to define the extent of such increase or decrease.

*17. What will be the impact on **urban transport safety & security**?

- Do you expect an increase in accidents involving e-scooters or bikes?
- Do you expect an increase in the accidents involving delivering goods with bikes/e-scooters?

	Increase	Decrease	Not affected	Not applicable
Share of urban mobility accidents involving micro mobility means (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of urban mobility accidents involving on-demand bike/scooter deliveries (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



*18. Based on your answers in Q17, what do you estimate to be the **amount of increase/decrease of the share of urban mobility accidents?**

	<5%	5-10%	10-15%	>15%
Share of urban mobility accidents involving micro mobility means (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share of urban mobility accidents involving on-demand bike/scooter deliveries (%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6.3. Impacts on access to mobility services

Note: Q19 aims to define whether an increase or decrease will occur until 2030. Then the following questions try to define the extent of such increase or decrease.

*19. What will be the impact on the accessibility to mobility services?

- Do you expect an increase in the affordability of using mobility services or not?
- Do you expect an increase in the accessibility to transfer services by all citizens?

Accessibility for vulnerable groups (elderly, people with reduced mobility, and parents with strollers) to mobility services (ease with which vulnerable passengers can use public transport)

	Increase	Decrease	Not affected	Not applicable
Affordability of using services (citizens' average annual cost of trips / annual income)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to mobility services (ease with which all categories of passenger can use public transport)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accessibility for vulnerable groups to mobility services (ease with which vulnerable passengers can use public transport)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



*20. Based on your answer in Q19, what do you believe will be the amount of increase/decrease of the level of city's **affordability of the mobility services**?

	<5%	5-10%	10-15%	>15%
Affordability of using services (citizens' average annual cost of trips / annual income)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*21. Based on your answer in Q19, what do you believe will be the amount of increase/decrease of the level of city's **accessibility of the mobility services**?

	Minor	Moderate	High	Extreme
Access to mobility services (ease with which all categories of passenger can use public transport)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accessibility for vulnerable groups to mobility services (ease with which vulnerable passengers can use public transport)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



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7. The end

Thank you for participating in this Survey!

The result will be included in the SPROUT's Deliverable 3.2. "Sustainability impact analysis of city-specific scenarios"

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*If you need further information about SPROUT project you can contact:
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