



## Mind shift and behaviour change from a customer point of view

**Civitas Policy Advisory  
Committee Statement**

**2022**

**Dear Urban Mobility Decision Makers,**

*With this policy statement, we, the CIVITAS Policy Advisory Committee (PAC), would like to share our views on the theme of 'Mind shift and behaviour change from a customer point of view', with a special focus on the European context.*

*In recent years, there has been an incredible boost in the urban mobility world, with lots of strategies, priorities and packages being built in order to prepare cities for the adoption of measures which aim at more livable and climate-neutral cities.*

*However, sometimes the human factor is forgotten and political entities do not reflect important aspects that lead to awareness-raising and behavioural change in their mobility plans, which in its turn jeopardise the ultimate objectives.*

*With this Statement, the CIVITAS PAC aims to focus on the importance of addressing this issue, while providing a concise overview of best practices for all cities in Europe and beyond.*

*We look forward to cooperating with you in the framework of the CIVITAS Initiative.*

*Yours sincerely,*

**The CIVITAS Policy Advisory Committee**

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# 1 Why this statement?

Urban mobility stakeholders across Europe are facing many challenges not only at a climate level (pollution, climate change, alternative fuels, impacts of new technology, etc.) but also at a social one, which in its turn are asking for a more decisive action to meet the new urban mobility objectives. Having this in mind, the European Commission (EC) started to reflect in its strategies and plans the ambition to not only improve collective and public transport and provide better active mobility options (along with the implementation of efficient zero-emission urban logistics), but also to reach citizens in a way that they can change their habits and create a new generation of mindsets much more focused on sustainable urban mobility.

This can be seen through, for example, one of the 4 priorities of the strategic agenda for the EU set back in 2019 to shape the political and policy agenda until 2024<sup>1</sup> in order to address the main challenges faced by the EU - **Building a climate-neutral, green, fair and social Europe**. In terms of political guidelines, the **European Green Deal**<sup>2</sup> contributes to the preservation of Europe's natural environment, tackling climate change and making Europe carbon-neutral and resource-efficient by 2050. But how can Europe operationalise and attain these ambitious goals? Are SUMP's and investment in new infrastructures enough?

Knowing the importance of citizens' behaviour for mind shift, the new **European Urban Mobility Framework**<sup>3</sup> included in one of the 12 building blocks that is structured around (see Annex I) the action point of **increasing awareness, citizen engagement and assistance to local authorities**. This, by itself, sets the importance of including **behavioural** and **mind shift** campaigns in mobility strategies.

From the EU's concerns and priorities to the day-to-day challenges that they found in their cities, the Policy Advisory Committee (PAC) members recognise the importance to foster a collective mind shift in citizens so that they are attracted and willing to adopt sustainable mobility options. For this reason, and although many resources are already available to support the design and development of the behavioural change and mind shift of Europeans in regards to the use of sustainable urban mobility, the PAC intends to contribute to the already existing work with a political perspective as they liaise directly with the end-users and target groups that these strategies and measures affect.

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<sup>1</sup> [https://european-union.europa.eu/priorities-and-actions/eu-priorities\\_en](https://european-union.europa.eu/priorities-and-actions/eu-priorities_en).

<sup>2</sup> [https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en).

<sup>3</sup> [https://transport.ec.europa.eu/news/efficient-and-green-mobility-2021-12-14\\_en](https://transport.ec.europa.eu/news/efficient-and-green-mobility-2021-12-14_en).

This statement intends to be presented as a roadmap for cities in which PAC members draw on their own experiences and build a manual of recommendations and best practices to motivate and engage citizens to change behaviour in order to prepare the next generations for a sustainable and green Europe.

## 2 What is behind mind shift and behavioural change?

As concluded from the previous section, changing human behaviour is the key piece to ensuring urban sustainability. But how can cities stimulate this? Usually, it takes years to see a relevant cultural change that influences the citizen's habits so if we want to influence the next generation to be more self-aware and attracted to alternative mobility options, we need to **start now** planning strategies for change. But then another question poses: how can we seduce/convince citizens to change their habits/behaviour?

According to some models like the BJ Fogg's model<sup>4</sup>, people only change their behaviour if the three following elements converge at the same moment: **Motivation**, **Ability**, and a **Prompt**. When a behaviour does not occur, at least one of those three elements is missing. Transposing this framework into the mobility concept, citizens need to be capable to follow the proposed opportunities and be motivated at the same time to take them. One concrete example of this cause-effect relationship is detailed in the report of the CIVITAS Forum 2014 masterclass on behavioural change<sup>5</sup> that shows that in order to try to make people commuting to work by car to go by bike, three things need to occur:

- People need to have a bike and be able to ride it (ability);
- Their workspace needs to be relatively close (prompt);
- People need to have a reason to make this change (motivation), whatever it may be.

Cities (and/or other relevant stakeholders) can influence either one of these factors if they are lacking to create the perfect environment for change to happen. If a citizen does not have their own bike or is not capable of affording one, the municipality can provide bicycles to be rented and co-shared in specific points of the city. If the distance from home to work is long, making it impossible to travel by bicycle alone, perhaps other public transport could facilitate some

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<sup>4</sup> <https://behaviormodel.org/>.

<sup>5</sup> [https://civitas.eu/sites/default/files/documents/civitas\\_forum\\_2014\\_masterclass\\_iuts-behaviorchapter-final.pdf](https://civitas.eu/sites/default/files/documents/civitas_forum_2014_masterclass_iuts-behaviorchapter-final.pdf).

parts of the journey by making it possible for citizens to carry their bicycle to make the first or last part of their journey. And even when these 2 conditions are met citizens are not willing to change their habits, maybe they need to be encouraged to (whether financially, through intensive marketing campaigns or capacity-building activities).

Also, another important aspect to take into consideration is the time it takes for some habits to change. If we think back to 30 years ago, the term sustainability was still unknown to society. But over the last few years, a strong emphasis on the climate emergency was disseminated through several communication channels and many campaigns were built to spread awareness on the importance of adopting some behaviours (for example, do not throw garbage on the floor, turn off the tap while washing dishes to save water, reuse plastic bags, etc.). The mobility field was not left out and there is already much evidence of behavioural change in many cities across Europe (as will be presented in section 5) however, there is still a long way to go. Assuming the **Theory of Change**<sup>6</sup> is correct and that “*most people have mobility habits that they consider unrealistic to change*”, cities need to identify first the target groups who are more likely to be prone to change and focus the majority of resources and activities on them first. Once they are ‘persuaded/convincing’ and, therefore, start to adopt a new and more sustainable mobility lifestyle, it will be easier to reach all the others.

Taking this into consideration, it is clear that behavioural change is a long-term process and to really achieve it in the urban mobility ecosystem, more is required than just a one-shot intervention as urban mobility strategies need to incorporate middle and long-term actions to produce lasting results. Given the difficulty to cover all these aspects in a unique statement, this document will focus on the strategies and respective implementation activities that can increase citizens’ awareness about the importance of mind shift related to mobility so that they want to embark on this new journey. Nonetheless, the PAC members do not disregard the importance of also providing appropriate infrastructures and other types of tangible opportunities/incentives so that citizens can be able to operationalise their change in behaviour. But this roadmap will focus more on providing guidelines in order to ensure the citizens have the **motivation** to change their behaviour.

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<sup>6</sup> [https://ec.europa.eu/futurium/en/system/files/ged/promoting\\_behaviour\\_change.pdf](https://ec.europa.eu/futurium/en/system/files/ged/promoting_behaviour_change.pdf)

## 3 Creating awareness as part of the process

Before people even think about changing their behaviours and are convinced to change their actions and habits, they should be informed of all the possible options. This is why creating awareness is such an important part of the mind shift process.

Awareness can be induced by 2 different routes: (i) information and (ii) promotion campaigns, which are aimed at developing sustainable mobility behaviour among the citizens without any additional infrastructure investment. Such campaigns have to perfectly communicate the **value proposition** that will solve the obstacles to change while addressing both objectively and emotionally the selected target groups. Amongst others, the following actions can be implemented in order to raise awareness:

1. Formulate integrated information strategies to draw people's attention to the negative impacts of individual motorised traffic and the positive effects of multimodality or different types of mobility solutions (shared mobility, cycling, MaaS, walking and public transport). These positive effects could include reduce travel time, lower the cost, environmental and health impacts, etc.;
2. Promotion and marketing campaigns on sustainable transport modes such as public transport, shared mobility, MaaS, non-motorised transport modes, low emission vehicles, car-pooling, etc. Both physical and online communication channels should be used to reach different types of groups;
3. Organisation of events for strengthening the image of public transport;
4. Public events like a temporary conversion of main streets to pedestrian zones, carfree days, children painting the streets and implementing speed measurements near schools, inline-skating or bicycle events on urban streets and others (e.g. on 24 April 2022, the entire route for the [Antwerp 10 Miles](#) run was traffic-free). These stand-alone events can be the opportunity to change the routine and give people the chance to realise that they can actually invest more in sustainable mobility with small effort;
5. Integration of the citizens in discussions about mobility issues and planning processes. This should not only include the period of public consultations (which by itself should be more publicized and citizens should be encouraged to participate) but also the follow-up period to the measures' implementation (citizens must know if the results of these actions were successful or not, and if not, why). As an example, the authorities

of the Basque city of Vitoria-Gasteiz have made an extraordinary effort to involve citizens and other stakeholders in the development of a Sustainable Mobility and Public Space Plan, mobilising dozens of volunteers to inform the population about the changes. This resulted in a strong sense of ownership of the Plan by the local population, which helped to overcome challenges such as conflicts of interest and adaptation to change (for more information check the presentation of the [Public Space & Sustainable Mobility Plan of Vitoria-Gasteiz](#));

6. E-learning platforms for the general public and/or companies which inform about possibilities of how to use shared mobility, MaaS, multimodality, clean vehicles, public transport, etc. The municipalities website should at least have a comprehensive guide about the options that the city offer, with a highlight for the more sustainable ones. Stakeholders like transport companies and MaaS providers should be encouraged to promote their platforms and integrate them into the municipality website.
7. Early collaboration with actors that are responsible for trip-generation in a city, such as the city's shops and chamber of commerce, for understanding which win-win scenarios are attractive for mobility shift. For example in SURF project in Karditsa, the most popular city-centre shops were invited to provide zero-emission deliveries with e-bikes allocated by the Municipality. The shops were interested to spend less on gas, but also to promote their environmental-friendly activity to their customers. With the help of the chamber of commerce, the benefits were communicated broadly and this activity expanded to many other city-centre shops.

These are only some examples of strategies that can support cities in the process of providing awareness and engaging citizens to adopt sustainable mobility decisions. There can be, of course, many more, but the important is that these need to be linked with an overall mobility strategy that ensures the capability and existence of opportunities for people to pursue this change.

In the next chapter, a discussion on the main factors/points that the measures for a mind shift and behavioural change should tackle will be presented, as well as an overview on which type of groups should be targeted and how the B2C and B2B markets can influence this transformation.

## 4 How to persuade people to change their behaviour?

### 4.1 Main factors

When starting to design a measure to influence a behaviour change, **3 main factors** should be taken into consideration if the desired effects want to be accomplished:

- **Free public information about every mobility solution:** starting from the basics, every city should have public and easy-to-access information for their citizens regarding all the mobility transport modes available, with a focus on the more active and sustainable routes that can be taken. This information should be available online (on the municipality's website and social media channels) and also in physical format (flyers, posters on information desks or close to bus and train stations, etc.) so that the not so technology ready part of the population can also benefit from this information. Cities can and should also liaise with private transport companies or MaaS providers so that their channels also display this information in an integrated and intuitive way.
- **Availability:** In line with what was presented in section 2, cities need to provide basic but important elements to enable citizens to go through with their behavioural change. For example, cities should comprise a diverse offer in terms of transport modes that accommodate every type of journey (long and short distance, with and without luggage, alternatives depending on the weather, possibility to carry bicycle inside other transports, etc.). Also, cities should provide alternatives that take into consideration all types of citizens (mobile or less mobile, digitally or non-digitally ready users, etc.) from all types of social classes (and this should be cover not only in financial terms but also in terms of infrastructures/equipment).
- **Easy payment system:** many cities already have integrated systems that ease the payment process in what comes to public transportation. For example, if people can use the same subscription to travel by bus and metro, they will be more likely to adopt a shared transport mode to move around. And this is where the MaaS providers can play a very important role as well so cities should come closer with these entities and work together towards change. If people do not need to pay for different subscriptions and can find a trajectory within the same platform that takes them to where they want in a timely and efficient way, they will more likely leave the car at home.

Although these were the main pillars identified by the PAC to take into account when designing new strategies that can persuade a cultural change in mobility, there is a clear agreement that other issues should not be left behind. For example, it is important to reduce the negative effects on other public domain users in order to build up a positive image of micro-mobility that is a vital part of MaaS and the last mile solution.

## 4.2 Should we focus on target groups?

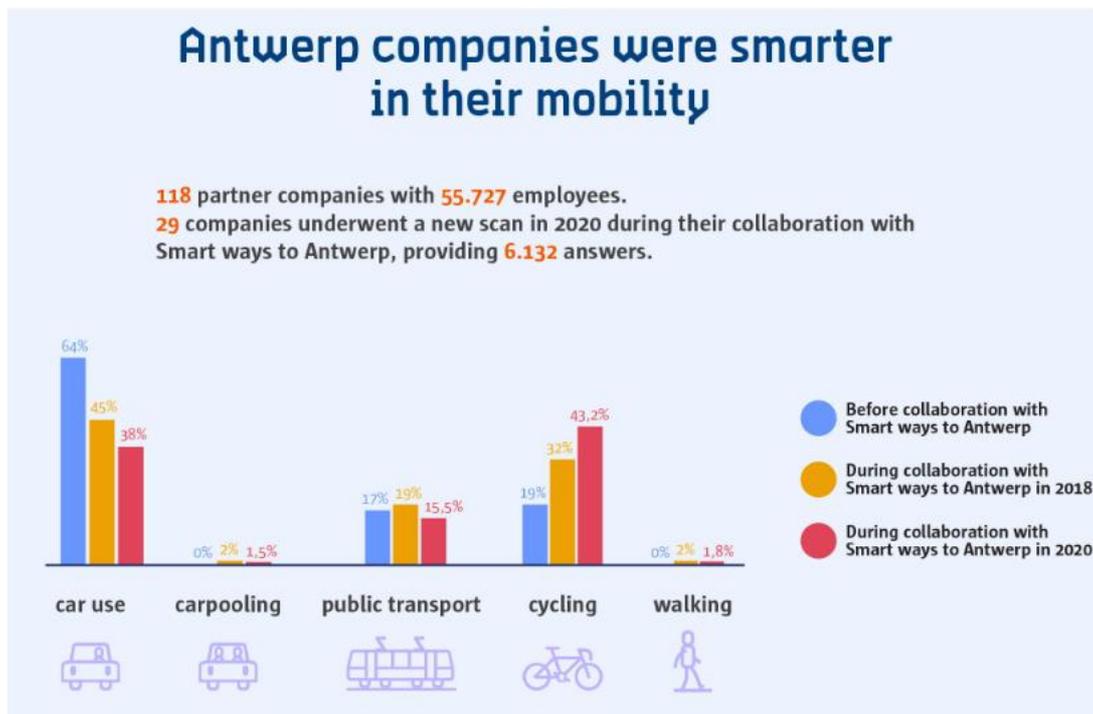
The objective is to reach a collective change in behaviour, however, and as stated at the beginning of this document, some groups in society are easier to approach than others due to their flexibility and willingness to change. In this sense, it is a good option to maybe try to persuade these first so that they can after replicate the change within their networks.

Also, PAC members recognise the importance of involving and targeting the **young generation** since they will be tomorrow's society and are more likely to influence their parents, grandparents and older relatives. **Young people are the pillars of change** so there is a strong need to invest in the new generations (from elementary to university students), informing them of all possible options. They should be aware that there are more possibilities than their own personal car. The behaviour should change from “*my car, my pride*” to “*my mobility, my pride*”. To attract this specific group, cities should bet more on modern marketing and social media campaigns as well as incentives and value propositions that are more in line with their interests and needs (use of influencers, rewards like bitcoins or social media exposure, etc.) so that they can be easily influenced in a sustainable way before they adapt to a car-oriented lifestyle. The student population also fits into this group and for them, the majority of cities already have some perks for them to use public transportation like student discounts (either on monthly subscriptions or if they bought their tickets through the designated apps), free-trial tickets, etc.

Of course that the young generation is not the only one that cities want to target and different groups of residents can be reached, for example, car drivers as potential public transport or car-sharing users, but also visitors and tourists may be influenced by designing measures, particularly for this group.

Finally, local and regional businesses and institutions should also be addressed to organise information campaigns or training courses for employees at worksites. For example, in Antwerp, [Smart Ways to Antwerp](#) is supporting employers with 20 or more employees in the development of an effective mobility policy, to help them have a smooth and enjoyable journey to work. The company communicated the benefits of joining this campaign - the time people

would save compared to if they drove to work aligned with the money they would not be spending on gas and parking. In the image below, it can be seen that the use of a car to go to work has been decreasing with the increase in companies' collaboration with the Smart Ways to Antwerp initiative. In its turn, the use of the bicycle to go to work has been increasing, proving that the right incentives provoke the desired results. The city wants to expand this program to the entire transport region.



**Figure 1 - Results of the Smart Ways to Antwerp campaign**

### 4.3 What are the differences between the B2C and the B2B market?

Cities should not only work from a B2C market perspective if they want to influence behavioural change, especially given the importance that the mobility stakeholders have in ensuring key elements and conditions for the implementation of mind shift measures. In this regard, cities should look for innovation and for companies that help citizens change behaviour such as the case of MaaS providers and/or other “ambassadors” – it can be citizens, companies, etc. The challenge with the **B2B** market is that many times the interests of these stakeholders are not totally aligned with the public ones and the means of cooperation are limited, sometimes because of legislation (or lack of it). Tax regulation is also an obstacle in some countries, where the government provides tax benefits for company cars. Although currently these tax benefits are being designed to promote less polluting (electric/hybrid) cars, a better mitigation measure would be to launch a mobility budget for shared mobility that would be more attractive than tax regulation benefits. This could really be a big change for the B2B market.

In its turn, the **B2C** market is where government regulations are less influential and, therefore, it is harder to persuade. Here, the role to inform and spreading awareness of active and micro-mobility alternatives should be emphasized by cities to citizens.

## 5 PAC Cities cases

This chapter presents some cases from the PAC members' cities in order to illustrate what type of obstacles European cities have been facing in the implementation of their measures to create awareness and change behaviour.

### Antwerp, Belgium



In 2016, the city of Antwerp saw the need to integrate all information related to shared mobility and public transport into one single app so that it could be easily accessed and used for every journey to and from the city. At the moment they are still working on integrating more data and providing not only an intermodal planning app but also a real-time intermodal navigation app. This navigation function should be live in Q3 of 2022. **Main obstacles/barriers:** Lack of providers to provide data; compliance with GDPR rules; technical challenges for data integration and real-time intermodal navigation.

In 2020, the city of Antwerp began preparing the implementation of the dropzones to prevent and reduce the nuisance of shared e-scooters and e-mopeds in the public domain. This resulted in less wild parking in the city centre and around the central train station. **Main obstacles/barriers:** limited public space in the city centre.



In 2021, the city of Antwerp introduced new legislation that made it mandatory to integrate at least 3 MaaS platforms for every actively shared mobility provider in Antwerp. The results at the moment can be seen in the table below:

Mobility provider	Own app yes/no	MaaS platform								
		skipr	Whim	kbc mobile	Optimile	Olympus	Tranzer	Moves	Gaiyo	Amaze
Poppy auto	Yes	integrated	integration in progress	X	X	X	X	X	X	X
Cambio	Yes	X	X	integrated	X	integrated	X	X	X	X
Lime	Yes	integrated	integration in progress	X	integration in progress	X	X	X	X	X
Poppy step	Yes	X	X	X	X	X	X	X	X	X
Bird	Yes	integrated	integration in progress	X	X	X	integrated	X	X	X
Go Sharing	Yes	negotiation phase	X	X	X	integrated	integration in progress	X	X	X
Unimobility	Yes	X	X	X	X	X	X	X	X	X
Cargoroo	Yes	X	negotiation phase	X	X	negotiation phase	X	X	X	X
Mobit	Yes	integrated	integrated	integrated	X	integrated	integrated	X	X	X
Donkey Republic	Yes	negotiation phase	negotiation phase	X	X	negotiation phase	X	integrated	integrated	integrated

**Main obstacles/barriers:** Lack of trust between the MaaS platforms and mobility providers.

### Sint-Niklaas, Belgium



In 2021, Sint-Niklaas introduced the extended 'zone 30 km/h' in the whole city centre. This improved road safety and the municipality decided to use the positive power from the people living in the city centre to support this new measure through a general communication campaign, where people living in the new zone 30 could show their support by putting a so-called '30 max'-board on their house. **Main obstacles/barriers:** People from outside the city using the car to visit the city centre were not enthusiastic about the idea.

Sint-Niklaas started an intense process in the [Elisabethwijk](#) district, where together with the residents designed a new centre for the neighbourhood. During a 3 stages process, the municipality dialogued with the neighbourhood via coaches and ambassadors, people living in the neighbourhood that were moderators in the dialogue between the city administration and the neighbourhood. Using ambassadors leads to a more balanced and credible dialogue. The result is a credible design that works for the neighbourhood and ticks all the boxes of the city's goals.



### Graz, Austria



The city of Graz participates annually in the European Car Free Day: the Europe-wide initiative on 22 September that aims to raise awareness for an environmentally friendly choice of transport. The closure of a street for cars near the city centre for

the mobility festival and the many activities and children's attractions on soft mobility were very well accepted. **Main obstacles/barriers:** criticism of the roadblock by motorist lobbies.

The city of Graz has been organising many city cycling events (like “Grazer CityRadeln”) on car-freed streets, secured by police and rescue services. From 2010 to 2019 there have been 47 tours with 21,070 participants.

The city of Graz has been involving district politics, the local population and local businesses in the design of district mobility concepts (**co-creation approach**).



### Rethymno, Greece



During European Mobility Week 2020 and 2021, the city of Rethymno offered traffic education to all students of all municipal primary schools conducted by the Association of scooterers and Traffic Police. Online workshops were also organised about clean and zero-emission commute for locals. This gave all primary school students the opportunity to attend and be trained about using the scooter safely with a simulation ride from home to school and Rethymno residents were informed about clean commute meaning electric vehicles, public transport, walking and cycling options, raising awareness.

In April 2022, the city of Rethymno organised a Bike-friendly days campaign in order to promote cycling as an alternative mode of transport, raising awareness among professional drivers and emphasising the role of the bike within the Road Traffic Code and road safety issues. Also, younger generations had the opportunity to be educated about cycling safety.



## Ljubljana, Slovenia



One of the most significant measures that the city of Ljubljana implemented has been the modification of the traffic regime on the main road for transit motor traffic through the city centre that is now closed to private motorized vehicles and is used only for public transport, cyclists, and pedestrians. After introducing the altered traffic regime, the number of pedestrians and cyclists increased. The attractiveness of the public passenger transport equipment also encourages the use of city buses (new, spacious and modern bus stations, bus arrival displays, e-paper announcements, seats, Braille markings).

## Parma, Italy

In the summer of 2020, as an answer to COVID restrictions, the Municipality of Parma transformed a number of parking spaces (mainly in the city centre) into terraces for restaurants, bars and cafes. The local authority increased the number of available spaces by reducing the number of parking spaces and eased the permission process to use one or two



parking spots in front of their shops in order to put a temporary terrace for the customers. In addition, in 2020 the tax for the occupation of public spaces was free of charge. In total, since summer 2020, around 200 parking spots have been converted into spaces for people, where citizens and tourists can enjoy quality time rather than parking their cars. This is a very good example of how sustainable mobility and local retail can profit from each other. By converting some parking spots into terraces the quality of life of the street improves, and this attracts more people to the area with positive effects on the turnover of the shops. This measure was welcomed in a very positive way by citizens, as no complaints about the parking removal were registered.



“[Parma cambia spazio](#)” (Parma changes space) is a project aimed to promote sustainable mobility by encouraging the use of non-polluting vehicles when travelling from home to school. Several activities were launched involving primary and middle school students, such as the redesign of spaces around selected

schools, a new website - [www.parma.cambiaspazio.it](http://www.parma.cambiaspazio.it) - created to raise awareness of the advantages of active and sustainable mobility, and a competition using gamification techniques where pupils compete in reaching school by choosing the best way in terms of mobility and sustainability. In a single month, the children managed to reduce the total number of km travelled by car by 385 km, with a consequent saving of around 36 kg of CO2. Before the gamification activity, 55% of the students went to school every day on foot or by bicycle, 29% by car and 7% by the school bus. During the gamification activity, 65% of children habitually adopt the best modal choice (on foot or by bicycle) while the use of the car drops to 6%. The second edition started in spring 2022.

After the lockdown experienced during the Covid-19 pandemic, the resumption of urban travel could have a disruptive effect on urban mobility due to a massive use of private cars. Emilia-Romagna region and the City of Parma promoted a comprehensive programme for boosting the use of the bike on a daily base. Bike-to-work is a strategy designed to govern the mobility demand in all the cities of the Emilia-Romagna Region working on mobility behaviours in the post-pandemic.



## Schaarbeek, Belgium



In Autumn 2021, major changes in the neighbourhood 'Stephenson' were proposed by and discussed with all stakeholders. Special attention is given to the participation of children. The municipality of Schaarbeek provided a caravan specifically built for this project and it was a great place to meet.

The neighbouring school still makes use of this tool.

During 2021 and 2022, online sessions on SUMP Josaphat-Colignon in Schaarbeek were organised. Developing Sustainable Mobility Plans requires not only experts drawing proposals but starts with the experience of the local residents. During nine sessions (3 times in 3 neighbourhoods) participants could first



share their experience; then brainstorm on improvements; and finally, give feedback on the plan and indicate if any accompanying measures are needed.



In the Spring of 2022, it was organised the Discovery walk-in Schaarbeek as the preparatory meetings for the SUMP Josaphat-Colignon in Schaarbeek were virtual due to sanitary conditions so people were participating enthusiastically in the discovery walk. This method is used regularly also with target groups like women and for other projects that have an impact on public space.

### **Trikala, Greece**

The city of Trikala in an attempt to raise awareness of low-speed driving across the city centre, installed the first smart crossing system in Greece using machine vision technology at a critical crossroad. When the system recognizes pedestrians it automatically activates a LED warning signage to get drivers' attention and proceed in reducing speed. Simultaneously, the system activates flashing LED elements on the road, which are visible to the drivers from a long distance. Apart from increasing road safety, the system also functions as a smart hub for real-time traffic and environmental data collection.



Another measure that the city will implement in 2022 in order to create a shift from car use is to promote micro-mobility. The city will provide 75 e-scooters placed in 23 stations and supported by five charging stations, 50 e-bikes, four of which are suitable for people with disabilities located in five stations. These means are supported by 100 bicycles, property of the municipality and available in three stations. People can rent all means of micro-mobility through the citizens' app, including open APIs for future interoperability with the urban transport service.

During the annual Christmas Fair in Trikala, which is the biggest one in Greece attracting more than 1M visitors, the municipality procured an electric bus to transfer visitors free of charge from the venue and to the city centre. The measure aims to create awareness of electromobility and zero CO2 emissions transportation within the city fabric.



### Vitoria-Gasteiz, Basque Country (Spain)



Vitoria-Gasteiz has an experient track record in working towards mind-shift and raising awareness in the urban mobility field. In 2010, the city was rewarded with a CIVITAS Award for Public Participation<sup>7</sup> for the Basque city's authorities' extraordinary efforts to involve citizens and other stakeholders in the development of a new Sustainable Mobility and Public Space Plan, mobilising dozens of volunteers to

brief the population about the changes. In order to support this process, the city of Vitoria-Gasteiz focused not only in providing the right and ready to access infrastructures (like have more buses on service, less bus lines through rationalisation of bus routes, reorganisation of bus-stops locations at grid nodes, traffic light priority given to public transport buses, among several others) but also by providing: *“a bus/tram integrated fare (BAT Card) with contactless technology; free Park & Ride service in five strategic locations to reduce the volume of traffic coming into the city; strong dissemination and participatory initiatives, including a recruitment campaign for volunteers (several information points on streets, buses, stops and civic center gave direct information orally to 44,683 people); more than 10,000 hours of training given to bus drivers, inspectors, administrative personnel and traffic and customer service; new network incorporation on the main route planners available on the internet and smart phones (google transit and nanika metro); push and pool tools, such as changes in the regulation of surface parking and increasing prices to dissuade the use of private cars”*<sup>8</sup>.

<sup>7</sup> <https://civitas.eu/awards/2010>.

<sup>8</sup> <https://civitas.eu/sites/default/files/civitas-plus-case-study-new-pt-network-vitoria-gasteiz.pdf>.

This resulted in a strong sense of ownership for the Plan among the local population, which helped overcome challenges such as conflicts of interest and adjustment to the changes. **Results:** 89% increase in public transport users during 2008-2018 and 91,5% user satisfaction.

### Karditsa, Greece

Karditsa, known as the “Greek city of cycling” is implementing various strategies to encourage behavioural change towards sustainable mobility. Stakeholders and the local community are actively involved in a variety of activities. The city’s efforts to engage the public and promote behavioural change have been recognized in the European Mobility Week campaign (EU winner for small cities in 2019) and the Bike to Work campaign (national winner) among others. Below are some representative examples.

**Zero-emission deliveries:** During autumn'21 Karditsa launched a pilot project for zero-emission deliveries of the city centre shops (“SURF” project) with the support of EPLO. 10 shops participated by doing deliveries with (e)bikes only (mostly food and beverage). Trainings for safe deliveries took place



and the general public was informed in an effort to promote sustainable behaviour and consumption. Significant cost reduction was measured (CO2 reduction is assumed). The action had a “buzz effect” and more shops kept joining. After demand, a list is published for more shops to join, proving that the pilot was seen as a win-win situation by the shops. Complementing this action, the city is in the procurement phase for a cargo-bike sharing fleet for businesses and individuals locating stops in the train and bus station. **Main obstacles/barriers:** Slow pace for “cargo” bike-friendly infrastructure.

**Electromobility uptake:** Karditsa is one of the first cities in Greece to install an EV charger for 2 EVs. Its scale-up is described in its Local Electromobility and EV charging Plan (approved in 2021). 36 EV charging stations providing 77 charging points are going to be installed in 3 phases. RES integration and complementarity with the Regional Electromobility Strategy are considered in the relevant Electromobility Plan for the Region of Thessaly, developed within the EnerNETmob project. National subsidies were provided for purchasing EVs. **Main obstacles/barriers:** Insufficient regulatory framework for RES use and slow RES integration.

EV prices remain high for low/medium income households limiting the behavioural change flexibility.



This activity has received funding from the European Institute of Innovation and Technology (EIT), a body of the European Union, under the Horizon 2020, the EU Framework Programme for Research and Innovation

**Recovering trust for public transport:** During covid-19 public transport suffered the most with the ridership dropping dramatically. As a response, Karditsa launched the CO-APS crowdsourcing application that informs passengers about the crowdedness in public transport with the aim of

encouraging the safe and comfortable use of non-crowded buses. **Main obstacles/barriers:** while this solution was appropriate for young and tech-savvy persons, it did not work well for older persons.

**Rewarding sustainable behaviour:** Karditsa is participating annually in the “Bike to work” campaign, being awarded very often for the best performance at the national level. rewards for municipal tax exemption. **Main obstacles/barriers:** Bureaucratic procedures make it extremely difficult for the city to provide any kind of reward.

## 6 Design and Implementation of Successful Measures

When implementing sustainable supportive measures, several important steps must be followed and taken into account:

1. **Gather information:** Revise the results of former promotional campaigns; Collecting experiences from other municipalities; Engaging experts on techniques of marketing and promotion campaigns; Launching a behavioural survey prior to the implementation to provide a tailor-made strategy based on the characteristics and the concrete needs of the target groups.
2. **Design of the concept:** Definition of target areas of the city; Selecting the target groups; Definition of the criteria for procurement (e.g. for training activities); Developing an action plan by detailing appropriate measures to be implemented, creating a schedule and assigning the tasks.

3. **Implementation:** Launching the promotional campaigns and implementing the measures;
4. **Measurement of results:** Measuring direct and indirect results and drawing conclusions for future actions.

Experience reveals that the early support of politicians and the acceptance and cooperation of key stakeholders is crucial for the success of behavioural change measures:

- **Political support** - It is crucial to inform politicians with positive/documented examples of successful campaigns. Furthermore, it is important to combine marketing measures with other sustainable solutions to create a synergy effect (as previously highlighted, it is important to look at the target groups when the details of the campaigns are being planned).
- **Acceptance** - The measures are well-accepted as they are “soft” measures and normally do not restrict personal mobility behaviour. However, a well-prepared information strategy and the introduction of incentives for people are necessary as these measures are often ignored due to the lack of interest in initiatives and campaigns.
- **Financial management** - In order to guarantee financial support, the long-term benefits and the positive cost-effectiveness of information and education campaigns in comparison to expensive infrastructure investments need to be explicit. The involvement of different stakeholders might result in a division of costs of the campaigns.
- **Institutional Cooperation** - Cooperation of a multi-disciplinary team of stakeholders fosters the success of the measures significantly. However, it is advisable to let citizens provide ideas and suggestions for the implementation of the measures as well.
- **Work beyond silos** - mobility campaigns should be understood as an effort for a better, safer and more sustainable environment.

## 6.1 Main obstacles

Drawing from their experience and together with what can be found in the state of the art on the topic, the PAC members identified some common obstacles that need to be addressed to support behaviour change, as well as some mitigation measures to overcome them:

- **Lack of information:** People generally report as a difficulty the lack of information about which routes to take or even the lack of street signs. **Mitigation Measures:** municipalities should ensure that everyone has access to information about the urban mobility options the city offers in an online (city's website and transport providers' platforms and/or apps) and physical format (maps, guides, signs, etc.).
- **Ineffective promotional campaigns:** Lack of skills to promote different types of mobility (multimodality, MaaS, shared vehicles) amongst businesses (B2B) and citizens (B2C) and insufficient communication between city departments and citizens will lead to a waste of resources for ineffective promotional campaigns. **Mitigation Measures:** create tailor-made campaigns that meet adequately the needs of the target groups from which behavioural change will start. Also, create effective and regular communication between the main involved stakeholders.
- **Safety:** the strength of this obstacle intensified during the covid-19 pandemic. People were afraid to use collective transport modes because of the higher transmission index but also because streets were less crowded and people feared for their safety. On the other hand, some municipalities invested in spaces and routes to intensify active mobility, something that gathered many fans during the lockdowns. **Mitigation Measures:** cities should ensure the safety of cycling and walking routes as well as all sanitary conditions in collective and shared mobility transports.
- **Geographical barriers:** This is a common obstacle to many strategies and initiatives that emerge in the mobility world because the majority of the proposed measures are designed to fit the big city's needs. In smaller and rural areas, there may be inadequate public transportation accessibilities or a lack of verbs to ensure the maintenance of infrastructures. Furthermore, the attraction of big transport companies and MaaS providers is much harder in small and medium-sized cities (as also presented in the PAC Statement 2021 - MaaS for cities of all shapes and sizes<sup>9</sup>). **Mitigation Measures:** adapt your measures to your reality. Also, governments can try to attract investors to these areas through some monetary incentives.
- **Lack of awareness and citizen engagement:** This is one of the main obstacles to overcome when changing behaviour. The lack of public interest together with some cultural barriers against active mobility and public transport modes can jeopardise all the efforts made to try to reach citizens. **Mitigation Measures:** invest in creating

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<sup>9</sup><https://civitas.eu/resources/civitas-pac-statement-2021-maas-for-cities-of-all-shapes-and-sizes?fbclid=IwAR3YMOmWifiuXvjQEedCBLF7i5klGedwJb83zVjAzGidMeeo0F7rUTLNcG3Y>.

awareness by communicating a clear and strong value proposition that meets the citizens' needs (involve them also in the planning process through citizen engagement activities). This was successfully done in the city of Vitoria-Gasteiz when mobilising dozens of volunteers to inform former users of the public transport network that was being completely redesigned<sup>10</sup>.

- **Lack of public sector support:** Some governments still practice transport policies that prioritise private car transport (such as tax incentives for company cars) and continue to invest in strategies that are not aligned with sustainable forms of transport. **Mitigation Measures:** pressure the governments in investing in more sustainable/shared options and create packages of incentives to incentivise citizens to choose them.
- **Lack of private sector support:** Private companies do not have the incentives to opt for more sustainable travel plans for their employees or provide the necessary infrastructures for it (cycle parks, changing rooms, showers). Also, the majority is still pretty insensitive towards their employees' transport preferences and do not see the need to encourage them to walk or cycle to the workplace. **Mitigation Measures:** to raise awareness among companies of the importance of adopting a sustainable image in all aspects, whether by reducing plastic or by providing their employees with the necessary incentives and infrastructure so that they can travel to work in a self-sustaining way.

Besides these obstacles, is important to take into consideration that many other factors may influence mobility choices over time like the change in home or work location or other external factors such as fuel price or parking fees increase.

## 6.2 Online Implementation

In order to implement a measure that successfully reached the objective of changing the habits and routines of society, different groups need to be targeted and these groups are reached through different channels. For example, the younger generation is more prone to technology and digital platforms and since they are the future, cities should invest in strong online campaigns and knowledge-sharing activities and digital platforms that integrate as many transport options as possible.

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<sup>10</sup>[https://civitas.eu/sites/default/files/new\\_public\\_transport\\_network\\_-\\_public\\_space\\_and\\_sustainable\\_mobility\\_plan\\_of\\_vitoria-gasteiz.pdf](https://civitas.eu/sites/default/files/new_public_transport_network_-_public_space_and_sustainable_mobility_plan_of_vitoria-gasteiz.pdf)

Looking at one of the examples from the PAC cities' cases in chapter 5 (the case of Antwerp), they brought all solutions together in one place – the [Smart Ways to Antwerp](#) platform - as well as the information about the transport and respective payment options. This way, the user (whether resident or tourist) has access to all the relevant information in one single platform.

### 6.3 Onsite Implementation

Onsite measures serve not only to inform and create awareness but also to create a proper environment for people to feel safe and comfortable embracing change.

#### Hard measures

- Invest in infrastructures like bike lanes, safe bicycle parks, no traffic zones, dropzones in the city centre (or any other type of infrastructure investment that will help improve the convenience of different micro-mobility solutions);
- Invest in infrastructures that promote and ease the use of ecological solutions (like the creation of a shared car parking and/or charging facilities);
- Park and Ride (P&R): this system aims at reducing urban traffic congestion, in which drivers leave their cars in car parks on the outskirts of a city and travel to the city centre on shared micromobility or public transport. This is a very adequate measure, especially for commuters who travel to big cities every day and their mobility options until they reach the big cities are narrow.

#### Soft measures

Soft measures, although usually less expensive than hard measures, can enhance the effectiveness of 'hard' measures which can attract some organisations to give priority to campaigns without investing in supportive infrastructure.

- Use of online channels as means of communication and dissemination for campaigns whose objective is to raise awareness;
- Organise events/activities/congresses around the topics of MaaS and active and micro-mobility;
- Take into account MaaS options when drafting SUMP;
- Engage citizens in co-creation processes for the design of new urban mobility measures.

## 7 How to measure behavioural change?

The specific results of an awareness-raising measure for behavioural change might be difficult to attain. However, this is a very important element to have not only to know if the initiatives took had any impact (and if not, why) but also to be communicated to citizens that could have been involved in the co-creation process of the respective action, or that will be motivated by the results. That is why every measure needs to be planned and defined with a robust monitoring and evaluation framework with targets and indicators that are well-defined, relevant to the specific project objectives and measurable.

Project indicators may relate to the monitoring of project outputs (e.g. participation rates), as well as evaluation of the wider objectives relating to the reduction in car use, time and money savings or safety and economic benefits. The most objective and used monitoring criteria are:

- Attendance and participation rates in events/activities that stimulate active and sustainable mobility;
- Modal split data (vehicles and people's count);
- MaaS platforms data on citizens' use of the multimodal solutions;
- Vehicle km saved during the action (for example, free-car days and free-traffic zones);
- Acceptance and satisfaction surveys.

There can also be a distinction between qualitative and quantitative data (and to be noted that both are important and worth gathering). For example, satisfaction surveys gather qualitative data while the reduction of cars in the city centre is a quantitative indicator of the measures' success.

Furthermore, cities can also measure improvements that result from new mobility practices or policies using the set of Sustainable Urban Mobility Indicators (SUMI)<sup>11</sup> that the European Commission has developed in order to support the standardisation of the evaluation of their mobility systems. Some indicators that may be relevant for cities to measure the impact of their mind-shift measures:

- Indicator 6: Access to mobility services - Share of population with appropriate access to mobility services (public transport);

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<sup>11</sup> [https://transport.ec.europa.eu/transport-themes/clean-transport-urban-transport/sumi\\_en](https://transport.ec.europa.eu/transport-themes/clean-transport-urban-transport/sumi_en).

- Indicator 10: Opportunity for Active Mobility - Infrastructure for active mobility, namely walking and cycling;
- Indicator 11: Multimodal integration - An interchange is any place where a traveller can switch from one mode of travel to another, with a minimum/ reasonable amount of walking or waiting;
- Indicator 12: Satisfaction with public transport - The perceived satisfaction of using public transport.

## 8 PAC Recommendations to encourage Behavioural Change and Mind Shift

Throughout this document, the CIVITAS PAC approached the theme of *Behavioural Change and Mind Shift* from the customer's point of view from its 'root'. How can we change behaviour? - was the first question posed. We quickly realise that is not an easy question to answer and that many factors can influence people's predisposition to change.

In this last chapter, PAC members summarise and highlight their main recommendations that were presented in this statement in order to encourage and stimulate behavioural change in their cities:

- **Focus on young people:** mind shift takes time so if cities invest in the education to change young people's habits, they will reflect that in tomorrow's society. They are also very influential which is good to spread awareness on the topic.
- **Offer a clear value proposition:** cities need to understand the problem that they are proposing to solve. No solution fits us all so the measures should be tailored to the city and the target groups' needs taking into consideration aspects like geography and size of the cities.
- **Campaigns and promotion:** although these are just part of the process to enable behavioural change, they are the main driver to create awareness. Without soft measures, hard measures can be inefficient and a waste of time and resources.
- **Citizen engagement:** citizens should be an integral element not only when considering planning changes (and during public consultation phases), but they also should be involved in the try-runs and tests for the implementation of the measures. Furthermore, they should also receive feedback on the results of their behavioural change so that

they can understand if the efforts of all the involved are worth it or if the strategy needs to be rethought.

## 9 Would you like to know more?

### About CIVITAS

CIVITAS is one of the flagship programmes helping the European Commission achieve its ambitious mobility and transport goals and in turn those in the European Green Deal.

It does this by acting as a network of cities, for cities, dedicated to sustainable urban mobility. Through peer exchange, networking, and training, CIVITAS fosters political commitment and boosts collective expertise, equipping cities to put mobility at the centre of decarbonisation.

Since its launch in 2002, CIVITAS has advanced research and innovation in sustainable urban mobility and enabled local authorities to develop, test and roll out measures via a range of projects.

CIVITAS supports cities to make smart and sustainable urban mobility a reality for all. In doing so, it is ensuring that mobility is a driving force behind the creation of climate-neutral and resilient cities. The CIVITAS Initiative is currently coordinated by CIVITAS ELEVATE.

Find out more on the CIVITAS website: <https://civitas.eu/>

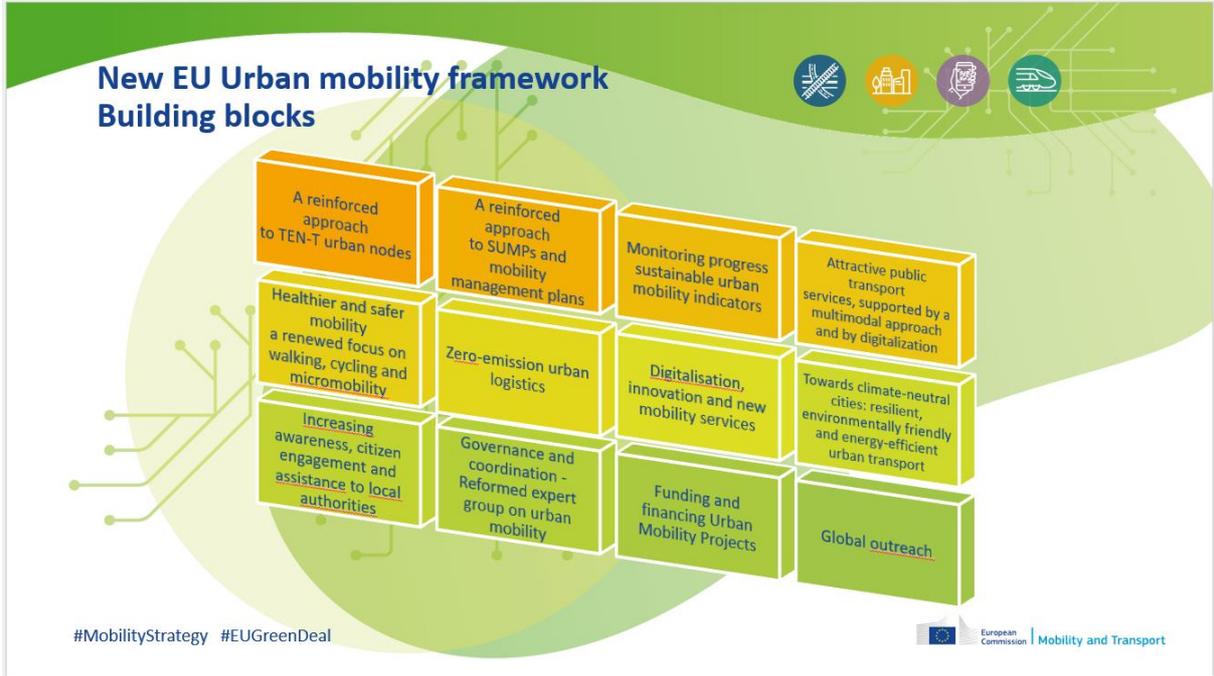
### About the CIVITAS Policy Advisory Committee (PAC)

The Policy Advisory Committee (PAC) is a group of leading and dedicated elected politicians that act as an advisory board to the CIVITAS Initiative and network of cities. It convenes regularly to share experiences on sustainable urban mobility policy and interact with DG MOVE. The main activities of the PAC members are:

- Delivering policy recommendations to the European Commission (EC) 's Directorate-General for Mobility and Transport (DG MOVE) – such as this PAC statement;
- Reinforcing the liaison between the DG MOVE and the CIVITAS network of cities, as well as the CIVINET national and regional networks;
- Supporting DG MOVE in evaluating CIVITAS city applications to host the CIVITAS Forum conference, and providing input for its agenda;
- Taking part in key CIVITAS activities such as study tours, peer reviews and policy support groups;
- Ensuring and strengthening the involvement of local politicians from CIVITAS cities in the implementation of CIVITAS activities;
- Advising and supporting the organisation of CIVITAS core activities.

Find full information on the CIVITAS PAC webpage: <https://civitas.eu/pac>

# Annex I – The 12 Building Blocks of the New Urban Mobility Framework



This image was retrieved from DG MOVE's (EC) presentation on the new Urban Mobility Framework to the PAC on 5 May 2022. The full presentation can be accessed here: <https://cebre.cz/static/2022/05/ek-ppt.pdf>.