FASTTRACK

Fast Track Innovation and Knowledge Strategy

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Responsible Author(s):	
Lucia Cristea (EIP)	
Responsible Co-Author(s):	
EIP: Marga Marin, Teodora Stoica CERTH: Maria Morfoulaki, Maria Chatziathanasiou, Natalia-Maria Constantinidou	

2020 CIVITAS Cleaner and better transport in cities FASTTRACK

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Glossary

KPIs = Key Performance Indicators

LA = Local Affiliates

IK – KPIs = Innovation and Knowledge Key Performance Indicators

“8Ms” = CREATE’s developed set of indicators

WP = Work Package

SULP = Sustainable Urban Logistic Plan

SUMP = Sustainable Urban Mobility Plan

SEAP = Sustainable Energy Action Plan

GA = Grant Agreement

CBW = Capacity Building Weeks

Abstract

This document presents the innovation and knowledge strategy for assessing the performance of the Fast Track actions and to understand the Cities Innovations Profiles.

Project Partners

Organisation	Country	Abbreviation
ICLEI	Germany	
European Integrated Projects SRL	Romania	EIP
HIT/CERTH	Greece	HIT
Eurocities	Belgium	Ec
Vectos	Germany	
Mobiel 21	Belgium	M21

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Executive summary

This document establishes the framework for assessment for the innovation and knowledge performance in Fast Track. The project's objective is to build capacity for twenty-four local authorities that have signed up to the project, of which twenty are known as "Local Affiliates," and four act as formal FastTrack project partners ("Ambassadors").

The assessment of the Innovation and Knowledge Performance in Fast Track will capture how the project has deployed knowledge to the Local Affiliates and Ambassadors cities, and how this knowledge helped cities to increase their local capacity and processes to deploy sustainable mobility. Moreover, through Innovation Performance, the project will try to assess the innovation capacity in the participant cities and to help identify those aspects and factors that may contribute to enhance the innovation capacity at local level.

The assessment framework has two major components described in chapters 3 and 4 to this document. The first line of assessment – city innovation profile – is inspired by the H2020 CREATE guidelines, presented as 8 Ms (see chapter 3 for details). Although very clear and insightful, these guidelines do not offer a clear assessment base that a city could use to benchmark its ability to change and innovate. The lead author of this document – EIP – has been the main contributor to these CREATE guidelines and has developed within the first months of Fast Track a new framework to assess the cities innovation profile (this is presented in chapters 3.2 to 3.4). The second line of assessment is through monitoring and refining the knowledge provided for sustainable mobility solutions. This is done through a very thorough list of key performance indicators (KPIs) that allows the project to understand the efficiency and the impact of the capacity building programme developed for the cities. Additionally, this assessment based on KPIs will also identify the response of the cities involved in the project after each phase of the programme that will facilitate fine tuning the programme based on the progress of the cities (see chapter 4 and the annexes).

The innovation performance methods established within Fast Track allow cities to see certain elements that they pushed forward, to be innovative, while they are blind towards other elements. This innovation "blindness" is the actual focus of the project. Fast Track could provide adequate lenses to see differently certain aspects and actions, and to support all cities in their efforts to achieve high-level goals of sustainability and resilience towards the fast-changing systems.

The main author of this document is the EIP (chapters 1, 2, 3 and 5) with significant contribution and support from CERTH team (chapter 4 and annexes).

This document will serve the actions in Innovation Performance, but it will also contribute to understand how the capacity building programme led by Eurocities could be tailored to better cater for cities' expectations. It will also contribute to the activities with the external parties, led by Mobiel 21. Furthermore, the assessment frameworks supported the understanding of the cities profile, as resulted from the work done by Vectos.

Lead author would like to thank very much the Fast Track cities – affiliates and ambassadors – for their interest and collaboration.

Section 1: Introduction

1.1 FastTrack project in brief

Local authorities across Europe are motivated to take bold and swift action now to accelerate the rate of sustainable change in the mobility and transport sector. However, it is not easy for local authorities to keep pace with insights regarding what works, where, why, and how to transform innovations into worthwhile, reliable, and rapidly implemented mobility solutions. Practitioners may lack the time and resources to focus on innovation in their day-to-day work, while limited funding may prevent innovative ideas from coming to fruition.

FastTrack helps local authorities accelerate their transformation by addressing these knowledge, capacity, governance, data, evidence, and funding challenges.

FastTrack familiarises practitioners with new areas of innovation and supports them to develop plans for rapid implementation. The project delves in the marketplace of mobility innovations to help local authorities procure and implement innovation that is appropriate to their local context, fits into their broader SUMPs (where these exist), and address local challenges and opportunities.

The project has begun with a “Diagnostic” phase that enables FastTrack to respond to real challenges faced by local authorities. FastTrack’s 24 local authorities have identified what “smart and clean innovations” mean to them, and what they need to address the barriers to rapid implementation.

Applying a “Connection & Engagement” approach will enable FastTrack to develop capacity and share knowledge to meet the identified needs – both internally and for the benefit of audiences across Europe. Databases of solutions, a best practices portal, and capacity-building and knowledge-sharing events will illuminate new opportunities for technically, culturally, and geographically relevant innovation. Finally, FastTrack local authorities will be supported in action planning to fast track their chosen sustainable transport projects.

1.2 Fast Track Objectives and Expectations

Fast Track objective is to build capacity for twenty-four local authorities that have signed up to the project, of which twenty are known as “Local Affiliates,” and four act as formal FastTrack project partners (“Ambassadors”). For achieving this objective, the project established an ambitious programme for capacity building based on five intensive learning weeks, scheduled throughout the project and with regular meetings and interactions between the learning weeks. All cities involved in the project should produce an as called “deployment plan” for their desired innovation that would like to fast-track with the help of the project. This deployment plan will be comprised by all elements that innovation/solution chosen should have to pass as a proper fast-tracking plan for the local council/city administration.

As this objective is set for a short period of time – twenty-four months – the project has been divided in four distinct stages that will help the project members and the cities involved to reach their objectives. These stages are (see also the figure 1. below):

- Understanding the needs of the cities – since the outset of the project a team of project partners worked to understand the needs and interest that cities signed up in the project have. This activity has been deployed mainly through a very thorough and

comprehensive questionnaire, followed by an interview – discussion one-to-one – with each of the cities' representative. The results of this activity constitute two major reports of the project: the cities needs and their innovation profile. Additionally, to have a comprehensive imagine about the city, desk research about each city has been also done. This activity allowed the project partners to understand what the actual interests of the cities are, what are their preferences in receiving knowledge from the project and which are their local challenges and barriers in implementing innovative solutions. This contributed to setting up the structure of the first learning week and to crystallise the first understanding of the city innovation profile, the as called: "City Fingerprint".

- Understanding the process and the options to be studied/implemented – having a clearer image of a city's characteristics and interests, allowed the project to develop a series of events that aimed on targeted discussions with the cities representatives to deepen the actual barriers and challenges. This understanding in fact is a process that continues throughout the project in certain moments that allows the project to ensure that (i) the knowledge offered is meaningful and (ii) the city representatives are progressing in their local actions in deploying innovative solutions and approaches. The innovation performance monitoring will use these moments to assess the above and the perceived progress that cities representatives are making throughout the project. Different methods will be used from interviews, to brainstorming sessions that will allow the cities and the project to explore the best solutions for each of the cities, and ways to address the expressed challenges and perceived barriers for progress.
- Co-creation activities to develop the plan for the desired innovation/solution chosen – the learning weeks are the main moments established in the capacity building programme that will allow the project to provide the most meaningful and inspiring knowledge to the cities participating in the project. The learning weeks are designed to reunite all the cities representatives in a city that act as Ambassador in this project. Due to the influence of the COVID 19 pandemic, virtual meetings have been also considered and implemented. These gatherings take different forms: from inspirational workshops to co-creation activities around white boards to one-to-one discussions. The important result of these activities is that cities are shaping new ideas/solutions/innovations with the support of the partners, external reviewers, suppliers, and the rest of the cities partners. In fact, one of the interests that cities have expressed in the project is the actual exposure to other cities experiences, either positive or negative – this helps them to understand their own situation and to get inspiration from their peers.
- Deployment for the desired innovation/solution chosen – the co-creation activities will help the cities to crystalise a plan for the solution/innovation they would like to deploy at local level. This plan, called by the project a deployment plan, has the role to facilitate cities representatives to think how they can accelerate the traditional process of deployment of the desired innovation/solution. In this respect, cities have been recommended a series of key questions that allows them to define the plan based on input, output, outcome, and available resources. This approach will allow cities to define a list of actions that they have to take to accelerate the process of implementing the desired solution/innovation. This approach has also the advantage to allow the cities to tailor the key support questions prepared by the project to their chosen solutions (this could be a plan, a strategy, a new process, a new technology

implementation etc). The knowledge received from Fast Track will be shared by cities representatives with their colleagues and they will work together to adapt this knowledge on their own challenge and to create an action list and the deployment plan (formal deliverables in this project).

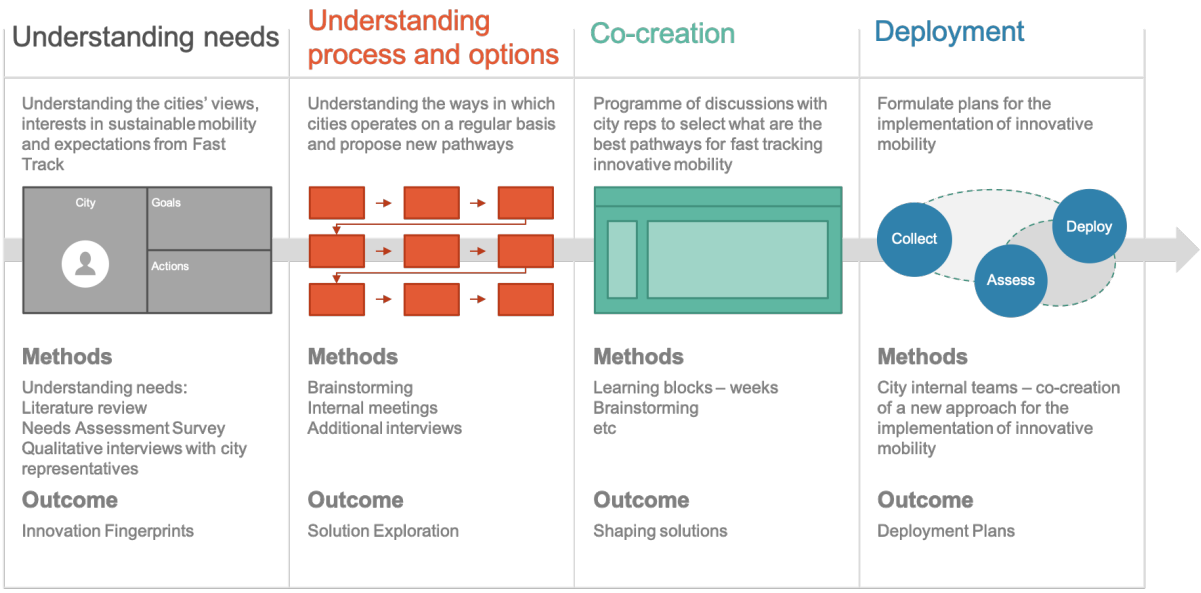

Figure 1 Fast Track Approach, Source: EIP own design

The process presented above has been set up since the start of the project, and all project partners will have an active role in implementing each of the phases in the project. The needs assessment exercise, the assessment of the cities' views and expectations after each of the learning activity set in the capacity building programme are integral parts of the innovation and knowledge performance of the project. In the section 2.2 the project's strategy to assess this performance is presented.

1.3 Aims of the Fast Track Innovation Performance and structure of the document

The Innovation Performance in Fast Track will capture how the project has deployed knowledge to the Local Affiliates and Ambassadors cities, and how this knowledge helped cities to increase their local capacity and processes to deploy sustainable mobility. Moreover, through Innovation Performance, the project will try to assess the innovation capacity in the participant cities and to help identify those aspects and factors that may contribute to enhance the innovation capacity at local level.

The plan developed by the project to capture the innovation performance is two-fold (see figure 2 below):

1. **Branching Exploration** – Understanding the prerequisites for fast tracking solutions. This type of exploration aims to understand innovation profile of the cities (local affiliates and ambassadors). This understanding is based on a new developed method based on the H2020 CREATE guidelines [1].

[1] CREATE Guidelines – https://www.mobilitatedurabila.ro/create

2. **Incremental Iterative Refinement** – Monitoring and refining mobility solutions. This part of the plan developed a very thorough list of key performance indicators (KPIs) that allows the project to understand the efficiency and the impact of the capacity building programme. Additionally, this assessment based on KPIs will also identify the response of the cities involved in the project after each phase of the programme that will facilitate fine tuning the programme based on the progress of the cities.

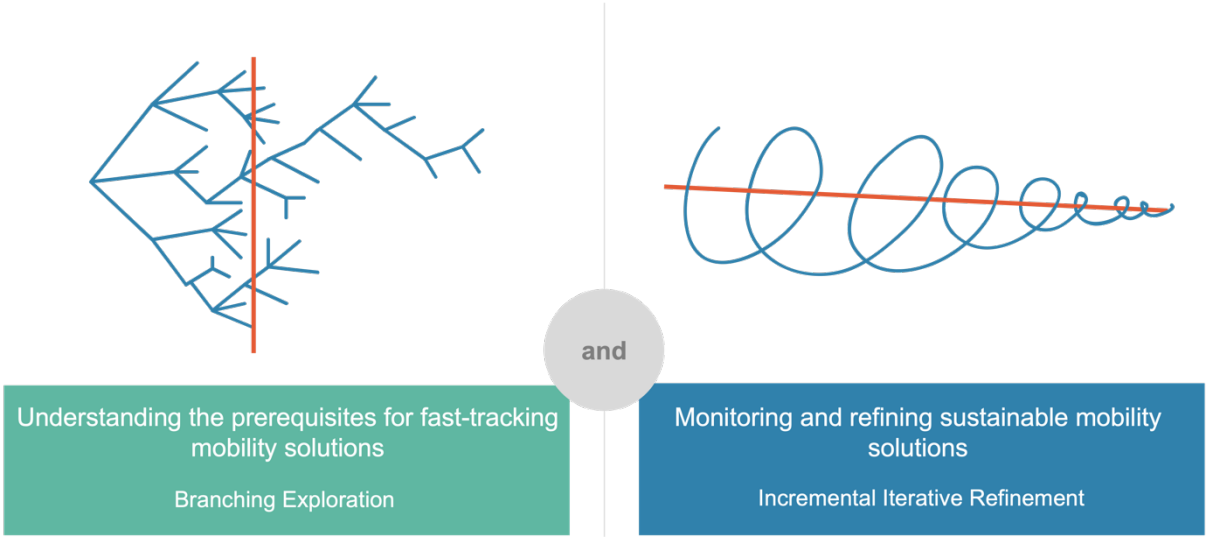

Figure 2 Fast Track Innovation Performance, Source: EIP own design

These two methods are presented in the chapters 3 and 4 of this document. Both methods are very complex and required extensive attention to develop. The City's innovation profile assessment method required a framework for implementation and has been presented, discussed, and assessed with partners in the project and with the authors of the CREATE guidelines (Professor Laurie Pickup, Vectos/SLR – lead author and Professor Peter Jones, UCL – the coordinator and initiator of the CREATE concept). The concept and the method are explained in chapter 3 in this document.

The assessment method based on KPIs addresses the main expectations of the project in building capacity in the cities involved in the project. These expectations defined as impacts of the project are clearly addressed in chapter 4 of this document. Moreover, examples of how the monitoring activities will be implemented will be also presented in the Annexes to this document.

Section 2: Fast Track Approach for Assessing Performance Innovation

2.1 Innovation Background

What is innovation?

Innovation is a process that leads to an outcome: this outcome is, by definition, novel in the sense that it is an object or a way of doing that previously did not exist[2]. This very general definition begs many questions. Who innovates? What particular processes lead to innovation? How is an innovation recognised and measured? What is the purpose of innovation?

The real challenge in innovation is not the invention – basically, coming up with good ideas - but the implementation of these ideas, either from technical point of view, or social-economic expectations, etc. The innovation interactive - both the technology push and the demand pull need to be mobilized. Innovation is more than simply coming up with good ideas; it is the process of growing these ideas into practical use. Definitions of innovation may vary in their wording, but all stress their need to complete the development and exploitation aspects of new knowledge, not just its invention. If we understand only a part of the innovation process, then the behaviours we use in managing it also likely to be only partially helpful even if the process is well intended or executed. Innovation is often confused with invention, but the latter is only the first step in a long process of bringing a good idea to widespread and effective use.

Why innovation matters?

Innovation is driven by the ability to see connections, to spot opportunities and to take advantage of them. Innovation is not only about new products and services but also about new ways observing the established and mature ones. Of course, technology often plays a key role in enabling new options. However, there is scope for improvement of an old product often using old technologies in new ways. Innovation is not confined to manufactured products, usually there is a huge growth in innovation seen in services such as mobility. Usually, public services may not generate profits, but they do affect the quality of life for millions of people. Bright ideas well implemented can lead to valued new services and the efficient delivery of the existing ones at the time on when pressure or national funds is becoming even tighter. New ideas have the potential to change the quality of life and the available opportunities for people. There is also plenty of scope for innovation and entrepreneurship in mobility sector. In general, the most successful organizations have in common the way they have invested in the innovation. Whilst competitive advantage can come from size or possession of assets the pattern is increasingly coming to favour those organizations which can mobilize knowledge technology, technological skills and experience to create novelty in their offerings (products and services) and in the ways in which they create and deliver those offers.

[2] Godin, B. (2008). Innovation: The history of a category. Project on the intellectual history of innovation.

Innovation matters, not only at the level of the individual local authority or company but increasingly to boost the national economic growth. Virtually, all the economic growth that has occurred since the 18th century is ultimately attributable to innovation[3].

Innovation is becoming the major building block for certain national economic policies. Because of this there is a growth in developing sets of policy measures designed to encourage and nurture innovation at local, regional, and national level. There is also an increased hidden innovation which means those innovation activities that are not reflected in traditional indicators, such as: investments in formal R&D or patents. Hidden innovation it's arguably increasing especially in services. Four types of hidden innovation could be mentioned:

- Innovation that it is identical or like activities that are measured by traditional indicators, but which is excluded from measurement
- Innovation without a major scientific and technological basis, such as innovation in organizational forms or business models
- Innovation created from the novel combination over existing technologies and processes
- Locally developed, small scale innovation that take place under the radar, not only of traditionally indicators but often also of many of the organizations and individuals working in the sector.

Innovation contributes in several ways to the development of the mobility sector. Research evidence suggests that there is a strong correlation between sector performance and new products. New mobility products and services could capture and retain mode share; they have the potential to obtain an increased interest. In the case of established mobility products, their mode share growth doesn't come only from lower prices but also from a variety of non-price factors such as: design, customization, quality, and price. In the world of shortening product life cycles, being able to address the mobility needs with improved versions of the existing offer is increasingly important. Competing in time reflects a growing pressure on local authorities not only to develop and implement sustainable mobility strategies, but to do it faster than car industry, for example. Automotive industry needs few years to develop certain components of a car and promote it as a new product that attracts the interest of their customers. How long does a local authority have to promote a new mobility product or service?

At the same time new mobility product development is an important capability because the environment is constantly changing in the social economic field - in what people believe, expect, want, and earn - create opportunities and constraints. Policies may open new pathways or close down others; for example, increasing the requirements for environmentally friendly products. Local authorities need the ability to respond with new, innovative sustainable mobility products and services. Whilst new mobility products and services are often seen as the cutting edge of innovation, the process innovation plays an important, strategic role. Being able to offer new mobility products or services it is a powerful source of advantage in attracting new revenues to the city, but mainly to provide a high quality of life for the cities' residents, visitors and tourists. Smaller cities may have an advantage in implementing innovation in

[3] Baumol, W. (2002) The Free-market Innovation Machine: Analysing the Growth Miracle of Capitalism

mobility because the way they function could allow for a better management of innovation (shorter cycle from the idea to deployment).

With the rise of the Internet, the scope for mobility service innovation has grown enormously. The challenge the Internet poses is not only for major urban areas, but also for rural areas. Of course, not everyone has access to Internet to shop online their mobility services or products, therefore there is an important aspect to be considered in developing Internet based solutions.

Fast Track intends to use innovation as the process of turning ideas into reality and capturing value from them.

2.2 Fast Track Approach for assessing the innovation performance

As previously explained, the project ambitious programme for capacity building is intensive, designed for a very short period of time. However, the expected impact is on long term, mainly to address the sustainable mobility vision of the city and the long-term vision for carbon neutrality.

The two types of methods of exploration that Fast Track uses to understand how the project supports the 24 cities part of the project will address how the long-term goals are integral part of the process of capacity building process. There is a strong link between the user needs assessment that has been conducted at the beginning of the project and the structure of the capacity building programme. Moreover, the evidence base and the external expert support mechanisms are rooted in the needs and interests expressed by the local authorities participating the project. The collaboration between the project partners and the cities is designed in four knowledge clusters:

- **Cluster 1** – Urban Logistics
- **Cluster 2** – Active Mobility
- **Cluster 3** – Integrated public transport systems
- **Cluster 4** – Data management

Each of these clusters are led by an Ambassador City supported by one of the project partners with expertise in the area. The cluster leaders have discussions with the members of their clusters and based on the expressed needs and interests develop a series of activities to boost the knowledge level and to facilitate the access to new, external expertise for their interests. In the diagram 3 below, the Innovation Performance Approach in Fast Track is illustrated; the project focus on providing evidence, building capacity and support the innovation implementation is clearly shown.

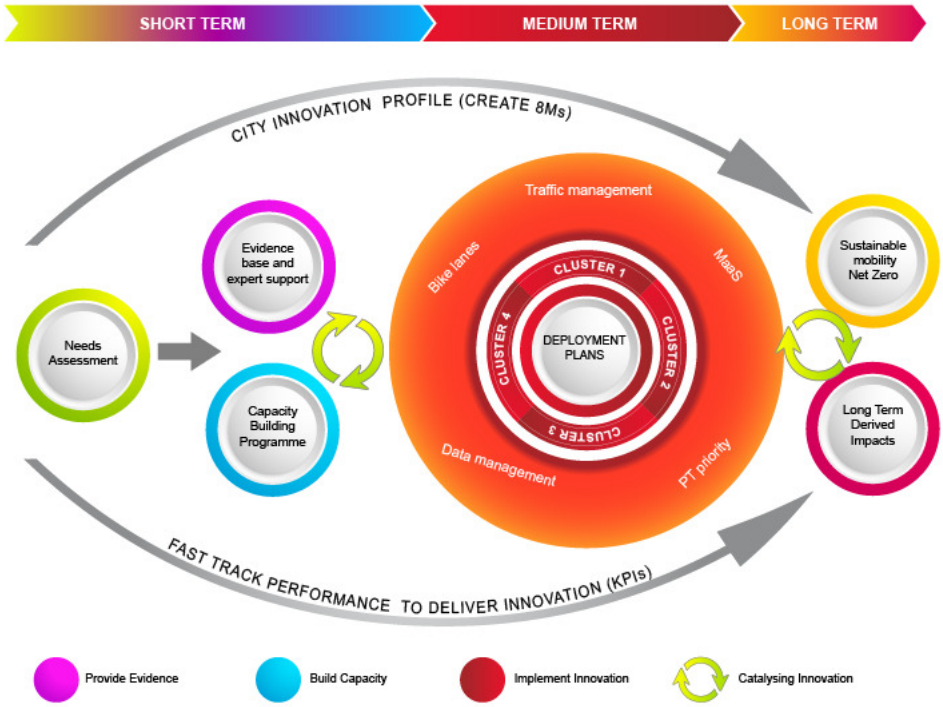

Figure 3 Fast Track Performance Assessment, Source: EIP own design

The Fast Track programme for capacity building will address those challenges that cities face to reach in a short period the carbon neutrality. The success of the programme may have long term impact that cannot be measured throughout the project lifetime. Usually the change in the mindset (either political, professional or of the end-users) requires time, sometimes generations. A technology is not immediately recognised as important – sometimes cities are reacting to “the push” of the industry to create new rules and regulations in tacking up that technology. Equally, a very well-established process in a city authority may not be changed easily; redesigning new administrative structures for tackling challenges may require time, especially in those organisations that are not used to address a challenge in a timely manner.

Despite these observations from many cities across Europe, in the group of the cities involved in the project there are many cities that have an “agile” way to work; the creation of multidisciplinary teams, working in partnerships (either with private sector or with academia, etc) and the ability to upscale tests or small-scale projects being only few of the advantages that will be shared with their peers. The major expectation of the Fast Track Innovation Performance approach is to identify those particular characteristics in the city innovation profiles that will support cities to understand their own values and strengths that will contribute to deploy more timely the sustainable mobility goals. Equally, by understanding how the project performed in preparing new “seeds” for future change in the cities that are part of the project will provide valuable insights for other cities of how to understand their own innovation profile and the ways to action to achieve high level policies.

Section 3 Understanding and monitoring the innovation profile of the Fast-Track cities

Cities have core values that determine the way they tackle the future. Sometimes is just rolling the same process over and over again without being interested in the actual effect (process inertia). At the same time, there are cities that understand their own DNA, the way they operate; equally, by understanding their past, they are prepared with what is needed to tackle the unknowns of the future.

3.1 Understanding the past, tackling the future – CREATE approach

In 2015, European Commission funded CREATE project that tried to understand transport policy development; what are the factors that may determine a city to change the core policy for sustainability and healthy living, by reducing the dependency on the car. CREATE brought together ten large and medium sized cities from across Europe, Accession countries and MENA. The project did its best to help these cities to understand their past, what determined their present and what may influence their future. The cities worked very well together analising with the expert partners their own data, but also collected additional knowledge by working with the other city peers. The CREATE approach was very simple – by looking and understanding the past and its lessons you may understand how to better position for the future challenges. The last 50 years and more have been determined by an explosion of car ownership and usage. This trend has been manifested later in Eastern Europe, only after 1989. Despite this trend, there were cities that observed a levelling up or even a decrease in this trend; naturally, the basic question is: how did they achieve this? CREATE identified three trends in car use, three types of policy packages and three type of mindsets. Other trends have been also identified, but for the purpose of this document we refer to only these. These trends influenced the way cities developed their policies to tackle the car ownership. CREATE identified three stages in the transport evolution. These stages correspond to the three main policies perspective implemented in the cities:

1. **Stage 1** – a car-oriented city
2. **Stage 2** – a sustainable mobility city
3. **Stage 3** – a city of places

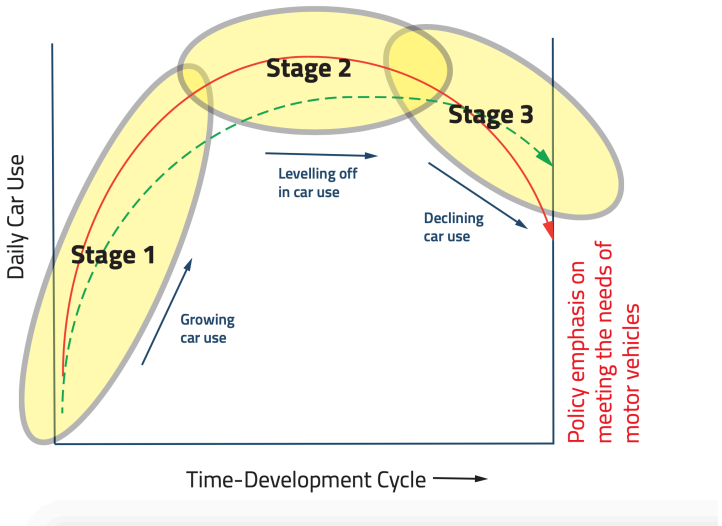

Figure 4 CREATE Policy Evolution, Source: Peter Jones, H2020 CREATE

The CREATE guidelines[4] are compiled in a very comprehensive document that provides a novel way to look at the city performance to implement transport policies. The author and the contributors provide a through overview of the factors that have influenced the evolution of urban transport policy; moreover, they provide a framework for cities that are planning change – how to develop transport visions, policies, strategies and measures. This framework is a collection of practical information that has been developed as a series of eight "M"s:

1. ***Mood*** – public, political and professional acceptability – the deeper values that are driving how these groups behave
2. ***Motivation*** – trigger for change, such as deterioration in traffic conditions, COVID 19 – can be sudden and evolving
3. ***Mass*** – capacity building deepens and broaden the skills base – does the city have the cross-sectoral/cross-disciplinary skills in the house? If they do not, what do they do?
4. ***Momentum*** – building on success- pilots and policy windows. This represents acceleration – what factors speed-up and then maintain the momentum of change. For example: keeping an issue in the eye of a politician – events, pressure groups, lobby groups or interna; city committees to keep the measure alive
5. ***Mechanisms*** – engagement, enforcement, administrative, delivery; the cooperation and the coordination between different governance levels
6. ***Measures*** – public transport and active mobility investments reallocate the road space – three level policies, strategies and measures themselves.
7. ***Methods*** – moving from "predict and provide" policy to "vision and validate" policy. This means a clear definition of what a city would like to happen to co-create the pathway to achieve it
8. ***Money*** – funding and financing mechanisms in cities, the role of public and private sector, innovative ways to combine different sources of money.

This collection of insights provides cities with guidance of the changes that they may need to achieve to reach their high-level established goals. Although very clear and insightful, these guidelines do not offer a clear assessment base that a city could use to benchmark its ability to change and innovate. The lead author of this document – EIP – has been the main contributor to these CREATE guidelines and has developed within the first months of Fast Track a new framework to assess the cities innovation profile (see diagram 5). This approach has been discussed with partners and cities involved in the project; and the interest received in this concept determined the actual level of development of the framework.

The underlying DNA of a city makes easier or harder the implementation of the innovation - difficulty in making strategic decisions in certain countries, very relaxed policy making culture in certain countries, impact of the communism legacy influence in Eastern countries, etc. This underlying DNA of a city may limit its ability to change their innovation profile. Cities with similar profile may start in the same way, but the nature of their DNA would influence the process. This is actually explained through understanding the importance of a certain "M" – either mood, or motivation etc.

[4] CREATE Guidelines – https://www.mobilitatedurabila.ro/create

A city's DNA is a sum of deeper values and processes developed slowly in time; they are very much influenced by the local culture (both professional and personal), traditions etc. Of course, a city's DNA is very much influenced by the national policies, the city's position in the constellation of important cities in that country. Moreover, the city's ability to absorb new knowledge and innovation – beyond their own understanding boundaries – it is an important factor for determining a city's DNA. Lastly, very importantly, the political environment of the city and its legacy determines types of priorities and strategic decision to get to a certain vision.

These factors have been considered when defining the framework of assessing a city's innovation profile.

3.2 City Innovation Profile – framework for assessment

It is very important to understand the contribution of each of the "Ms" in describing the city's profile for innovation. The structure of each "M" is a sum of "indicators" that could be assessed to understand that particular "M". These indicators could be used to assess only one M or many others. As you can see in the figure 5 below, an indicator such as: Staff Skills or Governance or Policy and Planning Environment could be used in the analysis of more than one M. In the constellation of the indicators that are combined to assess a certain M, their importance may be different. As previously mentioned, although the assessment of that indicator may not change, its importance in a structure of a M may be different than in another M. For example, the Staff Skills may be very important for "Motivation", however, in "Methods" its importance is lower. The algorithm is set to recognise this importance, depending on the structure of a "M".

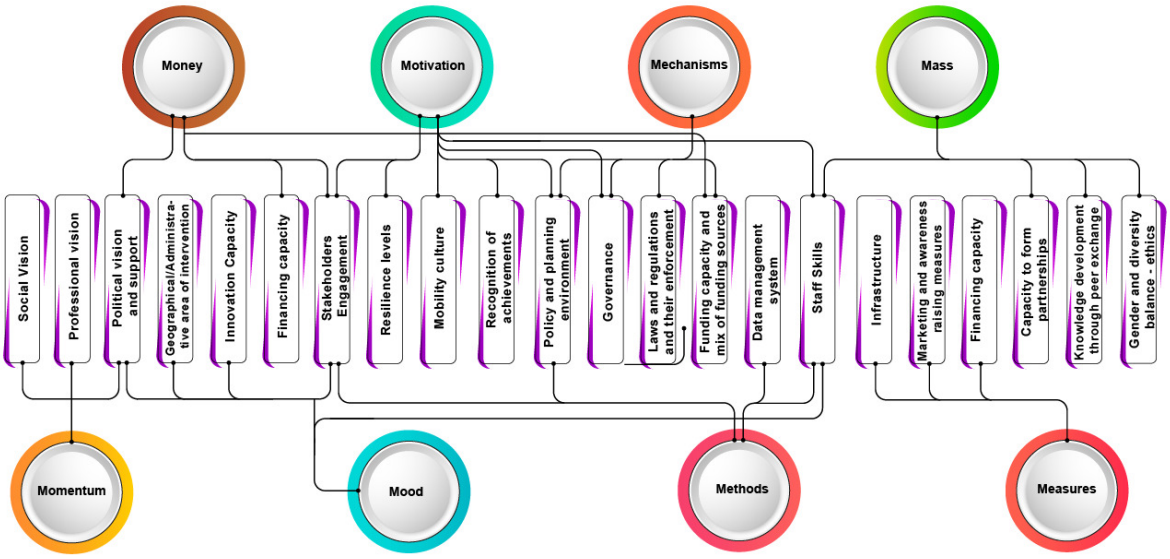

Figure 5 Fast Track City Innovation Framework, Source: EIP own design

This framework for city innovation profile has been developed to fill in the gap in the evaluation methods to understand a city's performance. The evaluation frameworks are usually quantitative, and they are based on very well determined set of quantitative indicators. While this is a correct approach in understanding the dimension and the performance of a particular

city system, the actual factors that may influence some of the parameters observed may remain unknown or very little discussed. Usually, through process evaluation (as a qualitative method of evaluation), sometimes these factors of influence may be observed. However, they are not structured, or presented in such a way to allow a city authority to take decision either to change their own processes or to invest in new approaches that allows them to better deploy innovative actions. The framework for assessing the city innovation profile based on CREATE eight Ms intends to allow cities and researchers to better understand those particular factors that may be barriers for cities in their development and how these barriers could be eliminated or transformed in such a way to become opportunities for future actions that allow them to reach their high-level vision.

The framework has been used in understanding the Fast Track cities needs and they have been used to illustrate the “fingerprint” of a city. This is work done in corelation with the activities at the outset of the project (Workpackage 1 activities, led by Vectos/SLR). An example of how a city fingerprint has been illustrated based on the city innovation profile, is presented in the figure 6, below.

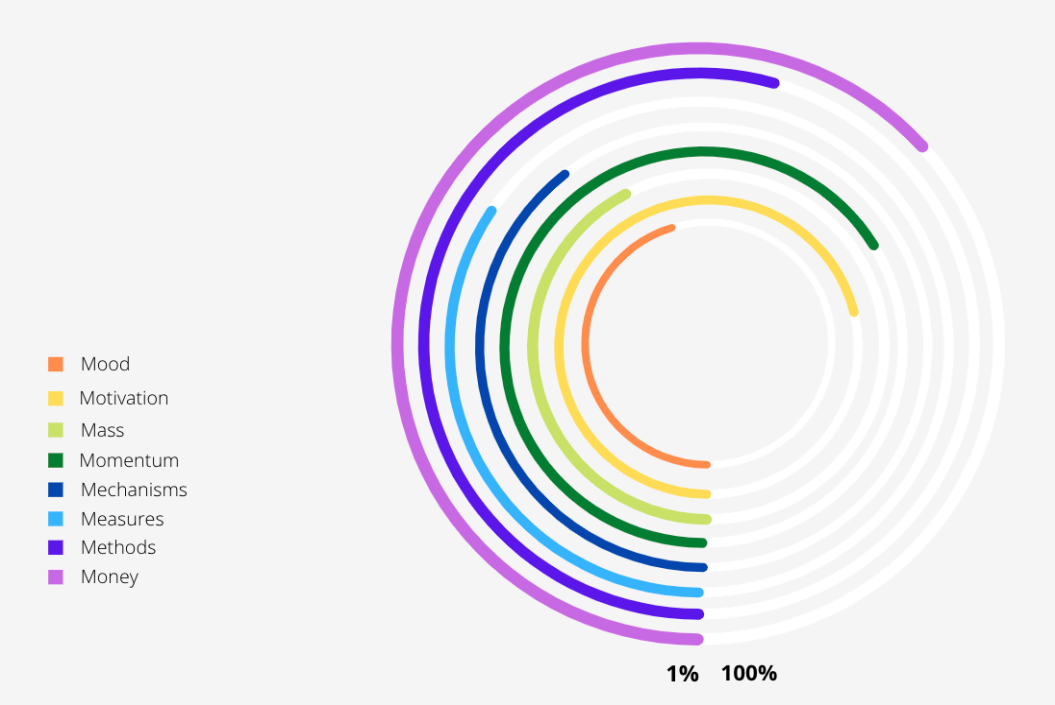

Figure 6 Example of how a "fingerprint" is illustrated in Fast Track using the City Innovation Framework, Source: EIP own design

The city innovation profile will be observed two more times throughout the project (months 13 and 23 of the project). This approach will allow to complement the observation of the project performance observed through the set of innovation knowledge key performance indicators (see chapter 4 in this document and relevant annexes). Moreover, this approach will be useful in fine tune the assessment framework and provide a strong legacy to future cities interested in understating their innovation profile. In the following part of the section, an overview of the importance and the structure of each of the Ms is presented to facilitate the understanding of the concept.

3.3 The structure of the component parts of the assessment framework for a city's innovation profile

3.3.1 Mood

The "Mood" is one of the most difficult M to explain, as the audience's first question usually is "how do you measure "the mood"?". The Mood is characterised by two dimensions (i) the mind-set that drives gradual evolution and the "normal" way the things are done and (ii) the state of mind that seeks to disrupt the "normality" and create a new way of doing things, defining a new mind-set[5]. In the diagram 7 which shows the evolution of the transport policy, two changes in mood can be observed – the change from stage 1 to stage 2 and from stage 2 to stage 3 (see chapter 3.1). The mood to develop a new, sustainable mobility system and later the mood changed again towards a more liveable city. This mood is not obtained equally in all cities nor professionals, politicians or public could align their mind-set to achieve that status. However, few factors could be observed that created that mood for change:

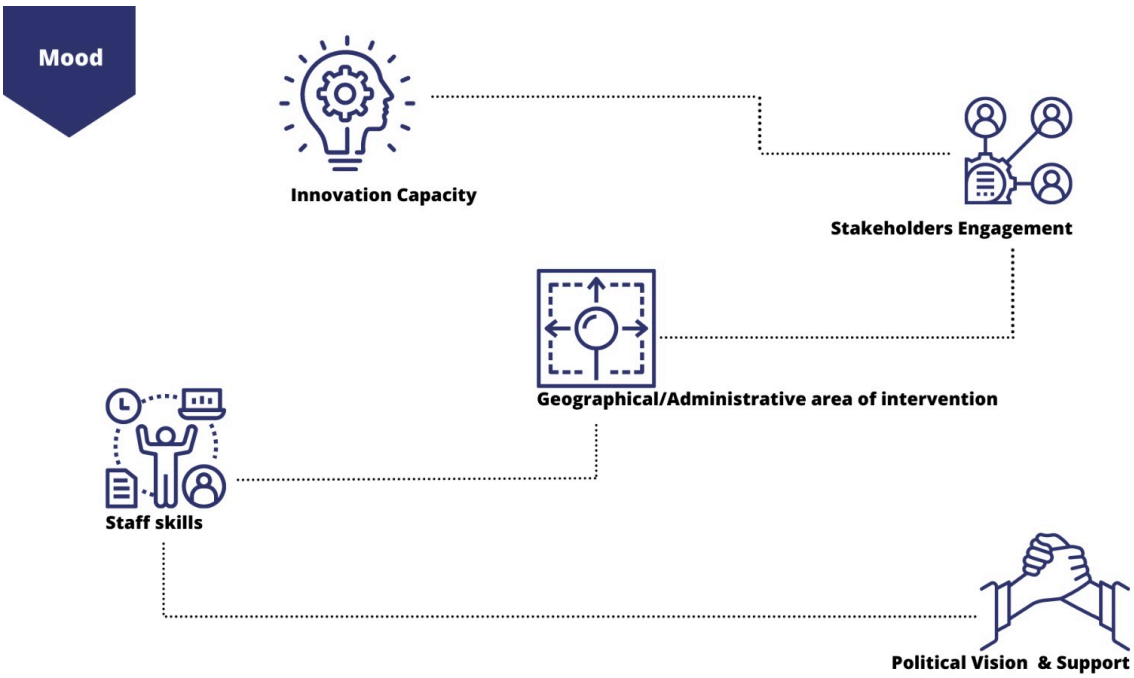

Figure 7 Mood indicators, Source: EIP own design

- **Innovation capacity** – in the period new ideas and technologies have been generated; the appetite for knowledge was high; more information became available, mainly through the impact of the internet. This accelerated the innovation capacity, but also the prevalence of resource scarcity etc.
- **Stakeholders' engagement** – it was observed that different organisations discussed more about their mutual concerns and seek for joint solutions; this increased attention

[5] CREATE Guidelines – https://www.mobilitatedurabila.ro/create

to the needs of different stakeholders made a difference in how the planning of the city has been developed

- **Geographical/Administrative area of an intervention** – many transport related interventions concentrated to mainly tackle the congestion in the city centre. Cities agora became unused, they were simply blocked by the cars and their function as places for people disappeared. The pollution, the limited space for developing new projects in city centres, the liveability of the city centres forced local authorities to develop new rules and regulations that "pushed" cars away from the city centre. In time, the intervention area expanded towards the city's administrative boundaries. Nowadays, we observe the importance that cities give to the link with the surrounding rural areas. New planning policies include the links with these areas in most of the European cities.
- **Staff skills** – very much linked with the professional awareness of new ways and methods that could be used because of the new technological development, but also the awareness in limitation of understanding the users' needs. This opened the possibility for new type of disciplines to be represented in a team structure: from solely transport engineers and economists, city authorities invested in developing teams with urban planners, marketing specialists, communication experts etc. This approach allows them to better address the needs of the users, but also to develop new forms of partnerships for improving the innovation deployment in the city.
- **Political vision and support** – finally, one of the major constituent indicators of the Mood. The politicians' role to develop a long-term vision is more needed nowadays than never. Moreover, this vision should incorporate the needs and expectations of all members of the society, it needs to be inclusive and to address all high-level local, national, and global goals. Besides the definition of these goals, the politicians need to prove their leadership, to navigate smoothly through difficult times with either limited resources or unexpected barriers. Their role and support in changing the "mood" of the society is very important.

In conclusion, the Mood is one of the most important components of the assessment tool. An overview of the perceived state of the mood in the Fast Track cities could be observed in the diagram 8. One caveat in this assessment: those that have provided the information about a city may not have been representative for how the city should be understood as a system; additionally, there may be a biased observation involved in this assessment that could be corrected in the following stages of assessment. Another caveat is that sometimes the same score in two different cities it doesn't mean that they have the same approach; each individual indicator may differ from a city to another, despite the final score. Besides all of these, in all cities a quite high level of interest in changing the mood is observed – in some more intense than in others.

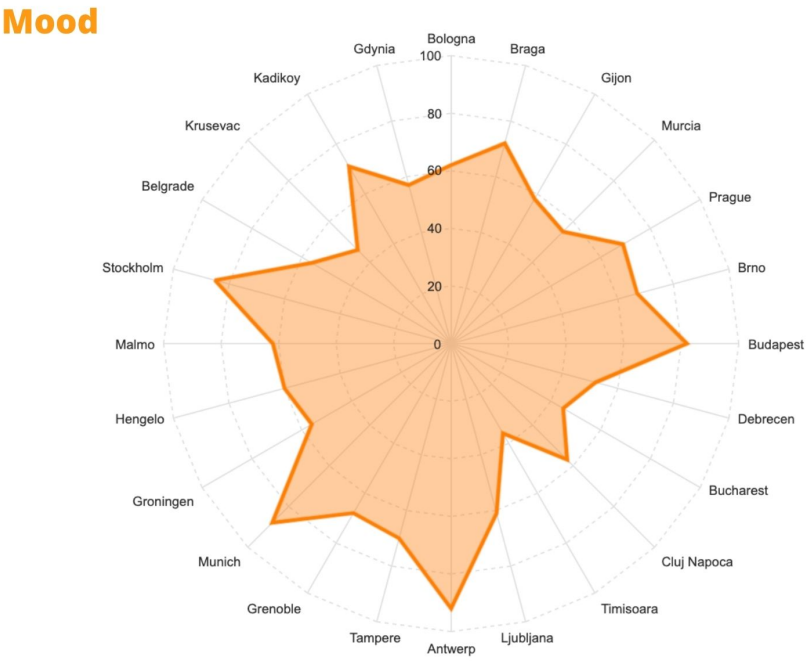

Figure 8 Perceived level for Mood for Fast Track Cities, Source: EIP own design

3.3.2 Motivation

This explains what motivated a city to change, to aspire to become a better city, to support sustainable mobility. The motivation is the energy to change[6]; it sometimes could be positive, sometimes it could be negative. The actual change of a city could be influenced by the mood but cannot be done without motivation. Those cities that achieved the high-level of liveability nurtured an environment where innovation could be used to determine the change. The factors that contribute to this environment are illustrated in the figure 9 below. Their individual contribution in the assessment of the motivation is very important, as it offers an image of what drives a city's ambition for change:

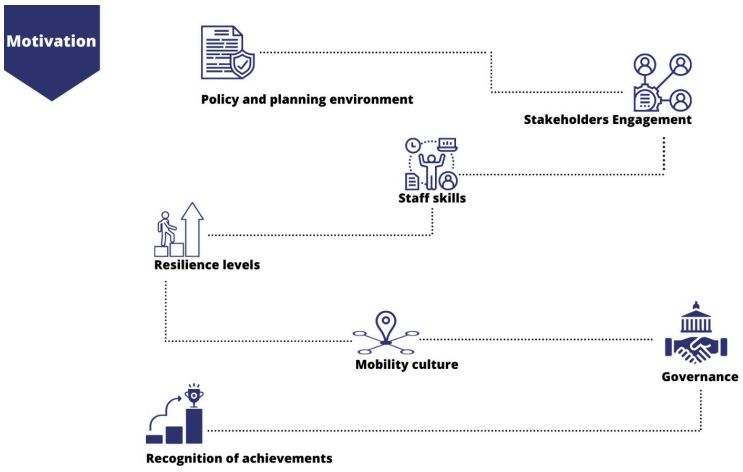

Figure 9 Motivation Indicators, Source: EIP own design

[6] CREATE Guidelines, Chapter 6.3 https://www.mobilitatedurabila.ro/create

- **Policy and planning environment** – having a strong political vision for the city creates the determination to have the adequate policy and planning instruments to implement it. During the last 25 – 30 years, the planning environment changed; from strictly road development to street as a place development. This approach needed new planning basis, the integration of traditional transport engineering planning methods with urban development principles, also considering the citizens' views and expectations for the place they live. This approach has been a pillar to support the already created vision, but also to adapt the city vision to new future challenges.
- **Stakeholders' engagement** – as in the case of Mood, the collaboration and interaction with stakeholders is seen as very important to preserve a high level of motivation. If all stakeholders are driven by the same positive energy, the motivation level is high, and the change could be made possible in an accelerated way. It is not a factor that has been considered in many European countries, especially in those that were part of the communist bloc. The legacy of that period, it is very much seen in the motivation levels in these countries. Their cities face problems in discussing with stakeholders and aligning their views; in certain cases, their reticence in engaging with stakeholders has been referred as "fear to talk to them". Certain cities, however, used this lack of knowledge in their favour and tried to engage and involve the stakeholders in the decision-making process. The accelerated effect of the solution deployed is clear – the acceptability level being very high, as the stakeholders have been part of the decision-process.
- **Staff skills** – as in the case of mood, this is a very important indicator. Assessing the skills needed in the team and investing in creating multi-disciplinary teams helped cities. Transport professionals become more aware about the social impact of their project; the urban sprawl also forced them to integrate transport and land-use planning. The development of the society should determine cities to explore ways in which they can develop an array of areas of expertise needed for planning their modern transport systems. By recognising the skills needed, a city would have important chance to recruit or use in-house resources to complement the existing, more traditional team structure.
- **Resilience level** – is all about how to use negative energy or situations. Sometimes cities use different reactions of the population as the motivation to change. This is more a reactive response, rather than a pro-active one. However, by engaging with the stakeholders (see above), they improved the levels of ownership of the ideas and the responsibilities during the process of policy implementation. This could be considered a good example of turning negative energy in a positive contribution to the success at the city level. Another important aspect that is related to the resilience is in fact the capacity of a city to mobilise all the resources to face an unexpected[7] threat. Covid-19 pandemic offered an array of examples of how many cities have showed their resilience in the last couple of years. They used the negative energy of the pandemic in creating new motivation for change; initially considered only temporary through the highest moments of the pandemic, it was proved that in certain situations these

[7] Minnesota Innovation Research Program (Van de Ven et al. 1999)

temporary solutions could become the norm. Nevertheless, the cities' ability to deal with unknown/unexpected situations is an important factor that allows to understand their motivation to policy change towards sustainable mobility.

- **Mobility culture** – there are cities that have been resistant to the increase of car ownership and usage. Their intrinsic mobility culture traits motivated them to resist to this increased type of mobility. The cities built on these traits to motivate the policy change towards sustainable mobility. In cities with long tradition to use sustainable modes such as public transport or active mobility, the motivation to return to this way to travel is higher. In certain cities, the sustainable mobility culture should be developed, motivated with continuous awareness raising actions.
- **Governance** – the structure of a city and the way it operates may influence very much the motivation for change. The changes in governance structure may influence the motivation for achieving sustainable mobility. Moreover, the perceived fragmentation of the local and regional structures influences the motivation to work and decide together the local/regional policies. Stakeholders' engagement is one of the most powerful instruments to keep open the relationships between different governing structures and nurture the dialogue that will motivate the change.
- **Recognition of the achievements** – one of the important aspects that contributes to a city's motivation is the acknowledgement of their efforts for sustainability. This recognition may influence the way a city could push furthermore the policies for change. A city's recognition for its achievements could also be motivating for other similar cities in the region, country or even world; it is important to understand their efforts and what were those particular factors that motivated them to achieve change – giving full recognition for these efforts is in every party's benefit: city authority, local stakeholders, country representatives etc.

In conclusion, the motivation for change towards sustainable mobility should be stimulated and nurtured. Cities should understand which are the factors that influence their positive motivation and how they can create a framework to preserve this positive energy for change. In the diagram below, the motivation levels in Fast Track cities are presented. It is easy to observe that the motivation is high in many of the cities, while in some of them certain factors such as mobility culture, staff skills or even the recognition of their own efforts may be an influence of the perceived level of motivation.

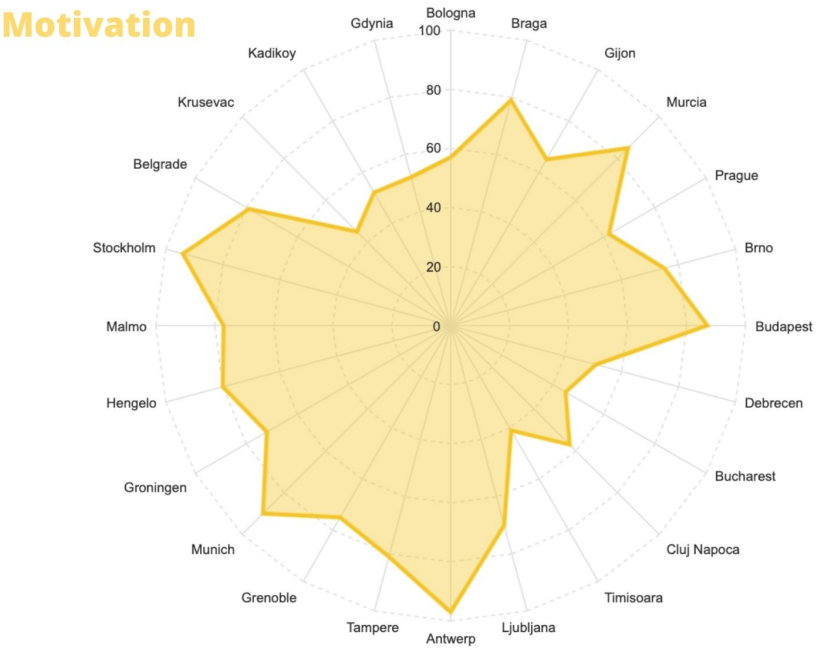

Figure 10 Perceived level for Motivation for Fast Track Cities, Source: EIP own design

3.3.3 Mass

To achieve sustainable mobility change, cities need to have a critical mass of experience and knowledge. The creation of multidisciplinary teams, as described in Mood and Motivation, it is not an easy task. Cities may have budget for the implementation of certain measures, but not available budget to recruit more people, especially from disciplines that are not traditionally linked with sustainable mobility. In the figure 11 the factors analised within Mass are presented; they are:

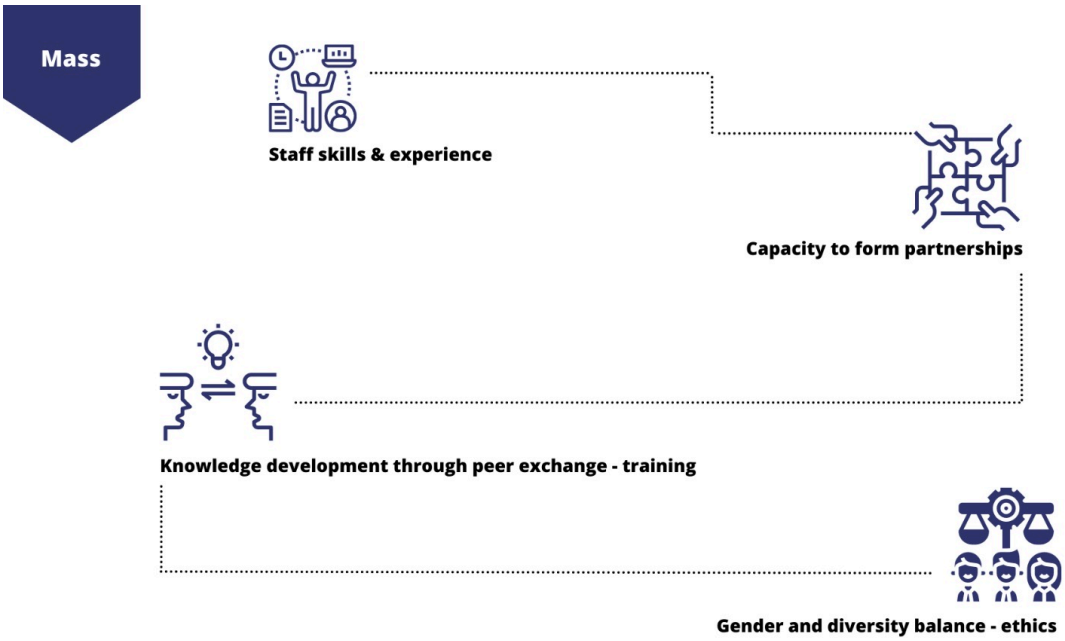

Figure 11 Mass indicators, Source: EIP own design

- **Staff skills and experience** – as explained already in Mood and Motivation sections, the multidisciplinary teams play an important role for cities interested in deploying innovation. However, this is not something easy to reach. Moreover, in certain situations, a limited budget does not allow for an expansion of the city staff or its structure. This puts additional pressure on the existing staff to deliver or to increase the possibility to develop/acquire new skills. In this situation, many cities will limit their interest, with a negative impact on the implementation of the sustainable mobility strategy at local level. Cities should correctly assess the structure and the dimension of the team that will implement the local sustainable mobility strategy; this should be part of the plan, in fact.
- **Capacity to form partnerships** – because sometimes cities have limited resources, they should have the possibility to create strategic partnerships. The most used one is with the local university, that could easily fill in the gap of skills that a city staff may have. These partnerships with the academic representatives could be developed on a project based, but there is evidence that wider partnerships between city authority, academia and private sector works very well. In certain cities, they formed as called “innovation hub” which role is to understand a particular need, to study which is the best solution to address that need, to choose a technology or to create a process that will address the particular need. The role of each member in the hub is well defined, and each of them have an important contribution; the innovative sustainable mobility solutions are deployed in an accelerated pace when such a structure exists.
- **Knowledge development through peer exchange and training** – this is one of the objectives of the Fast Track. Through projects such this one, cities have the possibility to meet their peers, exchange views, ideas, experiences and

have immediate access to a larger number of experts that otherwise could be difficult to reach. In past research done in all projects involving cities, EIP observed that the most important need expressed and in the same perceived advantage by a city is the knowledge experience and the peer-to-peer exchange. The Fast Track capacity building programme will be a great opportunity for participant cities to develop their knowledge.

- **Gender and diversity balance - ethics** – although not a highly influencing factor in the overall structure of the Mass, it was previously observed that a city that pays attention to gender and diversity balance and ethics has more chance to meet the challenges of creating policies "for all".

In conclusion, the Mass offers an overview of how a city is interested in developing its capacity through developing new skills, creating strategic partnerships, learning from peers and by offering opportunities to all. In the figure 12 below the perceived Mass situation in the Fast Track cities is presented. It is encouraging to see that many cities invested in creating teams that allows them - through structure and dimension - to implement the sustainability goals.

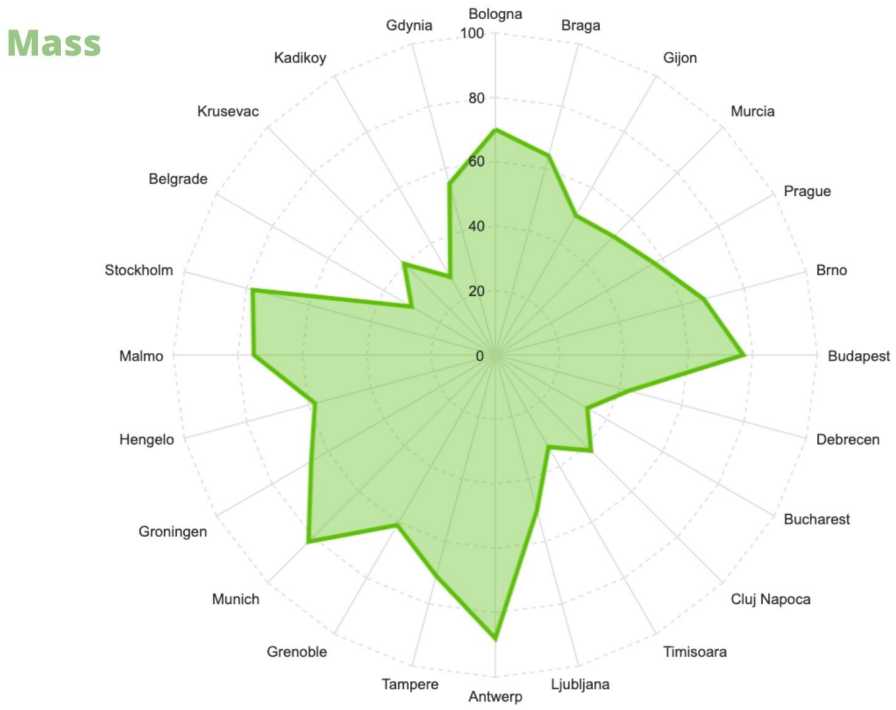

Figure 12 Perceived level for Mass for Fast Track Cities, Source: EIP own design

3.3.4 Momentum

Mood and Motivation are not enough for a city to deploy innovation and sustainable mobility. Momentum is achieved when the factors that have changed the mood and triggered the motivation to implement, work in synergy to sustain the energy for deployment. What does it fuel the situation that has been generated with the adequate mood and by a great motivation? Who are the main influencing factors that facilitate the innovation implementation? For this

assessment framework, three main factors to influence the "momentum" have been considered; they have been observed in past research[8] by authors and partners in this project. As illustrated in figure 13, these factors are:

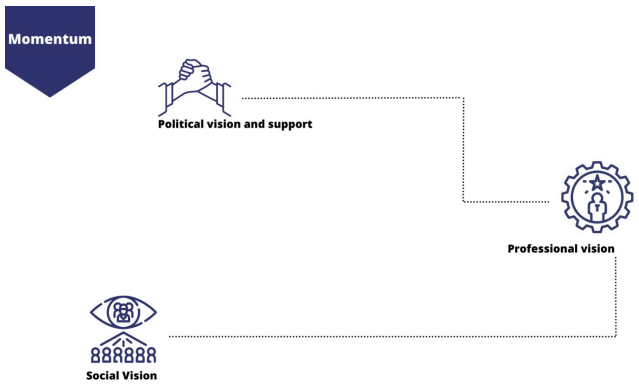

Figure 13 Momentum Indicators, Source: EIP own design

- **Political vision and support** – the creation of a strong vision for sustainability in a city requires a strong political presence, leadership, and acceptance. To have all of this, political parties have a huge responsibility in advancing the right persons for key roles at city level. Moreover, their own political platform at local and national level should be aligned, to support the development of sustainable policies. These goals are difficult to obtain when there is a lot of political instability in a region/country or there is a split views between local and central governments. Long-term commitment of the local politicians together with cross-party consensus for a long-term vision could contribute very much to building the momentum for the implementation of the local ambitious goals.
- **Professional vision** – usually, professional executives from city authorities are driving the change. Their professional review of technologies, products and services that are needed for a modern transport system generates the "mood" for change. Aligning their views with the political vision will be pre-requisites for breakthrough change in the observed mobility patterns.
- **Social vision** – the above views won't be enough if the end-users, the citizens, visitors, and tourists won't accept the proposed mobility policy and system. However, the acceptance won't be obtained, unless the citizens manifest the same level of understanding of the conditions for change.

In conclusion, the Momentum is defined by the alignment of different views and perceptions on the sustainable mobility, mainly of the politicians, the professionals and of the citizens/end-users. This alignment has been observed in certain moments in time; the changing moments in CREATE stages could be an example of an observed momentum. The change from Stage 1 to Stage 2 happened in a momentum when politicians needed to take tough decisions

[8] H2020 MIND-sets project, Deliverable 2.a, **https://www.mobilitatedurabila.ro/_files/ugd/219f91_b14a545bbded4ef1ba6732d06f86c8aa.pdf**

regarding the limited resources available (petrol crises in 70s), congestion and derived pollution in the city centre and the need to increase the quality of life. This coincided with the rise of professional generation that was oriented to achieve sustainability of transport through public transport, better usage of vehicles and of the street space. Lastly the politicians and professionals' views coincided with the citizens' expectations for a better quality of life and increased awareness on sustainability principles.

In the figure 14, an overview of the Fast Track perceived Momentum is presented.

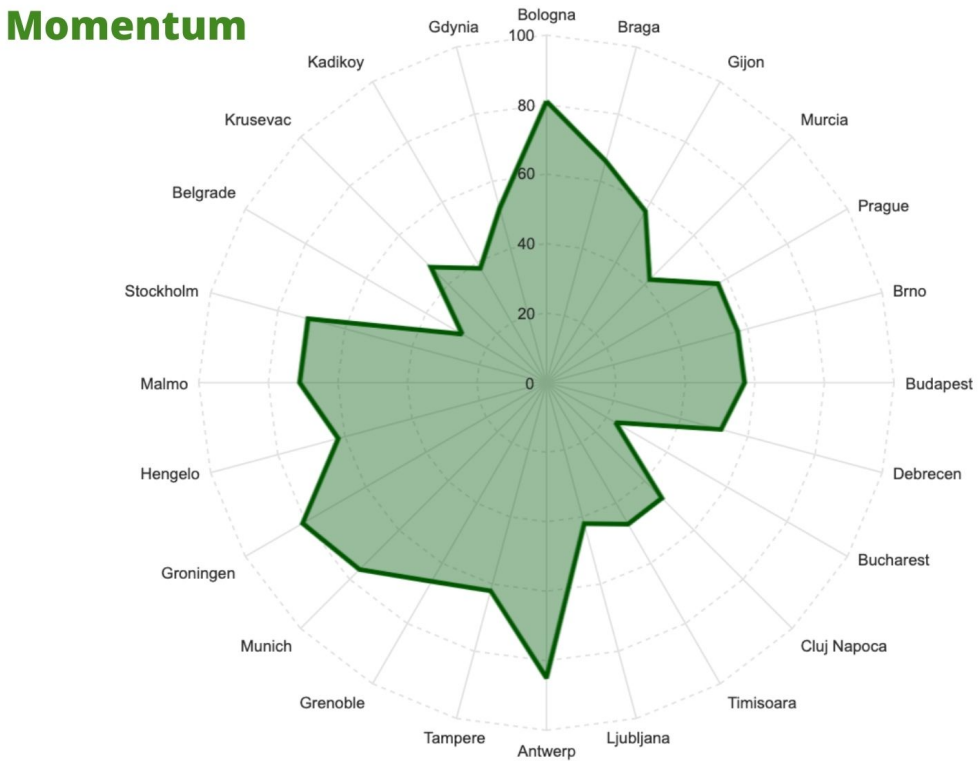

Figure 14 Perceived level for Momentum for Fast Track Cities, Source: EIP own design

3.3.5 Mechanisms

The Mechanisms are defined by the processes established at local level to implement the policies to achieve sustainable mobility. These "Mechanisms" are very complex, and they tend to increase in the complexity with the city dimension and its ambition. Four intrinsic factors that contribute to understanding of the city "Mechanisms" have been observed (see also the figure 15):

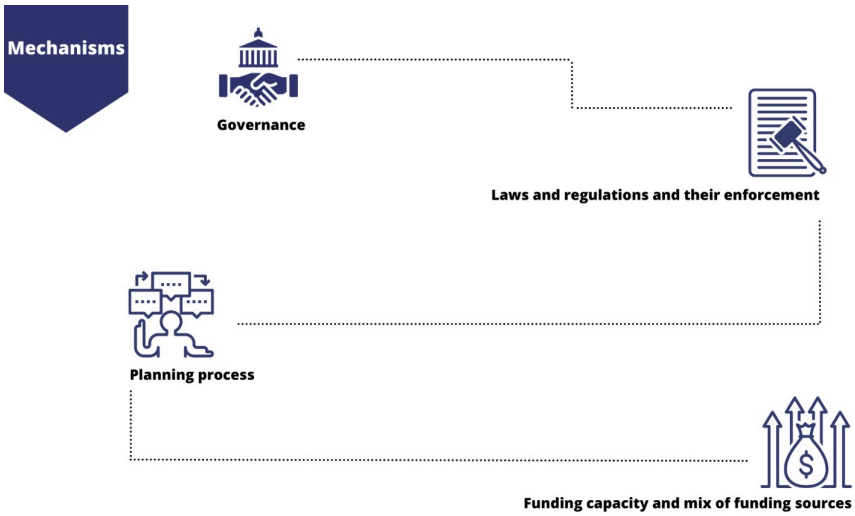

Figure 15 Mechanisms' indicators, Source: EIP own design

- **Governance** – as previously explained, the structure of a city is very important in deploying innovation and achieving sustainability goals. The fragmented governance between different public bodies, and the increased interest in linking the urban and surrounding rural areas, generated the interest in developing new structures for the relations between these structures. Moreover, the relationship between the local administration and the central government is also very important when considering the mechanisms at local level; the creation of different engagement structures that allow representatives from different layers of governance to discuss and participate to the decision-making process. Many cities have developed different forms of participation from simple reunions of members of different sectors to mobility forum, as a reunion of different stakeholders at local (and regional) level to discuss the important decisions for mobility[9]. These forms facilitate the dialogue; and their frequent meetings support keeping the momentum as a perfect mechanism that the city uses to improve the links between different layers of governance.
- **Laws and regulations and their enforcement** – these are mechanisms that support the implementation of different sustainable mobility measures. From local and national laws and regulations to European ones, these "Mechanisms" help cities to deploy change, reduce the dependency on cars and support mass transit and active mobility. They may have different forms, depending on the nature of what they need to "regulate". However, many advanced cities have used them to restrict car access in different areas (parking management policies), and to prioritise public transport and active mobility etc. Successful cities developed new rules and regulations to implement innovative approaches for sustainable mobility. Sometime, national laws do not consider local particularities; therefore, cities should be bold in creating their own rules and regulations adapted to their local conditions and catering for their long-term vision for the city.
- **Planning process** – as previously mentioned, in the recent years a new mobility-planning framework has been encouraged by the European Commission through the

[9] SUMP PLUS – https://sump-plus.eu/methods/stakeholder-engagement

SUMP concept. While this is good in theory, many cities use this strategic document to shed their immediate measures to obtain planned funding. The actual role of a SUMP can be overrated if its real value is not absorbed at real value by cities and used as a proper mechanism to implement sustainable mobility. Moreover, some of the recommendations of the SUMP guidelines are to engage with the local stakeholders, to co-create the measures to be implemented and to continuously evaluate the success of the implementations. Additionally, there are other pressures at local level to generate a SULP, a SEAP, an Environment Plan, etc. All these plans are created in isolation; their creation being inspired by the availability of certain funding sources. While excellent in principle, all these plans create fragmentation, lack of integrated vision at local level. Hence, there are some successful cities that have created high-level umbrella strategies that link all the above plans, and the vision of different sectors. This type of approach will be a very good support mechanism for a city.

- **Funding capacity and mix of funding sources** – a city cannot be ambitious without available funds. The success of implementation resides in a healthy budget. Cities' ability to attract funds is very important; not only to support the implementation of the current and future projects, but also to attract more funding opportunities in the future. The capacity to attract and absorb funds, it is a major quality that a city could manage the implementation of good quality project. Usually, cities have allocated healthy budgets for their plans; however, the diversity of the projects, and their importance puts cities in difficulty to prioritise them. Therefore, the ability to attract other funds, from different sources will reduce the pressure on the city and its team in implementing their local plans. This approach ensured a healthy budget for many cities to deploy sustainable projects.

In conclusion, the set of mechanisms that cities have at their disposal to implement innovation and sustainable mobility is important; the wise usage of these mechanism, the capacity to mix and match, to adapt and to tailor solutions to local needs and dimension it is a major factor of success for cities. As the Figure 16 illustrates, the cities involved in Fast Track have a good set of mechanisms that are using, some more than others. Their participation in the project may contribute to add new approaches to the existing set of mechanisms that they are using.

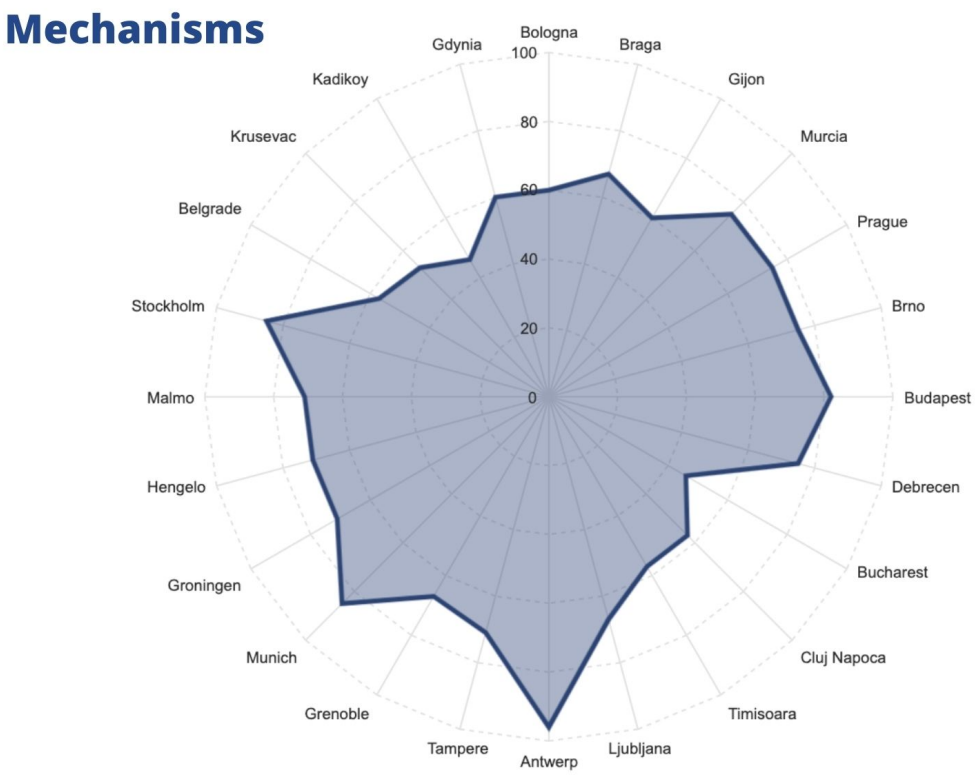

Figure 16 Perceived level for Mechanisms for Fast Track cities, Source: EIP own design

3.3.6 Measures

To achieve the sustainability, cities need to implement a series of measures that are complementary and support each other. The investments in the infrastructure projects – from building roads to creating liveable places – need to be supported with a series of measures that facilitates the smooth implementation and acceptance of the infrastructure-related projects. These measures should also be accompanied with a series of measures that inform and raise the awareness of the end-users. Moreover, ring-fencing the available resources for the projects developed could be a good aspect that facilitates a city to accelerate the process of implementation of their measures. A large scale project for example could be faster integrated if communication and awareness raising measures are implemented in parallel; this approach ensures the understanding of the needs of those affected by the implementation and working together to find the best solutions that will increase the acceptance levels of the project's beneficiaries. In the figure 17 the three main indicators observed to assess how a city implements a measure are presented; they are:

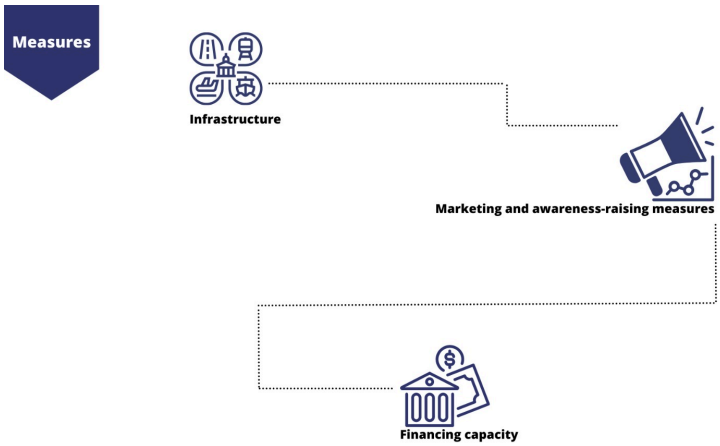

Figure 17 Measures Indicators, Source: EIP own design

- **Infrastructure** – the implementation of the infrastructure projects depends on the needs and vision of a city. Many cities still invest in building a vast network of roads (CREATE stage 1 approach), while many of them invest in the specific infrastructure to prioritise the public transport usage and active mobility. Others already plan to reduce the road space allocated to the cars and increase the space for street activities and active mobility. The goal and structure of infrastructure projects differ nowadays from those developed 30 years ago. The emphasis of these projects is different; even a new road is built, the major question at the beginning of the project is – how to make it more sustainable? The change in the paradigm – from building for cars to building for people – requires a mix of skills and expertise. Moreover, the project managers need to integrate stages in the large projects where information, engagement and communication activities are also implemented (see below). There are cities in Europe that are still developing a large network of road – building for cars – while in others the decision to put effort and resources in new infrastructure projects are co-created together with those affected by the change and with the project's end-users.
- **Marketing and awareness-raising measures** – in general, cities develop marketing and awareness campaigns only when necessary. There is evidence that cities where communication has been at the core of their activities, has been more successful and the acceptance level for the resources spent and the actual disruption caused have been less than in those that didn't communicate. The involvement of all the relevant stakeholders in the discussions and decisions taken at local level is usually a measure that cities do not prioritise. However, the communication is a very powerful measure that cities should aim to include in all their project. From a simple survey or focus group with representatives of the targeted audience to large scale campaigns using different types of media, cities have an array of measures that they could use. Projects that integrate different types of measures, are comprehensive and have higher chance of acceptance and timely implementation.
- **Financing capacity** – this is an important support measure that cities should not overlook. By introducing different schemes, cities may solve a lot of problems caused by the congestion; additionally, these schemes could generate new funds that could further support the implementation of sustainable measures. Cities decided to tackle the congestion with different measures; from parking management schemes to

incentives for public transport or limiting the access in certain areas (usually city centres) only to name a few. The complementarity of the measures, their synergic effect has been a key to success for many cities in Europe. Understanding the type of measures, they have implemented, the ways they implemented them will provide valuable insights to know how to better proceed in the future.

In conclusion, the many transport-related projects involve a mix of the above explained measures. Cities use these types of measure differently; the proportion differs from a city to another; this is easily explained through Motivation and Momentum for example. The capacity of a city to use the right mix of measures may influence the duration in which the high-level goal is achieved. In the figure x, below you can observe how different cities chose to implement different measures. While some of them are still investing in large infrastructure (CREATE stage 1) many of them move towards infrastructure to create places (CREATE Stage 3).

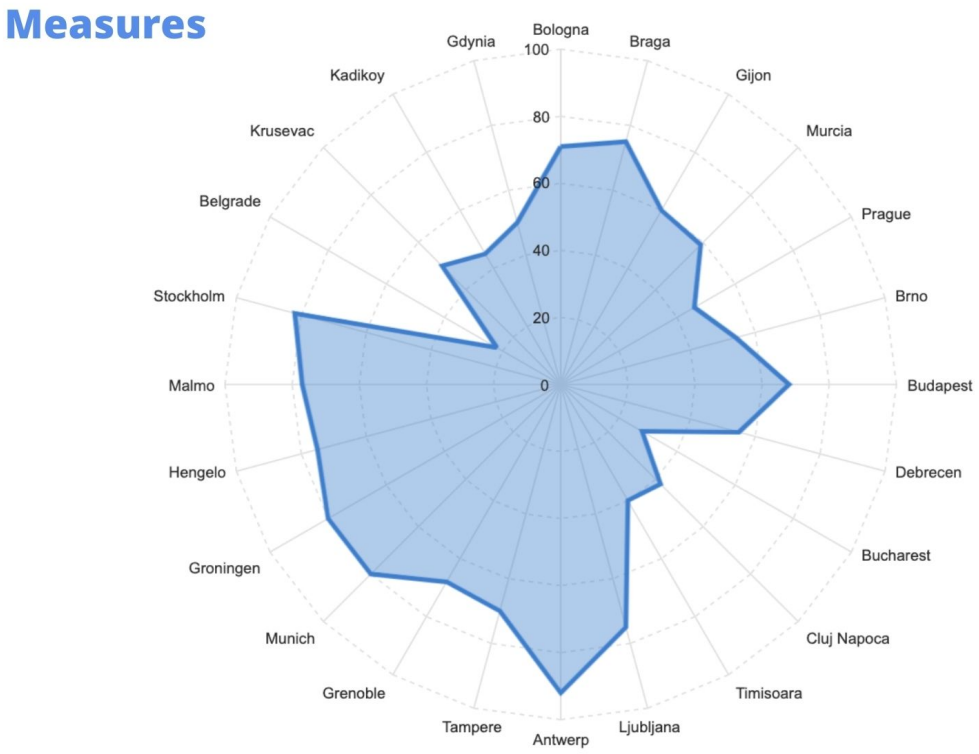

Figure 18 Perceived level for Measures for Fast Track cities, Source: EIP own design

3.3.7 Methods

Cities either have established “methods” to address an issue or they develop a new method, based on the particularities of the issue addressed. These methods could be of different nature, but generally developed methods follow the predominant mind-set for the period. In this respect, the most discussed methods are political, professional, or developed for public or generated by public. These methods are not developed in isolation, therefore studying their particularities, strong corelation with the contextual situation should be made. In the figure 19

below, the main indicators to be considered when understanding the type of methods used by a city to develop innovative strategies to achieve sustainable mobility are presented.

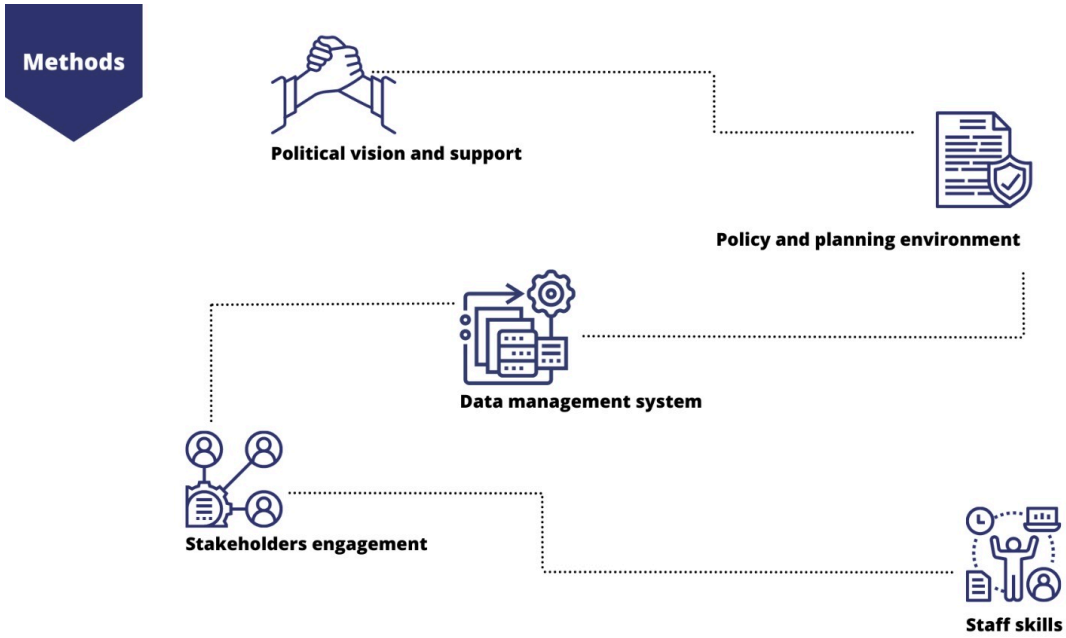

Figure 19 Methods' indicators, Source: EIP own design

- **Political vision and support** – as in the case of other Ms, political vision and support plays an important role in understanding the array of methods that a city employs in their efforts to achieve sustainability. Politicians play a central role in designing, developing the acceptance and the implementation of their city's vision for sustainability. Sometimes, the politicians work is very visible, including the stakeholders and the public in their decisions (policy through consensus – as a method), other times, the politicians seek acceptance from different political representatives at local level (new policy acceptance through consensus – as a method). Most times, depending very much on their own character and their political platform, politicians become the ambassadors of their policies and through their actions they try to accelerate the innovation. This has significant impact in creating acceptance and drive the change.
- **Policy and planning environment** – The urban and transport planning practice developed in the last years; the change in their focus towards the people and their well-being has been the basis of the quality of liveability in the cities, as we perceived today. However, their methods not always kept up with the speed of the change in the vision. Therefore, in certain situations, old methods are used to produce new evidence. Meanwhile, new methods have been developed – technology advancement being a major factor in this regard. The public also has more knowledge and through wide access to information, it has a more informed opinion of what form their expectations should have. The engagement methods have also diversified and been based on established marketing methods. All these methods – old or new – put pressure on city

authorities to develop a system to collect data, understanding and studying it and transform it in meaningful evidence for politicians and decision-makers. Basically, the policy and planning environment transformed from a well-established, academic like environment in a vibrant, co-creative environment where old and new methods are intertwined to better address the current challenges.

- **Data management system** – Data plays a more important role than before. By enlarging the source base for data, the urban and transport policies will become more focused on a particular challenge or problem. Data management and manipulation require a special attention these days; the methods for data collection, the reliability of the data, the safety and security aspects related to the data are only few aspects that are on the agenda of the city administrations.
- **Stakeholders' engagement** – as previously explained, in the case of other Ms, stakeholder engagement is a key method in developing and implementing new policies. New methods for engagement used by city authorities or by the sustainability lobby groups are supporting a faster take-up of sustainability principles, and to develop new policies, tailored for the needs of the community. Through the technology development, the access to wider methods and communities, engagement now plays a local, regional, national, and even a European role; the access to information, the knowledge generated in other places helps different communities to address their own interests and needs. This is now an important aspect of city authorities' activity; developing specific knowledge and skills (or employ them through different forms of partnerships – see above) will support cities to use a larger array of methods to achieve their goals.
- **Staff skills** – as previously explained, the local authorities should develop the methods to work with different type of community groups. Some of the authorities, due to lack of skills or resources are mainly reactive to the change which creates a resistance a protest from the communities they are addressing. However, if they develop and use methods to engage with wider groups of communities and if they encourage the co-creation and discussion of the current issues, it expected to have a more immediate impact. There is also important that local authorities to understand the characteristics of the communities involved in the dialogue or in the co-creation; not all of them have immediate interest or expertise to be part of this dialogue. Cities need to embrace new methods to ensure that all groups are involved in the dialogue, and they become catalysts for innovation and change.

In conclusion, the methods employed by a city to implement sustainability are quite diverse, they are either established practices or new developed ones. The important aspect in understanding the methods used by cities is if they have an impact, they are meaningful, they are accepted and they are efficient. This understanding is very valuable in forming an image about a city's capacity to deploy innovation and to accelerate its take-up. In the figure 20 below, it is evident that some of the Fast Track cities have a larger array of methods or expectations in using different methods to deploy sustainability. In Fast Track, cities will exchange views and experiences in using different methods.

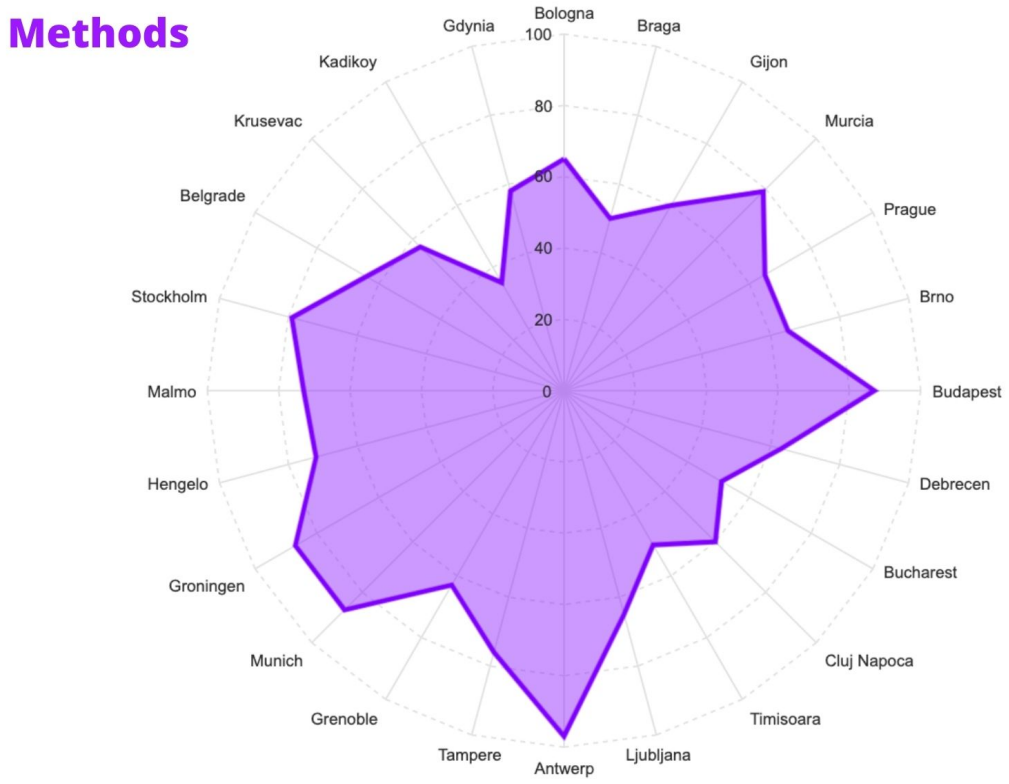

Figure 20 Perceived level for Methods for Fast Track cities, Source: EIP own design

3.3.8 Money

The generic term of “Money” refers to the capacity of a city to secure appropriate funds for developing and implementing sustainable projects. This is a very important activity for a city authority, and it requires a thorough understanding of the budget needed for these projects, but also knowledge of possible funding sources. The financing capacity (the capacity to ensure the adequate funds for the projects) is very important as it combines the understanding of the sources of funding with adequate planning in time and on specific projects of the funds. Therefore, an ambitious, but coherent vision in terms of sustainability makes possible the identification of funding sources and to better plan the funds for the desired projects. In the figure 21, a series of indicators are presented; they facilitate the study of a city’s capacity to secure funding and to plan the finances.

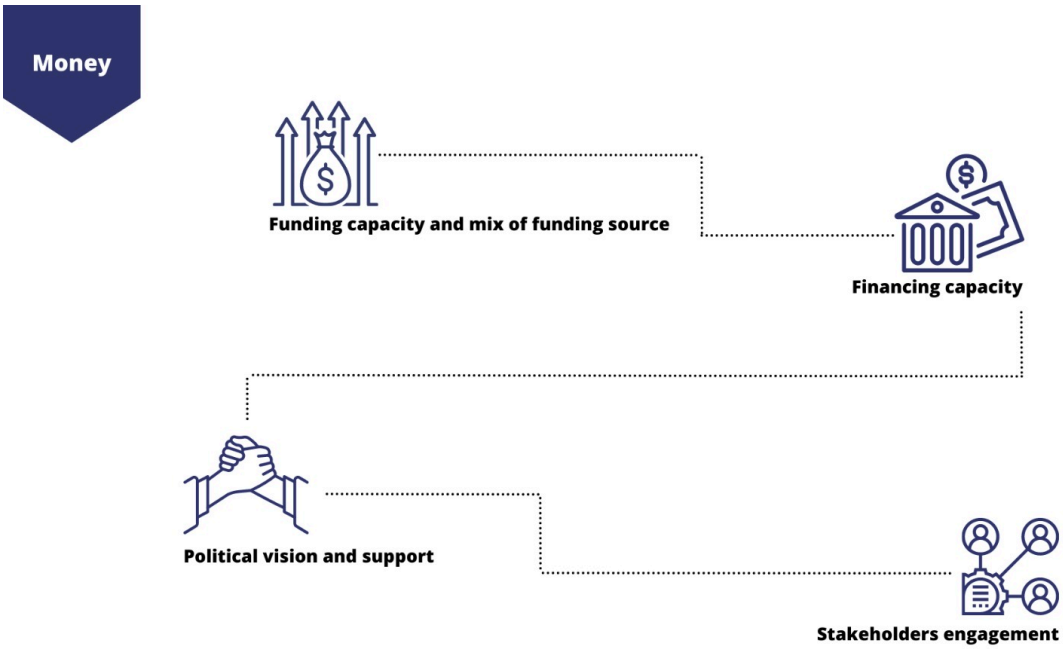

Figure 21 Money Indicators, Source: EIP own design

- **Funding capacity and mix of funding resources** – a city authority has several sources for funding, that could be easily distinguished from the sources they originate: local taxes, central budgets, incomes and credits. A city authority could consider many ways (measures) to fund projects for their transport system. The major difficulty faced by cities in the past is to prioritise the funds for different projects. The integrated planning, the capacity to link the city's vision characteristics with concrete projects, facilitated the identification for planning. Moreover, cities that have a coherent vision and planning strategy usually have a quicker access to different sources for funding; the acceptance of their proposed projects by local/regional/central governments or investors or donor banks etc. This ability together with the skills of the staff in funding and financing accelerate the speed of acceptance of funds, but also it contributes very much to the city competitiveness (economic impact, but also improved quality of liveability as an indirect impact).
- **Financing capacity** – As mentioned above, the capacity of city to access funds is crucial for deploying innovation. However, this alone won't suffice if a city doesn't have a good finance practice and capacity. Basically, it is not enough to ensure funds; it is essential to ensure a healthy financing system throughout the project's life. This is very difficult to obtain in periods where a city faces different challenges (such as, financial crisis in 2008, COVID situation in these last years, just to mention general/global challenges). Therefore, cities having good financial capacity could face any waves of shocks in an easier way than others. This indicator together with the one above shows the ability of a city to face disruptions either provoked by local/regional conditions, but also ripples of major crisis happened elsewhere.
- **Political vision and support** – of course the available city budgets and funding opportunities won't be possible without trust and confidence that a city could deliver good quality projects for the city's prosperity. The political vision and constant support

are conditions to ensure the trust in a city administration that could deliver the proposed solutions/projects. Politicians play a very big role in promoting their cities' ambitions, but they are responsible also in nurturing the confidence levels of those that could invest in their cities' projects. Sometimes, the longevity of a leading political team in a city, the coherence and clarity of their vision, the positive results and successes obtains in the past weights very much in preserving a very good access to funds. In a period when resources are getting very scarce, the ability of politicians to preserve a continuity of funds for their local project is of a major importance.

- **Stakeholders' engagement** – the consultation of major actors at local level, the involvement and engagement with the public since early stages of a project, will ensure a smooth implementation of a project, irrespective of its nature. This is a major action to implement by cities, to avoid the adoption or implementation of plans that could not be accepted or useful for the targeted audience. Projects blocked, or simply not accepted by their targeted audience are using the resources that could be better used in other projects. By knowing very well the targeted audience, their interests and particular needs, the cities will use intelligently the available funds, mainly if they are scarce. Cities that have a good practice and enough capacity to engage with their stakeholders have a better rate of acceptance (and usage) of their projects. Moreover, the funding agencies, irrespective of their nature, ask nowadays a very good knowledge of the stakeholders' opinions and views for the projects they will fund. City authorities that develop multidisciplinary teams (see other Ms above) invest practically in their future and in their ability to navigate difficult times.

In conclusion, cities have an array of funding sources and different opportunities for financing their projects. The scarcity of the funds is a major indicator expressed by cities; as you can see in the diagram 22 below, the cities perception of the available funds for sustainable transport system differs from a city to city. The nature of this disparity is of course linked not only with the availability of funds, but also their capacity to prioritise the ways the funds are used. In Fast Track, discussions between cities and experts will facilitate a dialogue in this regard.

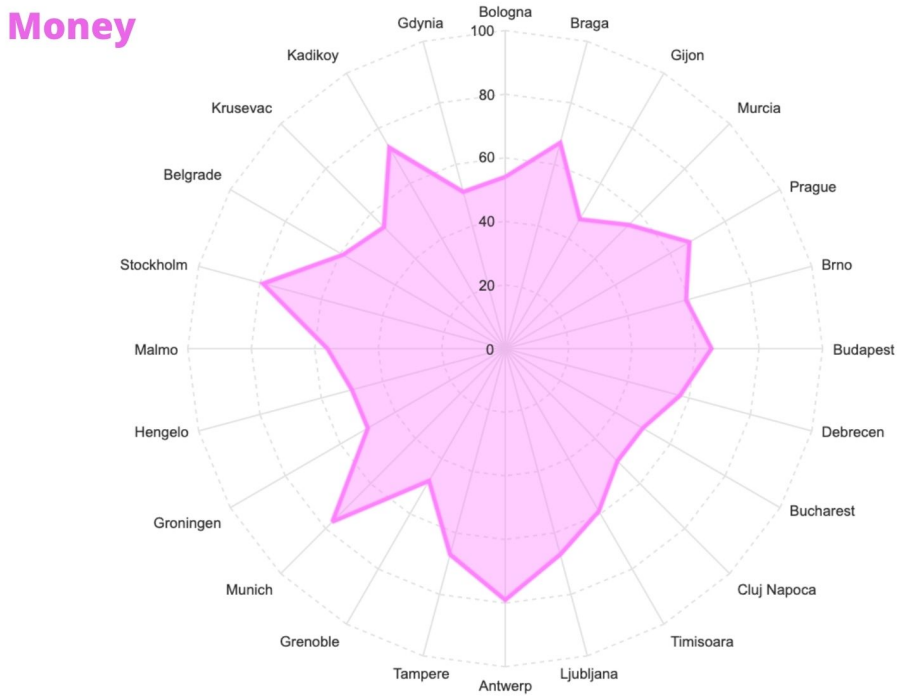

Figure 22 Perceived level for Money for Fast Track cities, Source: EIP own design

3.4 Assessment method of the city innovation profile

The assessment method of a city's innovation profile consists in an overview of the major aspects described as 8Ms (see descriptions in the chapter 3.3 above). The understanding of each of the indicators that could reflect an "M", an assessment scale has been developed. This scale is based on a 7-points Likert scale model (1 – low performance, characteristics, etc and 7 – high performance, characteristics, etc). The scale for each of the indicators has been developed after an extensive literature review to identify practices in cities across Europe, supplemented with the authors' experience in working with city authorities (more than 30 years). Each of the indicators try to capture a certain experience or practice a city has in a particular aspect. Few examples of the indicators are presented in the figures 23, 24 and 25 below. The three indicators presented offer an image of the complexity of the analysis done for each of the assessment points.

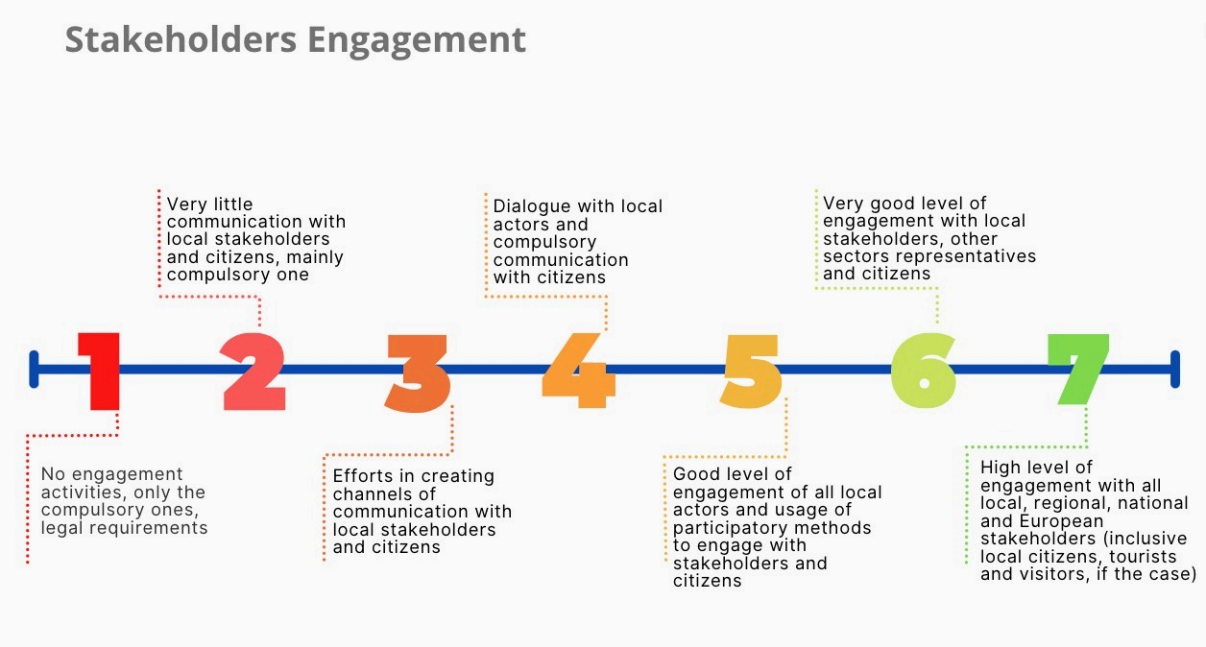

Figure 23 Assessment scale for Stakeholder's Engagement, Source: EIP own design

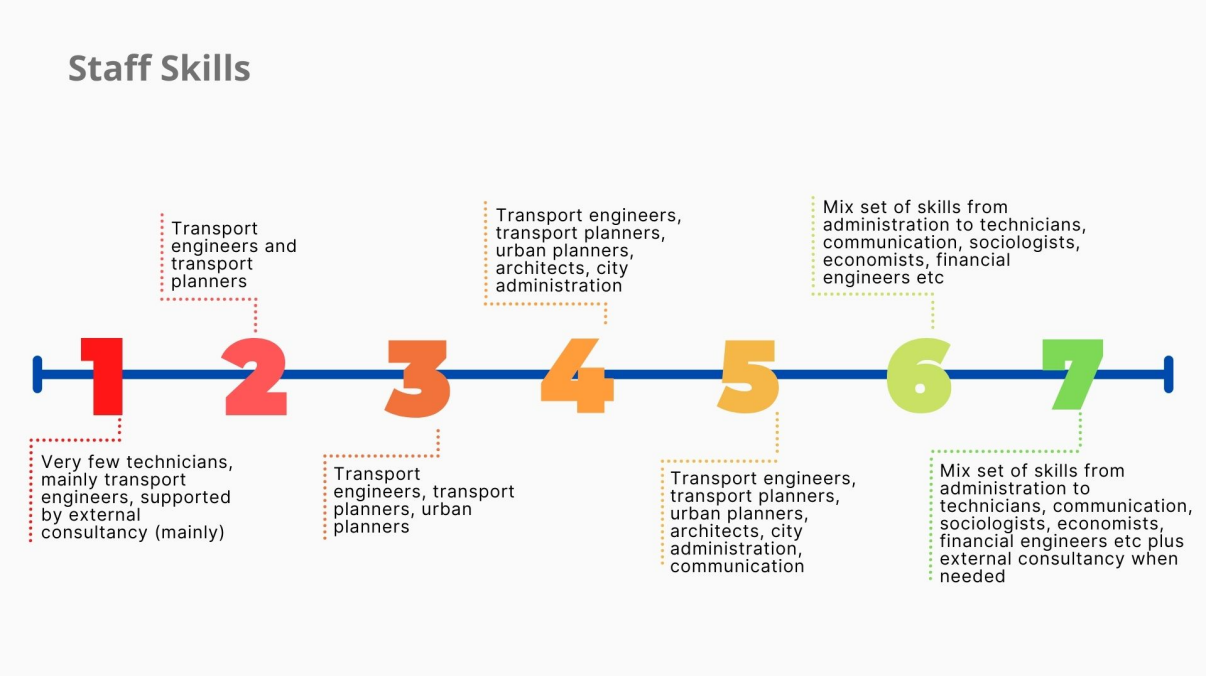

Figure 24 Assessment scale for Staff Skills, Source: EIP own design

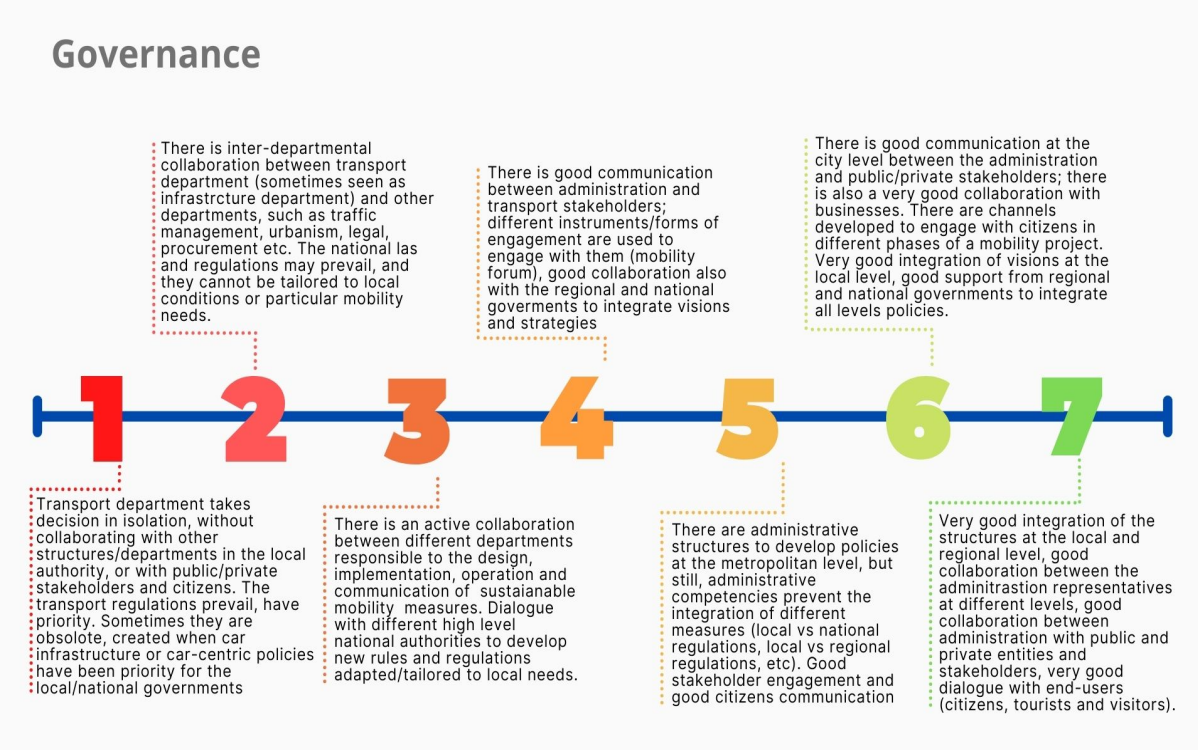

Figure 25 Assessment Scale for governance, Source: EIP own design

The assessment method of all eight Ms uses altogether 42 indicators with 308 assessment points. Admittedly, a certain indicator could be used in more than one M's assessment, however its importance may differ from a M to another. For example, the indicator "Stakeholders' engagement" has a high importance in the case of "Mood", while in the case of "Methods" or "Money" its importance is different. Although many assessment points were derived from existing validated experiences, some of them were developed specifically for this assessment framework. The allocation of the importance for each indicator in the structure of a M is not arbitrary; it tries to reflect the role each of the indicator has in the general understanding of that particular aspect in a city. This importance will be subject of discussion with the Ambassador Cities in Fast Track and with the Local Affiliate Cities.

The assessment method has been already used to generate the innovation profile for each of the Fast Track city (irrespective of its role – ambassador or local affiliate). The result of the method applied is the as called "city's fingerprint" that has been introduced and presented in the deliverables[10] prepared by colleagues from Vectos within a different section of the project. At the beginning of the project, a very comprehensive questionnaire has been designed and implemented by Vectos together with the partners in the project. The city's fingerprints have been developed based on the analysis of the results of the questionnaire, calibrated with the information received through one-to-one discussions with the cities' representatives and the

[10] D1.1 Analysis of Issues Affecting the FastTracking of Innovation in Local Affiliate areas (Lead author: Stefan Gabi, Vectos) and D1.2 Synthesis of Issues Affecting the FastTracking of Innovation (Lead author: Stefan Gabi, Vectos)

information collected through observation from different events organised at a project level with all cities involved in the project.

The method may have limitations, depending on the way it is used. The measures of the different aspects of planning, process management, and innovation performance are perceptual, based on the information provided by different city representatives. The assessment relied on perceptual measures, as it was difficult to obtain objective and comparable information for the innovation process-related ideas across multiple cities with so diverse characteristics. Furthermore, perceptual performance measures, at least at the city level, seem to be highly correlated with the role of the responded within the city administration.

Nevertheless, the method applied seeks to obtain a representation of aspects that a city could develop. Moreover, as mentioned previously, the data is gathered from the viewpoint of key respondents. Although the city representatives are well-informed with respect to city's planning, process, and performance issues, the assessment cannot control for the problem of possible different views. Future research may fruitfully explore this issue in more detail and use multiple respondents for each of the assessment points.

3.5 How does Fast Track monitor the city innovation profile?

As previously mentioned, the Fast Track cities' innovation profiles have been assessed based on the user needs assessment made at the beginning of the project. Throughout the project, the capacity building programme will also allow to update the profile by observing different indicators described above. However, the authors would like to develop two different stages of assessment of the city innovation profile. The scope for this approach is to understand how cities innovation performance could change because of the knowledge received throughout the capacity building programme developed in the project. Moreover, the ambassador cities in the project will be interviewed to assess themselves their own innovation profile. This will provide a possibility to validate the perceived views on the city's profile compared with self-assessment of this innovation profile. In the diagram 26 below, the timeline of the activities for

city innovation profile assessment compared with the capacity building programme is presented.

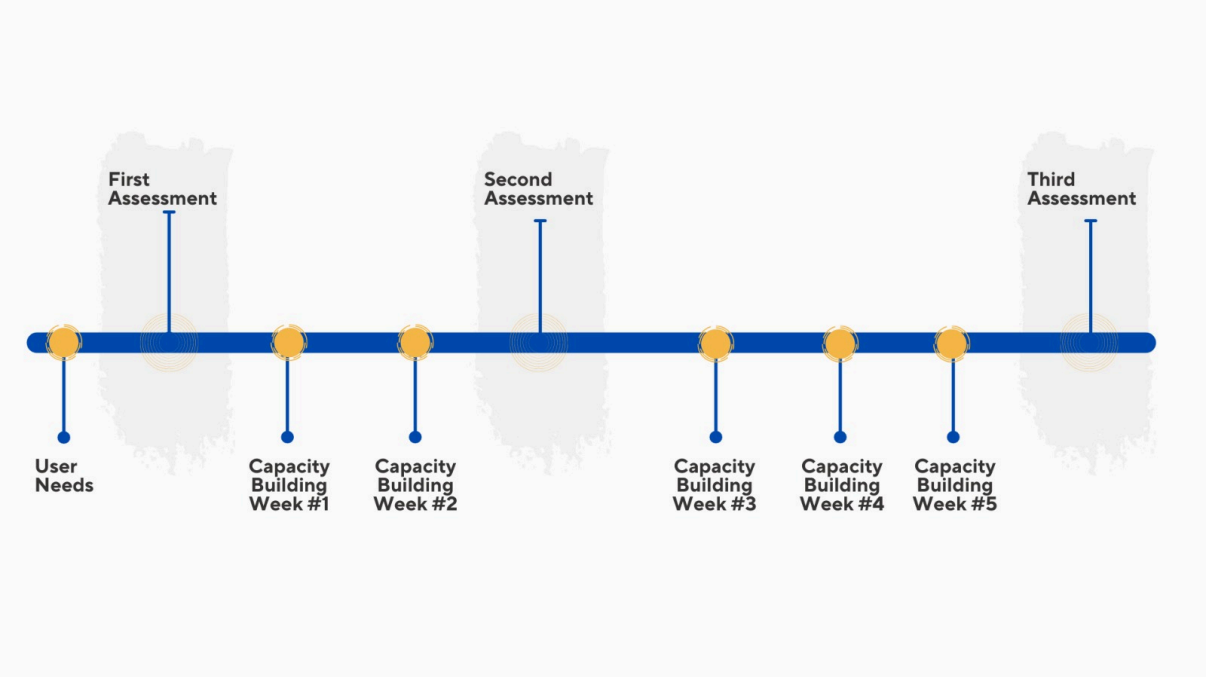

Figure 26 Timeline of the activities for city innovation profile assessment, Source: EIP own design

An additional source of information for the innovation performance will come for the innovation diaries (see chapter below and annexes). Through these forms, cities express their views, observation, and comments on different aspects of the work done within the Fast Track project.

Section 4 Innovation and Knowledge - Key Performance Indicators

4.1 The KPI's approach in Fast Track

The overall goal of FastTrack is helping local authorities to achieve climate-resilience through innovative sustainable mobility solutions, addressing the challenges they face for more rapid delivery in knowledge, capacity, governance, data, evidence, and funding. Twenty-four local authorities have signed up to the project, of which twenty are known as "Local Affiliates," and four act as formal FastTrack project partners ("Ambassadors"). This FastTrack Innovation Community brings contrasting and wide-ranging urban, peri-urban and rural mobility contexts

SMART (Specific, Measurable, Achievable, Relevant, Time-bound) targets that build upon and accelerate the take up of knowledge and deployment of innovation, by providing advice, exchange services and meeting the needs of the Local Affiliates are defined. The GA outlines a series of expected impacts, subdivided into specific domains. Each one lists multiple

indicators, by which the different dimensions of the impact might be measured. In the centre of it all, lies the **FASTTRACK CAPACITY BUILDING PROGRAMME,** aiming at long-lasting improvement in individual and organization performance for identifying, selecting and implementing innovative mobility solutions.

There is a great discussion among capacity building assessment frameworks ([11],[12],[13] are indicatively referenced) on the methodological difficulties associated with establishing a direct link between capacity building and impact (how to "map the pathway" from improved individual capacity to community impacts). There is a common understanding, though, about the need to differentiate, along this pathway, between the "inputs", "outputs" (sometimes bound together with the inputs), "outcomes" and "impacts" of any learning process. In fast Track the following terms have been defined and described to allow the project to monitor the performance of the innovation provided through the capacity building programme:

- Inputs measure the *efforts* placed and are usually linked to the *delivery* of activities/ services
- Outputs measure the *results* that the delivered activities/ services should be able to guarantee
- Outcomes measure the *effectiveness* of the delivered activities/ services (sustained production of benefits)
- Impacts measure the *changes* that are linked to higher-level objectives towards which the delivered activities/ services are expected to contribute.

The following figure presents an adapted generic impact pathway for FastTrack Capacity Building Programme. This is based on the 'capacity building-to-impact pathway" presented by Hailey, James and Wrigley ([2]), and the Ripple Model presented by Rich James ([14]), in which the "capacity building interventions ripples", like a drop of rain, flow outwards from capacity building outputs to behaviour change amongst beneficiaries.

[11] Deborah Jane Templeton (2009), A Framework for Assessing of the Impact of Capacity Building,
[12] John Hailey, Rick James and Rebecca Wrigley (2005), Rising to the Challenges: Assessing the Impacts of Organisational Capacity Building
[13] Jenny Gordon and Kevin Chadwick (2007), Impact assessment of capacity building and training: assessment framework and two case studies
[14] James, R. (2002) 'Practical guidelines for the monitoring and evaluation of capacity building'

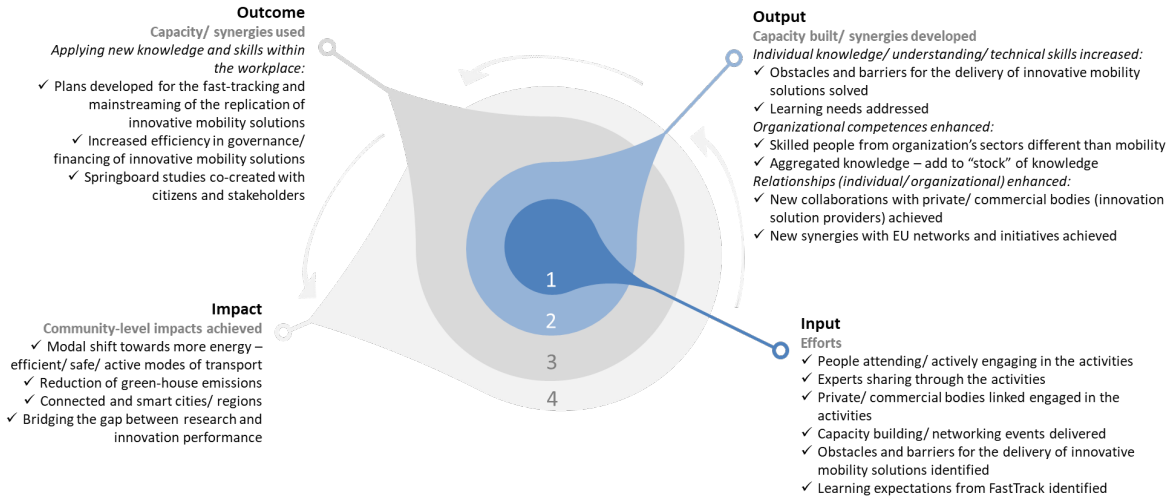

Figure 27 FastTrack capacity – to – impact pathway, Source: CERTH own design

For FastTrack, Key Performance Indicators (KPIs) are set for every level, from inputs to outputs, outcomes and eventually impacts (changes at higher levels). In a generic reference (before moving forward with the description of the detailed KPI approach), capacity input indicators include number and type of engagement events, number of attendees, but also measurements of the delivery of the capacity building content, such as number of obstacles and barriers that the city representative identified in the delivery of innovative mobility solutions and number of learning expectations from FastTrack. Capacity output indicators refer to *capacity built* through, for example, challenges solved, learning needs addressed, new collaborations with private/ commercial bodies and new synergies with EU networks and initiatives. If direct measure of capacity built is not available, proxy indicators (i.e., satisfaction of the trainee) is used. Outcome indicators refer to the *capacity used* to reach achievements and changes at an individual or organisation level, always within the spectrum of the rapid deployment of innovative mobility solutions, including, for example, increased efficiency in governance/ financing of these solutions, or the delivery of the relevant deployment plans. Finally, at an impact level, focus is placed on community-level benefits, beyond those applying directly for the individuals or the organizations. For FastTrack these benefits are attributed to the innovative mobility solutions per se (as these mobility solutions are perceived as enhanced quality services provided by the cities to the communities) and can refer to behavioural mobility changes (modal shift to more safe and sustainable modes of transport) or environmental conditions changes (such as reduction of green-house emissions).

The following table is produced after the positioning of the project's expected results within the FastTrack capacity – to – impact pathway and their attribution to the following *three impact domains*:

1. Capacity building and consulting advice
2. Partnership building with the private sector and procurement
3. Innovation - implementation and deployment of sustainable mobility solutions

Reference is also made to the metrics attributed to each expected result and the number of the assigned Key Performance Indicators

Table 1:FastTrack Expected results, linked to impact domains, pathway, metrics and number of KPIs

Expected result	Impact domain	Capacity – to – impact	Metrics	Number of assigned KPIs
Fast-Tracking and mainstreaming the replication of innovative, urban, peri- urban and rural mobility solutions	Innovation - implementation and deployment of sustainable mobility solutions	Outcome	• 24 Deployment Plans for innovative mobility solutions developed: ○ 20% addressing rural areas ○ 30% addressing peri-urban areas ○ 50% addressing urban areas • support the implementation of minimum of 8 mobility solutions with knowledge generated through the exchange and capacity building activities • support the transfer of minimum 8 mobility solutions (affiliates taking demonstrable steps to replicate during the project duration)	10
A number of people to be involved in the activities undertaken in the cities/ municipalities of FastTrack and…	Capacity building and consulting advice	Input	• 24 city-regions actively involved throughout the project • 500 people actively engaged in capacity building, expert advice and exchange partnership building with the private sector and cross-sectoral stakeholder engagement • 5 Capacity Building Weeks (CBW) organized • minimum 10 core activities undertaken during the CBWs • minimum 6 offline activities supplementing the core activities implemented • minimum 1 stakeholder co-design and implementation learning event organized, to coach LAs in efficient but participatory forms of solution planning and implementation • minimum 5 FastTrack Springboard studies implemented, involving citizen engagement, to coach LAs in efficient but participatory forms	10

Expected result	Impact domain	Capacity – to – impact	Metrics	Number of assigned KPIs
			of solution planning and implementation • for each LA, 5 local actors from outside the typical transport planning stakeholder group engaged for the first time in transport decision-making processes	
….improve their capacity to develop urban mobility and investment plans for deployment of innovative transport solutions	Capacity building and consulting advice	Outcome	• minimum 90% of the Local Affiliates are “very satisfied” or “highly satisfied” with the new knowledge obtained from core exchange activities • minimum 2 new data sources that will provide evidence for mobility planning and inform investment and business plans identified by each city/region • 24 Deployment Plans, incorporating investment cases and business plans and including stakeholder engagement processes • minimum 4 local affiliate’s city-regions move from ‘starter’ to ‘sharer’ status in their chosen innovation area during the project timescale • minimum 4 city-regions move from ‘sharer’ to ‘leader’ status in their chosen innovation area during the project timescale	
New research and innovation collaborations in sustainable urban mobility between organisations (public/private), especially those located in countries that are more advanced	Partnership building with the private sector and procurement	Output	• minimum 5 matching and exchange events between commercial/private sector and public sector bodies undertaken in the frame of WP3 (input) • minimum 50 private/commercial bodies participate in the project through WP3 activities (input) • minimum 5 direct market engagement activities / contract	10

Expected result	Impact domain	Capacity – to – impact	Metrics	Number of assigned KPIs
and those located in countries lagging behind in the deployment of urban mobility innovations			propositions / pre-procurement dialogues initiated through the project (output) • attendance of the cities/regions representatives in minimum 6 externally organised events (output) • meaningful link created by FastTrack with minimum 15 ongoing EU (and other) projects and networks (output) • all topic-based clusters comprised by LAs both from advanced countries and countries lagging behind (cooperation amongst them is initiated) • for each FastTrack affiliate, 1 of the 5 local actors from outside the typical transport planning stakeholder group provides city resilience advice/design input	
Climate resilient and zero-emission city-regions	N/A	Outcome	• 34 (minimum) mobility solutions taken forward for deployment (assuming places taken in the topic-based clusters go on to full deployment plan status), aligning with the goal of net zero emissions • 60 (minimum) mobility solutions exchanged within the project, aligning with the goal of (net) zero emissions	1
Connected and smart city-regions	Innovation - implementation and deployment of sustainable mobility solutions	Input/ Output	• investigate of open data platform creation (enhancement) with at least 5 of the FastTrack city-regions (output) • undertake capacity building activities related to data and deployment (input)	3
Modal shift towards more energy efficient,	N/A	Outcome	• 34 (minimum) mobility solutions developed (based on the current “demand” for innovation	3

Expected result	Impact domain	Capacity – to – impact	Metrics	Number of assigned KPIs
safer and active (wherever possible) modes of transport for freight and/or passengers			expressed through the 24 affiliates • 60 (minimum) mobility solutions exchanged within the project All aligned with the goal of more energy efficient mobility and safer or active modes	
Recommendations to bridge the gap in the research and innovation performance	Innovation - implementation and deployment of sustainable mobility solutions	Impact	Recommendations delivered to the European Commission	4

INNOVATION AND KNOWLEDGE KEY- PERFORMANCE INDICATORS (IK-KPIS) ARE DEFINED AND ADOPTED by FastTrack for monitoring the achievement of the project towards the project's expected results. In total, 49 IK-KPIs are proposed, which reflect the effectiveness of the exchange and capacity building, by comparing values at project baseline (at the outset of the project) with those at completion (reviewing changes). For cases where new results are produced (i.e. Deployment Plans), the baseline is set at zero. For cases which retrofit existing competences/ cooperation, the baseline data are gathered.

The IK-KPIs approach, is connected directly with the activities of the FastTrack WPs, by reflecting and assessing the project progress, the realization of the learning activities and collaborations, the level of engagement, the level of knowledge transfer and capacity building and finally, the project results and barriers that cannot be addressed in the context of FastTrack. For this reason, an effective process of communication and collaboration is considered among all the WPs. The fundamental connections between the WPs and the IK-KPIs are demonstrated in Figure 28.

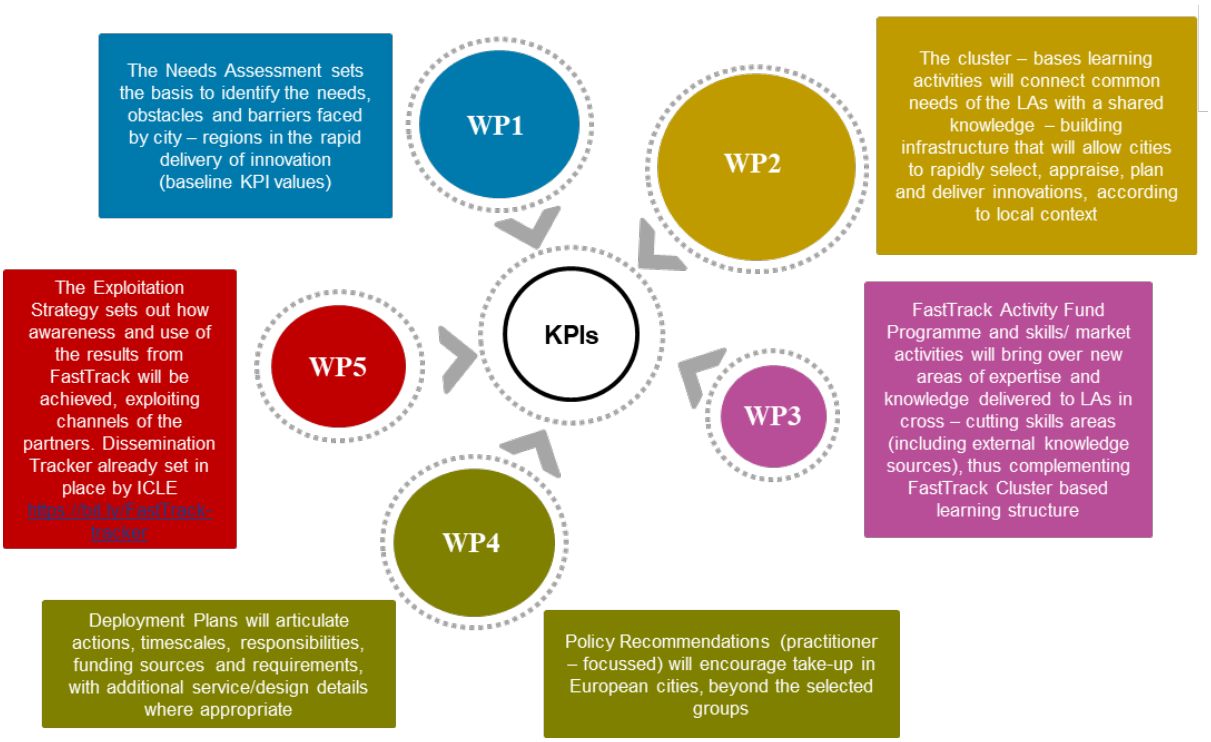

Figure 28: Fundamental connections between the WPs and the Innovation and Knowledge - Key Performance Indicators, Source: CERTH own design

The IK-KPIs are analysed in detail in section 3.2 of the current document.

The methodological steps for adopting the IK-KPIs, rests in the following steps:

1 Review of existing literature and frameworks: this included desk research on literature on how to monitor the capacity and for exploring methodologies for data collection and monitoring. The CREATE framework, in which project partner EIP developed a new approach to assessing the needs of 10 cities, was an important source of information, as FastTrack Impact Assessment methodology is developed alongside the specific approach of CREATE. Other sources of valuable information are already referenced above, but also included (indicatively) the MIND-SETs techniques, methods and tools, CIVITAS Evaluation Framework, Handshake.

2 Refine set of indicators included in GA: alignment of the KPI's definitions and relevance to the project's expected results was carried out. The project impact domains, expected results and positioning within the FastTrack capacity-to-impact pathway were cross referenced with the KPIs and the following were marked for each KPI (see also section: 4.2 Detailed definition of the IK-KPIs):

- Whether they are monitoring inputs/ outputs/ outcomes/ impacts
- Whether they hold a short or medium/ long term time reference, thus assessing the calculation feasibility of each change the indicator monitors within (short) or outside (medium/ long) the project duration. This also relates to the level of expected result reached (input/ output/ outcome or impact). It should be highlighted, though, that especially the "impact" assessment indicators (i.e. modal shift, energy reduction), are very relevant to the monitoring capacities across the cities, the availability of

data there (i.e. availability of prediction models) and the willingness of cities to share these data with the project.

- Whether they are monitoring efforts/ changes at city level or project level. Some KPIs monitored at city level can be further aggregated to sum or average values, for informing the project level as well.

This step included an extensive communication with all WPs (inviting comments electronically, receiving feedback through consortium task group meeting, etc.). At the time reference of this deliverable, the list of KPIs is exhausted to the GA reference. Mining for additional indicators will be done throughout the process of application of the FastTrack Evaluation Framework, thus making the latter one a dynamic and "live" process, and on the basis of step 1 above. As the learning takes place, some elements of the data gathering methods might also change (i.e. currently defined survey questions shifting).

3 Preparation for calculation (data mapping): data collection methods were decided and the relevant tools for gathering data were created. Data collection will be done in a consistent format, either through individual data points (usually provided as online forms/ questionnaires) or directly within the logbooks (simple spreadsheets or word documents) created both for data collection and storing. Each KPI is matched to the data streams (with specific criteria for data collection, shared internally within the consortium) and mechanisms are set for organization (foldering and classification). Data collection methods to be used approximately include interviews, questionnaire surveys and structured observations.

A loop for the KPI monitoring is established, as iterations of data collection will enable a regular understanding of the performance of the exchange and learning programme, thus, also allowing for responsive and/or formative mechanisms to take place for tackling rising issues and/or better addressing the learning needs and expectations of each city.

Activities and roles for engaging partners and LAs in data collection are defined. Activities for engagement in the data collection process include the exchange and capacity building activities (establishing an ongoing collaboration). Nonetheless, email support to partners and the LAs is also considered for providing guidance for completing the data forms, along with requests for dedicated meetings on that matter.

4 Data storing: datasets required for KPI calculation will be imported in specific logbooks, shared in the project's spaces (under the contractual EU data protection laws, to which FastTrack partners are obliged to abide). Data sources to be used approximately include the outcomes of questionnaire surveys and interviews, but other data (i.e. outcomes of local/ regional transport models and simulations, traffic management data, open data, metadata, etc.) might be shared from the cities and eventually used for the KPI calculation.

5 Calculate KPI values: part of quantitative values will be automatically calculated from formulas inserted within the logbooks (spreadsheet), while other will go under "manual" data calculation loops. Qualitative data will go under qualitative analysis.

On the basis of what has been indicated above, the *monitoring of the KPIs* will be done with the use of the following FastTrack tools:

- *Event Forms* (method used: short online survey), introduced by FastTrack WP4 in order to capture both quantitative (i.e. number of participants) or qualitative information (i.e. level of participation) regarding the FastTrack Exchange and Learning Events (either

stand-alone events or events organized within the Capacity Building Week), serving also as a tool of "observation" of the level of engagement to the project and the learning dynamics of the individuals or the working teams. They are addressed to each event organizer and their template is provided in Annex 3 of the current document. **The Event Forms are expected to be filled in by the event organizer (one event form per event) within 2 weeks after the event implementation.** Guidance from WP4 on the assigned, to the partners, responsibilities is considered prior to each event.

- *Registration Forms > Participation Forms* (method used: online registration forms, participants' logbooks – spreadsheets or word documents), accompanying each event organization. A specific, but simple, registration form template is proposed by WP4, to be used prior to each event implementation for tracking the registration of people from the Local Affiliates, private sector or other public bodies' representatives in FastTrack events. **The minimum fields** that are required for the proper monitoring of the related KPIs are provided in Annex 4 of the current document.

  The Registration Forms are to be handled by each event organizer, upon specific responsibilities assigned to the partners from WP4. After each event, WP4 asks the event organizers to validate the registration forms, thus creating the *participation forms*. Participation forms will allow the tracking of individuals that are engaged to the programme over a long period of time, thus giving valuable insights on the level of involvement and engagement.

- *Needs assessment survey* (method used: questionnaire, accompanied by structured interviews), contacted as part of Task 1.1 activities, for defining clusters of interest and understanding the baseline needs, obstacles and opportunities faced by the Local Affiliates (LAs) and the Ambassador Cities (ACs).

- *Innovation Diaries* (method used: questionnaires, including a mix of closed and open questions and embracing a self-assesment process). Tthese are introduced by FastTrack WP4, as a tool for monitoring the city/ region progress/ satisfaction throughout the entire duration of the FastTrack Capacity Building Activities. In addition to the basic questions of participation and representation (covered primarily from the participants list and the Event Form entries), the Innovation Diaries will engage cities to questions related to challenge definition (barriers that hinder the rapid deployment of innovative mobility solutions), idea formation (getting inspired from city peers) and learning action framing (what exactly cities need to overcome the identified challenges).

  According to the "Programme of Work for Local Affiliate Engagement" (D1.3), the 24 Local Affiliates will fill in an Innovation Diary after the completion of each Learning Sequence. Consequently, 120 Innovation Diaries as expected by the end of the Learning Programme (24 Local Affiliates x 5 learning sequences). The Innovation Diaries are addressed to the LAs and ACs and their template is provided in Annex 2 of the current document. In order to maximize the response rate, dedicated sessions for the Innovation Diary fill in are considered at the end of each Capacity Building Week. There, they will be **introduced in each cluster by the Technical Support Partner and the Ambassador cities.** Final entries for each city will be done online through a dedicated online questionnaire, filled in by one city representative (who may aggregate the experiences of more people, in case more than one representative from the city attends), within a short period (2 weeks) following the end of the CBW.

- *WP5 Dissemination Tracker* (method used: short online form). This has been introduced by FastTrack WP5 in order to monitor the attendances of the project partners to external events. Participation will be counted on the basis of both the project dissemination (i.e., participants sharing the project experiences), as well as the participant's learning experience (i.e., participants learning from others).

Direct input for the KPI monitoring is also expected through:

- The results of the *Exploitation Strategy* (WP5)
- the content of the *Deployment Plans* (WP4),
- the results of the implementation of the *FastTrack Fund Programme* (WP3) and
- the *Policy Recommendations* (WP4)

For both direct data collection from the partners and data storing, *FastTrack KPI logbook* has been created with the form of a shared – among partners - spreadsheet.The logbook allows fro information from various sources to be gathered together and easiligy shared among the consotrium. Its index is presented in Annex x of the current document. CERTH is the partner responsible for inserting external data entries (i.e. answers from the Innovation Diaries) to the KPI logbook or assigning data entries to other partners.

A synopsis of the KPIs, summarizing the responsibilities from all partners for the monitoring of the KPs, the location of the KPIs entry values (index of the logbook) and their calculation timestamp has been created.

Reporting on the KPIs will be done internally through the Activity Reports and publicly through project Deliverable 4.2. In total, 4 Activity Reports will be produced (M9, M15, M21 and M27), each one following the completion of the "Learning Sequences" 1-4 of the Programme of Work for Local Affiliate Engagement (Deliverable 1.3). The Deliverable 4.2 "Results of the engagement strategy developed and its impact – strengths and weaknesses" (M26), will draw conclusions from the Activity Reports, around the performance of the capacity building and learning tools.

4.2 Detailed definition of the IK-KPIs

For the detailed definition of the KPIs the following conceptual elements were used:

- **Encoding:** a unique code number representing the indicator
- **Name/ (definition):** the name of the indicator, accompanied by each description (if KPI is not self-described by name)
- **Expected result/ time reference:** capturing whether the KPI monitors inputs/ outputs/ outcomes or impacts, indicating along whether the expected result has a short term or medium/ long term reference
- **Level of monitoring:** differentiating between project and city level
- **Target value (metrics)/ (measurement unit):** what is intended to be achieved (if relevant from the GA), accompanied by the standard of measurement (if not clear from the name or the target value)

- **Methodological approach and monitoring tools:** this element will desribe the overarching strategy and methodological rationale behind each indicator, providing, at the same time the tools/ methods used for the monitoring of the indicator.

Following, a detailed presentation of IK-KPIs against the above conceptual elements is done, so that, eventually, an “identity card” is provided for each IK-KPI (see annex 1).

Section 5 Conclusions and ways forward

This document presents a novel approach of assessment. In a very quick development society, to stop and take stock of own innovation and sustainability performance is relatively difficult. The major challenges observed are the lack of knowledge of how to assess these parameters; or cities do not have enough capacity or skills to invest in this stage. Additionally, cities have access to an abundant stock of methods that they may use in their evaluation, some straight forward, others either complicated (beyond their capacity or skills) or not necessarily relevant for the projects developed. Moreover, to actually measure the performance of different strategies and implemented measures cities need patience, as the actual impact will be seen/perceived only in time.

Furthermore, some cities do not evaluate or assess their innovation profile or invest in understanding their own strengths and weaknesses. The Fast Track project comes to fill in this gap and try to work with cities to understand what those particular aspects are where cities perform well and to help them to capitalize on these. Equally, if a city identifies some weak points the project with its capacity building programme and expert support will try to help them.

Through the city innovation performance framework of assessment, a city may see all the dimensions they need to work for a successful implementation of a scheme; this is not necessarily useful in assessment the measure in itself, of course, but it offers a comprehensive overview of all the aspects that converge to support the successful implementation of a scheme.

Through the comprehensive list of KPIs that project will assess throughout the project, information of how project manages to cater with specific knowledge the cities involved in the project will be offered; equally, the KPIs programme will collect views and insights of how cities perceive the work in the project, the quality of the support received and its usefulness for their work.

The innovation performance methods established within Fast Track allow cities to see certain elements that they pushed forward, to be innovative, while they are blind towards other elements. This innovation “blindness” is the actual focus of the project. Fast Track could provide adequate lenses to see differently certain aspects and actions, and to support all cities in their efforts to achieve high-level goals of sustainability and resilience towards the fast-changing systems.

Annex 1 KPIs list

Encoding	KPI 1.
Name/ (definition)	***Number of approved Deployment Plans completed during the project*** The number of Deployment Plans delivered in the project, entailing all the information required by the project (as this defined by WP4).
Expected result/ time reference	Outcome/ short-term
Level of monitoring	Project Level
Target value (metrics)/ (measurement unit)	24 Deployment Plans
Methodological Approach and Monitoring Tools	This indicator is directly linked to project deliverable D4.5. Its monitoring will be based on the monitoring of the project deliverable status by the respective lead partner (EIP). The criteria for a Deployment Plan to be complete, will be set by WP4.

Encoding	KPI 2.
Name/ (definition)	***Number of learning needs identified*** (in the duration of the whole project)
Expected result/ time reference	Output/ short-term
Level of monitoring	Project Level
Target value (metrics)/ (measurement unit)	Target value: N/A
Methodological Approach and Monitoring Tools	The outcome of the *Task 1.1.: Needs Assessment* will define the baseline learning needs of the Local Affiliates. After that, the FastTrack Learning Programme will validate the baseline and/or generate new city/ region learning needs. Mapping of the learning needs will be done across FastTrack horizontal skill streams (funding, governance and participation, data management) but also from a technological or planning point of view.

	The following monitoring tools/ methods will be used for this indicator: 1 The *needs assessment survey* (Task 1.1), capturing the baseline entry value of the indicator 2 The *Innovation Diaries*, capturing the cities/ regions progress towards identifying the needs to be addressed by FastTrack Capacity Building Activities

Encoding	**KPI 3.**
Name/ (definition)	***Percentage of the Deployment Plan that was implemented during the project for each innovative solution***
Expected result/ time reference	Impact/ medium, long-term
Level of monitoring	City/ region level
Target value (metrics)/ (measurement unit)	• 8 mobility solutions supported towards implementation • 8 mobility solutions supported towards transfer (affiliates taking demonstrable steps to replicate during the project duration)
Methodological Approach and Monitoring Tools	This indicator references each one of the 24 deployment plans that will be developed by M24 of the project. The indicator will be monitored by WP4 at the end of the project to grasp on the progress towards implementation of each mobility solution within each deployment plan. Monitoring tools used will either depend on the Innovation Diaries, or a dedicated workshop with the cities held at the end of the project for the purposes of the project's impact assessment.

Encoding	**KPI 4.**
Name/ (definition)	***Number of synergies with innovation solution providers established through the project activities per city/ region category (urban, peri-urban, rural)*** This KPI refers to the number of synergies that will be established between the cities/ regions and mobility providers due to the engagement activities of FastTrack. These new synergies will be clustered according to the cities/ regions geographical focus (city – urban level or functional area -peri-urban or rural – level).

Expected result/ time reference	Output/ short term
Level of monitoring	Project Level
Target value (metrics)/ (measurement unit)	5 (minimum) direct market engagement activities / contract propositions / pre-procurement dialogues initiated through the project
Methodological Approach and Monitoring Tools	The Local Affiliates will have the opportunity to establish synergies with innovation solution providers during the FastTrack Exchange and Learning Programme. The *Innovation Diaries* will provide the input for this indicator. It should be noted that, at the beginning of the Programme, only the opportunity for new collaborations is explored and not the number of synergies established. The categorization of the cities/ regions geographical focus in the project, is done through WP1 *Needs Assessment Survey*.

Encoding	**KPI 5.**
Name/ (definition)	***Number of innovative solutions that address the needs per city/ region reference (urban, peri-urban, rural)*** Number of innovative solutions selected by cities/ regions to be examined within FastTrack, clustered according to the geographical reference of the innovative solution (urban, peri-urban, rural)
Expected result/ time reference	Output/ short-term
Level of monitoring	Project Level
Target value (metrics)/ (measurement unit)	34 mobility solutions taken forward for deployment 60 (minimum) mobility solutions exchanged within the project, aligning with the goal of (net) zero emissions
Methodological Approach and Monitoring Tools	The cities/ regions will have the opportunity to indicate the sustainable innovative mobility solutions that correspond to their needs through the *Innovation Diaries (1 and 2).* At the end of the exchange and learning activities, where the deployment plans will be produced, the final solutions selected by the cities/ regions (and their number) will be presented through their *Deployment Plans*.

Encoding	KPI 6.
Name/ (definition)	***Percentage of distribution of solutions suitable for urban, peri-urban, and rural areas*** Percentage of the innovative solutions selected by cities/ regions to be examined within FastTrack, distributed across the spatial reference that each solution could have for the cities/ regions (urban, peri-urban and rural).
Expected result/ time reference	Output/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	○ 20% of the deployment plans (and their corresponding mobility solutions) addressing rural areas ○ 30% of the deployment plans (and their corresponding mobility solutions) addressing peri-urban areas ○ 50% of the deployment plans (and their corresponding mobility solutions) addressing urban areas
Methodological Approach and Monitoring Tools	As KPI 5., this KPI also follows the number of innovative mobility solutions selected by cities/ regions to be examined within FastTrack. Opposite to KPI 5., though, KPI 6 maps these solutions across the spatial reference that each solution could have for the city/ region (urban, peri-urban, rural). This information will be retrieved by the *Innovation Diaries* and eventually validated by the *Deployment Plans.*

Encoding	KPI 7.
Name/ (definition)	***Number of obstacles and barriers identified for the implementation of each solution per city/ region category (urban, peri-urban, rural)*** Number of **obstacles and barriers** discussed during FastTrack Learning and Exchange activities that may hinder the rapid implementation of the innovative solution(s) that each city/ region selected to be examined under FastTrack, clustered by cities/ regions geographical focus (city – urban level or functional area -peri-urban or rural – level).

Expected result/ time reference	Output/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	Target value: N/A
Methodological Approach and Monitoring Tools	Cities/ regions will be asked to give direct feedback for this indicator, during FastTrack Learning and Exchange Program, through the *Innovation Diaries.* Eventually, the *Deployment Plans*, will describe in details, the obstacles and barriers addressed by the selected innovative solution(s).

Encoding	**KPI 8.**
Name/ (definition)	***Capacity of the cities/ regions to finalize the implementation of the innovative solutions after the end of the project***
Expected result/ time reference	Outcome/ short-term
Level of monitoring	City/ region level
Target value (metrics)/ (measurement unit)	Target value: N/A Measurement unit: qualitative scale 1 to 5 (1: total lack of capacity to 5: high capacity)
Methodological Approach and Monitoring Tools	This KPI will be based on self-assessment question(s) included in the *Innovation Diaries*, capturing the cities/ regions perspective after the end of the FastTrack Learning and Exchange program.

Encoding	**KPI 9.**
Name/ (definition)	***% of identified needs that were covered through the replication procedure of the innovative solutions per city/ region category (urban, per-urban, rural)*** Learning needs (as these expressed by the cities/ regions the events of the FastTrack Learning and Exchange Program) that were successfully addressed (answered through, i.e. knowledge exchange and advice shared from peers and good practices' inspiration) through the project's activities, distributed across

	cities/ regions geographical focus (city – urban level or functional area -peri-urban or rural – level).
Expected result/ time reference	Output/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	(target value: N/A)
Methodological Approach and Monitoring Tools	At each Learning Sequence, the Local Affiliates will indicate whether each learning need of theirs was addressed by the exchange content of the FastTrack learning program. Data for this KPI will be collected through the *Innovation Diaries*.

Encoding	**KPI 10.**
Name/ (definition)	***% of identified problems and barriers that were solved for the successful implementation/replication of the innovative solutions per city/ region category (urban, peri-urban, rural)*** Percentage of **obstacles and barriers** (hindering the rapid implementation of the selected innovative solutions), solved during the learning and exchange activities and clustered by cities/ regions geographical focus (city – urban level or functional area -peri-urban or rural – level).
Expected result/ time reference	Output/ short-term
Level of monitoring	Project Level
Target value (metrics)/ (measurement unit)	Target value: N/A
Methodological Approach and Monitoring Tools	At each Learning Sequence, the Local Affiliates will indicate whether each problem/barrier of theirs was addressed by the exchange content of the FastTrack learning program. Data for this KPI will be collected through the *Innovation Diaries*.

Encoding	**KPI 11.**
Name/ (definition)	***Number of people from Local Affiliates engaged and actively involved in the project activities***

	People from Local Affiliates and Ambassador Cities encouraged and actively participating in capacity building, expert advice and exchange, partnership building with the private sector and cross-sectoral stakeholder engagement. Engagement of experts and mobility innovators from the private sector is also considered.
Expected result/ time reference	Input/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	500 (minimum) people actively engaged (= 15 people from cities-regions x 24 cities-regions, plus 5 people representing experts and mobility innovators from the private sector x 24 cities-regions)
Methodological Approach and Monitoring Tools	The monitoring of the number of people from the cities/ regions participating at the FastTrack Learning Programme, Surveys, Interviews and Meetings, is expected to reveal an upward trend of engagement and involvement. For the monitoring of this KPI, analysis will be done through the *Registration/ Participation Forms* after checking and cleaning the databases across all events from duplications (so that only people that are actively engaged in the project – registrations to multiple events – are counted once in the indicator's value).

Encoding	**KPI 12.**
Name/ (definition)	***Before and after knowledge of network members on innovative transport solutions*** Before and after awareness of the cities/ regions members regarding ongoing innovations in the field of mobility.
Expected result/ time reference	Outcome/ short-term
Level of monitoring	City/ region level & project level (average value)
Target value (metrics)/ (measurement unit)	Target value: N/A Measurement unit: qualitative scale 1 to 5 (1: no resources to follow all innovation to and 5: we closely follow all developments)
Methodological Approach and Monitoring Tools	This KPI will be based on a self-assessment process by each city/ region representative who actively participates in the FastTrack learning programme, following his/ her perceptive regarding on how aware is the city organization as far as

	innovative transport solutions is concerned. Analysis will take place on a "before-after" basis on the city level, thus evaluating any individual/ organizational transformation achieved. The following monitoring tools/ methods will be used for this indicator: 1 The *needs assessment surveys* (Task 1.1), capturing the baseline entry value of the indicator for the city level 2 The *Innovation Diaries*, capturing possible changes along the implementation of FastTrack learning and exchange programme.

Encoding	KPI 13.
Name/ (definition)	***Before and after capacity of network members to select and implement the innovative mobility solutions*** (network members: city/ region members)
Expected result/ time reference	Outcome/ short-term
Level of monitoring	City/ region level & project level (average value)
Target value (metrics)/ (measurement unit)	Target value: N/A Measurement unit: qualitative scale, 1 – 5 (1: poor and 5: high)
Methodological Approach and Monitoring Tools	This KPI will be based on a self-assessment process by each city/ region representative who actively participates in the FastTrack learning programme, following his/ her perceptive regarding the city/ regional capacity on both the selection and the implementation of innovative mobility solution. Analysis will take place on a "before-after" basis on the city/ region level, thus evaluating any individual/ organizational transformation achieved. The *Innovation Diaries* will be used for data collection.

Encoding	KPI 14.
Name/ (definition)	***Network members' willingness to remain engaged in the FastTrack network after the end of the project*** Willingness of the members of cities/ regions to participate and be involved after the end of FastTrack, giving input to the Exchange Hub and upgrading the knowledge using the updated

	learning material of the Mutual Learning Toolkit and signing up to an updated Exploitation Plan.
Expected result/ time reference	Output/ medium-long term
Level of monitoring	City/ region level
Target value (metrics)/ (measurement unit)	Target value: N/A Measurement unit: close question (yes/no) and multiple-choice for the ways to be engaged
Methodological Approach and Monitoring Tools	The indicator will be measures with input provided at the end of FastTrack learning and exchange programme by the *Innovation Diaries*. The indicator is provided against three options: a) remain engaged by providing input to the Exchange Hub, b) remain engaged by using any updated learning material of the Mutual Learning Toolkit, c) remain engaged by signing up to an updated Exploitation Plan

Encoding	**KPI 15.**
Name/ (definition)	***Satisfaction with the knowledge obtained from FastTrack exchange activities***
Expected result/ time reference	Output/ short-term
Level of monitoring	City/ region level & project level (average value)
Target value (metrics)/ (measurement unit)	90% of Local Affiliates members being “very satisfied” or “highly satisfied”) Qualitative scale (1 to 5, 1: not satisfied at all – 5: highly satisfied)
Methodological Approach and Monitoring Tools	The indicator will be measured with input provided by the *Innovation Diaries* at the end of FastTrack learning and Exchange Programme.

Encoding	**KPI 16.**
Name/ (definition)	***Number of new data sources discussed in Skills Streams meetings*** The overall number of data sources discussed in Skills Streams and/ or cluster meetings/ workshops, that can provide evidence

	for mobility planning and/or inform investment and business plans.
Expected result/ time reference	Output/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	48 new data sources (2 per city/ region)
Methodological Approach and Monitoring Tools	The new data sources discussed will be listed by the cities/ regions in the *Innovation Diaries.*

Encoding	**KPI 17.**
Name/ (definition)	***Number of new data sources included in Deployment Plans*** The overall number of new – for the cities/ regions - data sources that were included in the Deployment plans and their collection process has been launched
Expected result/ time reference	Outcome/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	investigate of open data platform creation (enhancement) with at least 5 of the FastTrack city-regions (output)
Methodological Approach and Monitoring Tools	Data collection for this indicator will be done at the end of FastTrack learning and exchange programme through the last *Innovation Diary*. The data sources included in the Deployment Plans will be listed by the cities/ regions.

Encoding	**KPI 18.**
Name/ (definition)	***Before and after knowledge of network members on developing investment and or business/operating plans for deployment of innovative transport solutions*** Before and after capacity of cities/ regions in respect to the development of investment and business operating plans.

Expected result/ time reference	Outcome/ short-term
Level of monitoring	City/ region level & project level (average value)
Target value (metrics)/ (measurement unit)	Indirect target value: 24 Deployment Plans, incorporating investment cases and business plans and including stakeholder engagement processes Measurement unit: qualitative scale, 1 – 5 (with 1: poor and 5: high knowledge on developing investment and/or business operating plans)
Methodological Approach and Monitoring Tools	This KPI will be based on a self-assessment process by each city/ region representative who actively participates in the FastTrack learning programme, following his/ her perceptive regarding the city/ regional capacity on developing investment and or business/operating plans. Analysis will take place on a "before-after" basis on the city/ region level, thus evaluating any individual/ organizational transformation achieved. The *Innovation Diaries* will be used for data collection.

Encoding	**KPI 19.**
Name/ (definition)	***Number of registered Deployment Plans*** The number of Deployment Plans registered (delivered) in the project, entailing the minimum information required by the project (as this defined by WP4).
Expected result/ time reference	Outcome/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	24 Deployment Plans
Methodological Approach and Monitoring Tools	This indicator is directly linked to project *deliverable D4.5*. Its monitoring will be based on the monitoring of the project deliverable status by the respective lead partner (EIP). The criteria for a Deployment Plan to be registered, containing the minimum requested information, will be set by WP4.

Encoding	KPI 20.
Name/ (definition)	***Movement of cities through the spectrum of 'starters' to 'sharers' and 'sharers' to 'leaders'*** The movement of cities through the spectrum of: • 'Leaders': A relative leader or Ambassador Local Affiliate in a specific topic, but still with room to benefit from further advice and enhancement through FastTrack, ready to enter into a rapid stage of implementation during FastTrack. • 'Sharers': "capacity conscious" city/ regions who can share knowledge, like Leader affiliates, but also have learning needs about the topic, alongside the Starter affiliates. • 'Starters': city/ regions facing a rapid transition curve and ready to interact and learn from the challenges and experiences and proven knowledge of the Leader and Sharer affiliates, perhaps located in countries lagging behind in the deployment of urban mobility innovations and committing to practical ways to accelerate deployment in their own contexts, spread this to peers in their own countries. The KPI will monitor the "positive" movement, namely the number of cities that either move from starters to any of the other 2 categories, or from sharers to leaders, in their chosen innovation area during the project timescale.
Expected result/ time reference	Outcome/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	• minimum 4 city-regions move from 'starter' to 'sharer' status • minimum 4 city-regions move from 'sharer' to 'leader' status
Methodological Approach and Monitoring Tools	This KPI is based on a self-assessment process by the city/ region representatives, as far as their chosen innovation area (selected innovative mobility solution) is concerned. The input from the *Innovation Diaries* will reflect both the baseline and the end term entry of this indicator, thus following the learning achievements of a city/ region

Encoding	KPI 21.
Name/ (definition)	***Number of private/commercial bodies participating in the project through WP3 activities***
Expected result/ time reference	Input/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	50 (at least) private/ commercial bodies
Methodological Approach and Monitoring Tools	During the implementation of the FastTrack Learning and Exchange Program several private and commercial bodies will be invited to participate and contribute at the learning activities, through the "Meet the FastTracker" events of Task 3.2. For the monitoring of this KPI, analysis will be done through the *Registration/ Participation Forms,* after cleaning the databases across all events from duplications (so that bodies that participate in the events are counted only once in the indicator's value).

Encoding	KPI 22.
Name/ (definition)	***Number of new research and innovation collaborations in sustainable urban mobility between private/public organisations and the Local Affiliates that were structured in the framework of the project***
Expected result/ time reference	Output/ short term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	Target value: N/A
Methodological Approach and Monitoring Tools	The implementation of the Learning Program is intended to accelerate the research and innovation collaborations, since the Local Affiliates will meet, contact, and learn from them. This indicator will be monitored through a direct input from the *Innovation Diaries.*

Encoding	KPI 23.
Name/ (definition)	***% of new research collaborations located in countries that are more advanced*** Number of new research and innovation collaborations in sustainable urban mobility between private/public organisations and cities/ regions in countries that are more advanced (as far as the deployment of urban mobility innovation is concerned), divided to the total number of new research collaborations (KPI 22). FastTrack recognises two primary types of area facing rapid economic and social change: ➢ The first group (countries lagging behind) relates to those countries, often in the accession areas of Central and Eastern Europe, which have until recently been based around more traditional areas of the economy (such as agriculture and manufacturing) and have until recently (or still may be) at a less advanced stage of economic development, prosperity and, as far as FastTrack is concerned, lag behind in integrated approaches in the implementation of sustainable mobility policies, than some other western nations in Europe. ➢ The second group (advanced countries) relates to centres of intensification of existing economic strengths and prosperity in more advanced economies often in western parts of Europe, particularly focussing on economies based around their service industries. Each group of cities has common attributes in the context of development despite the different speeds and levels of economic development and social change, as well as examples of advanced mobility solutions to be considered in the project.
Expected result/ time reference	Output/ short term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	Target value: N/A
Methodological Approach and Monitoring Tools	This indicator is calculated from *KPI 22,* by extracting the number of new research collaborations involving the cities that are located in countries more advanced (as far as the deployment of urban mobility innovation is concerned).

	The clustering of the cities in countries that are more advanced or countries lagging behind is done under Task 1.1 (*Needs Assessment*).

Encoding	KPI 24.
Name/ (definition)	***% of new research collaborations located in countries lagging behind in the deployment of urban mobility innovations*** Number of new research and innovation collaborations in sustainable urban mobility between private/public organisations and cities/ regions in countries that are lagging behind in the deployment of urban mobility innovation, divided to the total number of new research collaborations (KPI 22).
Expected result/ time reference	Output/ short term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	Target value: N/A
Methodological Approach and Monitoring Tools	This indicator is calculated from *KPI 22,* by extracting the number of collaborations involving the cities that are located in countries lagging behind (as far as the deployment of urban mobility innovation is concerned). The clustering of the cities in countries that are more advanced or countries lagging behind is done under Task 1.1 (*Needs Assessment*).

Encoding	KPI 25.
Name/ (definition)	***% of new research collaborations with signed MOUs assigning responsibilities and work between the different parties*** The signed memorandums of understanding (MoUs) between two or more parties express a convergence of will between the parties, indicating an intended common line of action. It is supposed to enforce and seal the engagement and agreement.
Expected result/ time reference	Output/ short term
Level of monitoring	Project level

Target value (metrics)/ (measurement unit)	Target value: N/A
Methodological Approach and Monitoring Tools	This indicator is calculated from KPI 22, by extracting the number of new research collaborations that reached an MoU.

Encoding	**KPI 26.**
Name/ (definition)	***Number of meaningful links generated with other EU projects and networks*** This KPI refers to the number of synergies that will be established between the cities/ regions and EU (and other) project and/or networks due to the engagement activities of FastTrack.
Expected result/ time reference	Output/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	link created with minimum 15 ongoing EU (and other) projects and networks
Methodological Approach and Monitoring Tools	This indicator will be monitored through a direct input from the *Innovation Diaries,* capturing the direct cooperation between the LAs and other EU projects and networks. A cross-check will be done through the *Event Forms,* were the invited speakers from external projects and networks will be referenced.

Encoding	**KPI 27.**
Name/ (definition)	***Number of attendances at Smart Cities Marketplace[15] (SCM), EIT Urban Mobility and other relevant EU network events, distinguished by: FastTrack city-regions; and FastTrack partners*** Number of attendances of partners and cities/ regions in SCM, EIT Urban Mobility and other relevant EU network events.

[15] The Smart Cities Marketplace was created by merging the two former Commission projects "Marketplace of the European Innovation Partnership on Smart Cities and Communities" (EIP-SCC) and the "Smart Cities Information System" (SCIS) into one single platform (**https://smart-cities-marketplace.ec.europa.eu/**)

Expected result/ time reference	Output/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	attendance of the cities/regions representatives in minimum 6 externally organised events
Methodological Approach and Monitoring Tools	This indicator will be monitored as part of WP5 activities and through the *Dissemination Tracker*, created for this purpose by WP5. Content related to the attendances of the Local Affiliates will be also expected based on cluster-specific proposals made to the LAs for their capacity increase (indicator monitored for LAs within each cluster).

Encoding	**KPI 28.**
Name/ (definition)	***Increased number of local authorities participating in Smart Cities Marketplace (SCM) (signing up as partner and actively participating in SCM activities)***
Expected result/ time reference	Output/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	Target value: N/A
Methodological Approach and Monitoring Tools	This KPI will be monitored directly through the input from the *Innovation Diaries*, reflecting both the baseline and the end term entry of this indicator.

Encoding	**KPI 29.**
Name/ (definition)	***Number of interactions with Smart Cities Marketplace (SCM)*** Counted on the basis of i.e., joint events organized with SCM or sharing insights of the projects in SCM initiatives.
Expected result/ time reference	Outcome/ medium-long term
Level of monitoring	Project level

Target value (metrics)/ (measurement unit)	Target value: N/A
Methodological Approach and Monitoring Tools	The awareness and use of the results from FastTrack will be achieved, both during and following the end of the project. This indicator will be monitored by the *Exploitation Strategy.*

Encoding	**KPI 30.**
Name/ (definition)	***Number of FastTrack innovations taken up within the framework of the Smart Cities Marketplace (SCM) Action Cluster on Sustainable Urban Mobility***
Expected result/ time reference	Outcome/ medium-long term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	Target value: N/A
Methodological Approach and Monitoring Tools	The Action Clusters under the Smart Cities Marketplace bring together partners "to work on specific issues related to smart cities, by sharing the knowledge and expertise with their peers, giving added-value to their national and local experience and identifying gaps that need to be fulfilled at European level[16]. Specifically, the goal of the Action Cluster on Sustainable Urban Mobility is to "facilitate the matchmaking between cities, industry and academia for identifying and promoting blueprints for sustainable urban mobility services, which could be replicated throughout Europe"[17]. The connection of the LAs with the SCM Action Cluster on Sustainable Urban Mobility, on the basis of bringing forward the innovations explored by FastTrack as initiatives within the cluster, will be monitored at the end of project through the *Innovation Diaries.*

[16] **https://smart-cities-marketplace.ec.europa.eu/action-clusters-and-initiatives/action-clusters**
[17] **https://smart-cities-marketplace.ec.europa.eu/action-clusters-and-initiatives/action-clusters/sustainable-urban-mobility**

Encoding	KPI 31.
Name/ (definition)	***Number of local actors from other sectors, for each city, involved for the first time in mobility planning and implementation processes*** (e.g. meeting attendance, development of joint measure proposals)
Expected result/ time reference	Output/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	120 local actors (5 local actors * 24 cities/ regions)
Methodological Approach and Monitoring Tools	Several actors from the city sectors will participate at the FastTrack Learning Program and attend the learning activities. The involvement and engagement of people from other sectors than mobility planning, is considered of high importance for bringing "on board" the inter-disciplinary approach required by innovative mobility solutions. For the monitoring of this KPI, analysis will be done through the *Registration/ Participation Forms.*

Encoding	KPI 32.
Name/ (definition)	***Number of local actors from other sectors, for each city, meaningfully engaged for the first time in mobility planning and implementation processes*** Number of local actors from outside the typical transport planning stakeholder group providing city resilience advice/design input.
Expected result/ time reference	Output/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	24 local actors (1 per city/ region)
Methodological Approach and Monitoring Tools	This KPI will be monitored at the end of FastTrack learning and exchange activities, either through the last Innovation Diary, or an observation method within the working groups of the project.

Encoding	KPI 33.
Name/ (definition)	***% of local actors from different sectors (e.g., land use, energy, health, and technology) meaningfully engaged for the first time in mobility planning and implementation processes*** The number of local actors from other sectors meaningfully engaged for the first time in mobility planning and implementation processes (KPI 32.) to the total number of local actors from other sectors involved for the first time in mobility planning and implementation processes (KPI 31.)
Expected result/ time reference	Output/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	20%
Methodological Approach and Monitoring Tools	This indicator is calculated from KPIs 31. and 32. (KPI 32. / KPI 31.)

Encoding	KPI 34.
Name/ (definition)	***Number of local events where project partners (including Local Affiliates acting as Ambassadors) attend*** Number of events outside the FastTrack Learning and exchange program, at a local (i.e. city/ neighborhood) level, where project partners and Local Affiliates (the latter ones acting as Ambassadors) attend.
Expected result/ time reference	Output/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	minimum 6 events
Methodological Approach and Monitoring Tools	This indicator will be monitored as part of WP5 activities and through the *Dissemination Tracker*, created for this purpose by WP5.

Encoding	KPI 35.
Name/ (definition)	***Number of stakeholder co-design and implementation learning events*** Number of learning events that coach cities/ regions in efficient but participatory forms of solution planning and implementation
Expected result/ time reference	Input/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	minimum 1 stakeholder co-design and implementation learning event
Methodological Approach and Monitoring Tools	The *Event Forms* will directly provide input to this indicator. Monitoring of this KPI will be done at the end of FastTrack Learning and Exchange Program.

Encoding	KPI 36.
Name/ (definition)	***Number of Springboard Studies involving citizen engagement*** Number of springboard studies implemented, involving citizen engagement, to coach LAs in efficient but participatory forms of solution planning and implementation, funded by the project under the FastTrack Fund (Task 3.2).
Expected result/ time reference	Input/ short term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	5 Springboard Studies
Methodological Approach and Monitoring Tools	The implementation of Springboard Studies will result in bite-size nuggets of advice that will be integrated into the Deployment Plans of the Local Affiliates. The monitoring of the implementation of the *FastTrack Fund Programme* (Task 3.2) will give a direct input for this indicator.

Encoding	KPI 37.
Name/ (definition)	***Number of Local Affiliates from countries lagging behind involved in the Topic Based Clusters*** Number of Local Affiliates from countries lagging behind in innovation, which are involved in FastTrack Topic Based Clusters. FastTrack recognises two primary types of area facing rapid economic and social change: ➢ The first group (countries lagging behind) relates to those countries, often in the accession areas of Central and Eastern Europe, which have until recently been based around more traditional areas of the economy (such as agriculture and manufacturing) and have until recently (or still may be) at a less advanced stage of economic development, prosperity and, as far as FastTrack is concerned, lag behind in integrated approaches in the implementation of sustainable mobility policies, than some other western nations in Europe. ➢ The second group (advanced countries) relates to centres of intensification of existing economic strengths and prosperity in more advanced economies often in western parts of Europe, particularly focussing on economies based around their service industries. Each group of cities has common attributes in the context of development despite the different speeds and levels of economic development and social change, as well as examples of advanced mobility solutions to be considered in the project.
Expected result/ time reference	Input/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	There is not specific quantitative target value. All the topic-based clusters will comprise Local Affiliates from both categories. In total, 24 cities/ regions are expected to be actively involved throughout the project (sum of KPIs 37 and 38).
Methodological Approach and Monitoring Tools	The needs assessment surveys (Task 1.1) categorize the countries as more advanced, those lagging behind innovation and those considering themselves “in between”. At the same time, it provides the express of interest of the cities to be part of the project’s Topic Based Clusters (as these formed under Task 1.2). The latter one will be validated through the first *Innovation Diary*.

Encoding	KPI 38.
Name/ definition	***Number of Local Affiliates from advanced countries or countries "in between" involved in the Topic Based Clusters*** Number of Local Affiliates from advanced – in innovation - countries in innovation, which are involved in FastTrack Topic Based Clusters (see also definition of KPI 37.)
Expected result/ time reference	Input/ short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	There is not specific quantitative target value. All the topic-based clusters will comprise Local Affiliates from both categories. In total, 24 cities/ regions are expected to be actively involved throughout the project (sum of KPIs 37 and 38).
Methodological Approach and Monitoring Tools	The needs assessment surveys (Task 1.1) categorize the countries as more advanced, those lagging behind innovation and those considering themselves "in between". At the same time, it provides the express of interest of the cities to be part of the project's Topic Based Clusters (as these formed under Task 1.2). The latter one will be validated through the first *Innovation Diary*.

Encoding	KPI 39.
Name/ definition	***% greenhouse gas emission reductions resulting from implementation of mobility solutions*** Greenhouse gas emissions are pollutants coming from all urban area passenger and freight transport modes. For this indicator, we refer only to the greenhouse gas emission reductions coming from the implementation of the investigated / chosen by the cities' mobility innovations. Reference to this indicator is done at city level, when stated in the deployment plans.
Expected result/ time reference	Impact/ medium-long term
Level of monitoring	City/ region level
Target value (metrics)/ (measurement unit)	Indirect target value: 34 mobility solutions aligning with the goal of (net) zero emissions

Methodological Approach and Monitoring Tools	The calculation of this indicator is content-related to the Deployment Plans (*deliverable D4.5*) and will be monitored based on relevant input provided from the cities/ regions (if relevant to their selected innovative solutions). The percentage of greenhouse gas emission reductions resulting from the implementation of the selected mobility solutions can be estimated/ calculated from the Local Affiliates based on the following options: ➢ calculation of the indicator from an existing (environmental) model or relevant data and future projections ➢ assessment of the improvement (reduction of percentage of greenhouse gas emission) based on: o experts' opinion o literature review, impacts of similar solutions to areas of similar characteristics

Encoding	**KPI 40.**
Name/ definition	***Number of capacity building activities, including the data and data management Skills Stream, and number of attendees during the capacity building programme*** Number of all events included in the FastTrack Programme of Work for Local Affiliate Engagement, including optional activities (such as tailored training, work-shadowing visits, 1:1 meetings) and "Meet the FastTrackers Skills and Market Activities" (Task 3.3)
Expected result/ time reference	Input/ short term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	• 5 Capacity Building Weeks (CBW) organized • minimum 10 core activities undertaken during the CBWs • minimum 6 offline activities supplementing the core activities • minimum 1 stakeholder co-design and implementation learning event • minimum 5 matching and exchange events between commercial/private sector and public sector bodies undertaken in the frame of WP3

Methodological Approach and Monitoring Tools	Capacity building activities, including the data and data management Skills Stream, will take place during the FastTrack Learning and Exchange Program (Task 2.2 and Task 3.3). As core activities during the Capacity Building Week, the following ones will be considered: • Horizontal topic sessions for all • Hands-on workshops per cluster • Peer learning sessions per cluster • Study visits The offline activities supplementing the core activities refer to the intermediate activities, which could take the form of: • remote peer learning sessions per cluster or • remote horizontal topic sessions or • any other optional activities (i.e. training, work-shadowing) funded through the project's activity fund. The implementation of the Learning Programme will provide direct input for this indicator. The Event Forms, will monitor the implementation and also provide input for the attendances. Attendances will be cross-checked with the participants list.

Encoding	**KPI 41.**
Name/ definition	***Number of FastTrack city-regions offering to share open-source data or knowledge at the start; and at the end of the project***
Expected result/ time reference	Output/short-term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	Target value: N/A
Methodological Approach and Monitoring Tools	This KPI will be monitored through the *needs assessment surveys* (baseline entry) and the last *Innovation Diary.*

Encoding	**KPI 42.**

Name/ definition	***Before and after knowledge of network members on data gathering, management and analysis***
Expected result/ time reference	Outcome/ short-term
Level of monitoring	City/ region level & project level (average value)
Target value (metrics)/ (measurement unit)	Target value: N/A Measurement unit: qualitative scale, 1 – 5 (1: poor and 5: high)
Methodological Approach and Monitoring Tools	This KPI will be based on a self-assessment process by each city/ region representative who actively participates in the FastTrack learning programme, following his/ her perceptive regarding the city/ regional knowledge on data gathering, management and analysis. Analysis will take place on a "before-after" basis on the city/ region level, thus evaluating any individual/ organizational transformation achieved. The *Innovation Diaries* will be used for data collection.

Encoding	**KPI 43.**
Name/ definition	***% modal shift towards more energy efficient modes that the innovative solutions replication will bring to each FastTrack city-region (where data is collected through deployment plans)*** Passenger choices shifting to more energy efficient modes, such as public transport, shared mobility, bicycle and walking. A positive modal shift to energy efficient modes also means positive changes in the energy consumption of a vehicle fleet (i.e, operators' choices towards "cleaner" freight vehicles and public transport vehicles). Reference to this indicator is done at city level, when stated in the deployment plans.
Expected result/ time reference	Impact/ medium-long term
Level of monitoring	City/ region level
Target value (metrics)/ (measurement unit)	Indirect target value: 34 mobility solutions aligning with the goal of more energy efficient mobility Possible measurement units could be: ➢ % of modal shift ➢ trips/passenger kms shifted to clean public transport

	➢ trips/ vehicle kms travelled shifted to clean vehicles for passengers and goods
Methodological Approach and Monitoring Tools	The calculation of this indicator is content-related to the Deployment Plans (*deliverable D4.5*) and will be monitored based on relevant input provided from the cities/ regions (if relevant to their selected innovative solutions). The percentage of modal shift towards more energy efficient modes due to the implementation of the selected mobility solutions can be estimated/ calculated from the Local Affiliates based on the following options: ➢ calculation of the indicator from an existing (transport/ environmental) model or relevant data and future projections ➢ assessment of the improvement (increase of the modal share of energy efficient modes) based on: o experts' opinion o literature review, impacts of similar solutions to areas of similar characteristics

Encoding	**KPI 44.**
Name/ definition	***% modal shift towards safer modes that the innovative solutions replication will bring to each FastTrack city-region (where data is collected through deployment plans)*** This indicator is reflecting both the shift to safer modes of transport, i.e. shift from private cars to public transport (buses, railway etc.), as well as improvements/ interventions in the road infrastructure that can prove to have a positive effect in safety aspects (i.e. reduction of road speed, creation of dedicated bicycle lanes for improving bicycle safety, lane management, traffic management, etc.), thus making transport safer for all users (drivers, pedestrians). Moreover, with human errors (speeding, distractions, drunk driving) being an important contributor to road-traffic related (fatal) injuries, innovative solution, such as autonomy and alcohol sensing in vehicles, can play an important role in safety improvements. Reference to this indicator is done at city level, when stated in the deployment plans.
Expected result/ time reference	Impact/ medium-long term
Level of monitoring	City/ region level

Target value (metrics)/ (measurement unit)	Indirect target value: 34 mobility solutions aligning with the goal of safer modes Possible measurement units could be: ➢ % of modal shift to public transport ➢ reduction of average road speed ➢ reduction of the fatalities and injuries due to traffic accident in urban network (number of accidents/year)
Methodological Approach and Monitoring Tools	The calculation of this indicator is content-related to the Deployment Plans (*deliverable D4.5*) and will be monitored based on relevant input provided from the Local Affiliates (if relevant to their selected innovative solutions). The percentage of modal shift towards safer modes of transport due to the implementation of the selected mobility solutions can be estimated/ calculated from the Local Affiliates based on the following options: ➢ calculation of the indicator from an existing (transport) model or relevant data and future projections ➢ assessment of the improvement (safer transport) based on: o experts' opinion o literature review, impacts of similar solutions to areas of similar characteristics

Encoding	**KPI 45.**
Name/ definition	***% modal shift towards more active modes of transport that the innovative solutions replication will bring to each FastTrack city-region (where data is collected through deployment plans)*** KPI related to KPI 43. Modal shift to bicycle and walking. Reference to this indicator is done at city level, when stated in the deployment plans.
Expected result/ time reference	Impact/ medium-long term
Level of monitoring	City/ region level
Target value (metrics)/ (measurement unit)	Indirect target value: 34 mobility solutions aligning with the goal of (net) zero emissions Possible measurement units: ➢ % of modal shift to active modes of transport (bicycle, walking)

	➢ Motorized trips shifted to bicycle and walking trips
Methodological Approach and Monitoring Tools	The calculation of this indicator is content-related to the Deployment Plans (*deliverable D4.5*) and will be monitored based on relevant input provided from the Local Affiliates (if relevant to their selected innovative solutions). The percentage of modal shift towards active modes of transport due to the implementation of the selected mobility solutions can be estimated/ calculated from the Local Affiliates based on the following options: ➢ calculation of the indicator from an existing (transport) model or relevant data and future projections ➢ assessment of the improvement (increase of the modal share of bicycle and walking) based on: o experts' opinion o literature review, impacts of similar solutions to areas of similar characteristics

Encoding	**KPI 46.**
Name/ definition	***Obstacles and barriers that were identified in local, national, and European level for the successful implementation/ replication of the innovative solutions per Local Affiliates category (urban, peri urban, rural)*** Factors that slow down or impede the implementation of the sustainable innovative mobility solutions clustered in local, national and European level and per cities/ regions geographical focus (city – urban level or functional area -peri-urban or rural – level) (see also KPI 7.)
Expected result/ time reference	Output/ short term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	Target value: N/A
Methodological Approach and Monitoring Tools	LAs and ACs will be asked to give direct feedback for this indicator through the *Innovation Diaries.*

Encoding	KPI 47.
Name/ definition	***% of identified problems and barriers that CAN be answered in local and national level for the successful implementation/ replication of the innovative solutions of the Local Affiliates***
Expected result/ time reference	Output/ short term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	Target value: N/A
Methodological Approach and Monitoring Tools	LAs and ACs will be asked to give direct feedback for this indicator at the end of the Learning and Exchange Programme through the *Innovation Diaries.*

Encoding	KPI 48.
Name/ definition	***% of identified problems and barriers that CANNOT be answered in local and national level for the successful implementation/ replication of the innovative solutions in the Local Affiliate and specific support is needed by the EU***
Expected result/ time reference	Output/ short term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	Target value: N/A
Methodological Approach and Monitoring Tools	LAs and ACs will be asked to give direct feedback for this indicator at the end of the Learning and Exchange Programme through the *Innovation Diaries.*

Encoding	KPI 49.
Name/ definition	***Number of recommendations that developed to bridge the gap in the research and innovation performance and the deployment of the innovative mobility solutions across EU Member States***

Expected result/ time reference	Impact/ short term
Level of monitoring	Project level
Target value (metrics)/ (measurement unit)	Recommendations delivered to the European Commission. No quantitative value provided for this KPI.
Methodological Approach and Monitoring Tools	This indicator is directly linked to project *deliverable D4.3* (Set of interim recommendations). Its monitoring will be based on the monitoring of the project deliverable content by the respective lead partner (EIP)

Annex 2 Innovation Diary – Learning Week #1

Dear Ambassador cities and Local Affiliates,

Thank you for making use of the Innovation Diary 1 form. The information provided herein will help us better understand how FastTrack learning activities are progressing for you and identify further learning needs you might have.

The Innovation Diary 1 covers FastTrack Learning activities of the so called "Learning Sequence 1", initiating in September 2021 and finalized in November 2021 with the end of the 1st Capacity Building Week. This Innovation Diary is the first one out of five, meaning that a similar survey will follow the end of each of the five Learning Sequences planned within FastTrack.

The aim of the learning activities of this period is for you to get to know your communities and start building up expertise on innovation in the mobility field of your choice. At this learning stage, it is envisaged that you learn about FastTrack provisions (within and outside their cluster of preference) and co-define (together with FastTrack partners) your missions and goals as far as innovative mobility solutions deployment is concerned. A first glance at possible solutions to be adopted by or inspire you is offered and specific (learning) topics to be further up taken during the next Learning Sequence will emerge and be consolidated. Particular emphasis is placed on meeting the suppliers.

You are kindly requested to fill in the Innovation Diary 1 until ***December 2, 2021****.*

Should you have any questions or difficulties in filling in this form, please use the embedded contact form.

Data protection:

The data shared by you through this form will be used for monitoring the progress of the learning activities of FastTrack and it may be quoted anonymously in publicly available online reports. Personal data may be shared with FastTrack partners, all of whom are contractually bound to abide to EU data protection law. Personal data will be held for a maximum of 2 years after the end of project, after which time it will be destroyed. Under no circumstances will any data submitted to this form be given to third partners.

Please tick to confirm that you understand and agree with the above.

Personal information

Your email:
Your full name:
The city you are representing:
The organization/ department you are working for:
Focus of your work: (engineering; transport planning; urban planning; architecture; public administration; business administration; law; other (please define):

MAIN CHALLENGES AND EXPECTATIONS IDENTIFIED/ DISCUSSED DURING THIS LEARNING PERIOD

In general, to what level FastTrack learning activities of this period allowed you to express your city's challenges and needs, as far as the deployment of innovative sustainable mobility solutions is concerned (low to high)?

	1	*2*	*3*	*4*	*5*	
Low	*o*	*o*	*o*	*o*	*o*	*High*

Which innovative idea would you like to develop towards implementation in the framework of FastTrack?

_____

Why do you need this innovation/ solution? What is/are the policy target(s) you want to address through this innovation (i.e., tackle congestion, reduce CO2 emissions, reduce noise, achieve social inclusion, increase safety, etc.)?

_____

What is/are your city challenge(s) discussed in Fast Track activities of this period and related to the implementation of the above innovative idea/solution?

Please briefly describe the challenges (**obstacles and barriers** already discussed during FastTrack activities of this period) that may hinder the rapid implementation of the innovative solution(s) you have identified for your city. These could be for example: lack of funding/ political acceptance/ clear motivation/ knowledge or skills, unclear responsibilities/ legal framework, poor evidence base).

For each challenge you are kindly asked to also indicate:

whether it refers to a local, national or European content,

whether it was addressed by the learning activities of this period (yes/no)

Learning Sequence 1	**Challenges**		
	Description of challenge	Level of reference of the challenge (local, national, European)	Challenge addressed through FastTrack learning activities of this period (Yes/No/ Partially)

What do you want to learn from FastTrack in order to overcome the abovementioned challenges (part of them or all)?

Please briefly describe your learning expectations/ needs from FastTrack in order to overcome the abovementioned identified challenges. Please also indicate whether the learning expectation/ need was addressed by FastTrack learning activities of this period or not.

	Expectations/ needs	
Learning Sequence 1	Description of learning need	Need addressed through FastTrack learning activities of this period (Yes/No/Partially)

Are there any other challenges and expectations that you weren't able to bring forward for discussion? If yes, please indicate them below.

_____

INNOVATION OFFERED BY SUPPLIERS/CITIES

Please identify and briefly describe at least one specific innovation/ solution that you **have found particularly interesting** during the FastTrack activities of this period.

For each innovation, you are also kindly asked to:

indicate the factors that you find necessary for the **rapid** implementation of the innovation (i.e., mix of funding sources, new business models, digitalization/ data management, citizens' engagement, etc.). With a Yes or No next to each factor, please give an estimate on whether the factor is also present in your city.

indicate whether any of the challenges described in question 1.4 were brought forward during the discussion/ presentation of each offered innovation. If yes, please indicate these challenge (s), using the numbering (1,2, 3 or 4) of the table in question 1.4 above.

indicate the spatial reference (urban, peri-urban, rural) that the identified solution could have for your case.

classify your city's overall capacity (in an international European context) with regards to this solution? Do you consider your city being a Starter/ Sharer or Leader (Starter city = city facing a rapid transition curve, ready to interact and learn from the challenges and proven experience of Sharers and Leaders; Sharer city = "capacity conscious" city who can share knowledge, but also have learning needs; Leader city = a relative leader, but still with room to benefit from further advise and enhancement)?

Learning Sequence 1

Description of innovation	Factors for implementation (also placing yes/no next to each factor for indicating whether the factor is present in your city or not)	Challenge(s) brought forward through the discussion/ presentation of the offered innovation (please use the numbering 1-4 of the table of question 1.4)	Spatial reference of the innovation (urban, peri-urban, rural)	How do you classify your current overall capacity with regards to this innovation? (Starter/ Sharer/ Leader)

KNOWLEDGE SHARING AND NEW SYNERGIES

How do you perceive your city's knowledge on developing business/ operating plans for deployment of innovative transport solutions?

	1	*2*	*3*	*4*	*5*	
Poor	*o*	*o*	*o*	*o*	*o*	*Very High*

How do you perceive your city's knowledge on data gathering, management and analysis?

	1	*2*	*3*	*4*	*5*	
Poor	*o*	*o*	*o*	*o*	*o*	*Very High*

How do you perceive your city's knowledge on governance in territorial planning?

	1	2	3	4	5	
Poor	o	o	o	o	o	*Very High*

How do you perceive your city's capacity on engaging citizens/ stakeholders in territorial planning?

	1	2	3	4	5	
Poor	o	o	o	o	o	*Very High*

How do you perceive your city's overall capacity on selecting innovative mobility solutions?

	1	2	3	4	5	
Poor	o	o	o	o	o	*Very High*

How do you perceive your city's overall capacity on implementing innovative mobility solutions?

	1	2	3	4	5	
Poor	o	o	o	o	o	*Very High*

Where there any new, for you, data sources (i.e., mobility survey data, real time traffic data, floating car data, etc.) discussed during FastTrack activities of this period that triggered your interest in relation to the innovations identified above?

Yes

No

If your answer is "Yes", please briefly specify them: _____

Do you see the opportunity for greater collaboration with a private or public organization you were in touch with during this period?

Yes

No

If yes, **with how many?**

Do you now see the opportunity for greater internal collaboration in your local government?

Yes

No

No need, collaboration already exists

How many links with other EU project and networks that can help you deploy innovations have you established due to FastTrack activities of this period?

(If none, please add zero)

_____

If you did establish links with other EU project and networks, were there any interesting ideas/ solutions/ innovations shared with them that inspire you for your needs? If yes, please briefly describe them below.

_____

Is your city currently actively connected with the Partnership on Smart Cities and Communities (EIP-SCC) initiative (i.e., signing up as partner or actively participating)?

Yes

No

If yes, what is the type of this connection?

My city is signed up as partner

My city actively participates in EIP-SCC activities

*Other (please define):*_____

Is your city currently actively connected with the European Institute of Innovation and Technology (EIT) initiative (i.e., signing up as partner or actively participating)?

Yes

No

If yes, what is the type of this connection?

My city is signed up as partner

My city actively participates in EIT activities

*Other (please define):*_____

Cities have the possibility to apply to FastTrack for finance for springboard studies (collecting evidence or conducting analysis as a basis for firm deployment plan priorities). Would you like to apply to a share of the activity fund?

For more information about FastTrack Fund, you may click **here** to download FastTrack Deliverable “Set-up Responsive Support Structure”.

Yes

No

Not decided yet

If your answer is “Yes”, please briefly indicate the purpose for doing so:

_____

LEARNING EXPECTATIONS FROM THE NEXT FASTTRACK ACTIVITIES

The next learning activities will further uptake the exchange of knowledge/ solutions-Good Practices, with the final aim each city to select and prioritize innovation/ strategies / technologies they need in an informed way. Particular focus will be placed on meeting the "implementers" (peers, city officials, policy makers).

What do you expect from FastTrack during its upcoming learning events?

Please describe your learning expectations and, for each expectation, please specify possible learning items and choose a format (i.e., co-learning workshop, co-creating workshop, webinar, in-person training, work shadowing, e-courses etc.) through which you would like to see these items delivered. For more information on the learning methods offered by FastTrack you can click **here** to download FastTrack Capacity Building Handbook.

	Description of the expectation	Possible learning items	Preferred format
Learning Sequence 1			

Please describe any (self-learning) action that will be undertaken by your and/or your city administration until the next Capacity Building Week and will further help you in the rapid deployment of the innovative solution you have chosen in FastTrack.

These actions can include self-learning activities (i.e., participation in webinars/ workshops/ courses, reading, etc.) or a variety exchange of experience actions (i.e., work shadowing, peer reviews, discussions with experts/ other authorities etc.), but they can also refer to preparatory actions for the drafting of your deployment plan (i.e., getting in contact with other departments of your organization or suppliers).

For each action please indicate:

its expected deadline

the person or department who will be in charge of it

the expected outcome

Action to be undertaken until the next Capacity Building Week (description)	Deadline	Person or department in charge of the action	Expected outcome

Final reflections

This space is for you to add any personal reflections you might like to share with FastTrack study team or note down to remind yourself of your state of thinking at this stage in the project.

Annex 3: Event Form template

FastTrack Learning Programme EVENT FORM	
Section 1: Event Information	
Learning Block (1-5)	
Type of event (cluster-based or all)	
	Cluster Name:
Learning Activity	
Event Name	
Event Date	
Start Time	
End Time	
Event Organiser	
Technical Support Partner	
Second Technical Support Partner	
Section 2: Event Attendances	
Total Number of partner participants	
Total Number of participants from Local Affiliates	
Number of stakeholders participants per category	Number per category: 1. Private / commercial bodies: 2. Public bodies: 3. Other guests (please define):
	Other guests:
Section 3: Event Process	
Learning Material Distributed / Used *(video, manual, report, presentations etc.)*	
Technical problems during the event	
How do you evaluate the easiness to handle all the (online) facilitation tools? (high, medium, low)	
Organizational problems before/ during the event (i.e. non registrations, delays in attendance)	
Section 4: Content and evaluation of learning	
Were there needs regarding the horizontal skill streams that came up during the event? If yes, please specify them below.	
Did you event meaningfully involve other EU projects and networks (e.g. other CIVITAS projects), such as in a speaking, coaching or other advisory	

role, or making substantial use of their materials? If so, please state which project(s) and how.	
To what extent were the learning needs of the cities/ regions addressed by the event? (high, medium, low)	
Please feel free to comment here your reply to question 4.3 above	
How do you evaluate the level of participation in your event (in terms of participants actively engaging in the process)? (high, medium, low)	
Suggestions for futher improvement	
Please share any suggestions you might for further improvement of similar events in the future (i.e. as far as methods, tools, etc. is concerned)	

Annex 4: Registration / Participation Form

FastTrack Learning Programme REGISTRATION / PARTICIPATION FORM	
First name	
Last name	
email	
Role in the project	
Name of organization	
Type of organization	
Sector of occupancy	
City or neighborhood your organization is positioned	
FastTrack cluster	
Learning sequence 1 attendances	
Intermediate activity 1	
CBW1: cluster workshops Day 1	
CBW1: cluster workshops Day 2	
CBW1: cluster workshops Day 3	
Learning sequence 2 attendances	
Intermediate activity 2	
CBW2: cluster workshops Day 1	
CBW2: cluster workshops Day 2	
CBW2: cluster workshops Day 3	
Learning sequence 3 attendances	
Intermediate activity 3	

CBW3: cluster workshops Day 1	
CBW3: cluster workshops Day 2	
CBW3: cluster workshops Day 3	
Learning sequence 4 attendances	
Intermediate activity 3	
CBW4: cluster workshops Day 1	
CBW4: cluster workshops Day 2	
CBW4: cluster workshops Day 3	
Learning sequence 5 attendances	
Intermediate activity 5	
CBW5: cluster workshops Day 1	
CBW5: cluster workshops Day 2	
CBW5: cluster workshops Day 3	