

# MOVE LISBOA

STRATEGIC VISION FOR MOBILITY 2030





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## 66 MOVE LISBOA (...) EVERYONE'S PURPOSE FOR THE NEXT DECADE?



It is in large cities, where 70% of the European population now lives, that the battle against climate change is lost or won. That is why the parties have set the goal of achieving carbon neutrality

by 2050 in the Paris Agreement. The European Commission has set ambitious targets concerning the transport sector: to halve the number of vehicles with internal combustion engines used in urban transport by 2030; to withdraw them from circulation in the cities by 2050; and to decarbonise logistics in large urban centres by 2030.

As the European Green Capital 2020 and an ecologically responsible city, Lisbon has already exceeded the targets set in the Covenant of Mayors for 2020, and will also meet its commitments undertook with the signing of the new Global Covenant of Mayors for Climate and Energy, reducing GHG emissions by 40% by 2030, which have been revised upwards in the Action Plan for Sustainable Energy and Climate (2018), where it is set to reach 60% by 2030. And it does so not only for the sake of global but also local sustainability, because the actions being implemented in this field also contribute to ensuring a healthier population with better quality of life, a more democratic and equalitarian society, a more attractive Lisbon for residents, businesses, and visitors and a city more resilient to global phenomena, whether climatic, pandemic or other. In addition, promoting sustainable mobility is an economic opportunity, increases energy efficiency, minimises externalities in the transport system, generates employment, and increases disposable income for households.

While it is true that access to the car has brought greater mobility, it has also incorporated less desirable environmental and experiential impacts, resulting in a frequent loss of people's accessibility to goods and services, affecting mainly the most vulnerable. In fact, the freedom to use the car without restrictions has contributed to urban sprawl and reduced the freedom of those who have limited access to public transport and for whom it is harder to travel on foot or by bicycle.

Contrary to this trend, we propose that by 2030 Lisbon may be a healthier and freer city, otherwise the expectations created for a society that wants to be just and for all, will lead to deep disappointment.

At this level, there are plenty of challenges. Epicentre of a metropolitan area divided by the Tagus River, Lisbon has become the link between the two banks, which together welcome almost 3 million inhabitants. Every day, more than 1 million trips are carried out within its urban perimeter. It is a city with a historic centre of extraordinary value in terms of landscape, culture, and tourism, but whose orography imposes important challenges to mobility and requires a permanent balance between the urban space and the different transport solutions.

In 2017 Lisbon managed to win back the management of *Carris* <sup>1</sup>, and now assumes itself as the manager of its own transport system within a Metropolitan Area that seeks to actively contribute to change the mobility paradigm, an example of which is the creation of the Metropolitan Transports of Lisbon in 2018. On foot, by bicycle, on public transport, or in shared vehicles, the city of Lisbon aims to provide tailor-made answers to each person and at each moment, within a global framework of sustainable and socially inclu-

sive development, in which the car is no longer a necessity but an option, even during a pandemic.

Major challenges require a clear vision and strategy so that all actions contribute to the same goal. This conviction gives rise to *MOVE Lisboa – Strategic Vision for Mobility 2030*: a document which defines our ambitions regarding mobility and accessibility for the coming years.

They also demand a broad commitment, not only from the City of Lisbon, but also from the surrounding municipalities, and from institutions, companies, and citizens.

Making *MOVE Lisboa* a reality should therefore be everyone's purpose for the next decade.

FERNANDO MEDINA

<sup>1</sup> Translator's Note – Carris is the transportation company which operates Lisbon's buses, trams, and funiculars.



## MORE DECARBONISED, INCLUSIVE, AND SAFER MOBILITY,



Time is one of the most precious assets of today's society and the quality of mobility in cities directly conditions this resource. A right decision can give time back to individuals and families, making

life in society fuller and more profitable. This is what has led me to commit myself professionally to this matter 20 years ago.

Today, being a father of two children – the oldest of whom will become an adult in 2030 – the challenges are clear to me. As a society, we are committed to them and to eighty thousand young people and children from the city of Lisbon, in order for them to have a better city on that date, and that is exactly what is required of us by young adults in particular.

We only have 10 years left, which means, in city time, one single opportunity to do well in all areas, without hesitation and with determination, and to honour our commitment.

I was fortunate to participate in the study "Lisbon: the mobility challenge", a reference document in Portugal as a first exercise to diagnose the mobility of a city, which already pointed to concrete solutions for the city of Lisbon. It was the year of 2005, there was no tradition of mobility planning *per se* and the concept of sustainable mobility was beginning to be part of the lexicon of cities for the first time.

In recent years the city of Lisbon has changed. A new generation of senior technicians have integrated the municipality, with greater competence in the area of mobility and public space, and an unequivocal focus on the citizen, with the aim of creating a more inclusive and accessible city for all.

The presidencies of António Costa and Fernando Medina in the municipality of Lisbon have clearly focused on hu-

manising the city and improving the quality of the public space. The citizen has been placed at the centre of urban design, pedestrian space has been prioritised, conditions to promote the use of bicycles have been created, and public transport became the backbone of the city's mobility strategy, which allows to reconcile quality of public space with accessibility, particularly in a city with such commuting patterns as Lisbon.

All transport modes are part of the solution, but the city of the 1980s and 1990s, designed for the private car, is nowadays a burden on Lisbon's urban legacy, with roads where people cannot live, high road accident rates, reduced environmental quality, and absence of conditions for the enjoyment of public space.

The city will not be sustainable without the contribution of more decarbonised, inclusive and safer mobility, so the goal is to reduce the use of private cars to no more than 34% of trips in the city of Lisbon, allowing the balance of the space allocated to other users and modes of transport, particularly the most vulnerable ones. This is the only way to achieve a substantial improvement in air quality, the urban environment and public space, and to achieve Vision Zero – zero deaths on the streets of Lisbon by 2030.

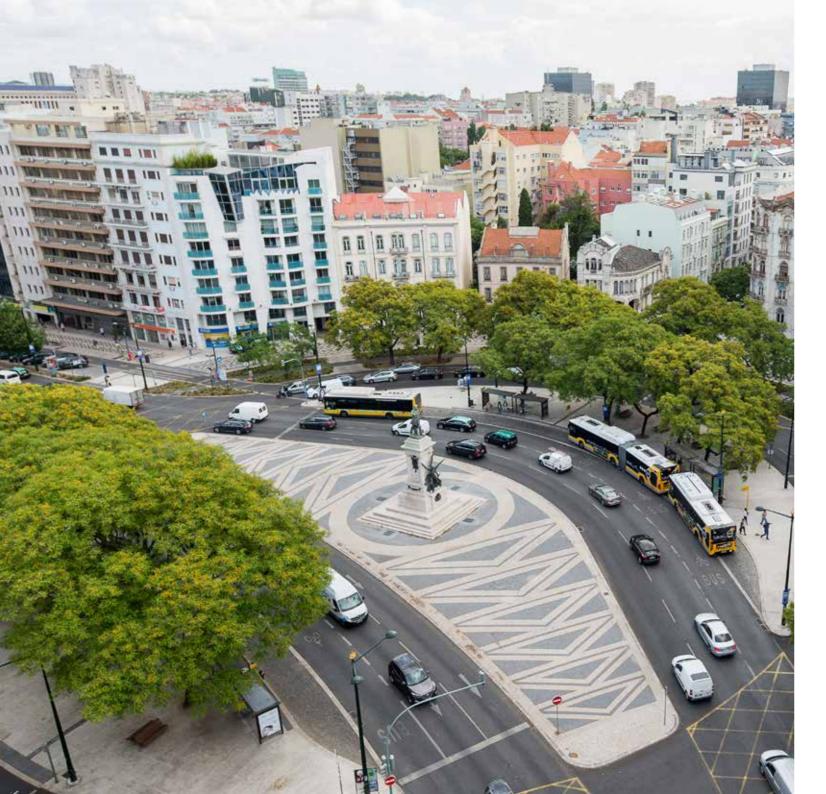
At the time this text is published, the world is experiencing the COVID-19 pandemic caused by SARS-CoV-2 virus, which has profoundly changed the way we live in society. It is an event that, due to its severity, will leave its mark on those who currently live it, but from which we cannot fail to learn lessons for the future.

This pandemic reinforces the ambition to improve Lisbon's environmental conditions, as it clarifies the urgency of improving air quality and the opportunities that result from quieter neighbourhoods. It will also leave a different perception of what the future of work can be, particularly in services, where teleworking opens new ways of organising our life in society, and objectively impacts the pressure in the city at different times of the day. To a large extent, this pandemic reinforces what *MOVE Lisboa* proposes.

MOVE Lisboa is not a plan, it is a vision of what we want to achieve and the paths we propose to use. It is a document that renews the mobility strategy in the city of Lisbon, created by different generations of City Council technicians, with the support, guidance, and support backing of the current governors.

This is a document which corresponds to the vision of the Lisbon City Council executive. In a world where mobility is no longer managed only on a plan, but increasingly in real time, the future for these entities, in particular for the Municipal Mobility Directorate and for the Lisbon Urban Management and Intelligence Centre, is highly demanding. This transformation will only be achieved by mobilising the human capital of these organisations, by empowering them and by strongly modernising the technologies that connect them to the mobility ecosystem.

Finally, I would like to acknowledge all those who in the past served to defend the public interest, contributing to the improvement of mobility in Lisbon, and a very friendly word of respect and professional recognition for the transformation that City Deputy Mayors Manuel Salgado and José Sá Fernandes brought to the city of Lisbon: the first with a huge improvement in public space and walking conditions, the second with a strong promotion of the city's green spaces and the growth of the cycling network.







## WHY A STRATEGIC VISION FOR LISBON'S MOBILITY?

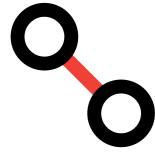
The choice for a smarter mobility, ensuring maximum accessibility with minimum impact, has become a key commitment for Lisbon.

Lisbon has already implemented a number of measures to promote more sustainable mobility, but it still lacked an integrated strategy that would define a clear vision and ensure the coherence of the choices made.

*MOVE* Lisboa – Strategic Vision for Mobility 2030 aims to provide that coherence, by defining a clear plan for the desired future and pointing out the guidelines for the use of operational instruments that will take us to a new level in terms of mobility and urban accessibility.

This vision proposes a transport system which is more integrated, reliable, connected, accessible, and open to new solutions, reclaiming space for people, increasing the community's sense of belonging, maximising the quality of life of the city and Lisbon Metropolitan Area (AML) residents, and improving the experience of those who use and live Lisbon.





## FROM THE MOBILITY WE HAVE TO THE MOBILITY WE WANT

RIUM SALDANHA

In the last decades, the Lisbon Metropolitan Area has gone through important urban, social, and economic dynamics, which have been decisive in the population's mobility choices and the subsequent evolution of the transport system and the respective

modal split. Among those dynamics, two are of particular relevance: first, the demographic outward flow of Lisbon residents to AML's neighboring municipalities, and, secondly, the proliferation of car ownership and its widespread use. In the early 1980s, the population living in the city of Lisbon exceeded 800,000 inhabitants. Since then, there has been a progressive decline in the number of residents, which in 2017 was of around 500,000. In AML as a whole, the inverse trend has been observed, with an overall increase in the population to 2.800.000 inhabitants in 2011.

However, this decrease in the population of the city has not corresponded to the reduction of the pressure on the Lisbon mobility system. On the contrary, AML's demographic reorganisation has changed mobility patterns, which, coupled with the massive use of cars, the ongoing investment in road infrastructures with subsidised tolls, and tax reductions in the allocation of corporate vehicles, has led to an excessive demand on the Lisbon road network, with consequences in terms of traffic and parking, as well as safety and quality of life of those who live and use the city. The growing inadequacy of the public transport system to the new reality of people's mobility has also contributed to that.

In fact, most workers and students in the city of Lisbon continues to favour the use of the car for their daily commutes. In 1981, public transport was the main mode of transport used for home-to-work or home-to-school journeys, with a share of 67% compared to 14% of cars. Since then, the modal split has changed radically, with the car assuming a central role in the mobility system, accounting in

2017 for about 46% of journeys that start and end in the city, compared to only 22% of public transport. As far as the Lisbon Metropolitan Area is concerned, the share of car trips is even higher, representing almost 60%. On the other hand, in 2017, walking already accounted for 30% of the trips in Lisbon, which represents an increase compared to 2001 and 2011, when its weight was 21% and 17%, respectively. Bike use has also been increasing. Although still with residual values, representing in 2017 about 0.6% of the trips in the city, this figure corresponds to an increase of nearly 200% compared to 2011.

Reversing the current modal split in order to free up public space for citizens and ensure convergence with the goals of the Paris Agreement, namely carbon neutrality by 2050, is the biggest challenge of the mobility policies for the city of Lisbon. It is thus necessary to change the paradigm; it is important to promote solutions that will reduce dependence on the private vehicle, improving the quality of life and health of Lisbon citizens. Lisbon needs to adapt the public transport system to housing areas and its migration flows, responding effectively and efficiently to the mobility requirements of its citizens.

Today we are witnessing a dramatic change in mobility policies globally, where outdated "predict and provide" strategies, that aimed to increase infrastructures for individual road traffic, have been replaced by others, more focused on humanising cities and increasing the quality of life of those who use them. In Lisbon, efforts have been made to return the public space to people, with a special highlight to the amendment proposed by the 2012 Municipality Master Plan (PDM – Portuguese acronym), in which, for the first time, the policies of mobility and land use planning are articulated. In this context, some aspects are highlighted: the multifunctionality proposed for most of the territory; the proximity of transport interfaces as a criterion for the demarcation of the new urban polarities; the introduction



**∞ MODAL SPLIT 2017** 

PRIVATE CAR > 46%

PUBLIC TRANSPORT > 22%

OTHER > 32%

₀- GOAL 2030

PRIVATE CAR > 34%

ALTERNATIVE MODES > 66%

ENTER THE CITY OF LISBON EVERYDAY?

IF SET IN A STRAIGHT LINE, THEY WOULD

LINK LISBON TO PARIS. \*2018 DATA.

of maximum limits for the creation of private parking in the vicinity of public transport stations; the revision of the hierarchy of the road network, in order to discourage quick access to the city centre by car through the radial axes, and to remove the through traffic from the historical and riverside area, in view of its urban rehabilitation.

Other key instruments that introduce or enclose measures to promote sustainable and inclusive mobility in the city include: the Pedestrian Accessibility Plan, the Urban Development Strategic Plan, the Lisbon River Front Intervention Plan General Intervention Plan for Lisbon Riverside Area, the "One Square in Each Neighborhood" and the Paving Lisbon 2015–2020 Programmes, the Municipal Strategy for Adaptation to Climate Change, the Urban Noise Action Plan, or the Sustainable Energy and Climate Action Plan.

More than half of the daily commuting from neighboring municipalities make use of the car. This imbalance might be corrected if, on the one hand, the offer of public transport is improved, more integrated, and complemented by active modes and other mobility services, and, on the other, if the population of the city of Lisbon grows, thus increasing the internal response to its job offer. The strengthening of the Lisbon City Council's competences in the management and supervision of city mobility, in close relation with the Lisbon Metropolitan Area and the Government of the Republic of Portugal, will lead to significant improvements in the service, making the use of public transport a real mobility option. A paradigmatic example was the creation of the Single Metropolitan Monthly Ticket Pass, set at €30 in Lisbon and €40 within the whole AML, a historic measure to simplify and reduce fares which led to a 30% increase in demand. In fact, this Single Metropolitan Pass has allowed to eliminate almost 4000 different tariffs, and has had an unprecedented impact on the economy of families in the 18 municipalities, who have now a maximum limit of 80€ per family to pay for the access to a network that includes all the AML operators, whereas before the family expenses could exceed €400 per family. With the possibility of managing Carris at a local level, the city can restructure its network, renew its fleet, improve its offer, increase the quality of its service, offer new products, adjust tariffs, improve relations with the city, residents, and visitors. The substantial increase in the bus fleet, the hiring of more drivers, the creation of new lines, and the extension of the trams network are ongoing measures which already address these objectives. In addition, the launch of the tender for the acquisition of the public road passenger transport service in the Lisbon Metropolitan Area will lead to an increase of 40% in the offer.

On the other hand, EMEL, assuming itself as a mobility

company, now offers new and additional mobility services, such as the successful GIRA - Public Bicycle Sharing System.

This dynamic gives signs to the transport system and influences and inspires new solutions. The private sector has already become aware of the directions provided by cities and, supported by innovative technologies, it has begun to offer radically different mobility services based on data sharing and connectivity, as well as shared vehicles, mostly supported by smartphone applications, and with disruptive business models, creating different dynamics, imposing accelerated rhythms, and forcing cities to reinvent themselves so as to adapt, given the force with which they enter the market. Examples of this include shared car, mopped, bicycle

and scooter services, as well as ridehailing services on unidentified vehicles by means of electronic platforms.

Lisbon is nowadays recognised as a scene of innovation in mobility. With each step, new ideas and new projects emerge and are embraced, quickly crossing the borders of the city. And AML, centred on the great square that is the Tagus River, a waterway that also needs to be explored with innovation, is a direct beneficiary of the dynamics that Lisbon imposes.

In short, while the last few decades have been strongly marked by urban sprawl, at a metropolitan level, much supported by individual transport, it is now fundamental to ensure a more rational, sustainable, and accessible mobility, but also more updated, efficient, and attractive. The aim is therefore to achieve an integrated mobility solution in which public transport operates in perfect harmony with active modes and shared services, in which the most important aspects are the user-friendliness of the system in terms of accessibility, information, ticketing and price, based on information systems built on data sharing, and ensuring a better linkage between public space and transport infrastructures.

It is in that sense that MOVE Lisboa emerges, as an instrument that intends to guide urban development in the next decade, towards a more resilient city, with better quality of life, which has proven to be decisive in a pandemic situation. Thus seeking a more balanced modal split, based on an integrated and connected mobility system, built on an unified and multimodal public transport network, on a safe, functional and attractive pedestrian and bicycle network, and on the proliferation of mobility services based on cleaner technologies, ensuring that in the future, Lisbon is a zero-emission city with high levels of environmental, economic and social quality.

Therefore, MOVE Lisboa intends to be a tool to help achieve one of the strategic objectives of the city government: to guarantee ACCESSIBLE MOBILITY, AVAILABLE TO EVERYONE.





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### MOVE LISBOA STRATEGIC VISION FOR MOBILITY 2030

Lisbon is nowadays a particularly attractive city. It owes it to its history, its geography, its people, and the way it has been growing in recent years. By 2030, however, Lisbon should be an even more appealing city as a result of the changes that are expected and many others that have already started.

The Lisbon we are striving for is a city with a people-centred mobility ecosystem that is accessible, useful, reliable, and safe, based on an integrated public transport network complemented by innovative solutions that allow conscious and sustainable choices.

Lisbon is European Green Capital in 2020, but the transformation it is carrying out and aims to achieve will make it possible to position itself, by 2030, as the European capital of reference in the area of mobility as well.

To this end, Lisbon City Council assumes it's role as mobility manager of the city. It plans its mobility and intervenes at different levels: in the management of the road network, including traffic light systems, in structuring surface transport, in parking management, in the implementation of cycling routes, in the promotion of shared services and vehicles, whether of its own initiative or by private companies, through the regulation of public space and integration with other forms of mobility.

By promoting integration between the municipal services, Carris, EMEL and the Municipal Police, the Lisbon City Council optimises its means to ensure better offer in terms of mobility.

If, on the one hand, the municipality is leading the movement of assumption of the new paradigm of mobility in its territory, on the other, it seeks to influence several partners and integrate them into its action. Acting directly with the Government of the Republic of Portugal, the Lisbon Metropolitan Area, other Municipalities, transport operators and mobility services companies, the Lisbon City Council

works to promote solutions that allow to reduce dependence of private cars, creating alternatives that help to foster a rational modal shift, to improve mobility and to increase accessibility.

The Lisbon that we aspire to is a city with a neighbour-hood life, of daily proximity, protected from the intense traffic, where people prefer to walk, use their bicycles or the neighbourhood bus line. To do so, pedestrian barriers will be diluted, routes will become comfortable and accessible, and traffic will flow more peacefully, coexisting friendly with pedestrians and bicycles for everyone's safety. The streets of Lisbon will be areas for gathering and enjoyment where inhabitants and visitors will meet and exchange experiences, where commerce and culture will set the pace, where children will be able to play, and the elderly will be able to fraternise.

The whole city will be connected through a network of multimodal axes, where an excellent network of public transport and new mobility services will circulate, using roads and train infrastructures efficiently, and exploring Tagus river waterway in an innovative way, allowing anyone to have access to urban scale functions (hospitals, universities, service centres, stadiums, among others) with flexibility and freedom of choice. That freedom will only be effective if it is available to everyone, so by 2030 the city should increasingly have universal levels of accessibility, guaranteed by the inclusive design of public space and simplified by the proliferation of online services and telework.

It is also important to ensure the progressive protection of the centre and increase its high levels of attractiveness, comfort, safety, and environmental quality. In order for the experience in this space to be enhanced and public health protected, Lisbon must ban through traffic from the central area of the city and make it a low emission zone, tending to zero, and providing maximum road safety. Circulation in downtown Lisbon should be reserved for local traffic, public

transport, active modes, shared systems, and connected and environmentally friendly vehicles.

More efficient and sustainable urban logistics should also be fostered, by limiting loading and unloading schedules, optimising bays reserved for those purposes, as well as micro-logistics solutions, making use of information and communication systems and increasingly environmentally friendly vehicles, thus distributing more cargo on fewer trips and less time.

By changing the way people and goods move around the city and access to their functions and destinations, equal opportunities will be promoted, as well as health and quality of life of the population, efficiency of services and the attractiveness of the city as a destination to live, visit, study and invest.



#### MOVE LISBOA STRATEGIC VISION FOR MOBILITY 2030

The use of clean vehicles, both by private individuals and by organisations, in the transport of passengers and goods, should make way, until 2030, and as defined in the Sustainable Energy and Climate Action Plan (SECAP, 2018), to the eradication of use of diesel light-duty vehicles in the central areas of the city. That will enable convergence with the first of the ten targets for a competitive and resource-efficient transport system, as defined in the White Paper: Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system. The target defines the need to "halve the use of 'conventionally-fuelled' cars in urban transport by 2030; phase them out in cities by 2050; achieve essentially CO2-free city logistics in major urban centres by 2030."

The city's aim is to meet its environmental and climate commitments and to make a decisive contribution to the decarbonisation of the transport sector and to the reduction of air pollution.

It shouldn't be overlooked that Lisbon has an airport with significant environmental impacts and, as such, the municipality defends measures to mitigate and reduce the impact of aircraft overflights on the city, through the construction of a new airport in the Lisbon Metropolitan Area, very well connected to Lisbon.

This vision for the mobility of Lisbon – MOVE Lisboa – is therefore decisive to transform the city and ensure the quality of life of its inhabitants and visitors.



#### STRATEGIC PILLARS

#### 1. MORE INTEGRATION

To promote integrated mobility solutions on a metropolitan scale, including all transport modes available, and providing one single point of contact for the user.

#### 2. MORE TRUST

To increase reliability, speed, and safety of public transport through measures which reinforce capacity, frequency, capillarity, surveillance, and prioritisation on the roads.

#### 3. MORE CONNECTIVITY

To ensure connected transport with real-time information, encouraging the use and sharing of data, and an integrated management of the network by the municipality on a mobility manager logic.

#### 4. MORE ACCESSIBILITY

To trengthen the accessibility, inclusiveness, convenience, and proximity of the network and of the cost of transport to all, and promoting an integrated, simple, and user-centred experience.

#### 5. MORE INNOVATION

To make Lisbon a pioneering and testing city for innovative mobility solutions in real but controlled environments, generating a positive impact both on the economy and users.

#### 6. MORE RESPONSIBILITY

To make citizens and businesses aware of the modal options and mobility products available, sensitising them to the impact of using private car, promoting alternatives whenever they exist, and developing pedagogical actions which promote the public space and sustainable mobility.



## WITHIN THE CONTEXT OF THE MOBILITY STRATEGY, WHAT IS INTENDED IS THAT LISBON:

## INCREASES THE ATTRACTIVENESS OF PUBLIC TRANSPORT (PT)

By simplifying and reducing tariffs, improving its reliability, regularity, quality, and increasing commercial speed, in particular through the implementation of high-performance bus corridors, the creation of PT dedicated lanes in the main roads that give access to Lisbon, the control of on-street parking and prioritizing PT in traffic lights. It will increase the efficiency and predictability of public transport, the recovery of passengers and the decrease of traffic congestion.

## INTEGRATES NEW MOBILITY SERVICES INTO THE TRANSPORT SYSTEM

Creating conditions for the existence of integrated platforms of mobility services, in a logic of mobility as a service, ensuring information to the public, simplicity in the acquisition of services and improving its quality and efficiency.

It will increase multimodality by adding flexibility and coverage to the transport system.

## RESTRICTS PRIVATE CAR ACCESS TO DOWNTOWN AND SURROUNDING HILLS

Historic areas of the city should be limited for public transport, active modes, shared systems and green vehicles. These restrictions should gradually be extended to other areas of the city.

It will improve the quality of urban life and achieve direct gains in terms of health

and road safety, in conjunction with the objectives advocated in the SECAP.

## IMPLEMENTS MEASURES TO PROMOTE SAFETY IN THE MOBILITY SYSTEM, STRUCTURED THROUGH THE MUNICIPAL ROAD SAFETY PLAN

It will allow to have safe streets, that aim for zero deaths on the roads of Lisbon.

## IMPLEMENTS A STRATEGY TO ACCELERATE THE ADOPTION OF ELECTRIC MOBILITY

Adapting the city to electric vehicles, both from the perspective of the charging infrastructure and the positive discrimination of their use, notably via the low emission zones.

It will allow the local reduction of GHG emissions and atmospheric pollutants.

## REQUALIFIES PUBLIC SPACE AND PEDESTRIAN NETWORK

It will humanise the city by reducing shortdistance car travel, enhancing the identity of neighbourhoods and improving universal accessibility to the PT network and equipments.

## IMPROVES MOBILITY TO AND FROM SCHOOL

It will reduce the number of journeys to school done by car, by promoting access by public transport, soft modes or ridesharing, fostering safety in the surroundings of schools and reducing the need for car use by households. 70% of the adults who take children to school do it in private cars, something that happens more often on private schools.

## EXPANDS THE CYCLE LANES NETWORK, MAKING IT MORE COMPREHENSIVE

It will allow absorbing trips currently made by car and offer mobility alternatives, in line with the effort made so far, that contributed to multiply by three the total bicycle trips in just 6 years.

#### **INCREASES THE RESIDENT POPULATION**

It will allow commuting reduction, increasing home - work/school travel on foot, by bicycle and by public transport, and reducing the need for daily private cars to enter the city.

## PROMOTES THE USE OF THE TAGUS RIVER AS AN INFRASTRUCTURE FOR WATERWAY MOBILITY

Considering the Tagus River as a metropolitan waterway, which ensures mobility throughout the city and between banks. It will enable the implementation of a network of individual and collective waterway transports along the riverfront.

## CONTINUES THE DEVELOPMENT OF PARK&RIDE INFRASTRUCTURES NEAR PERIPHERAL PT INTERFACES, WITH TARIFF INTEGRATION

It will allow promoting park&ride, reduc-

ing the entry of cars in the city of Lisbon and offering a solution for those vehicles that, coming from the metropolitan area, nowadays park in the residential districts of the city.

## FINDS NEW EMPLOYMENT POLES IN THE PT INTERFACES SURROUNDINGS

It will allow employment to be concentrated in the best-served areas of public transport, reducing the need for car use, strengthening PT operators and increasing the quality of their services.

#### TAKES ON NEW FORMS OF WORK

Learning from the conditions generated by the pandemic, resulting in greater use of teleworking and mismatched work schedules, with significant impacts on the dynamics of families and their mobility chains. It will reduce the amount of commuting and flatten the peaks of rush hours.

## **DEFENDS THE URGENCY OF METROPOLI- TAN INVESTMENT IN HEAVY MOBILITY**(train, metro, river), particularly in the con-

(train, metro, river), particularly in the context of new fund programming cycles.

#### STRENGTHENS COORDINATION AT MET-ROPOLITAN LEVEL OF MOBILITY SYS-

**TEMS**, in particular through the full development of the Lisbon Metropolitan Transports company and the taking over, by the Metropolitan Area, of the functions of Transport Authority over all modes.





## AN INTEGRATED PLANNING AND MANAGEMENT SOLUTION

Given the complexity of the transport system, the need for its chain operation and the diversity of factors that contribute to the choices made by those who have to commute, MOVE Lisboa proposes a set of guidelines to achieve a significant reduction in the use of private car and, consequently,

greater use of public transport and active modes.

Although investment in infrastructure is necessary to solve certain aspects of the transport system, much can and should be done to enhance the existing facilities. It is expected that this action, which includes Planning and Management, will bring relevant improvements in the transportation system.

To this end, a Mobility Planning has been proposed, based on 5 networks and 5 services, that should be articulated and should overlap in a coherent way, giving shape to the planned multimodal and intermodal transport system.

Mobility Management presents particularly interesting potential for a city such as Lisbon, which offers a comprehensive public transport network, which is in the process of investing in infrastructures for active modes and launching high impact shared services. The definition of assertive management measures can make a decisive contribution to the success of these new investments, enhancing the use of infrastructures and maximising the chances of their successful integration into city life with low cost/benefit ratios.

Management actions also allow the integration and coherence of the concrete measures to be implemented within the 5 networks and 5 services, as well as its alignment with the established vision. This integrated action makes it possible to secure the optimisation of public resources.

In this way, MOVE Lisboa proposes that the Mobility Management of the city of Lisbon be organised around 5 transversal axes: Resource Management, Control, and Optimisation; Information, Promotion, Awareness and Public Participation; Financing; Regulation; Monitoring, Evaluation, and Review.

From the coherent definition of these networks and services, and from the transversal axes, an accessible Lisbon

will emerge, where people, regardless of their physical or economic condition, will be able to move freely and access the goods and services they need.



5 NETWORKS 5 SERVICES

PEDESTRIAN PARKING

SHARED SERVICES

**PUBLIC TRANSPORT** 

URBAN LOGISTICS

CYCLE

ROAD

ADDITIONAL MOBILITY

**INTERFACES** 

**TOURIST TRANSPORT** 

**5 TRANSVERSAL AXES** 

RESOURCE MANAGEMENT, CONTROL AND OPTIMISATION

INFORMATION, PROMOTION, AWARENESS AND PUBLIC PARTICIPATION

FINANCING

REGULATION

MONITORING, EVALUATION AND REVIEW



#### PEDESTRIAN NETWORK

#### Why:

Walking is the most universal and democratic form of displacement, and for this reason it is the duty of the municipalities to promote pedestrian accessibility to any part of the city, so that everyone is free to move around the territory.

The pedestrian network forms the basis of the mobility system, since any movement, regardless of the mode used, involves walking at some point, which makes it a key element in the access to other modes.

Consequently, it is essential to ensure a good pedestrian network offer, one that promotes walking and connects to nearby destinations, in particular to the public transport system and to schools, which are crucial in choosing the form of daily traveling that working population with children need.

#### Vision!

MOVE Lisboa proposes a continuous, connected, and inclusive pedestrian network that guarantees comfortable and safe travels between residential areas, infrastructures, services, and local stores, linking these functions to public transport. This network should be attractive, inviting, and accessible to all, regardless of their pedestrian mobility abilities. The whole city should become safer through the dissemination of traffic calming measures and the implementation of protected areas.

#### How?

- Promoting a continuous, connected, and obstacle-free pedestrian network throughout the entire city;
- Implementing the Pedestrian Accessibility Plan:

- By creating attractive and fully accessible pedestrian axes that motivate walking and the use of public transport;
- By pedestrianising axes and squares, and creating shared zones whenever possible;
- By implementing traffic calming and pedestrian priority measures, especially in areas surrounding schools, in the access to neighbourhoods, and in all places where there is a high number of run-over accidents;
- By introducing pedestrian accessibility solutions in the planning instruments in order to minimise the constraints of the pedestrian network in a timely manner;
- By implementing a vertical pedestrian mobility network, supported by mechanical means that help to overcome the unevenness in the hills;
- By introducing comfortable and safe flooring, especially in the new or to be re-qualified pedestrian spaces;
- Planting trees next to the pedestrian routes in order to improve its attractiveness, comfort and shadowing.

It is proposed that in 2030 Lisbon be universally accessible by foot, both within the neighbourhoods and in the main axes of access to the central areas and infrastructures, in particular the interfaces and the school network.

**DID YOU KNOW THAT...** THE WORLD HEALTH ORGANISATION RECOMMENDS TAKING 10,000 STEPS A DAY FOR HEALTH REASONS?





#### PUBLIC TRANSPORT NETWORK

#### Why?

Lisbon's public transport network comprises urban, suburban, national, and international transport, integrating services provided by multiple operators.

There are several opportunities to improve the service made available to the population, in particular in the articulation and integration at metropolitan level. This improvement depends on the evolution of infrastructures, but also on the increase of the frequency, the redefinition of the network, the articulation between modes, the correct management of the interfaces to reduce the number of transfers and minimise its impact on travel time, when they exist. It also depends on the elimination of competition and overlapping supply, problems solved with the tenders launched by the Lisbon Metropolitan Area, which promote a greater complementarity, especially between urban and suburban networks. It also relies on single ticketing and full tariff integration, in a logic of mobility as a service. In the first half of this decade, Lisbon's public transport system suffered a drastic reduction in the number of passengers after disinvestment in the network and price increase registered at the beginning of this period. Since 2016, this trend started to be reversed as the supply was improved and the investment in the public transport service was recovered.

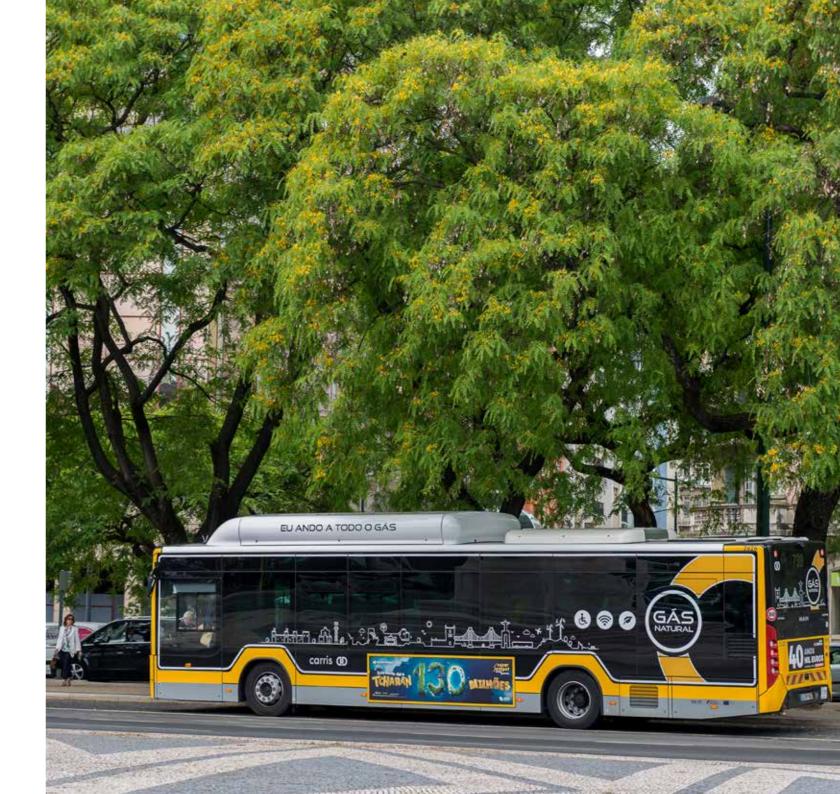
#### Vision!

Lisbon should have a comprehensive and accessible public transport system, planned and managed in perfect harmony with the municipal and metropolitan mobility strategies. At the metropolitan level, the priority in terms of public investment in public transport services and its supporting infrastructures should be the development of new transport corridors in dedicated lanes and the increase in connections to Lisbon, including the improvement of the last mile at

the beginning and the end of the trip, in line with the principles approved at the Summit of the Metropolitan Areas of Lisbon and Porto, in March 2018. The system should be seamlessly interconnected with the rest of the other transport networks and services and be supported by the single metropolitan pass that drastically simplifies the accessibility to public transport. It should guarantee frequency and fluidity, benefiting from its own space-channel and traffic light priority at the intersections, guaranteeing quality in the mobility of its residents and visitors, as well as students and workers who enter the city every day.

#### How?

- Enhancing the new single monthly ticket pass: Municipal, €30; and Metropolitan, €40;
- Reinforcing the supply and the integration of the metropolitan network, namely through the launching of network tenders by the Lisbon Metropolitan Area;
- Empowering the exercise of all the functions of the Transport Authority on public transport operations in the municipality of Lisbon, whether in the definition of CARRIS<sup>2</sup> public transport services or in connection with the Metropolitan Transports of Lisbon;
- Reinforcing, restructuring, diversifying and modernising the municipalized Carris, increasing its services in quality and quantity;
- Enabling Carris to provide a more accessible, reliable, comfortable and sustainable service through the acquisition of new low-emission buses and the hiring of more crew members;



<sup>2</sup> Translator's Note - CARRIS - Lisbon municipal bus service operator.

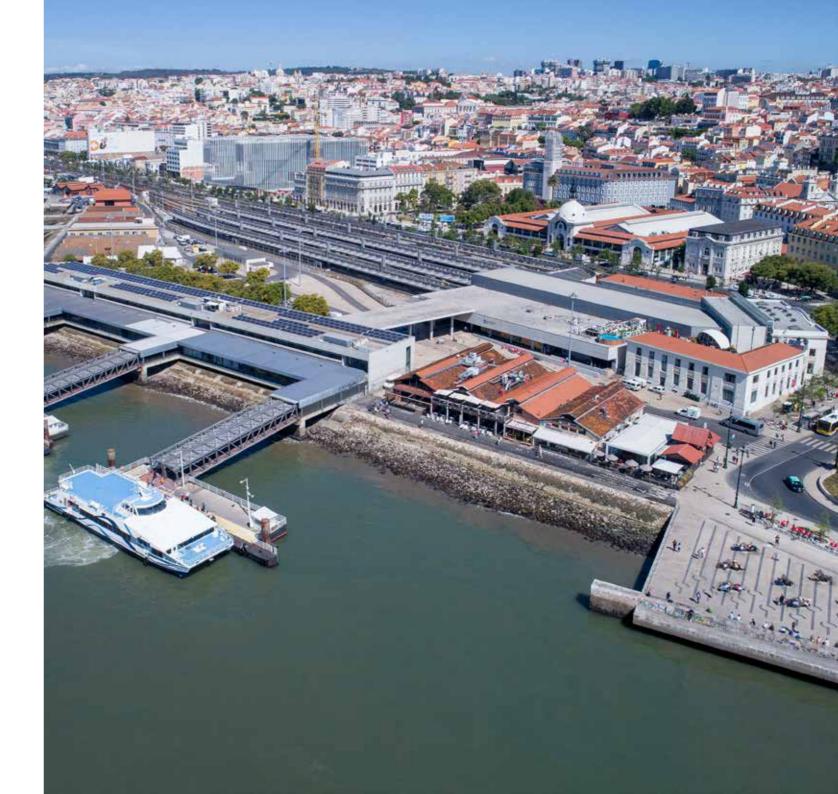
### MOBILITY PLANNING 5 NETWORKS | 5 SERVICES

- Reorganising the urban bus network, including:
  - The establishment of a high-level bus network for large flow of users;
  - An intermediate network that guarantees longer routes with fewer transfers;
  - The creation of a neighbourhood network that guarantees local transport.
- Improving the quality of on-board services such as wi-fi and passenger information services;
- Improving the quality of service of the surface public transports, including high-performance bus corridors, increasing the number of regular BUS corridors, and strengthening their enforcement;
- Implementing the Economic Recovery Plan, including the expansion of the Lisbon Underground, high-capacity corridors and reinforcement of the waterways and the light rail system;
- Expanding the metro and light rail network, including:
  - The extension of the metro yellow line from Rato to Cais do Sodré, creating an urban circle with the green line;
  - The extension of the red line from São Sebastião to Campo de Ourique and Alcântara;
  - The metro offer in the Telheiras, Colégio Militar and Benfica corridor;
  - The light rail connection between Alcântara and Cruz Quebrada;
  - The light rail connection between Santa Apolónia and Sacavém:
  - The extension of the red metro line between the Airport and Entrecampos.
- Developing dematerialised ticketing systems and loyalty programs that reward public transportation preference and promote its adoption by the whole household;

- Reinforcing the corridor of Tram 15 between Jamor and Sacavém;
- Promoting innovative waterway options, which use Tagus river as an infrastructure;
- Promoting on demand or flexible transports solutions to support the regular public service offer;
- Reviewing the policies and rules relating to the taxi service, looking into modernising it and increasing its competitiveness;
- Mapping the networks in an integrated way, to improve the information to the public and the channels in which it is made available to the users, incorporating all modes and promoting intermodality in Lisbon and the metropolitan area;
- Promoting the articulation between the PT network and the urban and economic development of the city;
- Implementing pedestrian and cycle routes, continuous and connected, that link residential areas, infrastructures, population and business hubs with the PT network;
- Improving intermodality, in what concerns coordination between modes, comfort, accessibility and available information;
- Promoting inclusive accessibility to PT.

It is proposed that in 2030 the PT network in the city be more comprehensive, robust and coherent, integrating new modes, and that the accessibility to the network is easy and inclusive.

DID YOU KNOW THAT... IN THE 1980S, PUBLIC TRANSPORT ACCOUNTED FOR ABOUT 65% OF THE TRIPS IN LISBON AND THAT CURRENTLY IT DOES NOT REACH 25%?



#### **ROAD NETWORK**

#### Why?

In recent decades, widespread access to the car has revolutionised the way we move, bringing multiple benefits, but also fewer positive consequences for people, cities, and the planet. Cities have become, in this process, more dispersed, less inclusive, and less safe. They have also become less healthy, just like its citizens, who are subject to air quality degradation and have as base a sedentary mobility.

In this context, in Lisbon, the area dedicated to the automobile has been systematically prioritised for years, becoming unbalanced from the point of view of the quality of the public space. In addition, the existence of an airport in the city puts significant pressure on the induced traffic, particularly in the Second Ring Road.

#### Vision!

MOVE Lisboa proposes a road network that increases the importance and the fluidity on the circular axes of the city and reduces the importance of the radial axes, protecting the centre through increasingly restrictive crown areas. These should be part of a new mental map of circulation in the city, which will encourage a more rational use of the car and reduce the need to cross neighbourhoods. Real traffic speeds should be reduced, especially in local streets, thus increasing road safety. The vehicles that use it must progressively become decarbonised, connected, and shared. Harmonious and safe coexistence between the various modes sharing the network should then become a reality.

#### How?

- Increasing the legibility of the road hierarchy, adjusting it to the mobility strategy;
- Creating conditions of fluidity in the inner ring roads of

- the city, reducing the ease of penetration towards the urban centre;
- Implementing a road system of 5 internal traffic ring roads to the city (from CRIL3), clearly signposted and with improved traffic flow, seeking to reinforce effective alternatives to the historic centre, resolving occasional connections with a view to its effective consolidation;
- Transforming the city's neighbourhoods into 30km/h
  Zones), ensuring traffic fluidity in major arteries and
  collectors (1st, 2nd, and 3rd level of the Municipality
  Master Plan);
- Renewing the city's traffic light management system, a new mobility management room coordinated by the Municipal Police Force, EMEL, Carris, and the Municipal Mobility Directorate, and integrating it into the city's daily mobility management processes, contributing for the decrease of congestion, time losses, and pollution;
- Implementing a network of road safety support systems such as cameras, radars, and red traffic light and yellow box sensors;
- Introducing mitigation measures that ensure the generalised reduction of traffic volume and speed;
- Eliminating through traffic in the city centre and in the interior of the neighbourhoods the city centre and the interior of the neighbourhoods;
- Controlling and significantly reducing the environmental and traffic impacts resulting from airport activities, restricting air activity on the city and finding new mitigating solutions;
- Delimiting the protection of the historical city centre, with circulation reserved to active modes, PT, residents and zero-emission loading and unloading vehicles;
- Defining a strategy for the implementation of 30km/h
   Zones, Superblocks and Coexistence Zones which pro-

mote local shopping, street living, and a sense of community inside the neighbourhoods;

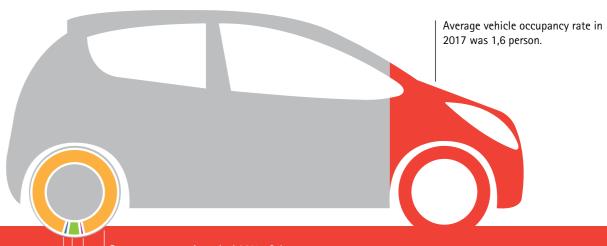
- Continuing and reinforcing the implementation of the Low Emissions Zones (ZER – Portuguese acronym), identifying the most vulnerable locations in terms of air quality;
- Promoting a Zero Vision policy based on the Municipal Road Safety Plan, ensuring zero deaths on the streets of Lisbon by 2030;
- Leading by example in the conversion of municipal cars into electric ones;
- Minimising the breaking effect of the 2nd ring road, giving it a more urban character, integrating it into the urban network and including a Bus Rapid Transit Corridor;
- Encouraging the use of CRIL and CREL<sup>3</sup> to replace the use of more local roads;

3 Translator's Note – CREL is the Portuguese acronym for the Lisbon External Regional Circular, a highway that constitutes the ring outside Lisbon.

- Reformulating the access nodes to CRIL, as well as redefining road access to the Lisbon Airport, releasing capacity in the 2nd ring road as a collector.
- Reformulating the access nodes to CRIL, as well as redefining road access to the Lisbon Airport, to increase the 2nd ring road's capacity as a distribution route.

It is proposed that in 2030 car traffic in Lisbon be preferably done in the road network with greater capacity, which will allow the protection of the city centre and the neighbourhood from through traffic.

**DID YOU KNOW THAT...** THE LISBON ROAD NETWORK IS ABOUT 1700 KM LONG, AND THAT ABOUT 500,000 VEHICLES CIRCULATE ON IT DAILY?



1,6% searching for parking space.

On average, a car is parked 92% of the time. In other words, 23 hours per day.

1% stuck in traffic.

5% driving.

## CYCLE NETWORK

#### Why?

Cycling is the most energy efficient mode of transport. In urban areas, it is very competitive, especially in short-distance (up to 5 km), saving up to 30% of travel time and ensuring door-to-door travel.

Although Lisbon is known as the city of 7 hills, 73% of its streets are flat or have slopes of less than 5%, meaning that they are accessible to most users. On the other hand, the proliferation of electric bicycles and other similar soft modes, as well as mechanical means of support, allow solving the difficulties imposed by the orography, and aspiring to a fully cycling Lisbon.

However, in 2017, only about 0.6% of travel in Lisbon was done by bicycle. Although this figure is roughly 200% higher than in 2011, it is far from the reality registered in other cities, some of which reach more than 40%. In fact, despite the increasing weight of the "cycling economy" in most European cities, and the international recognition that this mode is a fundamental pillar of the mobility system of modern cities, only in 2017, with the increase of the cycling infrastructure in the urban network and the introduction of the public bicycle sharing system GIRA, did the bicycle begin to be considered as a real alternative for many people in Lisbon.

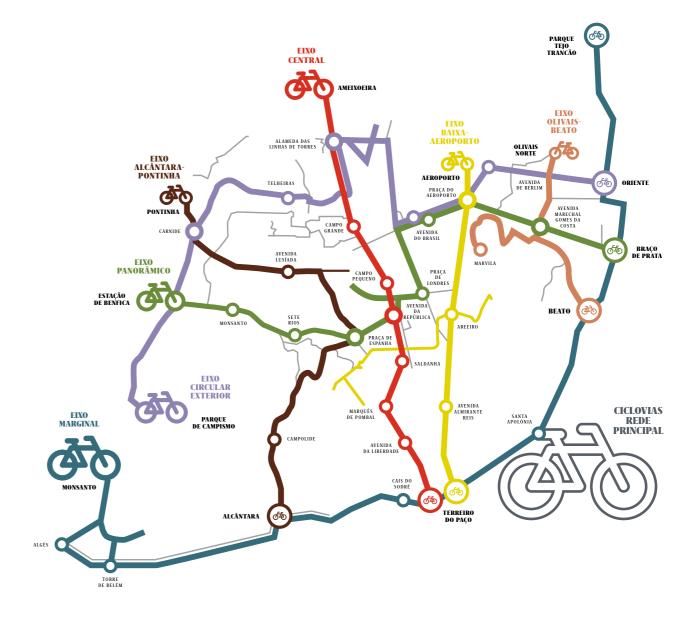
#### Vision!

Supported by a continuous, effective and safe network that promotes the daily use of the bicycle on the home to work/school routes by people of all ages, Lisbon proposes to be a cycling city. It should also have a comprehensive network of parking facilities and offer bicycle sharing services. The use of the bicycle as a transport mode should be easy and attractive for this mode to gain relevance in the modal split.

#### How?

- Consolidating a structuring, continuous, safe, and functional cycling network that connects interfaces, residential areas, large infrastructures, business districts, green and leisure zones, connecting to neighbouring municipalities, with at least 200 km of new cycle routes;
- Promoting the safe use of the bicycle in residential areas, through traffic calming measures in the neighbourhoods, and the improvement of cycling connections between them;
- Promoting complementarity between bicycle and public transport;
- Providing and facilitating access to the bicycle by supporting its purchase;
- Disseminating a network of stands for short-term bicycle parking, and creating safe long-term parking at the interfaces and car parking areas;
- Implementing a dense and comprehensive public bike sharing system covering the entire city, also using electrically assisted bicycles;
- Promoting traffic calming measures and space sharing between vehicles at low speeds, through a global network of 30 km/h + Bicycle streets;
- Providing information to the public, raising awareness of the advantages of cycling, and promoting its use in daily commuting;
- Reinforcing the creation and use of digital tools for cycling and other active modes.

It is proposed that in 2030 Lisbon be a cycling city with an urban network that allows the daily use of the bicycle in home to work/school trips and in leisure travel.







**DID YOU KNOW THAT...** THE ENERGY REQUIRED TO TRAVEL 1 KM BY BICYCLE IS 50 TIMES LESS THE ENERGY A CAR CONSUMES TO TRAVEL THE SAME DISTANCE?



#### **INTERFACES NETWORK**

#### Why?

The network of interfaces constitutes a basic and privileged infrastructure that favours access to the public transport network and to transfers between different modes. It allows the transport system to be intermodal, ensuring the use of different modes in a chain and giving flexibility and meaning to a multimodal transport system.

#### Vision!

MOVE Lisboa proposes that the city is equipped with an efficient and coherent network of interfaces, which guarantees the smooth and comfortable interconnection of all modes of the public transport system – municipal, intermunicipal, regional, as well as national and international. This network will comprise: top-level interfaces, which will be the preferred link from neighboring municipalities; medium-sized internal interfaces, from where it should be possible to reach any area of the city with a maximum of one transfer; and small nodes next to the centralities, where at least two to three modes intersect, connecting the whole city to the mid-level and upper-level interfaces, at most at the distance of one transfer.

#### How?

- Creating effective management models for the city's large PT interfaces, which will enhance them as multifunctional areas, in particular the interfaces of Gare do Oriente, Campo Grande, Sete Rios, Cais do Sodré, and Pontinha;
- Increasing the strategic importance of large interfaces in city management, and assuming the heavy modes as a structuring spine of the regional network of mass PTs;
- Promoting efficient and comfortable connections be-

- tween different transport modes, without wasting time when walking between them;
- Integrating the different transport modes in terms of timetables, ticketing and information, including shared mobility and new mobility services;
- Creating conditions for the efficient acquisition of transport tickets, offering simple and flexible solutions;
- Creating continuous, connected and attractive pedestrian and cycle routes that allow the connection of interfaces with residential zones, equipments, population and business areas;
- Promoting full pedestrian accessibility in and around the interfaces;
- Offering trade and daily services in the interfaces (supermarkets, nurseries...);
- Focusing on the creation of hubs of shared mobility next to the main public transport stops;
- Promoting high and low capacity waterway transport;
- Reinforcing the municipality's management capacity at the interfaces of the supra-metropolitan road networks.

It is proposed that in 2030 the network of interfaces allows the connection in PT of any two points of the city with maximum speed and the minimum of transfers, integrating whenever possible other networks and transport services.

**DID YOU KNOW THAT...** 200,000 PEOPLE USE CAIS DO SODRÉ INTERFACE EVERYDAY?





#### **SERVICES | PARKING**

#### Why?

Parking, whether on-street or off-street, is one of the most powerful, flexible, and low-cost tools a city has to regulate car use. Its price, opening hours, time restrictions and enforcement are the main regulators of demand, influencing the quality of life of residents, the modal choice, contributing to the reduction of car use in the city centre and the subsequent reduction of congestion. This will encourage the use of active modes and enhance the use and efficiency of public transport – EMEL is a key player in this process.

#### Vision!

MOVE Lisboa proposes a parking policy fully articulated with the city's mobility policies, adjusting the supply for residents, visitors, and operators of urban logistics in every part of the city. This policy must be supported by an intelligent information system, which quarantees a high quality of service to the users, as well as a better operational management capacity. Built-in parking should be prioritised against the occupation of public space, especially in long-term parking, giving back spaces for pedestrian and creating public transport corridors and bicycle paths in the centre of the city, as well as access to shared systems, where the PT network is stronger, and promoting Park & Ride solutions in the periphery. Priority should be given to parking vehicles that are more sustainable than the internal combustion cars, in order to encourage the replacement of the latter until these new vehicles are representative in the city's car fleet.

#### How?

 Progressively extending surface parking management to all the neighbourhoods in the city, adjusting the tariff policy to the availability of parking places and the desired levels of demand, improving the residents' access

- to parking in their area of residence, as a means to enhance other transport modes;
- Reducing the supply of surface car parking in the city centre, where there is a greater concentration of people, a greater scarcity of public space, and where the PT network is denser, creating, wherever appropriate, parking solutions in parks for residents;
- Restricting long-term on-street parking, promoting rationalisation and rotation in these public spaces;
- Encouraging long-term parking facilities, with proximity solutions or easy access for residents (24 hours), in order to free public space;
- Adjusting rotation parking rates according to city policies, increasing its surface value, especially in areas of greater pressure, in order to guarantee the availability of parking and the reduction of the congestion caused by the search for vacant places;
- Regulating parking rates, so that on-street parking is more expensive than the alternative car parking garages, prioritising on-street for visitors and residents;
- Increasing parking supply on a large scale, to promote sustainable mobility and a more rational use of public space, by bicycles, scooters, and similar vehicles, as well as motorcycles, shared automobiles, and electric cars;
- Strengthening the offer of electric vehicle charging points, especially in new parking lots;
- Promoting a mixed use of loading and unloading spaces, according to the time period (private use, use for sharing system vehicles);
- Promoting real-time information about on-street and parking lot availability, in order to reduce the circulation of vehicles in search of a parking place;

- Promoting real-time information on off-street parking availability, improving its attractiveness (accessibility, tariff), and enhancing its use;
- Assuming that for each off-street parking place created, at least one other place must be removed from on-street;
- Creating deterrent parks near the peripheral interfaces, integrated with the public transport system, which encourages actions such as Park & Ride;
- Progressively dematerialising payment and implementing intelligent customer information systems, as well as automating control and monitoring systems.

It is proposed that by 2030 the regulation of surface parking will be extended to the entire territory of the city, with tariff increase in areas where it is intended to have more free public space.

**DID YOU KNOW THAT...** THE SPACE OCCUPIED WITH ON-STREET PARKING IN LISBON IS EQUIVALENT TO ABOUT 600 FOOTBALL PITCHES?





#### **SERVICES | SHARED SERVICES AND ON-DEMAND**

#### Why?

The assumption of mobility as a service, and the subsequent integration of mobility services based on vehicle and travel sharing in the transport system, is an essential option for a modern and sustainable mobility policy, helping to maximise flexibility and efficiency in terms of travelling, while optimising resources. These services, which make it possible for people to choose the most convenient transport mode according to their destination and specific needs, are thus in full expansion in Europe, where they have been widely accepted by the public. Several systems with different types of vehicles have already been launched in Lisbon.

#### Vision!

MOVE Lisboa proposes that Lisbon promotes the rise of shared and on-demand transportation systems, which offer distinct options for different target groups and different destinations throughout the day. In this way, each person will be able to choose, at a given moment, the mode of transport most appropriate to their travel needs, which will make urban mobility more flexible, efficient, sustainable and inclusive.

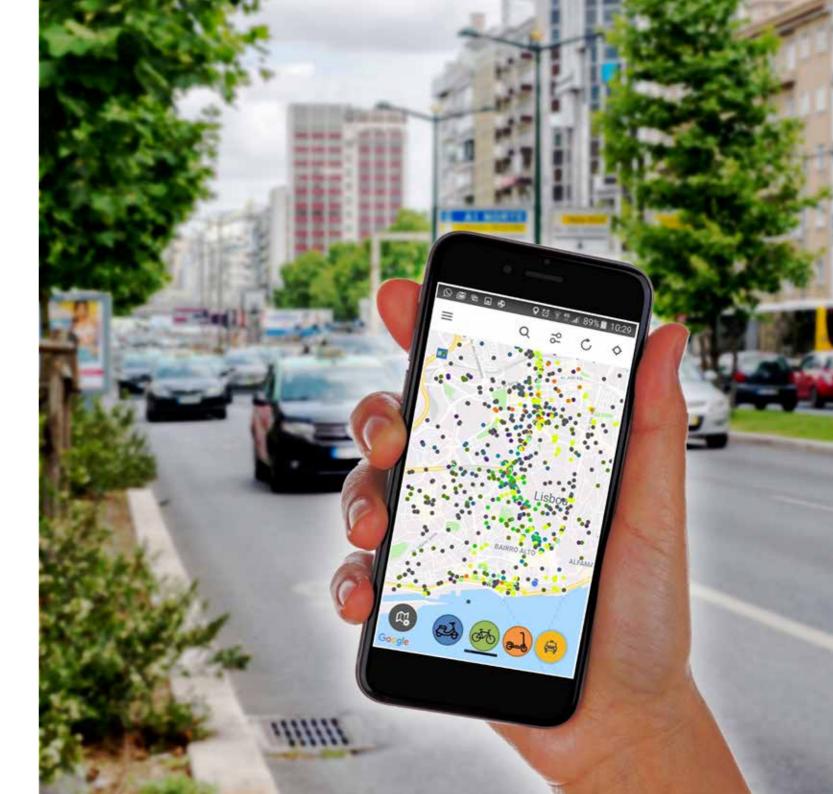
#### How?

- Reinforcing the focus on the GIRA public bike sharing system, making it denser and more comprehensive, and better integrated in the Lisbon transport system;
- Supporting shared and on-demand mobility services, whether public or private, so as to ensure greater flexibility, reducing city congestion;
- Reserving appropriate public space to the operation and promotion of these vehicles;

- Encouraging the adoption of new mobility models and concepts that promote resource sharing, including innovative solutions regarding shared vehicles, travel, parking spaces, etc., supported by new information and communication technologies, allowing for flexibility in regulation for a greater consolidation of innovative solutions;
- Creating conditions for the development of on-demand waterway transport (boat taxi, river-hailing);
- Encouraging the consolidation of an ecosystem of operators who sustainably affirm their service as complementary, reaching critical mass for credibility and reliability of the shared mode option;
- Promoting awareness and enforcement programmes for the use of these modes, in particular those of soft/active mobility, with regard to the coexistence of these vehicles with pedestrians and vulnerable users;
- Ensuring that shared and on-demand services resulting from innovation and entrepreneurship associated with the city's mobility ecosystem contribute to the dynamism and attractiveness of Lisbon.

It is proposed that by 2030 the city's territory will be covered by a public bike sharing system to be developed in several stages and with a density of stations and bicycles that will maximise the potential for use of this mode.

**DID YOU KNOW THAT...** EACH PARKING SPACE OCCUPIED BY A GIRA STATION SERVES AT LEAST 4 TIMES MORE PEOPLE?





#### **SERVICES | URBAN LOGISTICS**

#### Why?

Lisbon generates a significant movement in the urban logistics sector, particularly for the final distribution of small cargo. This daily reality comprises many vehicles, countless trips and kilometers travelled with negative impacts on the urban environment and the quality of life of citizens. In addition, about half of the city's loading and unloading are carried out through improper parking of these vehicles, often on sidewalks or through double parking, which harms the traffic flow and the use of public space for different functions. On the other hand, the logistic processes associated with economic activity and the evolution of e-commerce have contributed very significantly to the increase of pressure on the city, especially due to the increase of the HORECA channel in recent years (25%), or the expectation of doubling the volume of packaging over the next 5 years.

#### Vision!

Lisbon proposes the development of a sustainable urban logistics system that integrates the needs of local partners and constitutes a factor for economic growth. The city's logistics management model should make use of technologically advanced solutions, information systems, more efficient chains and more compact, lighter and greener vehicles, with higher occupancy rates in storage areas, which will distribute more cargo in fewer trips. The historic part of the city should gradually become a green urban logistics zone, accessible only to environmentally friendly vehicles, in line with the goals of the Transport White Paper.

#### How?

 Fostering the proximity of operators to city and public space management entities, in search of processes that reduce the impact of logistics in the city;

- Creating incentives for the use of management solutions that reduce the impacts of goods distribution activities in the city;
- Increasing the number of loading and unloading zones, connecting them and making them more effective to use;
- Positively discriminating greener vehicles, including electric vehicles and cargo bikes, fostering solutions to achieve zero carbon logistics by 2030;
- · Adopting rapid and effective management measures,

- such as using appropriate time windows, so that loading and unloading activities take place before the morning rush hour, or after the afternoon rush hour;
- Strengthening supervision, with a view to optimising the areas for loading and unloading, and to improve the traffic flow in the city's transport networks;
- Facilitating information systems to be used by all stakeholders;
- Implementing new concepts of logistic terminals, urban

- distribution centres and other forms of logistics and micro-logistic consolidation in the city centre, promoted by the City Council, in order to make up for market failures and support innovation;
- Adjusting the regulation of loading and unloading to the city's goals;
- Adopting the most modern ICTs for the management, control, supervision, and monitoring of loading and unloading activities in the city.



It is proposed that by 2030 Lisbon develops a last kilometre distribution system, using green vehicles coming from logistics centres located on the outskirts of the city.

DID YOU KNOW THAT... IT IS ESTIMATED THAT MORE THAN 50% OF ALL THE LOADING AND UNLOADING OPERATIONS ARE PERFORMED THROUGH DOUBLE PARKING STOPS?



#### **SERVICES | ADDITIONAL MOBILITY**

#### Why?

The networks and services presented above aim to meet most of the mobility needs of the residents of Lisbon and the Lisbon Metropolitan Area. However, there are other specificities that need to be addressed, namely adapted transport, door-to-door transport, school transport and business transport. Some of these services are justified on the grounds of inclusion, while others are of major relevance for the impact that the lack of solutions has on the urban mobility and the quality of life of people.

#### Vision!

MOVE Lisboa offers a set of additional services to meet the mobility needs of specific population groups who require tailor-made solutions. These services should be made available to the entire population and will tend to be free for the most disadvantaged populations. It is also proposed, whenever necessary, to create new proximity solutions for the essential functions of daily life.

#### How?

- Mobilising employers to adopt sustainable mobility measures in their companies, including through compliance with the Corporate Mobility Pact and the Lisbon Green Capital 2020 Commitment;
- Extending the school transport network to the mostneedy primary schools (and with no neighbourhood bus), to ensure a good articulation with public transport lines and connection to interfaces;
- Promoting school mobility programmes, and in particular Navegante Escola, which allows all students, from the
  1st cycle to the 12th grade, to have access to the public
  transport network, free of charge up to 12 years old in

- the entire Lisbon Metropolitan Area, and training programs for the use of public transport and active modes, including cycling;
- Providing a safe environment that is adapted to active modes in spaces that attract vulnerable users, such as schools, healthcare and elderly support facilities, through initiatives such as Bairro 100% Seguro 4;
- Developing transport services adapted to the most vulnerable groups of the population, with difficulties in accessing the public transport network;
- Implementing networks of day care centres, kindergartens, and other school equipment at or near the interfaces;
- Encouraging trips to school in organised groups, disseminating solutions such as bike or walk to school;
- Developing mobility credit solutions so that, together with the Parish Councils, social situations are supported;
- Supporting corporate transport solutions based on shared and on-demand mobility systems or private collective transport;
- Working with Lisbon Airport, a great employment pole and trip generator, solutions that promote alternatives to the use of individual transport by workers;
- Developing travel plans for large facilities, such as schools, business centres, or shopping areas, which favour the sustainability travel for staff, users and/or visitors.

It is proposed that by 2030 all public schools should have its surroundings intervened through the rehabilitation of the pedestrian and cycling network and with traffic calming measures.

 $<sup>4\,</sup> Translator's\, Note$  – The translation of the name of the initiative is "100% Safe Neighbourhood





#### **SERVICES | TOURIST TRANSPORT**

#### Why?

In recent years Lisbon has stood out as an excellent tourist destination, having been repeatedly distinguished by various international tourism rankings. Visitors arrive mainly through the Airport, the Cruise Port, and the Santa Apolónia and Oriente Railway Stations and especially seek out the downtown area and surrounding hills, the riverfront, the monuments in Belém, and the Parque das Nações.

Although tourists in Lisbon travel a lot on foot and in public transport, a situation that should be maintained and enhanced, there are multiple transport solutions well beyond public transport. From tourist trams to traditional hop-on/hop-off and occasional coaches, shared and ondemand solutions, amphibious vehicles, rental bikes, lifts, tuk-tuks, and other less conventional vehicles, Lisbon now offers mobility services for the various tourist requirements.

#### Vision!

MOVE Lisboa intends to promote walking, cycling, and public transport for tourists, and to ensure the existence of environmentally sustainable tourist transport services in the city which, in close articulation with the transport network, make it possible to meet the expectations of its visitors, particularly those with limited mobility, minimising the impacts on those who live and use the city on a daily basis. Thus, in addition to its light, its intricate neighbourhoods, its historical heritage, its culture and its identity, Lisbon will be able to offer tourists excellent experiences, allowing them to enjoy a qualified public space while ensuring tranquillity to both residents and visitors.

#### How?

- Promoting the movement of tourists on foot, in active modes and on public transport;
- Promoting the regulation of tourist transport in order to preserve historic and monumental areas, adapting mobility solutions to the Lisbon morphology and integrating them into the city's transport network;
- Encouraging tourist transport modes that meet the demand from tourists, but which are not aggressive or polluting, moving towards zero emission solutions in the most historic areas of the city;
- Suppressing the circulation and stopping of large tourist vehicles in historic areas, particularly in the hills and Pombaline downtown, safeguarding universal accessibility to the historic centre:
- Creating optimal conditions for parking, stopping, boarding and alighting passengers of various types of vehicles (occasional coaches, tourist circuits, tuk-tuks, etc.), restricting its impact on the landscape and the occupation of noble public space;
- Multiplying and diversifying places of tourist attraction and distributing flows among them, in order to decrease dependence on the downtown area.

By 2030 it is proposed that the city's tourist areas will be mostly visited on foot, by public transport, and through a suitable tourist transport system, using regulated routes and boosting the local economy without damaging the environment or without causing any constraints to the normal city daily routine.



#### MANAGEMENT, CONTROL AND OPTIMISATION

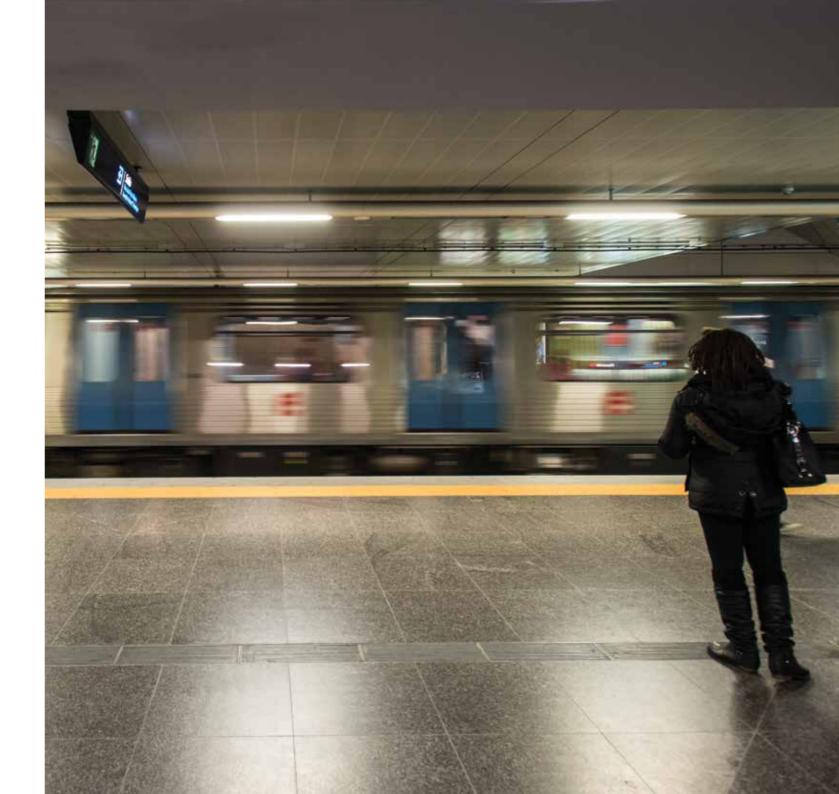


In order to achieve an effective management of mobility and the mobility system, which leads to increasing efficiency, safety, and comfort of travel in various modes, Lisbon assumes itself as a smart city, with a Lisbon Intelligent Management Platform (PGIL – Portuguese acronym), an integrative structure that collects and processes data, based on the latest technologies and the best analysis, management, and control algorithms. Lisbon also assumes itself as a dynamic innovation ecosystem, packed with entrepreneurs, start-ups and investors, capable of attracting "lighthouse" projects like Sharing Cities and global events like the Web Summit.

Lisbon proposes that the analysis, control and optimisation of mobility system resources take place in an Integrated Operational Centre (COI – Portuguese acronym), incorporated in PGIL, which concentrates all relevant information for the mobility management in Lisbon and, whenever possible, in the Metropolitan Area.

The COI will be able to cluster the Operational Mobility Control Centre (CCO-M – Portuguese acronym), where all the city's mobility ecosystem data are concentrated, transforming data into information that enables the management, control, and monitoring of the mobility system, as follows:

- Integrating processes of all municipal actors, such as the City Council services, the Municipal Police, Carris, and EMEL;
- Incorporating data from the mobility system and the respective constraints stemming from municipal services or partner entities management systems, the public transport network, the city's traffic model, the city's traffic lights management system, the speed control radars, the traffic monitoring camera system, the traffic counters, the parking lots, the parking meter network, the limited access areas, the environmental monitoring stations, the urban logistics management systems, the matrix signs, the connected vehicles, the electric vehicle charging stations, among others;
- Analysing the data and generating information that allows optimising the control of mobility in the city continuously, automatically or manually, managing the traffic constraints, accidents and incidents, as well as special events;
- Linking with other intelligent control, management and information systems;
- Ensuring effective real-time operation by managers and decision-makers, and rapid response to events that condition the normal functioning of the mobility system;
- Informing citizens, suggesting the best alternatives and allowing them to define their mobility options and preferences, enhancing the use of social networks;
- Strongly promoting the City Council's open data policy;
- Encouraging innovation, providing access to university academia, start-ups and third parties, tools and data from municipal services;
- Boosting innovation from projects funded by European and other co-financing funds.



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## INFORMATION, PROMOTION, AWARENESS, AND RELATIONS WITH THE PUBLIC

In order to enhance transport infrastructures and maximise its use, it is essential that users have access to clear, simple and appealing information that allows them to make the best use of the system, aware of the existing options and of how to make use of them. On the other hand, it is necessary to promote the most rational options and to ensure that public transport and active modes are truly appealing.

Adding a small budget for information and promotion to a large infrastructure investment can lead to very considerable gains in terms of the number of users.

MOVE Lisboa proposes to implement a system that centralises all the information from the 5 networks and the 5 mobility services, through the following axes of action:



- Developing effective mechanisms for the dissemination and promotion of the mobility system and awareness, marketing and communication campaigns to attract new users to the most energy efficient and sustainable modes of transport;
- Creating a digital platform that allows each person to have real-time information (e.g. via smartphone) of the various options available for their trip, taking into account their profile, wishes and needs, including schedules, fares and information relating to multimodal travel;
- Implementing solutions that provide integrated, dynamic, real-time information that enables optimising routes and effectively define trips;
- Incorporating access to solutions of urban travel planning, and ticket booking and vending;
- Promoting a close and effective two-way relationship with the user, including public participation mechanisms to monitor people's satisfaction levels and the improvement of the service based on the suggestions collected;
- Using preferred communication channels with the public (CML <sup>5</sup>, EMEL, Carris) to directly and personally transmit useful information to people, such as traffic constraints and parking alerts, among others.
- Opening the backoffice of mobility systems to third parties, in order to diversify citizen access channels;
- Expanding public wi-fi access points;
- Articulating transport information at the metropolitan scale, affirming the Lisbon Metropolitan Transports (TML
  - Portuguese acronym).

#### **FINANCING**

The implementation and success of measures to materialise the city's mobility strategic vision depends on Lisbon's ability to ensure the financial sustainability of the mobility and transport system. This implies, on the one hand, a rational and balanced management of available resources, and on the other, the proactive demand for diversified forms of financing, including structural funds, community funds, and private funds.

*MOVE Lisboa* proposes to explore ways of financing the transport system, seeking:

- To promote the balanced development of Public Accounts, including municipal companies;
- To boost the economic recovery based on the funds predicted in the Economic Recovery Plan, namely for the rapid development of PT structural corridors in Lisbon and in the metropolitan area;
- To ensure investment in public transport, the fundamental basis of the transport system, which has been in a recessive cycle that is only just beginning to reverse;
- To finance the recovery, requalification, and regeneration of the public pedestrian space, and provide infrastructures for the cycle network;
- To finance additional and alternative forms of transport that will have a major impact on the city's metabolism, such as shared services and other innovative forms of mobility that always arise;
- To stimulate the search for new solutions, involving public and private partners, in cooperation models that contribute to the profitability of infrastructures and systems;
- To finance the mobility system through EU funds, in-

cluding programmes such as Portugal 2020, Horizon 2020, CEF, and their successors, which will stimulate private investment and, at the same time, ensure the development and implementation of smart and innovative solutions:

- To ensure cross-subsidisation of more cost-effective services (such as parking) for less profitable services, such as public transport or shared services;
- To evolve into the user-pays principle, in particular on the most impactful activities;
- To share the amount of added-value services (tourists, ride-hailing services);
- To regulate and control new forms of mobility;
- To enhance transparency by way of contract of mandate.



<sup>5</sup> Translator's Note – CML stands for Câmara Municipal de Lisboa, meaning the Lisbon City Council



#### **REGULATION**

The successful implementation of the Lisbon mobility strategic vision also depends on the development of legal, institutional, and regulatory mechanisms to ensure the effective implementation of measures defined to improve the transport system. The normative instruments oblige the dominant policies so they can be used to change the mindsets and behaviours of people, institutions, and businesses by imposing rules, adopting taxes, and creating incentives.

To this end, European, national and local legislation and regulations have been created so as to encourage active modes, promote inclusive accessibility, reduce carbon emissions, boost energy efficiency, reduce traffic congestion, and increase *road safety*.

*MOVE Lisboa* proposes to create or revise regulations that promote sustainability and effectiveness of the transport system in terms of:

- Parking and circulation on public roads;
- Tourist transport services;
- Taxi services;
- Shared mobility services;
- Whenever safeguarding the public space and security of vulnerable users is justified;
- Electric mobility.

In any case, regulation must consider the maturity of the regulated matter, and is not in itself an obstacle to innovation.



#### MONITORING, ASSESSMENT, AND REVIEW

Public management processes with direct implications on people's daily lives should include monitoring mechanisms that aggregate and process data and information, producing a set of key indicators to support decision-making. Monitoring can be used to evaluate processes and define changes that allow for the continuous improvement of the mobility system, better mobility efficiency and increased user satisfaction.

In order to accomplish the strategy, a 3rd generation Sustainable Urban Mobility Plan (PMUS – Portuguese acronym) will be implemented in the city of Lisbon.

Monitoring, assessment and review of the mobility system will be carried out based on the management and con-

trol systems as well as on participated mobility observatory platforms, with a set of indicators of public access. These processes will allow:

- to define indicators that might not only inform the population about the system's performance, but also evaluate and, if necessary, correct the actions developed;
- to continuously monitor the mobility system, detecting and correcting problems and failures in real time;
- to assess the measures and actions implemented as well as the new systems and services, reviewing the options taken, making adjustments, eliminating inconsistencies, and continuously improving the entire mobility system.









### ACCESSIBLE MOBILITY, AVAILABLE TO EVERYONE

We are preparing a more humanised, healthier and with better quality of life Lisbon. For us and for the generations to come. And *MOVE Lisboa* defines the mobility guidelines for that Lisbon.

By 2030, Lisbon will be even more appealing, more comfortable and safer, a city

of neighbourhoods where it is pleasant to walk and flow through the streets and squares, and with easy access to the mobility services ecosystem, which allows us easy access to anywhere in the city and connections with the rest of the metropolis.

The basis of this ecosystem is the public transport network. A multimodal network that will cover the city in an integrated, coherent, and more efficient way. Organised around the metro, train, and other transport networks with dedicated lanes, and densified by a strong supply of buses, trams, and taxis, Lisbon's multimodal mobility ecosystem also comprises a myriad of shared and on-demand services. All these modes interconnect in modern and effective stations and interfaces.

The city centre will be protected from excessive traffic, which will be oriented to circular axes capable of ensuring its fluidity, supported by innovative solutions.

In the historic centre, pedestrians will have at their disposal mechanical means for connecting the downtown to the hills, such as lifts or funiculars.

The Pombaline downtown area of Lisbon will be increasingly reserved for zero emission vehicles. These restrictions will progressively extend to the rest of the city in order to phase out diesel and gasoline vehicles.

An integrated operational centre will contribute to the traffic management, parking, traffic lights, radars, public transport, interfaces, logistics, shared services, among others, connecting equipment and vehicles, providing real-time information. Anyone will be able to know the options that the mobility ecosystem offers at any given time, and they will be able to plan, book, purchase, and access their services in an integrated manner. Those who come from the outside will be able to know where the dissuasive parking lots are located, its availability, and the possible connections to the multimodal network, boosting its daily use.

The parking offer will be suitable for the desired traffic for each zone, and rates will vary depending on the pressure, space constraints, and proximity to the public transport network, so as to protect historic areas and neighbourhoods. Infrastructured parking facilities should be a desirable alternative to on-street parking, providing long-term stops.

In this way, the public space may have new uses, such as leisure areas, and the pedestrian and cycling networks may be improved, which will facilitate the connection between residential areas, employment centres, infrastructures, and interfaces.

On-demand transport and shared systems such as bike sharing and car sharing, by providing more freedom and alternatives, also help other people to try new mobility services, cycling and other options as a mode of transport, and they might even free themselves from the burden of owning their own cars.

At the same time, regulated and optimised urban logistics, capable of combine deliveries, will lead to a less congested city with less noise and air pollution.

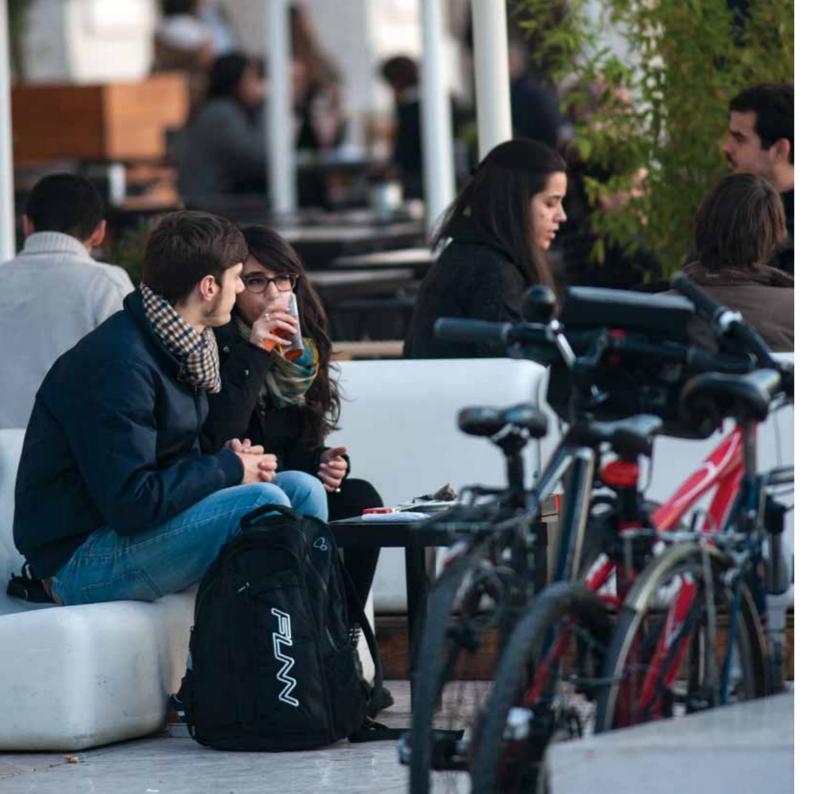
Lisbon is a city of extraordinary value and enormous attractiveness, where it is essential to offer varied and appealing mobility options, without compromising the enjoyment of the city, especially in the heart of the neighbourhoods and most emblematic areas. And this is what *MOVE* Lisboa proposes!

The Covid-19 pandemic has reinforced the need and emergence of measures that favour the most sustainable modes and return public space to people, ensuring its safe and comfortable enjoyment.

Thus, by 2030, Lisbon will be a more integrated, more fluid, more accessible, more innovative, and more responsible city.







#### REFERENCE DOCUMENTS

- CML, Governance Plan for the City of Lisbon 2017/2021
- CML, Major Planning Options 2017/2021
- CML, Strategic Charter of Lisbon 2010-2024, 2009
- CML, Municipality Master Plan (PDM), 2012
- CML, Pedestrian Accessibility Plan, 2013
- CML, "One Square in Each Neighbourhood" Program, 2014
- CML, Lisbon-Europe 2030 Strategy, 2013
- CML, Energy-Environment Strategy for Lisbon, 2008
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#### **GLOSSARY**

**30km/h + bici Routes -** shared lanes for bicycles and cars, with a maximum speed limit of 30 km/hour.

**30 km/h Zones –** areas of the city designed to limit road traffic to 30 km/hour.

**Active modes –** self-propelled, lightweight, low-speed travel and transportation modes that take up little space on the street and emit no air pollutants or noise.

**AML –** Portuguese acronym that designates the Lisbon Metropolitan Area .

**Bike sharing** – public bicycle sharing system.

**Car sharing –** shared car system.

**Cargo bikes –** Bicycles for the transport of goods.

**Coexistence zone** – zone of the public space specially designed for shared use by pedestrians and vehicles, where special traffic rules apply according to the Road Traffic Code.

**GHG** - Greenhouse Gases.

**Modal Split** – distribution of travels by people and cargo between different transport modes.

**Park & ride –** Integrated transport and parking ticket.

**PDM** - Municipality Master Plan.

**PT -** Public Transport.

**Smart city** – a city with sustainable, people-centred ambitions that promotes urban projects and solutions, often with technological support, aiming at the social progress and well-being of its residents and visitors.

**Soft Modes –** lightweight, low-speed travel and transportation modes, self-propelled or with low power engines, that take up little space on the road and with zero or low emissions.

**Superblocks –** Car Free Blocks, designed to maximise public space by favouring social and economic interaction at street level.

Tuk-tuks - light vehicles, motorcycles, quadricycles.

**ZER** – Reduced Emissions Zone – Area where only vehicles with specific characteristics may be driven with respect to the emission of pollutants in accordance with the considered European emission standard (EURO Standards).



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