

# Resilient Buenos Aires



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RESILIENT

CITIES



Buenos Aires Ciudad

# RESILIENT BUENOS AIRES

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**Resilient  
Buenos Aires**





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**Horacio Rodríguez Larreta,**  
Chief of Government of the City of Buenos Aires

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For more than 10 years, we have been working to continue building an open government in the City, based on the pillars of planning, proximity and teamwork with neighbors. We work every day to make Buenos Aires a city on a human scale, to enjoy and to assure the integration of all its residents, regardless of where they live – a place where we can all develop our full potential, with creativity and innovation.

This city vision accompanies the deep changes that are unfolding globally, with cities from all over the world having a higher profile to deal with the new challenges of development: climate change, migrations, changes in the labor market and the integration with new technologies that reach large cities first and affect those who live in them.

Within this context, the Resilience Strategy of Buenos Aires emerges as a response to the great challenges of the urban agenda, getting aligned with our City vision and proposing a path of inclusive and sustainable development that prepares us today, for the challenges of the future.

This strategy is the result of teamwork with a great number of stakeholders: residents, representatives from civil society organizations, academia, private sector leaders and government officials. Because we are convinced that the best solutions are those generated when the government listens and works close with neighbors, opening and sharing information to co-create the solutions to the challenges we have.

Furthermore, throughout all this process we also had the crucial support from the 100 Resilient Cities Network, of which Buenos Aires is member since 2016. This helps us to learn from the experiences of others and to look for solutions to the problems shared by large cities in the world.

Our Resilience Strategy is guided by the vision of being an integrated city, with public areas to enjoy, anticipating risks and getting ready. A city of talents, that innovates in education and bets today on the jobs of the future, committing to gender equity, diversity and sustainability.

We are convinced that residents are the true capital of a city. Therefore, we focus our strategy on them, on improving their quality of life. We believe that the only way of building resilience is by guaranteeing the same opportunities to all neighbors. For this reason, we are the first city that includes a theme that bets on talent and innovation as engine for development and integration, and a priority theme to reach gender equality.

Today the world looks at cities and demands them to lead the great social and economic changes that lie ahead. Resilience as a development strategy is a chance to weigh our opportunities towards the future, to recognize and anticipate the challenges to build a more prepared city where all residents can live better.





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**Michael Berkowitz,**  
President of 100 Resilient Cities

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On behalf of the entire team of 100 Resilient Cities, I would like to congratulate the city of Buenos Aires, the Chief of Government, Horacio Rodríguez Larreta, the Secretary General and International Relations, Fernando Straface and the Chief Resilience Officer, David Groisman, for the launch of Resilient BA, a milestone for the city and our partnership. This ambitious strategy consolidates the condition of Buenos Aires as a leading and innovative city at a global level and establishes a clear vision to build resilience in the face of the challenges of the XXI Century.

Since its foundation in 1580 on the south coast of the Río de la Plata river, the port of Buenos Aires has been the point of arrival of significant groups coming mainly from Europe, which provided the cultural eclecticism that is reflected in the city's architecture, music and gastronomy.

Buenos Aires is the largest urban node in Argentina and the main political, economic and institutional center of the country. With a rich culture, a great quality of life and human talent, the Argentine capital has become a center of attraction for youth and adults from all the region, leading to an important population growth.

The City of Buenos Aires comprises a wide spectrum of geographies, conditions and communities that pose different challenges and opportunities. The complexity of Buenos Aires requires a vision with nuances and leadership. That is the vision of this strategy, whose scope and scale will leverage the city's strengths and systems to build a more resilient urban ecosystem. The strategy addresses the main challenges faced by the City, from chronic stresses, like the difficulty of access to housing, informal settlements and insecurity, to shocks associated mainly to the effects of climate change, such as heat waves or powerful storms.

Based on the great progress and the innovative work already achieved by the City, Buenos Aires' Resilience Strategy consists of 5 pillars, 14 strategic objectives and 60 initiatives that will help consolidate this vision. It was a great civic engagement effort, jointly developed by different areas of government, citizens, academia and the private sector.

The strategy contains plans with the potential of transforming the city, such as the urban and social integration of its neighborhoods, the new conception of city through its new urban planning and building codes that respond to the population increase, and the development of the most ambitious hydraulic plans in the last 30 years. It is also committed to fostering talent and diversity as values for social cohesion. It is a visionary strategy that promotes new formats of teaching and learning, makes use of technologies and promotes entrepreneurship, in order to generate a better prepared society for the needs of the economy and the jobs of the future.

Buenos Aires has given way to great cultural changes and public policies that have built a more egalitarian society. Gender equity is a cross-cutting perspective reflected in several initiatives of this document. At the same time, this strategy demonstrates the city's commitment to the environment, fosters the creation of green spaces and sustainable buildings, promotes a comprehensive waste management system in coordination with its metropolitan area, including the infrastructure development of waste collection, transport and final disposal systems, as well as the use of energy from

This strategy reflects the dedication and leadership of the Chief Resilience Officer, David Groisman, and his team. It also highlights the commitment and support from the Chief of Government, Horacio Rodríguez Larreta, crucial for the potential and effectiveness of this ambitious plan. The work is only beginning, and we are excited to take the next step in our partnership by cooperating in the implementation of this pioneering transforming strategy that will ensure a resilient future for Buenos Aires while boosting the resilience efforts globally.





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**Fernando Straface,**  
Secretary General and International Relations of the City of Buenos Aires

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The XXI century is the cities' century. During the last decades, the world witnessed an unprecedented urbanization, and forecasts only confirm these trends for the coming years. This diagnosis is especially true for Argentina, where almost 90 percent of our population is urban.

The proximity of people, ideas, customs and cultures offered by cities is a fertile ground for innovation and is what can transform them into true engines of development for countries.

Furthermore, the challenges of this century are largely urban: cities can be exposed to structural stresses and become more vulnerable to disruptive shocks if they do not have adequate planning for those trends. Therefore, the current international scenario demands from cities concrete actions to face challenges such as climate change or inequality, but also to lead the reforms to make cities the place of equal rights and opportunities between men and women, or to implement the necessary changes to transform the educational systems for the jobs of the future.

Today, the most important cities of the world are designing policies that prepare them to be resilient, sustainable and inclusive. It is a huge opportunity for local governments, and in Buenos Aires we are committed to guiding our work over the next few years through the resilience lens.

In this context, the City joined the 100 Resilient Cities network in 2016 to come up with a development strategy that allows us to grow in a sustainable manner and prepare for the challenges of the future.

The Buenos Aires Resilience Strategy provides a holistic perspective to deal with the stresses the City is exposed to. On the one hand, our strategy addresses the issues of the "traditional agenda" of resilience which translates, for example, into the water risk reduction works, and the creation of new early warning systems that mitigate the risk of flooding and prepare the city for when they occur.

On the other hand, we seek to focus on a new agenda aimed at relieving chronic stresses in cities which are related to the economic and social changes that our societies are beginning to undergo. This new agenda is embodied in proposals that ponder the distinctive character of Buenos Aires as a diverse and creative city of talent, with top-level human capital recognized all over the world. Thus, this document presents concrete initiatives aimed at ensuring that all residents of our city have equal opportunities to develop their potential.

In this sense, one of the flagship initiatives of our resilience strategy is the Gender Indicators System. This system, the first at a subnational level in Latin America, provides statistical information with a gender perspective, which enables us to measure how we are performing and to come up with what needs to be done to achieve equal opportunities between men and women.

Such initiatives provide our strategy with a distinctive and forefront character, because if the XXI century is the century of the cities, it is also the century of those who live in them. For this reason, we decided to focus our resilience strategy on people, so that it helps build a city where we can all fully develop our potential, promoting and attracting talent and innovation, driving diversity as engine for social cohesion. We want Buenos Aires to be a global city, with a worldwide reference agenda on how to prepare to face the challenges of the future in a resilient way.







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**David Groisman,**

**General Director of Strategic Management and Chief Resilience Officer of the City**

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What does being a resilient city mean? On February 23, 2017, we posed this question to the attendees at the launch of the Resilient Buenos Aires Program. That day, representatives from all sectors gathered at the City Government Hall to discuss the novel concept of urban resilience and how to achieve it in Buenos Aires. The conclusions highlighted many of the government's lines of action – some emblematic ones, such as the integration of Barrio 31 (Neighborhood 31) – that contribute to building resilience. We were also able to identify our challenges, those aspects we must and can improve, and the strengths we want to reinforce.

This meeting was only the beginning of a path we pursued to develop the Resilience Strategy of the City of Buenos Aires. During this process, we drew on the opinions of experts and specialists in the urban world, worked with all areas of government and especially listened to residents, whose perceptions, ideas and proposals were included in this strategy.

As a result of this work, we came up with the five pillars that make up our resilience strategy, which challenge and respond to the main factors that were identified as those that make us more vulnerable as a city: extreme weather phenomena product of climate change, difficulties in access to housing, changes in the labor market and gender inequalities, among others.

Likewise, we decided to include three cross-cutting themes to obtain a more complete vision of resilience. These themes give our initiatives a differential as we seek to solve the metropolitan challenges of Buenos Aires in an integrated way, beyond its geographical boundaries, including the neighbors' perspective, and betting on the generation and use of data and evidence to make better decisions.

Thus, after a year and a half of work, we presented Buenos Aires' Resilience Strategy, a development strategy that enriches the main lines of work of the City, adopting a holistic approach and focusing its proposals on people.

What does being a resilient city mean? For Buenos Aires, being resilient means looking at people and building a city to their scale. It means integrating our neighborhoods and promoting sustainable growth, in harmony with the environment while anticipating risks. Being a resilient city also means betting on education innovation, training today the youth who will lead tomorrow's jobs and leveraging talent. It means working for a coexistence based on diversity, guaranteeing to everyone the same opportunities to develop their potential.

At the Buenos Aires Resilience Office, we work so that this vision permeates the whole City - from its infrastructure and administration to its companies and leisure areas - including each inhabitant. We know we have a huge task ahead of us, but we also know that as a city we are up to meeting the challenge.









## Executive Summary

The Resilient Buenos Aires program is a turning point in the design of public policies aimed at building the City we want. It is an exercise that allows us to confirm the direction we have been working on and, at the same time, to think today about a city that will be prepared for the challenges of the future.

In a context of rapid changes and in an increasingly urban world, the growing challenges we face as a global city call on us to stop to design and plan a more resilient Buenos Aires. For Buenos Aires, the concept of resilience implies focusing its strategy and planning its policies around the people and neighbors who live in and move around the City every day. Resilient Buenos Aires is the articulated construction of the City development strategy or 2030, in line with major international commitments, such as the Sustainable Development Goals and the New Urban Agenda.

Buenos Aires' Resilience Strategy stands out because it was jointly developed by all areas of the City Government, together with civil society, academia, the private sector, and neighbors, with the support of the 100 Resilient Cities Network. It was a joint work whose product reflects the essence of how it was put together: the integration among sectors, the conjunction of visions and the proactivity of the initiatives stated in this document.

Resilient Buenos Aires is inspired by the classic concept of urban resilience and experiences of other cities of the world, but also seeks to leave its own mark. Thus, the city's major milestones, such as the acknowledgement and social and urban integration of popular neighborhoods, the new conception of the city through its new urban planning and building codes, or the development of the most ambitious hydraulic plan in recent decades are part of this document. There are also initiatives that make up the differential part of our strategy, centered on creating opportunities for the development of all people, such as promoting innovation, generating and attracting talent, fostering diversity as the engine of social cohesion among residents, an ambitious and reference agenda regarding gender equality, or the commitment to the environment driven by cultural change.

Buenos Aires' Resilience Strategy is divided into five pillars and three cross-cutting themes:

- **Diversity, gender and coexistence:** a city that promotes equity in diversity, equality of opportunities, inclusion and coexistence of all its neighbors.
- **Innovation, talent and opportunities:** a city that promotes equality of opportunities for all its neighbors, that anticipates the advances of the future and provides the conditions to develop their potential.
- **Environment and sustainability:** a sustainable city that seeks better quality of life for its neighbors, committed to preserving its environment and using its resources efficiently.
- **Social and urban integration:** an integrated city, without barriers and on a human scale, that grows in a sustainable and balanced way.
- **Security and risk management:** a prepared city, aware of its challenges and willing to adapt.
- **Cross-cutting themes:** metropolitan vision, citizen participation and use of data and technology.

**Resilient Buenos Aires is a roadmap of the City we want to be, including latent impacts, chronic tensions and the opportunities we are facing today. Some of the initiatives that stem from this document are actions that we are already carrying out, but also integrated action proposals with multiple benefits that set a direction and show the world the vision we have for Buenos Aires. Through this strategy, we seek to build a more prepared city, which is able to anticipate today the challenges of the future, with proposals that improve the quality of life of those of us who live and move around the City.**







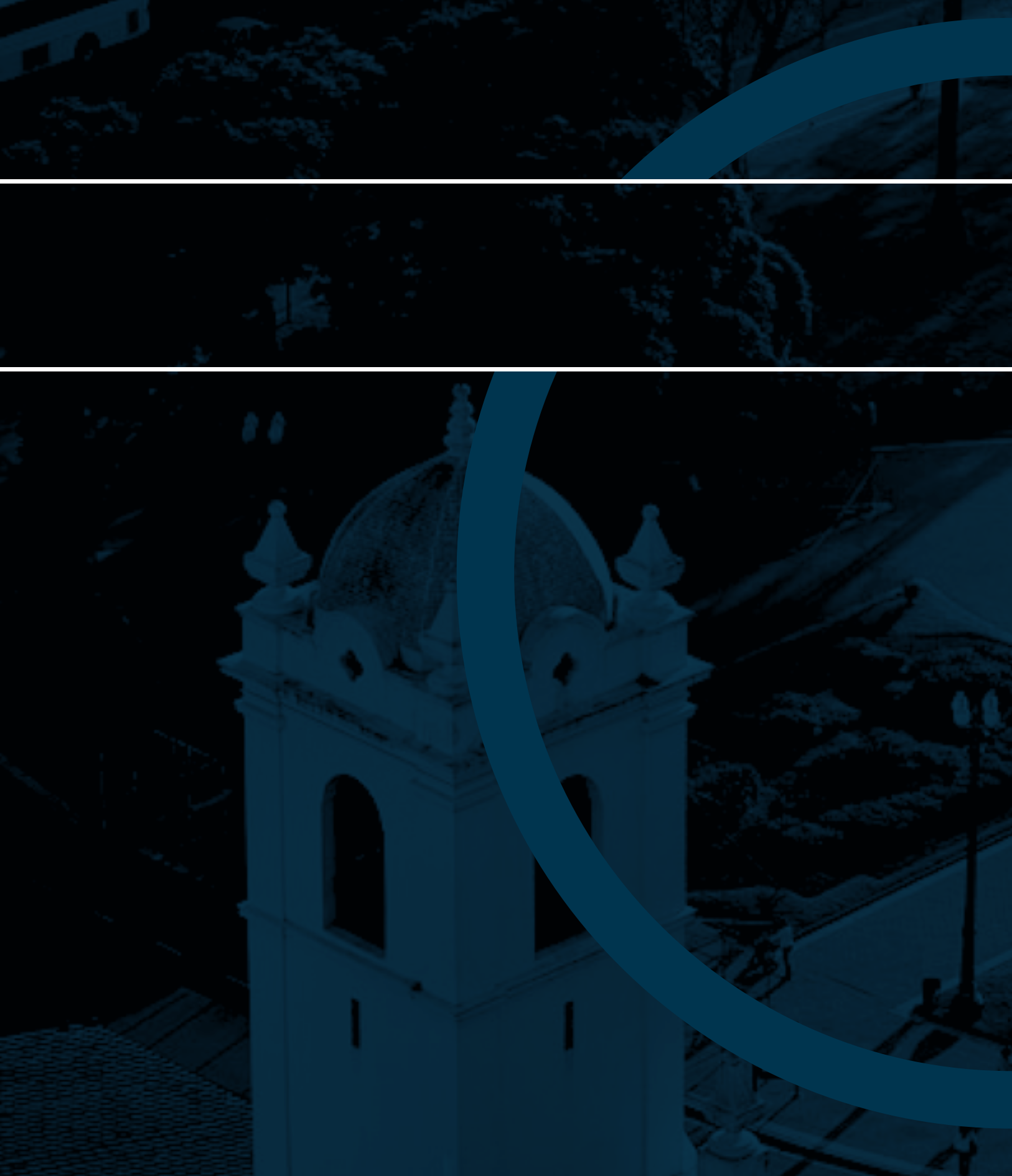
## Resilient BA Vision

Buenos Aires will be a worldwide reference in the promotion and generation of talent. A City that integrates its neighborhoods and enhances its leisure areas, anticipates its risks and gets ready. It innovates in education and bets today on the jobs of the future, committing to gender equity, diversity and sustainability.

## Pillars, Objectives and Initiatives

The strategy development is divided into 5 pillars: diversity, gender and coexistence; innovation, talent and opportunities; environment and sustainability; social and urban integration; security and risk management. These pillars are cut crossed by three themes that complete and leverage the resilience vision of the strategy: metropolitan vision, citizen participation and use of data and technology.

The pillars are subdivided into 14 strategic objectives that aim at heading the way to the city we want, by applying the resilience lens to the great goals of the city. The objectives translate into 60 initiatives, proposals, programs and plans that will allow us to build a more resilient Buenos Aires.







# Introduction

Conveying the concept of resilience is difficult, even for cities. The conception of a resilient city is manifested when stresses or shocks threaten any of the city systems. The development of Buenos Aires' resilience strategy helped define the implications of addressing the City's challenges in a cross-cutting way. Drafting what "being resilient" means involved a joint work with all the stakeholders that live in the city. The development process implied, in turn, incorporating the value of resilience into the government, charting a way forward for the wellbeing of all City residents.

## 1. 100 Resilient Cities Initiative

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Since 2016, the city of Buenos Aires has been part of the network of cities selected by the 100 Resilient Cities (100RC) program –pioneered by the Rockefeller Foundation, to carry out an urban resilience strategy that addresses the challenges posed by climate change, urbanization and globalization. 100RC cooperates with cities all over the world to make them more resilient to their social, economic and physical challenges. The initiative supports the adoption of a resilience vision that includes both, the shocks of natural phenomena, such as earthquakes, floods or heat waves, as well as the stresses that weaken the structure of a city in a daily or cyclic way, and that may affect its normal development trajectory.

Thus, the network provides cities with technical assistance and resources, offering access to tools and to international contributors from private and public sectors and civil society organizations that

assist in the development and implementations of their resilience strategies. In addition, 100RC provides access to an exchange network among cities to share best practices, solve problems together and learn from the experiences of others. Through these initiatives, cities conduct projects that promote and build resilience, encouraging the creation of urban resilience as a global practice, thus turning it into a core topic of the public agenda.

**Building resilience is managing the present of a city with a forward-looking vision.** Working on resilience enables us to build the future of the City so that we can adapt to the new challenges of the XXI century and transform them into growth and development opportunities for all its residents.



## Strategy Development Process

### Phase 01

#### DIAGNOSIS

Understand the city's resilience challenges. Identify the emerging issues that will be analyzed in greater depth in the next phase.

**Outcome: Preliminary Resilience Assessment**

#### DEVELOPMENT

Developing the Resilience Strategy: explore in greater detail the emerging issues of the city.

Activities articulated with internal and external stakeholders. Goals and practical initiatives that will form the final strategy.

**Outcome: Resilience Strategy**

### Phase 02

### Phase 03

#### IMPLEMENTATION

Implementing the initiatives identified in the Strategy.

Build greater resilience in systems and processes, guaranteeing the operation of the City.

**Outcome: Resilient City**

## 2. What Is Urban Resilience?

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Resilience is a term that emerges from the field of ecology in the 1970s to describe the capacity of a system to maintain or recover its functionality in the event of disruption or disturbance (ARUP, 2014). After undergoing several reconversions, the term is adapted today by cities, understood as complex systems that constantly adapt to changes and circumstances.

The world is increasingly urban: according to the United Nations, in 2050, 4 out of 5 people will live in urban areas. Their wellbeing relies on a complex web of interconnections among institutions, infrastructure and information. Citizens are drawn to cities as centers of economic activity, opportunities and innovation. But cities are also scenarios

where stresses accumulate, and sudden shocks may result in social, physical or economic crises.

By the same token, **city resilience is defined as the capacities of individuals, communities, institutions, businesses and systems within a city to survive, adapt and grow, no matter what types of chronic stresses and acute shocks they experience.** It consists of preparing a city to avoid unforeseen challenges diverting it from its normal development trajectory. Ultimately, it is about improving the quality of life of city dwellers, focusing on the most vulnerable ones.

*City resilience is defined as the capacity of individuals, communities, institutions, businesses and systems within a city to survive, adapt and grow, no matter what kinds of chronic stresses and acute shocks they experience.*

## 3. City Resilience Framework and Resilient Qualities

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To progress into a consistent vision of what resilience and the challenges imply to cities worldwide, 100RC promotes the use of a City Resilience Framework (CRF) as a starting point. This methodological framework enables analyzing the existing information about a city to articulate its challenges and opportunities through a specific perspective. Thus, analyzing the different systems of a city through this methodological framework helps to assess its recovery capacities, identify critical areas and strengths to enhance and design actions and programs that include the resilience dividend, i.e., generate multiple benefits in different areas. Moreover, the CRF provides a common language that enables the 100 cities of the network and others that have been inspired by their work, to share knowledge and experiences.




The Resilience Framework consists of 4 categories, 12 goals and 52 indicators that jointly establish the crucial environments on which

a city must work to be resilient, in other words, to strengthen its capacity to face a wide variety of stresses and shocks. The CRF offers a comprehensive perspective that allows us to understand the complexity of cities and the areas that contribute to building resilience.



1. Meet **basic needs**
2. Supports **livelihood and employment**
3. Ensures **public health Services**
4. Promotes **cohesive and engaged communities**
5. Ensure **social stability, security and justice**
6. Fosters **economic prosperity**
7. Provides and enhances protective **natural and manmade assets**
8. Ensures **continuity of critical services**
9. Provides **reliable communication and mobility**
10. Promotes **leadership and effective management**
11. Empowers a **broad range of stakeholders**
12. Fosters **long-term and integrated planning**

## Qualities of Resilient Systems

	<b>REFLECTIVE</b>	Systems that learn from their experience and inform future decision making.
	<b>ROBUST</b>	Systems designed, built and managed to withstand the shocks of threats without significant damage or loss of function.
	<b>REDUNDANT</b>	Systems with idle capacity planned to respond to disruptions, extreme pressure or peaks of demand.
	<b>FLEXIBLE</b>	Systems that can change, evolve and adapt in response to changing circumstances.
	<b>RESOURCEFUL</b>	Systems able to quickly find different methods to achieve their goals and respond to their needs during shock or stress.
	<b>INCLUSIVE</b>	Systems that emphasize the need for consultation and commitment of the local society, including the most vulnerable groups.
	<b>INTEGRATED</b>	Systems that behave in an articulated manner, aligned with decision makers.

A resilient urban system is one that **can withstand, respond and better adapt to stresses and shocks, one that can bounce back faster and revitalize from disruptions.**



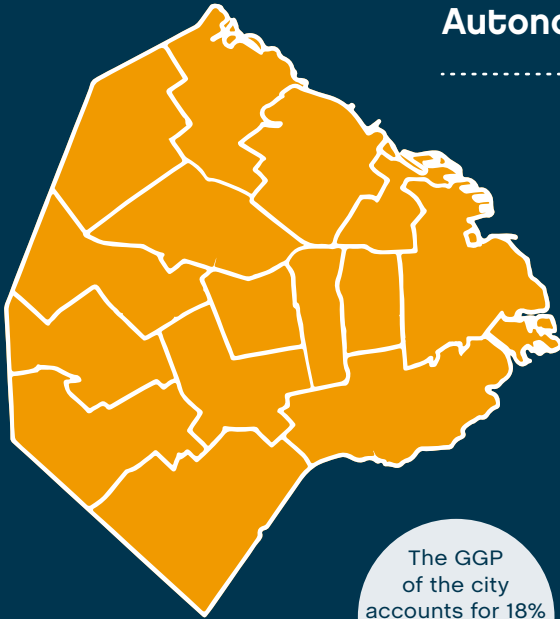
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# Context and Challenges of Buenos Aires

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## Autonomous City of Buenos Aires



The GGP of the city accounts for 18% of the country total



**3 Million**  
people live in the  
City of Buenos Aires

**203 km<sup>2</sup>**  
of area



**15**  
communes

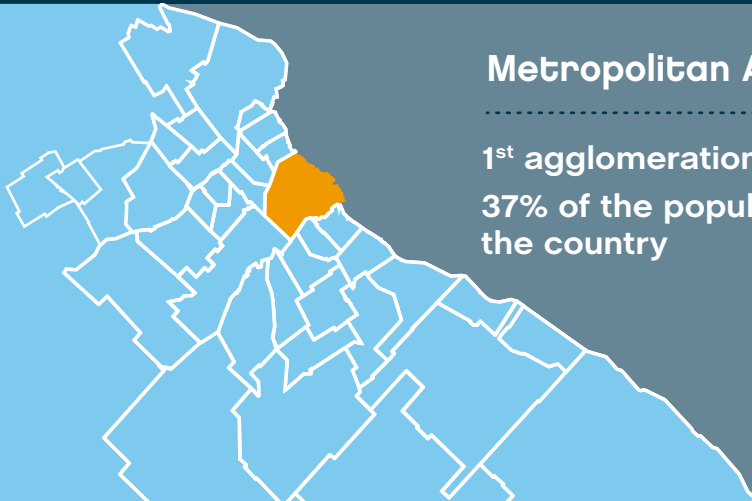


**7,6%**  
of the population lives  
in low-income  
neighborhoods

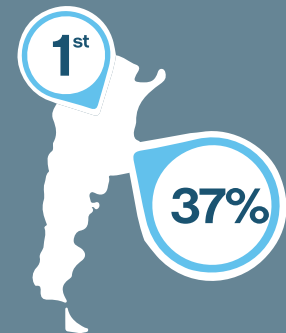


**70%**  
of the population lives  
in water basins

## Metropolitan Area of Buenos Aires



1<sup>st</sup> agglomeration of the country  
37% of the population of  
the country





**500,000**  
passengers per day/subway



**11,3 milions**  
local and international tourists  
visited the city in 2017



**6700 Tons**  
of solid urban waste are  
generated per day



**7,2%** unemployment rate  
in the city

**9,8%** unemployment rate  
among women

**8,8%** unemployment rate  
among young people  
(15 to 19 years of age)



**13.285 km<sup>2</sup>**  
of area



**14 M**  
of people



**40 Municipalities**  
and the City of  
Buenos Aires



**50%**  
of the country's  
GDP



The AMBA urban sprawl extends from Campana to La Plata, limited by the Río de la Plata and Provincial Route 6, with a surface of 13,325 km2. According to the 2010 census, it has 14,800,000 inhabitants that account for 37% of Argentina's total population. Unlike the city of Buenos Aires that has maintained a stable population since 1947, AMBA keeps growing: between 2001 and 2010 its population grew by 14% to reach almost 10 million inhabitants.

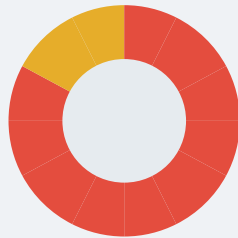
While the AMBA region represents 50% of the country's Gross Domestic Product (GDP), the city itself accounts for 23% of the country total (INDEC, 2017). The productive profile of the City is highly specialized

towards the service economy, where it accounts for 83% of the Gross Geographic Product (GGP). The City port channels 70% of the imports to the country, moving almost 11 million tons of goods per year. In turn, more than 50% of the country's exports regarding services originate in the City, reaching over 7 billion dollars in 2016. Furthermore, more than half of ICT companies are based in the City, positioning it as a potential regional hub.

## GGP Composition by Services

The City's GGP accounts for:

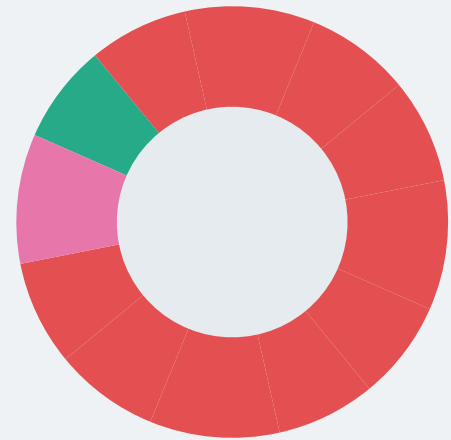
**18%**  
of the national GDP



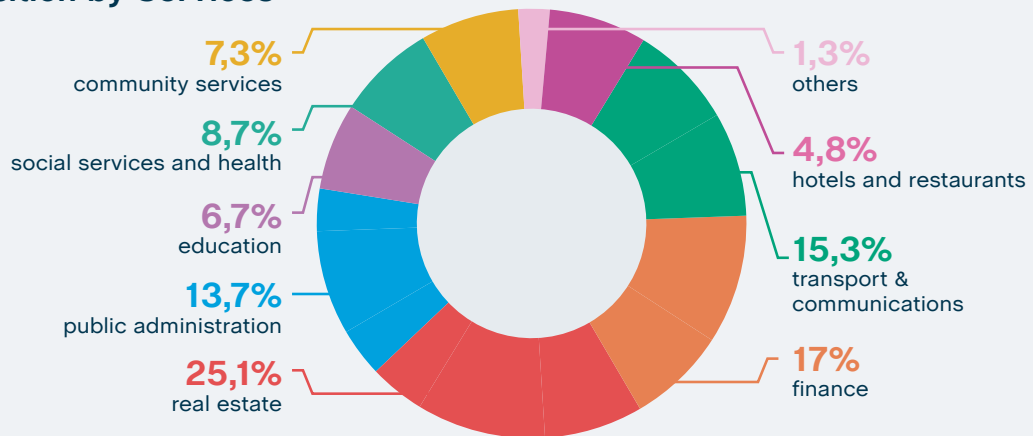
**7%**  
others

**10%**  
industry

**83%**  
services, commerce,  
transport and communications,  
banks and insurance companies



## GGP Composition by Services



Source: Own calculation based on data from the General Directorate of Statistics and Censuses (DGEyC for its acronym in Spanish) for 2016.

The administrative structure of the metropolitan area is not integrated in one single unit. This reflects a complex institutional and political framework maintained throughout its history. Unlike other metropolitan areas made up by different local districts in one same state, AMBA stands out for consisting of two jurisdictions of a provincial level. Although there is no consolidated metropolitan governance body that integrally coordinates the challenges of AMBA, several agencies and dependencies were created to deal with key issues for resilience across jurisdictions<sup>1</sup>.

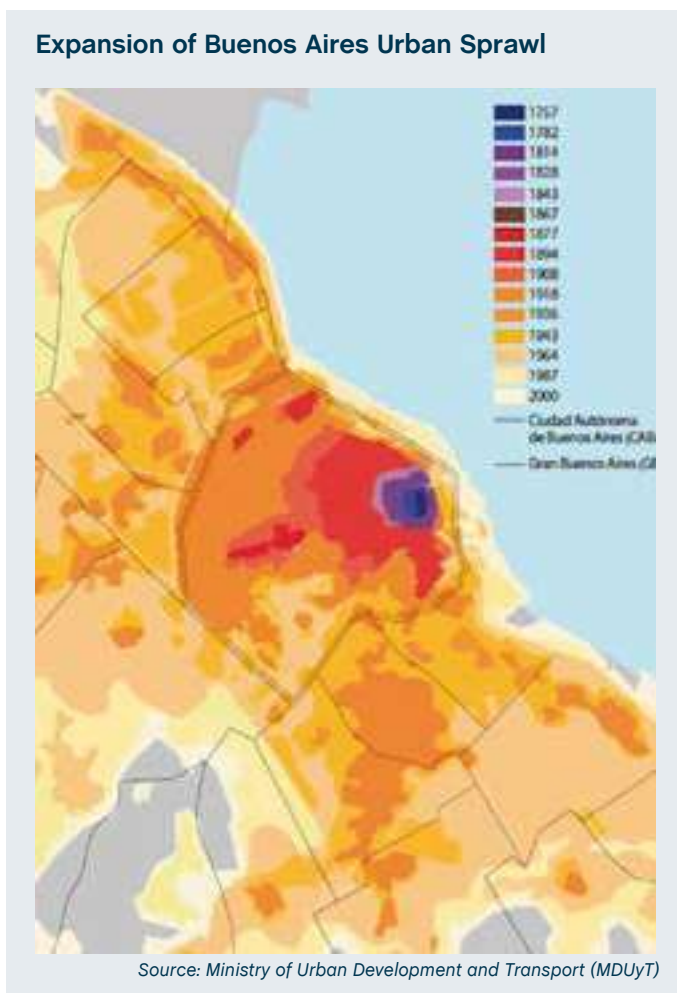
The central role of the city of Buenos Aires within the urban system of Argentina and the region (especially AMBA) makes it an attractive hub for the population, whether as daily commuters, residents or migrants. This centrality is due to the city's educational quality, its hospital equipment and the international prestige of its physicians,

the economic activity, the quality of the urban services and for being host of the national and international cultural arena. However, this growing demand poses strong pressures to the local urban system by increasing the economic and social costs related to the access to goods and services in the City.

At the same time, the fact that the three levels of government - Federal, Provincial and CABA- are politically aligned as of 2015 has created new possibilities to manage sectorial policies in AMBA.

While the population growth of the City has stagnated, its demographic structure has tended to change, and the size of households has reduced (single-person households have increased by almost 25% over the household total since the 1980s). Also, the population aged 65 or over, went from representing 5.3% in 1947 to almost 17% in 2016, and is projected to reach 20.3% by 2040.

As far as socio-economic inequality, the City experiences the same challenges as large global cities. Geographically, there is a more developed northern area and a southern one with higher levels of vulnerability. This is where almost all the low-income neighborhoods concentrate, known as shanty towns. These are settlements of improvised self-built housing on fiscal or private lands, where residents lack formal access to urban utilities and ownership rights over the land. Although the City is strongly working to formalize and integrate these neighborhoods, inequality not only exists inside their territory, but also deepens due to the clear differences with the municipalities of the AMBA region to the south and southeast.



1. Some sector-specific examples: regarding mobility, the Metropolitan Transport Agency; regarding waste, the state-owned company for Ecological Coordination in the Metropolitan Area (CEAMSE for its acronym in Spanish); in matters of watershed management, the Matanza-Riachuelo River Basin Authority, the Reconquista River Committee, the Luján River Committee, and regarding urban procurement, the Central Market.



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## 2. Shocks and Stresses of the City of Buenos Aires

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A resilient city is one that is prepared to respond to the disruptive effects of sudden shocks and chronic stresses. Through participatory work, bibliography review and interviews to key stakeholders, we identified and analyzed the main shocks and stresses that affect the city of Buenos Aires, to which the Resilience Strategy seeks to address.

The main shocks that threaten the City are mainly due to climate change effects: extreme meteorological phenomena increasingly more recurrent generate disruptive events associated to floods caused by storms and heat waves.

To respond to the effects of climate change, this Resilience Strategy seeks to delve into infrastructures that promote adapting the way in which the city is built, by promoting criteria of urban sustainability, strengthening the City's hydraulic system, including biodiversity principles and creating new green areas. Buenos Aires' strategy is people-centered: to mitigate the effects of climate change, the City will work on generating a communication that builds a culture of preparedness to empower residents so that they can respond and emerge stronger after disruptive situations.

Buenos Aires, like any other large city, is exposed to important chronic stresses. Among these are the inadequate provision of infrastructure and public services in low-income neighborhoods, the difficulty in access to housing and the regeneration of public space for leisure. To promote resilience, the City has embarked in an important urban integration process of low-income neighborhoods, emphasizing their social integration by fostering opportunities, recreation and culture. At the same time, it encourages sustainable mobility, through active mobility and prioritization of public transport.

The imminent changes in the labor market involve reshaping the way we conceive education and labor insertion. We need to anticipate the challenges of the future and create the necessary skills so that residents can work on jobs that have not yet been created. By promoting talent, incorporating and developing new skills from the educational system, the City will work to address the rapid changes without neglecting those who can be affected by the labor market turnaround. There are also challenges related to the new digital and collaborative economies and the way they can impact on the regular functioning of the city. In this sense, the strategy proposes a way to anticipate those disruptions and promotes a search for solutions or a harmonic acceptance of these new economies.

A resilient city is one that includes diversity and promotes inclusion. Faced with the challenges of gender inequity and social discrimination, we will work to empower women, celebrate differences as a value of the city, and promote coexistence and dialogue. We seek to support those who want to come to the City to study and work, so that they can develop their talent. Therefore, we propose to create equal opportunities for all the people who live and move around our city so that they can fully develop their potential.

A resilient city is one that focuses on people and builds according to their scale, promotes their talent and recreation, adapts to their historical challenges, and prepares for those of the future.

Difficulties in  
access to housing  
**CLIMATE CHANGE**  
Traffic congestion and metropolitan mobility  
Gender inequality  
Rapid changes  
in the labor  
market  
Lack of  
social cohesion  
Access to green spaces  
**UNEVEN LAND DEVELOPMENT**  
Floods, heat  
waves and  
power  
outages  
Regulation of  
new digital and  
collaborative  
economies

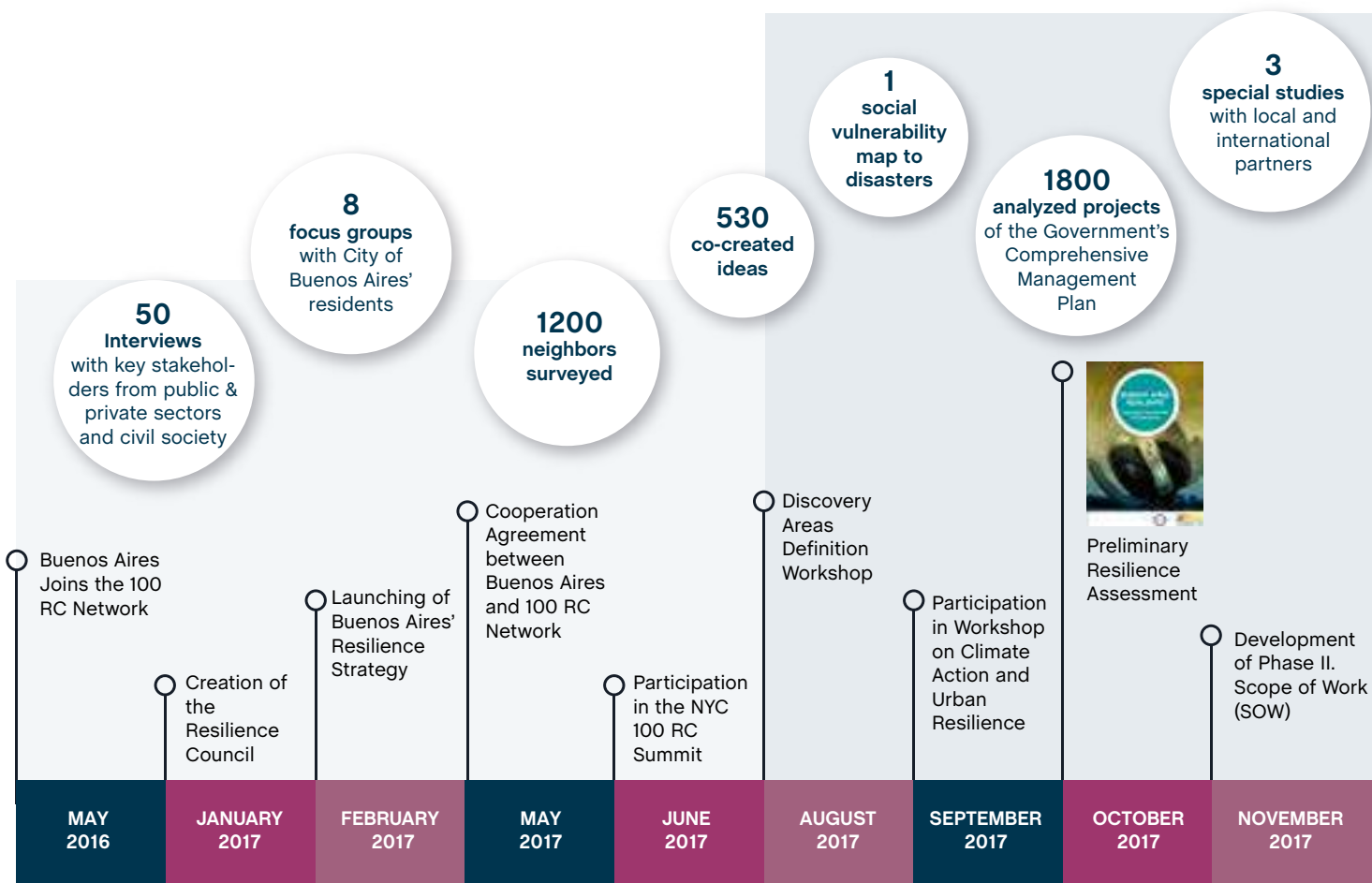




# Development of the Resilience Strategy

# 1. Elaboration Process

The development and implementation of Buenos Aires' Resilience Strategy is an opportunity to thoughtfully consider and generate innovative and collective solutions that enable the city to be better prepared to respond to acute shocks, overcome stresses, manage current problems and face future challenges. The diagram below shows the process carried out by the City to develop its Resilience Strategy (for more information about the drafting process see "Appendix" on page 135).



## PHASE 1:

### RESILIENCE DIAGNOSIS

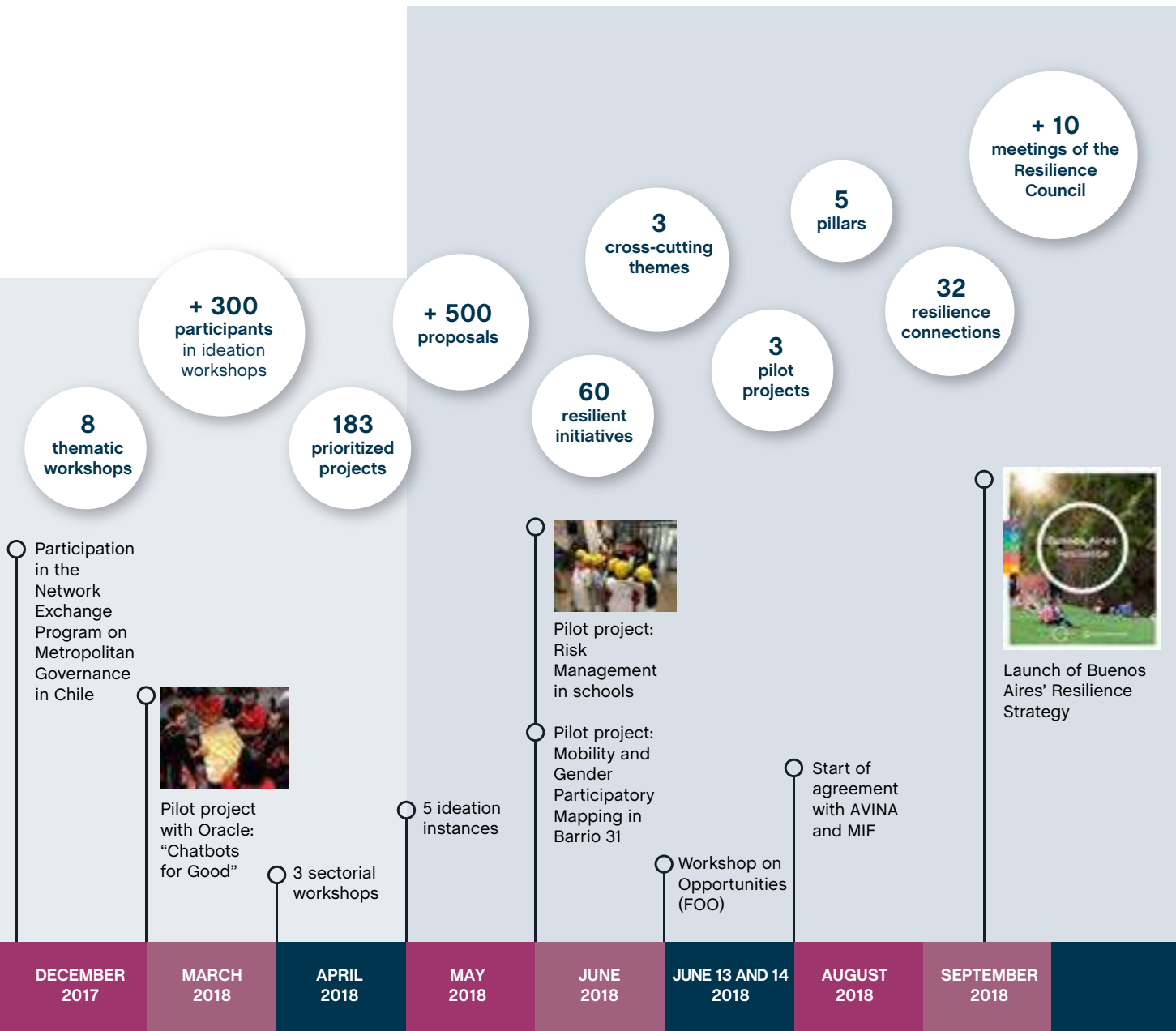
- Workshop to identify shocks and stresses.
- Understanding the City resilience challenges.
- Identifying emerging themes (Discovery Areas).

## PHASE 2:

### DEVELOPMENT OF THE RESILIENCE STRATEGY

- In-depth exploration of emerging issues of the City.
- Development of articulated activities with stakeholders from different sectors.
- Elaboration of specific studies on sustainable construction, teachers of the future, and green walls and roofs for schools.





**PHASE 3:  
IMPLEMENTATION**

- Implement the initiatives of the Resilience Strategy.
- Apply resilience to systems and processes of the City.
- Showcase Buenos Aires' resilience construction internationally.

## 2. How to Read the Strategy

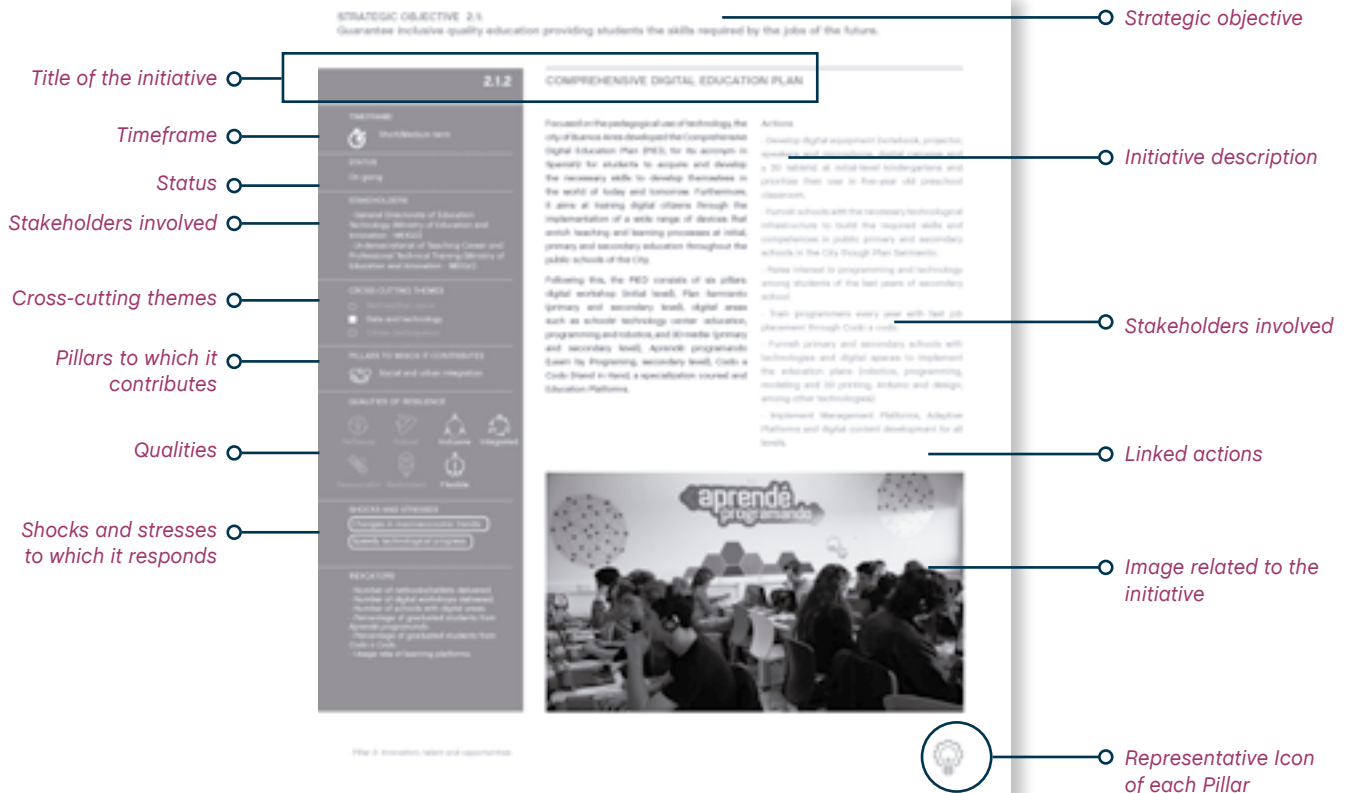
The Buenos Aires Resilience Strategy consists of 5 pillars, 14 strategic objectives and 60 initiatives. Each pillar responds to the shocks and stresses detected through the Preliminary Resilience Assessment and the activities carried out on Phase 2. In this respect, the Resilience Strategy reflects the vision and aspirations of the City.

The pillars enable structuring the main lines of work the City already has underway in its government plan, enriching it by means of the resilience lens. It also has 3 cross-cutting themes that complement and reinforce the City's vision for the future.

The pillars are structured around strategic objectives that define specific actions to achieve goals. Within each strategic objective there is a series of initiatives that embody resilience in the City. Many of these initiatives are linked to several objectives and to other pillars, which gives meaning to the cross-cutting concept of the strategy. On

the other hand, the resilience strategy complements with the UN 2030 Agenda for Sustainable Development. The strategic objectives set out therein, promote compliance of the Sustainable Development Goals (SDGs). The linkage between the strategic objectives and the SDGs is indicated on each pillar's cover.

At the same time, each initiative contains a brief description of the proposal and the resilience dividend of each action, its status, implementation timeframe (short, medium or Long-term), responsible parties and main stakeholders involved. The 100RC Network cities that served as inspiration for each initiative and whose good practices will contribute in the implementation phase are also mentioned. The actions have monitoring proposals or shock indicators to measure the implementation progress. The contribution of each strategic objective to the SDGs defined by the United Nations is also detailed.





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### 3. Cross-cutting Themes

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The cross-cutting themes are perspectives that underpin the City's vision of the future and go through each pillar of the strategy. They also contribute to a more complete understanding of the pillars' relevance from a new vision. These are: metropolitan vision, citizen participation, and use of data and technology. These cross-cutting elements are a

distinctive differential of the initiatives described, since they seek to solve the challenges of Buenos Aires in an integrated way, beyond its geographic limits, by including the vision of the residents of Buenos Aires and using evidence-based decision making.



#### Metropolitan Vision

Coordination among the different levels of government is a fundamental challenge of the institutional fabric of the Metropolitan Area of Buenos Aires (AMBA for its acronym in Spanish) that has deepened as of the autonomy of the city of Buenos Aires in 1994. Like any large city, Buenos Aires has challenges that go beyond its jurisdictional limits and require a systemic and metropolitan approach. Challenges such as waste and watershed management, transport, health and education do not respect borders and reflect social stresses and potential shocks both, in the City as well as in the municipalities that make up the metropolitan area. Incorporating the metropolitan vision to the understanding of urban resilience in the city of Buenos Aires implies acknowledging a coordinated and joint approach. This is reflected by the strategy's initiatives and actions that have an expanded vision of Buenos Aires' challenges, considering their complexity beyond its borders.



#### Citizen participation

In addition to enriching the content of the proposals, citizen participation as a tool for joint creation enables to better understand the needs and grants greater legitimacy to the initiatives. Engagement occurs when a government includes and favors citizen protagonism, using different mechanisms that can influence the definition of challenges, the search for solutions and decision-making. Including civic engagement as a cross-cutting approach aims to provide a response closer to the needs of residents that guarantees the City's identity and increases the sense of belonging, citizen commitment and involvement with the government.



#### Data and Technology

It is a vision that aims to generate concrete solutions, taking advantage of collective intelligence and developing solid links among government, residents, businesses, civil society and academia.

Advances in information and communication technologies (ICTs) pose challenges, but also great opportunities for open governments. The generation, publication and use of data imply robust and better-quality public policies, the development of evidence-based projects and proposals that have residents at the center of their drafting and development. The availability of data to think about the future of our cities also involves analyzing and understanding the information to develop efficient responses at critical moments. It also requires the government to be involved in the smart use of technologies and resources, to optimize their processes and to make this information accessible and useful for citizens, by transforming them into a tool to improve the quality of life in the city.

# Resilient Buenos Aires

PILLAR 1:  
Diversity, gender and coexistence



PILLAR 2:  
Innovation, talent and opportunities



PILLAR 3:  
Environment and sustainability



PILLAR 4:  
Social and urban integration



PILLAR 5:  
Security and risk management



1.1	Transform Buenos Aires into a city that promotes women's full development	<ul style="list-style-type: none"> <li>1.1.1 Commitment to gender equity in the labor market</li> <li>1.1.2 Gender Indicators System</li> <li>1.1.3 Accessible and safe mobility for all women</li> <li>1.1.4 Action against gender-based violence</li> <li>1.1.5 Strengthening sexual and reproductive health</li> </ul>
1.2	Recognize and promote diversity as an identity value of the City	<ul style="list-style-type: none"> <li>1.2.1 Orgullo BA (BA Pride)</li> <li>1.2.2 BA Migrante (Migrants in BA)</li> <li>1.2.3 Coexistence in BA</li> <li>1.2.4 BA Visión Cero (BA Zero Vision)</li> <li>1.2.5 Cultural pass</li> <li>1.2.6 Creative neighborhoods</li> </ul>
2.1	Guarantee inclusive quality education providing students the skills required by the jobs of the future	<ul style="list-style-type: none"> <li>2.1.1 Secondary school of the future</li> <li>2.1.2 Comprehensive Digital Education Plan</li> <li>2.1.3 Schools of the future</li> <li>2.1.4 Teachers of the future</li> <li>2.1.5 Predictive analysis</li> </ul>
2.2	Promote learning opportunities that favor access to quality jobs	<ul style="list-style-type: none"> <li>2.2.1 Segunda Vuelta Activa (Active Job Reinsertion)</li> <li>2.2.2 Jobs of tomorrow</li> <li>2.2.3 BA Emprende (BA Entrepreneur Academy)</li> </ul>
2.3	Foster innovation and generation of opportunities for economic development of the City	<ul style="list-style-type: none"> <li>2.3.1 Urban Innovation Fund</li> <li>2.3.2 Innovation park</li> <li>2.3.3 Public data policy</li> <li>2.3.4 Social and sustainable procurement</li> <li>2.3.5 Industries of the future</li> <li>2.3.6 New collaborative economies</li> <li>2.3.7 Study BA</li> </ul>
3.1	Develop an integrated green infrastructure system	<ul style="list-style-type: none"> <li>3.1.1 Green walls and roofs in schools</li> <li>3.1.2 Urban tree planting plan and metropolitan bio-corridors</li> <li>3.1.3 Privately owned publicly-accessible spaces</li> <li>3.1.4 New green areas</li> </ul>
3.2	Promote the City's energy sustainability	<ul style="list-style-type: none"> <li>3.2.1 Sustainable homes and buildings</li> <li>3.2.2 Sustainability challenge for businesses</li> <li>3.2.3 Efficient public buildings</li> </ul>
3.3	Implement a comprehensive waste management policy	<ul style="list-style-type: none"> <li>3.3.1 BA 4 Rs (reduce, reuse, recycle and recover)</li> <li>3.3.2 Waste to energy</li> <li>3.3.3 Technology and innovation in waste management</li> </ul>
4.1	Improve access to quality housing for all City residents	<ul style="list-style-type: none"> <li>4.1.1 Social and urban integration of low-income neighborhoods</li> <li>4.1.2 Access to affordable housing</li> </ul>
4.2	Promote sustainable mobility and a metropolitan cross-modal system	<ul style="list-style-type: none"> <li>4.2.1 Integrated public transport</li> <li>4.2.2 Electric mobility</li> <li>4.2.3 BA Carpool</li> <li>4.2.4 BA en bici (BA by bike)</li> </ul>
4.3	Design a people-oriented city which promotes coexistence and enjoyment	<ul style="list-style-type: none"> <li>4.3.1 Development of pedestrian priority zones and vehicle restriction in the downtown area</li> <li>4.3.2 Last mile logistics</li> <li>4.3.3 Barrio 31 High Line Park</li> <li>4.3.4 Commune 8 on a human scale</li> <li>4.3.5 Reform of the urban planning and building codes</li> <li>4.3.6 Art in neighborhoods</li> <li>4.3.7 Reconversion of equipment and urban regeneration</li> <li>4.3.8 BA sin barreras (BA without Barriers)</li> <li>4.3.9 BA vuelve al río (BA Returns to the River)</li> </ul>
5.1	Foster citizens who are informed, prepared and aware of the challenges they face	<ul style="list-style-type: none"> <li>5.1.1 Know BA</li> <li>5.1.2 Schools Get Ready</li> <li>5.1.3 Network of residents in the face of climate change</li> </ul>
5.2	Prepare the City to face the impacts of climate change	<ul style="list-style-type: none"> <li>5.2.1 Hydraulic Plan</li> <li>5.2.2 Early warning systems for storms and heat waves</li> <li>5.2.3 Risk Contingency and Preparedness Fund</li> <li>5.2.4 Single Coordination and Control Center</li> </ul>
5.3	Drive innovation and technology to build safer spaces	<ul style="list-style-type: none"> <li>5.3.1 Transformation of public spaces through tactical urbanism</li> <li>5.3.2 Comprehensive public security system</li> </ul>



## PILLAR 1

# Diversity, gender and coexistence

A prepared city, aware of its challenges  
and willing to adapt



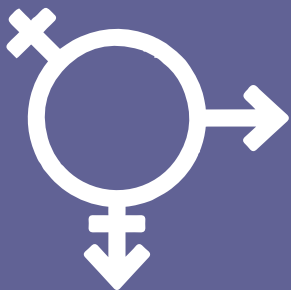


**1.1 TRANSFORM BUENOS AIRES INTO A CITY THAT PROMOTES WOMEN'S FULL DEVELOPMENT**

<b>3</b> GOOD HEALTH AND WELL-BEING 	<b>5</b> GENDER EQUALITY 	<b>8</b> DECENT WORK AND ECONOMIC GROWTH 	<b>11</b> SUSTAINABLE CITIES AND COMMUNITIES 
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**1.2 RECOGNIZE AND PROMOTE DIVERSITY AS AN IDENTITY VALUE OF THE CITY**

<b>5</b> GENDER EQUALITY 	<b>10</b> REDUCED INEQUALITIES 	<b>11</b> SUSTAINABLE CITIES AND COMMUNITIES 	<b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS 
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*“Buenos Aires seeks to promote the development of all its inhabitants, attending to their differences and enhancing coexistence in diversity.”*



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## Current Situation

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Building a society with equal opportunities entails promoting equal treatment, non-discrimination and effective social inclusion, no matter the gender, sexual orientation, ethnic, migratory origin or the religious beliefs of those who are part of it. By the same token, Buenos Aires seeks to promote the development of all its inhabitants, attending to their differences and fostering coexistence in diversity.

More than half the population of the City is female (54%). Although women have a greater presence than men in compulsory schooling, only 50% of working-age women (over 14) work (SIGBA, 2018). Upon entering the labor market, women have fewer senior positions and leadership roles than men. Women are employed mainly in domestic tasks, education, health and commerce (CIPPEC, 2018) and, in turn, dedicate two more hours a day to care-giving tasks.

Within this framework, Buenos Aires began to generate and make available statistical information with a gender perspective, through a Gender Indicators System that disaggregates the information by sex to measure how we are doing, and to implement interventions that will reduce the gender gap. Driven by this system, Buenos Aires announced changes in the legislation to implement a new family leave scheme for civil servants in the City.

On the other hand, the City pioneered rights extension in Latin America by allowing civil unions between same-sex people in 2002, before the national reform that led to same sex marriage in 2010. In turn, the City opened the country's first Transgender House: a safe environment where transgender people can empower themselves and gain knowledge and skills without fear of feeling discriminated against, rejected or attacked. The City also promotes trainings aimed to raise awareness about sexual diversity and LGBTI (lesbian, gay, bisexual, transgender and intersex) issues in institutional settings, such as schools, educational environments and health centers.

Buenos Aires is a thriving city, host to ongoing internal and external migration: 37.3% of the residents of the city were not native-born, while 13.5 % are foreign-born (DGEyC, 2011). The quality of health and education, a rich cultural offer, a high employment demand and the history of our country drive this migratory flow. Providing immigrants with information about their rights, advising them on the completion of procedures and reducing discrimination means recognizing and appreciating the cultural diversity that communities bring in to the City. To that end, BA Celebra (BA Celebrates) highlights the diverse community cultures and offers a scenario shared by all residents, where each community can celebrate their own history and identity.

Building a more resilient city entails creating instances that promote the social protection of all communities, supporting their engagement and empowerment, in order to create equal opportunities for all the residents that live and move around our City.

## STRATEGIC OBJECTIVE 1.1:

### Transform Buenos Aires into a city that promotes women's full development

#### 1.1.1

#### COMMITMENT TO GENDER EQUITY IN THE LABOR MARKET

##### TIMEFRAME



Medium-term

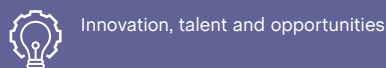
##### STATUS

New

##### STAKEHOLDERS

- Directorate General of Women (Ministry of Human Development and Habitat - MDHyH)
- General Secretariat and International Relations
- Private sector
- Undersecretariat of Employment (Ministry of Government -MGOB)

##### PILLARS TO WHICH IT CONTRIBUTES



Innovation, talent and opportunities

##### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

##### QUALITIES OF RESILIENCE



##### SHOCKS AND STRESSES

Gender inequity

Economic inequity

##### INDICATORS

- Number of companies that adopt the blind hiring model
- Number of government areas using gender perspective to assess work environment
- Number of companies classified as best workplaces for women
- Percentage of non-pregnant employees entitled to family leave
- Number of agreements signed with the private sector for equity in the labor market
- Percentage of GCBA female officials in hierarchical positions
- Female labor force participation
- Wage gap

Achieving gender equity is essential to have resilient societies. To that end, it is necessary to work articulately on the three dimensions of women's autonomy: physical, economic and decision making (ECLAC, 2018). The ability to generate their own income will make women less vulnerable to situations of violence, whereas sharing the unpaid work will give them greater chances to participate in the public space.

Gender equality is advancing slowly worldwide. And while progress has been made regarding female access to educational credentials, this does not translate into greater economic autonomy. There is a difference of 27 percentage points in women labor force participation, and the wage gap is of 23% (Women 20, 2018; UN Women, 2018).

In the City, the economic activity rate by gender continues to be low. In 2017, the male activity rate was of 70.6%, while the female rate accounted for 57.1%. Additionally, women from the city of Buenos Aires dedicate on average of 1.5 more hour a day than men to care-giving tasks, which takes the wage gap to 21.8% (SIGBA, 2018).

Upon entering the labor market, women are employed in sectors that reflect the tasks that traditionally fall on them in the domestic sphere: education, health and commerce (CIPPEC, 2018).

On the other hand, motherhood is also a challenge for women when it comes to staying in the labor market. In households with children, women are up to 20 times more likely to go to inactivity than men. Furthermore, evidence shows that discrimination against women exists and causes negative effects in their hiring, remuneration and promotion of their professional career, among others.

In order to reverse the described trends, the City embraced the commitment to equity in the labor market. Through a series of actions that include agreements with trade unions,

companies, reforms of regulations within the state itself (for example, the new paternity leave scheme) more women are encouraged to join the labor market in quality jobs and with equal pay as men. The initiative seeks to agree with employers and unions measures that achieve these objectives by means of evidence-based dialogue considering both, the wage gap and the working conditions. The City also offers free legal guidance for situations of labor conflict, training in programming, technical and financial assistance for entrepreneurs. All these services will particularly foster women participation.

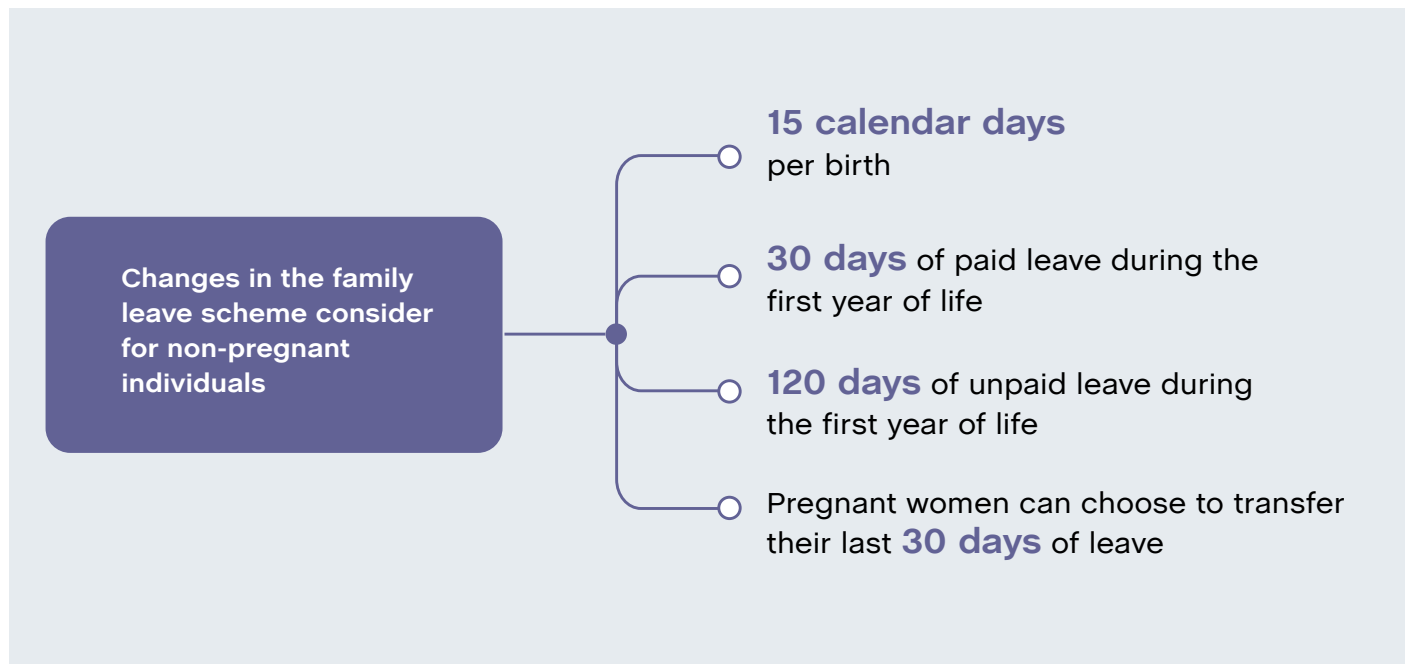
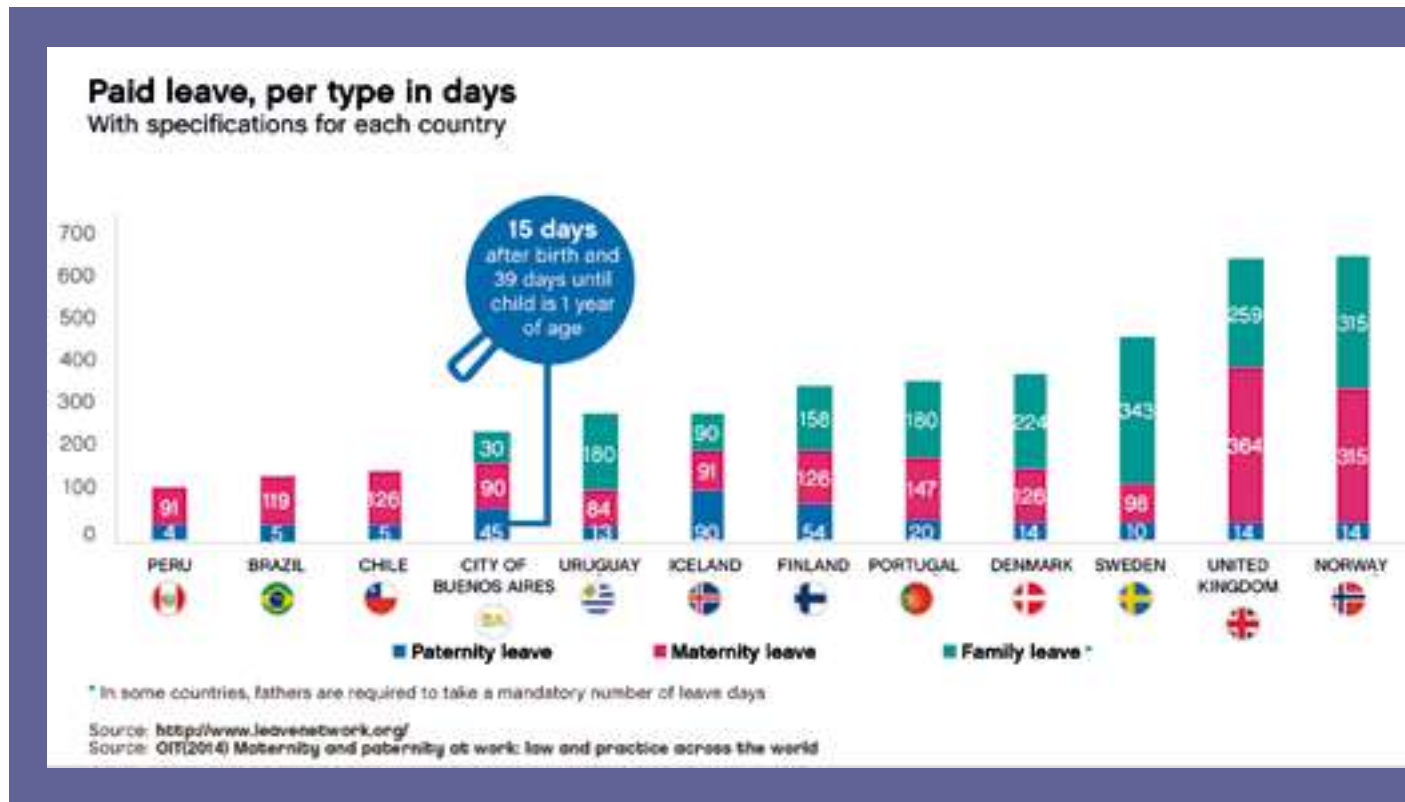
##### Actions

- Implement a family leave scheme to promote shared responsibility in care-giving tasks for employees of the Government of the City of Buenos Aires.
- Boost a partnership with the private sector to promote equity in the labor market.
- Set up a tripartite commission (unions, GCBA, and business chambers) for equality in the labor market.
- Implement blind hiring as a recruitment tool in the government.
- Develop an alliance with Great Place to Work to add gender indicators to their organizational climate surveys.
- Assess the work environment of the Government of the City with a gender perspective.



STRATEGIC OBJECTIVE 1.1:

Transform Buenos Aires into a city that promotes women's full development



**STRATEGIC OBJECTIVE 1.1:**  
**Transform Buenos Aires into a city that promotes women's full development**

**1.1.2**

**GENDER INDICATORS SYSTEM**

TIMEFRAME

 Short-term


STATUS

In progress

STAKEHOLDERS

- General Directorate of Statistics and Censuses (Ministry of Economy and Finance - MEyF)
- General Directorate of Women (Ministry of Human Development and Habitat - MDHyH)
- General Secretariat and International Relations

PILLARS TO WHICH IT CONTRIBUTES

 Innovation, talent and opportunities

CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

QUALITIES OF RESILIENCE



Reflexive   Robust   Inclusive   Integrated  
 Resourceful   Redundant   Flexible

SHOCKS AND STRESSES

Gender inequity

INDICATORS

- Number of indicators included in the Gender Indicators System of the City of Buenos Aires (SIGBA)
- Number of people who visit the website
- Number of information downloads

The city of Buenos Aires promotes gender equity so that men and women can live, enjoy and develop their potential with equal opportunities. A first step to achieve this ambitious goal is to close the statistical gap: having relevant information differentiated by sex is fundamental to measure how we are and to think about what needs to be done to achieve equal opportunities for men and women.

To that end, the City of Buenos Aires' Gender Indicators System was developed: a set of statistical data and records that create a systemic vision of the gender dimension in the City. It comprises a series of economic, political and socio-demographic indicators that enable identifying the progress and challenges women's situation.

The system gathers information in one single site with the triple purpose of raising awareness on

the gender situation, informing the public and encouraging evidence-based decision making towards increased equal opportunities. This is an essential tool for the development of the city's resilience strategy, since it enables to design new policies and programs, and monitor the progress of those already in place.

**Actions**

- Develop conferences on "Indicators System: sources and variables"
- Promote and encourage Plans for Equal Opportunities within all areas of government

**Gender Indicators System**

The information is structured according to the theoretical framework proposed by the Economic Commission for Latin America and the Caribbean of the UN (ECLAC) in three interrelated dimensions:

- Autonomy in decision making:** refers to the possibility of influencing decision-making processes.
- Economic autonomy:** addresses the difference between men and women in their capacity of generating income and resources from access to paid work and educational credentials.
- Physical autonomy:** refers to the capacity of individuals to act according to their own choice and not according to the decision of others. This dimension is understood as the capacity of preserving their integrity, deciding and having control over their own body, their sexuality and fertility.



**STRATEGIC OBJECTIVE 1.1:**  
**Transform Buenos Aires into a city that promotes women's full development**

**ACCESIBLE AND SAFE MOBILITY FOR ALL WOMEN**

In cities, women show a different travel pattern than men. While the latter carry out unidirectional and longer trips, women cover shorter distances and tend to make more trips related to house chores or to accompanying other family members (IDB, 2017). At the same time, women are more susceptible to suffering from situations of insecurity and violence, which often reduces or deteriorates their daily trips. This frequently limits labor, educational, recreational and social possibilities for women.

For this reason, the City has the challenge of including the gender perspective in its mobility policies and in the design of public spaces to reduce vulnerability as women move around the city.

The BA Mapea initiative (BA Mapping) proposes to carry out sessions of collaborative mapping in

different points of the city on accessibility and daily mobility, highlighting the vulnerability and the use of public spaces and public transport. The initiative seeks to gather information that accounts for the status of the different places in terms of infrastructure, security, and accessibility to improve the planning and managing of territorial resources.

**Actions**

- Establish a date for BA Mapea.
- Generate evidence to promote intervention in public spaces.
- Incorporate the gender perspective to the design and planning of public spaces and to the metropolitan transport network.

**BA Mapea en Barrio 20 (BA Mapping in Neighborhood 20)**

In May 2018 the City worked with women from Barrio 20 to conduct a participatory mapping focused on gender and mobility. The purpose of the activity was to understand how women move, through collecting and generating data. This proposal aims to generate information to think about policies that improve women's daily mobility in Barrio 20 and enhance their physical and economic autonomy.



**1.1.3**

TIMEFRAME

Short-term

STATUS

Pilot project

STAKEHOLDERS

- City Housing Institute (Office of the Chief of Staff- JGM)
- General Secretariat and International Relations
- Undersecretariat of Maintenance and Public Space (Ministry of Environment and Public Space - MAyEP)
- Undersecretariat of Citizen Security (Ministry of Justice and Security- MJyS)
- Secretariat of Transport (Ministry of Urban Development and Transport - MDUyT)

PILLARS TO WHICH IT CONTRIBUTES

Social and urban integration

CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

QUALITIES OF RESILIENCE

- Reflexive
- Robust
- Inclusive
- Integrated
- Resourceful
- Redundant
- Flexible

SHOCKS AND STRESSES

- Gender inequity
- Urban deterioration
- Inadequate public transport systems
- Insecurity

INDICATORS

- Number of participatory mappings carried out with gender perspective
- Number of women involved in participatory mappings with gender perspective



**STRATEGIC OBJECTIVE 1.1:**  
**Transform Buenos Aires into a city that promotes women's full development**

**1.1.4**

**ACTION AGAINST GENDER-BASED VIOLENCE**

**TIMEFRAME**

 Medium-term


**STATUS**

In progress

**STAKEHOLDERS**

- Directorate General of Women (Ministry of Human Development and Habitat - MDHyH)
- Undersecretariat of Human Rights and Cultural Pluralism (Office of the Deputy Chief of Government - VJG)
- Undersecretariat of Citizen Security (Ministry of Justice and Security -JyS)
- Ministry of Education and Innovation

**PILLARS TO WHICH IT CONTRIBUTES**

 Security and risk management

**CROSS-CUTTING THEMES**

- Metropolitan vision
- Data and technology
- Citizen participation

**QUALITIES OF RESILIENCE**



Reflexive Robust Inclusive Integrated  
 Resourceful Redundant Flexible

**SHOCKS AND STRESSES**

Lack of social cohesion

Gender inequity

Economic inequity

**INDICATORS**

- Number of trained teachers
- Number of police officers added to the brigade against gender-based violence
- Percentage of progress of the Comprehensive Care Centers for Women (CIM in Spanish)
- Number of communal commissariats with specialized units in gender violence

Cases of gender-based violence in the City led to develop institutional tools in the agencies that deal with victim care. Therefore, promoting gender equality requires working against violence based on the problematization and dissemination of the rights of women and LGBTI groups.

In this context, the City developed a prevention protocol in schools, with the purpose of preventing and eradicating violence and discrimination based on sexual orientation and gender identity. This protocol provides tools and training for educators of secondary and tertiary schools to act in response to complaints from students and thus, be prepared to solve these situations.

On the other hand, insecurity is one of the main concerns of residents and an essential component for the coexistence and enjoyment of public spaces. The City has a brigade against gender-based violence, comprised of 300 female trained officers in how violence cycles unfold, in detection indicators of violent situations, and in assistance resources to attend and protect women involved in violent relationships.

Additionally, 15 community police stations will be created to encourage proximity between

residents and law enforcement agencies. They will have a dedicated unit to receive complaints and offer advice.

**Actions**

- Install a Comprehensive Care Center for Women in each Commune.
- Provide specialized telephone assistance to victims of gender-based violence through the 144 line, anonymously, nationally and free of charge.
- Deliver panic buttons for emergencies.
- Raise awareness among government agents.
- Use an institutional action protocol to prevent and intervene in situations of gender-based violence and discrimination based on sexual orientation and gender identity for secondary and tertiary schools.
- Install homes and shelters for gender-based violence victims.
- Conduct a mass media and awareness-building campaign.
- Develop the Prevention and Assistance Program for violent dating relationships





## STRATEGIC OBJECTIVE 1.1:

### Transform Buenos Aires into a city that promotes women's full development

#### STRENGTHENING SEXUAL AND REPRODUCTIVE HEALTH

The concept of sexual and reproductive health is defined as “a complete state of physical, mental, social well-being and not the merely absence of disease or infirmity, in all matters related to the reproductive system” (ICPD, 1994).

To that effect, Law N° 418 on Reproductive Health and Responsible Procreation of the city of Buenos Aires focuses on adolescents as target of public policies and assures the existence of services and trained professionals in sexuality and procreation. Therefore, access to accurate and reliable information on sexual and reproductive health is essential for the full development of an autonomous sexuality (the 2016 Youth Survey states that 7.3% of young people between 15 and 29 years of age are not informed on sexual and reproductive health).

On the other hand, Law N° 2110 on Comprehensive Sex Education is taught at all mandatory levels and modalities of the educational system, either public or private and at all teacher training colleges that depend on the Government of the City of Buenos Aires. In this way, the City guarantees the right to information for the exercise of a responsible comprehensive sexuality and with education in values.

Thus, the Resilience Strategy emphasizes the development of a Comprehensive and Cross-Ministerial Plan to improve sexual and reproductive health, with the purpose

of enriching information and access to the necessary resources in order to strengthen care, prevent unintentional pregnancies and sexually transmitted infections. In addition, it also seeks to boost the Comprehensive Sex Education (CSE) with international agencies and experts, so that all students can make informed-based and responsible decisions regarding body care, inter-personal relationships, and sexuality.

#### Actions

- Increase care and counseling providing in public schools, Health and Community Centers (CECACs for its acronym in Spanish) and City Communes.

- Strengthen the technical teams of the Ministries of Education and Health.

- Carry out a mass media campaign on little-known contraceptive methods and demand from health sub-sectors to provide them free of charge.

- Open CECACs on Saturdays.

- Place condom dispensers in City's Healthy Stations and cultural spaces.

- Distribute implant contraceptive methods to women aged 12 to 24 with public health coverage.



#### 1.1.5

##### TIMEFRAME



Medium-term

##### STATUS

New

##### STAKEHOLDERS

- Ministry of Education and Innovation
- Ministry of Health

##### PILLARS TO WHICH IT CONTRIBUTES



Social and urban integration



Innovation, talent and opportunities

##### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

##### SHOCKS AND STRESSES

Marginalization of young people

Inadequate health systems

Gender inequity

##### INDICATORS

- Number of condoms delivered
- Number of mass media campaigns generated
- Number of women who accessed implant contraceptive methods
- Number of Health and Community Centers (CECACs) open on Saturdays

**STRATEGIC OBJECTIVE 1.2:**  
**Recognize and promote diversity as an identity value of the City**

**1.2.1**

**ORGULLO BA (BA PRIDE)**

**TIMEFRAME**

 Long-term

**STATUS**

In progress

**STAKEHOLDERS**

- Undersecretariat of Human Rights and Cultural Pluralism (Office of the Deputy Chief of Government - VJG)

**PILLARS TO WHICH IT CONTRIBUTES**


 Social and urban integration

 Innovation, talent and opportunities

**CROSS-CUTTING THEMES**

- Metropolitan vision
- Data and technology
- Citizen participation

**QUALITIES OF RESILIENCE**

-  Reflexive
-  Robust
-  Inclusive
-  Integrated
-  Resourceful
-  Redundant
-  Flexible

**SHOCKS AND STRESSES**

- Social discrimination
- Gender inequity

**INDICATORS**

- Number of government areas made aware of LGBTI issues
- Number of people attending mass events on diversity awareness and non-discrimination
- Number of people assisted at the Transgender House
- Number of visits to the Transgender House
- Number of people included in the comprehensive work access plan for transgender persons

Discrimination based on sexual orientation or gender identity represents one of the most widespread causes of violence and exclusion worldwide. Visibility is a fundamental tool to raise awareness about the LGBTI issues. Every year the City promotes different cultural, business, hotel, recreational and sportive activities, that create spaces for exchange and empowerment. Some of these are Semana Diversa (Diversity Week), Alta en el cielo (High in the sky) and Jornadas Porteñas de Diversidad Sexual (Buenos Aires Conference on Sexual Diversity). The City also celebrates the Pride Parade every year, where thousands of people demonstrate to express their freedom and rights vindication.

Buenos Aires also developed a training program on LGBTI issues, with workshops and courses to raise awareness on gender diversity, sexual identity and the defense of the LGBTI community rights. Special emphasis is placed on sensitizing law enforcement agencies and the civil service.

Furthermore, the Comprehensive Transgender Plan is developed with public policies aimed at assuring transgender persons the full exercise of their rights and freedoms, promoting respect and social integration. The Job Bank

for transgender people and the creation of the Transgender House are part of this framework.

Building a more resilient city entails generating instances of protection for the most vulnerable sectors, along with a sustained promotion of human rights and the creation of integration, participation and empowerment policies.

**Actions**

- Foster the Comprehensive Transgender Plan: promote social inclusion by means of counselling work on health, education and employment.
- Promote the Semana Diversa (Diversity Week) event to celebrate the LGBTI community with cultural, human rights, sportive and business activities.
- Develop the Jornada Porteña de Diversidad Sexual (Buenos Aires Conference on Sexual Diversity) event, to debate, reflect and exchange topics regarding Sexual Diversity.
- Support the yearly celebration of the Pride Parade.



**STRATEGIC OBJECTIVE 1.2:**  
**Recognize and promote diversity as an identity value of the City**



**First Transgender House in Latin America (action in progress)**

In 2017 the first Transgender House of Latin America was opened in Buenos Aires. This community center was created with the purpose of promoting social protection of the transgender community in Buenos Aires - a space for visibility and support that designs programs, in order to improve the living conditions of transgender people, access to health, education and work. It also helps to reduce the levels of daily social exclusion, violence and discrimination.





## STRATEGIC OBJECTIVE 1.2: Recognize and promote diversity as an identity value of the City

### 1.2.2

### BA MIGRANTE (MIGRANTS IN BA)

#### TIMEFRAME



Long-term

#### STATUS

In progress with new resilient actions

#### STAKEHOLDERS

- Undersecretariat of Human Rights and Cultural Pluralism (Office of the Deputy Chief of Government - VJG)
- Ministry of Human Development and Habitat
- Secretariat of Citizen Culture and Civil Service (Office of the Chief of Staff - JGM)

#### PILLARS TO WHICH IT CONTRIBUTES

Social and urban integration

Innovation, talent and opportunities

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



#### SHOCKS AND STRESSES

Lack of social cohesion

Ethnic inequity

Economic inequity

#### INDICATORS

- Number of immigrants who visited the Migrant Guidance and Information Center
- Number of immigrants who participate from the projects led by the Women's Network of Communities
- Number of immigrants who attended information and counseling workshops

According to ECLAC-IOM, 4.8% of the Argentine population is immigrant, which makes Argentina the South American country with the largest foreign population, even duplicating the regional average (2.1%). In Buenos Aires, migrants account for 12.8% of the inhabitants, and 4 out of 10 people living in the City were not born there. In this way, the quality of education and health, a richer cultural offer, a higher employment demand and the migratory history of our country, make Buenos Aires a tempting destination. At the same time, its identity reflects foreign intertwining influences, creating a heterogeneous and attractive result.

Immigrants play an active role in the vitality of the city. For this reason, BA Migrante (Migrant BA) seeks to develop an action plan to promote the inclusion of migrants in the City through partnerships, collaboration and a shared understanding with civil society organizations.

Under the challenge of bringing solutions for the neighbors, the City is designing a Migrant Guidance and Information Center, a mobile unit that is set up in events with the highest concentration of migrants, organized by the GCBA. The purpose of this center is to provide migrants with information about their rights, assist in the completion of procedures and sensitize the population to reduce discrimination.

On the other hand, we will set up information points close to the iconic spaces of the migrant communities living in the City (social clubs, associations, etc.), and organize information and counseling workshops for groups with specific demands. This way, all the migrant population will be reached, and accessible resources, such as transport, communication, education and services will be provided.

With the purpose of encouraging the recognition and appreciation that the cultural diversity of migrants and their communities bring to the identity of Buenos Aires, this initiative positions

Buenos Aires as a cosmopolitan, intercultural and inclusive city, model of coexistence.

#### Actions

- Set up welcome points where communities of migrants live (Welcome Centers).
- Set up Migrant Guidance and Information Centers.
- Expand activities for women and youth immigrants.
- Promote women's participation in the Network of Community Women.
- Develop a welcome campaign where a city resident acts as immigrant guide to assist and help with regards to services and opportunities offered by the City.
- Create a guidebook for migrants' rights to facilitate the arrival in the City and the access to services.



STRATEGIC OBJECTIVE 1.2:  
Recognize and promote diversity as an identity value of the City



REFERENCE



Welcome Pittsburgh: Aims to improve the lives of immigrants and residents by creating informed, diverse and welcoming experiences throughout the city. The plan includes a wide set of recommendations structured in three categories: Welcome neighbor! (creates community connections), Bridge to the City (articulates government services, policies and housing) and Prospering Together (promotes economic opportunities).



**STRATEGIC OBJECTIVE 1.2:**  
**Recognize and promote diversity as an identity value of the City**

**1.2.3**

**COEXISTENCE IN BA**

TIMEFRAME

 Long-term

STATUS

In progress

STAKEHOLDERS

- Migrant communities
- Religious communities
- General Secretariat and International Relations
- Undersecretariat of Human Rights and Cultural Pluralism (Office of the Deputy Chief of Government - VJG)

PILLARS TO WHICH IT CONTRIBUTES

 Social and urban integration

CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

QUALITIES OF RESILIENCE

 Reflexive  
  Robust  
  Inclusive  
  Integrated  
 Resourceful  
  Redundant  
  Flexible

SHOCKS AND STRESSES

- Social discrimination
- Lack of social cohesion

INDICATORS

- Number of mass events of religious and migrant communities
- Number of attendants to mass events
- Number of migrant associations supported

A resilient city is inclusive and free from all forms of discrimination. The city of Buenos Aires is characterized by multiple cultures that cohabit and coexist in it. Hundreds of communities make up the identity of the city, and diverse cultures and religions enrich the socio-cultural fabric.

To build resilience, it is important to work hard to promote good relations among residents, religious and migrant communities, in search of a more plural and inclusive city. Buenos Aires implements public policies to render the multiple coexisting cultures more visible and to foster respect and non-discrimination. It also promotes interreligious dialogue and organizes different advocacy campaigns, having Buenos Aires as scenario of celebrations that promote and preserve traditions, respect and integration of all worldviews and values.

In addition, it stimulates reflection on daily practices in public establishments, by encouraging an inclusive State that respects multiculturalism. Through the Probation program, the City promotes mechanisms of restorative justice for those performing community service in lieu of full trial followed by custodial

sentencing. This program consists of workshops aimed at reducing conflicts and promoting coexistence among residents.

**Actions**

- Raise awareness, train and promote human rights to tackle discrimination and sensitize residents of the City.
- Make the identity and roots of each migrant community in the City visible, showcasing their culture in public spaces.
- Promote an interreligious meeting to break down prejudices and enhance the richness of each tradition.
- Apply the principles of restorative justice to reduce the levels of conflict and disseminate coexistence.



**STRATEGIC OBJECTIVE 1.2:**  
**Recognize and promote diversity as an identity value of the City**

**BA VISIÓN CERO (BA ZERO VISION)**

Improving road safety requires a collective effort from the whole society. The adoption and promotion of safe behaviors is a responsibility of the City and of all of us who move around it. It involves generating a cultural change in traffic, so that we can incorporate a safer, more solidary and friendlier attitude to improve the way we relate in our streets and redesign the public space to give priority to people.

Therefore, the City adopts Visión Cero (Zero Vision), a program whose ethical principle states that no one should die or suffer life-long injuries in car accidents. This adds to the concept that the transport system should be designed to contain and reduce the impact of human errors, creating what is internationally known as Safe System.

Building a resilient city entails the commitment to reduce fatalities caused by road accidents, by working jointly and in coordination between the public, the private sector and the civil society. The Road Safety Plan establishes work structured around 4 areas monitored by the City Road Safety Observatory: safe infrastructure;

legislation and control; education and awareness, and citizens commitment.

**Actions**

- Create safe environments for pedestrians and expand restriction zones for motor vehicles.
- Implement maximum speed zones of 30 km/h.
- Carry out pedestrian interventions that generate shorter and safer crossings for pedestrians.
- Conduct mass media campaigns focused on pedestrian priority.
- Train and raise awareness among professional drivers, motorcyclists and cyclists.
- Reduce the maximum speeds of large avenues in the city.

**1.2.4**

TIMEFRAME

 Short-term


STATUS

In progress with new resilient actions

STAKEHOLDERS

- Undersecretariat of Sustainable and Safe Mobility (Ministry of Urban Development and Transport -MDUyT)








PILLARS TO WHICH IT CONTRIBUTES

 Security and risk managements

CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

QUALITIES OF RESILIENCE

-  Reflexive
-  Robust
-  Inclusive
-  Integrated
-  Resourceful
-  Redundant
-  Flexible

SHOCKS AND STRESSES

- Road safety
- Lack of social cohesion

INDICATORS

- Number of road accidents
- Number of fatalities in road accidents



**Sube y Baja (Pick up and Drop off)** (program in progress)

In the framework of the Road Safety Plan, the City created the Sube y Baja (Pick up and Drop off) program, a project that engages teachers, school principals, parents and students. The program proposes a methodology to organize children's entrance and exit from schools and to improve traffic in neighborhoods. The proposal adapts to the characteristics and surroundings of the establishment and prioritizes public transport, pedestrian mobility and cycling.

**STRATEGIC OBJECTIVE 1.2:**  
**Recognize and promote diversity as an identity value of the City**

**1.2.5**

**CULTURAL PASS**

TIMEFRAME

 Medium-term

STATUS

In progress

STAKEHOLDERS

- Ministry of Education and Innovation
- Ministry of Culture

PILLARS TO WHICH IT CONTRIBUTES

 Social and urban integration

CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

QUALITIES OF RESILIENCE

-  Reflexive
-  Robust
-  Inclusive
-  Integrated
-  Resourceful
-  Redundant
-  Flexible

SHOCKS AND STRESSES

- Social breakdown
- Urban decay
- Lack of social cohesion

INDICATORS

- Number of young people who have used the cultural pass

Facilitating and expanding access to culture is a key aspect to boost a strategic industry for the City. For this reason, the Cultural Pass initiative provides access to cultural goods for public-schools students between 16 to 18 years old by means of a card. This initiative will help foster the cultural consumption and generate youth greater demand for cultural industries. Additionally, it can be used on a preset cluster

that include the public, private and independent cultural offer.

Offering and consuming culture in the City enables to bridge the gap among different neighborhoods, bringing realities closer and promoting a space for encounters and coexistence among different residents of the City.



**STRATEGIC OBJECTIVE 1.2:**  
**Recognize and promote diversity as an identity value of the City**

**CREATIVE NEIGHBORHOODS**

Access to culture is an essential element to overcome the social barriers that exist among neighborhoods. Promoting access of residents to public and private cultural offers is a key factor to build true social cohesion. Bringing culture closer to neighbors and strengthening the local identity boosts a network fabric that decentralizes the cultural offer in Buenos Aires. For this reason, the *Barrios Creativos* (Creative Neighborhoods) program will launch a competition for dwellers' teams to design the cultural agenda of their neighborhoods and will grant financing to turn the best ideas into projects.

The competition aims to enhance the relationship among local cultural stakeholders, draft a collaborative cultural plan to highlight the identity of each neighborhood, add value and showcase proposals to generate new alternative cultural circuits of quality.

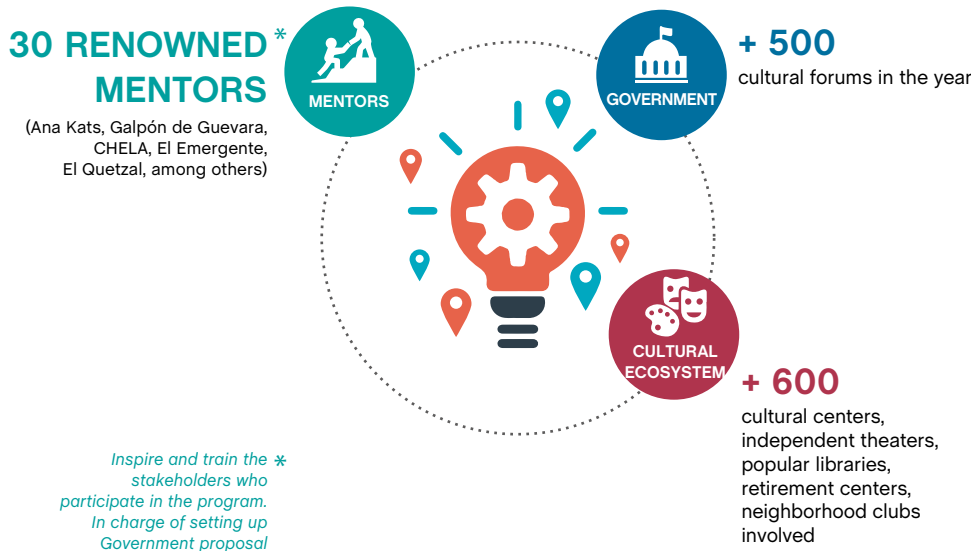
The purpose is to reward those collaborative

and participatory projects where the relationship between public and private offers is promoted. The first prize will get the funding and support of the project for one year. There will also be 3 special mentions that will receive resources and support for the project, and 11 supported activities of non-winning proposals.

These actions allow the City to expand the offer of neighborhood cultural centers included in the official agenda and increase the number of cultural activities and events jointly organized by local cultural stakeholders and the Ministry of Culture.

**Actions**

- Organize training sessions, clinics and personalized advice for cultural managers.
- Strengthen the cultural public and private spaces of the City.



**1.2.6**

**TIMEFRAME**

Long-term

**STATUS**

In progress

**STAKEHOLDERS**

- Ministry of Culture

**PILLARS TO WHICH IT CONTRIBUTES**

- Social and urban integration
- Innovation, talent and opportunities

**CROSS-CUTTING THEMES**

- Metropolitan vision
- Data and technology
- Citizen participation

**QUALITIES OF RESILIENCE**

- Reflexive
- Robust
- Inclusive
- Integrated
- Resourceful
- Redundant
- Flexible

**SHOCKS AND STRESSES**

Lack of social cohesion

**INDICATORS**

- Number of financed projects


**REFERENCE**

**London Borough of Culture:** It brings together Londoners of all ages and backgrounds, putting culture at the heart of local communities, with the aim of fostering cohesion and the sense of belonging in the city.



## PILLAR 2

# Innovation, talent and opportunities

A photograph of a person's hand pointing at a computer monitor. The monitor displays lines of code in a dark-themed editor. In the foreground, a laptop is open, showing a webpage with a blue and white design. The entire scene is overlaid with a semi-transparent teal filter.

A City that promotes equality of opportunities for all its residents, that anticipates the advances of the future developments and provides the conditions to develop their potential.





**2.1 GUARANTEE INCLUSIVE QUALITY EDUCATION PROVIDING STUDENTS THE SKILLS REQUIRED BY THE JOBS OF THE FUTURE.**



**2.2 PROMOTE LEARNING OPPORTUNITIES FAVORING ACCESS TO QUALITY JOBS.**



**2.3 FOSTER INNOVATION AND GENERATION OF ECONOMIC DEVELOPMENT OPPORTUNITIES OF THE CITY.**





*“The City is moving forward in changing the education model to anticipate these challenges, focusing on students being able to learn the necessary skills to cope with the world of today and tomorrow.”*

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## Current Situation

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The advance of information and communication technologies is changing the world. Digital revolution has generated immediate benefits such as facilitating communication and information, further flexibility, emergence of new jobs and new ways to resolve citizens' needs.

According to the City of Buenos Aires General Directorate of Statistics and Censuses, 1 out of 5 citizens (21.5%) is young. Even though they represent a particularly important age group for the development of the country, in the City, 1 out of every 10 youth face a process of double exclusion: from the education system and from the labor market (Youth Observatory, 2016). Furthermore, by 2020 they will make up more than one third of the world's labor force (Manpower, 2016) and the irruption of technology in this scenario will be increasingly higher.

Those changes –current and expected ones- impact a wide range of productive activities, generating challenges and enormous development opportunities for cities. They will, in turn, have a great impact on the elimination and reshaping of jobs, as well as the skills (soft and technical ones) required by the labor market (Weller, 2017). At the moment, 39% of the companies in the city of Buenos Aires face difficulties in covering the appropriate professional profiles due to the lack of technical skills, shortage of candidates and lack of experience (INET-GCBA, 2016).

The City is moving forward in changing the education model to anticipate these challenges, focusing on students being able to learn the necessary skills to cope with the world of today and tomorrow. In this context, the Secondary School of the Future was designed to adjust the school to a more inclusive model that places students in an active role. It incorporates innovative formats and new technologies for teaching and anticipates the possible demands of society, by transforming the school culture and rethinking institutional patterns and dynamics. On the other hand, the Comprehensive Digital Education Plan aims at training digital citizens through the implementation of different devices that enhance both teaching and learning processes. In addition, Buenos Aires developed programs that promote the creation and management of ventures contributing towards entrepreneurship and innovative talent as an engine of the City's economic development.

In this regard, the Resilience Strategy proposes adjusting learning processes, focused on students and teachers, generating modern learning spaces that promote talent and innovation development. On the other hand, the strategy highlights and boosts the emergence of new jobs and industries countering labor replacement processes, and promoting, in turn, economic growth and the adjustment of the City to the changes in the future of employment.

## STRATEGIC OBJECTIVE 2.1:

Guarantee inclusive quality education providing students the skills required by the jobs of the future.

### 2.1.1

### SECONDARY SCHOOL OF THE FUTURE

#### TIMEFRAME



Medium-term

#### STATUS

In progress

#### STAKEHOLDERS

- Ministry of Education and Innovation
- Public and private organizations where the education practices take place

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



#### SHOCKS AND STRESSES

Fast changes in the labor market

New ways of organizing teaching

#### INDICATORS

- Percentage of students improving their learning.
- Percentage of students remaining in the education system.
- Percentage of promoted students.

The demands of the knowledge society call for the adjustment of the current curricula. In this context, the city of Buenos Aires developed in 2015 the New Secondary School (NES for its acronym in Spanish) conceived to optimize the purpose and the relevance of the training offer for teenagers, enhance the performance of learning institutions and their capacity for the efficient management of education, the implementation of new curricular formats and the update of educational content considering youth cultures and the pregnancy of digital culture (GCBA, 2015).

In order to continue anticipating coming challenges, the City designed the Secondary School of the Future: a more inclusive school model, that inspires, stimulates, challenges and, especially, places students in an active role. Furthermore, it contributes to prepare students to face the disruption implied by technological changes affecting the capacity for adaptation and internalization of the new technologies, which, in turn, trigger with more swiftness the need of appropriate professional profiles in terms of both, specific knowledge and soft skills (INET-GCBA, 2016).

Hence, the Secondary School of the Future is tailored to the new technologies, the new formats of teaching and learning processes, and the new demands of society, transforming the school culture and rethinking institutional spaces, logics and dynamics. Thus, the different curricular areas are to be integrated into four areas of knowledge promoting articulated work. On the other hand, in the last year of school and considering training for higher education or the world of work, the initiative includes a period of school for pre-university or pre-tertiary training and integrating educational practices.

Expanding the current notion of schooling, considering the students' diverse social and cultural background implies redefining the

concept of student based on his/her inclusion in the learning processes and questioning those definitions linked to a traditional way of being at secondary school (CFE Resolution 93/09). The Secondary School of the Future outlines, therefore, a school that educates people who are responsible and prepared to make decisions, that promotes autonomous learning, and boosts creativity and research development, critical thinking and team work.

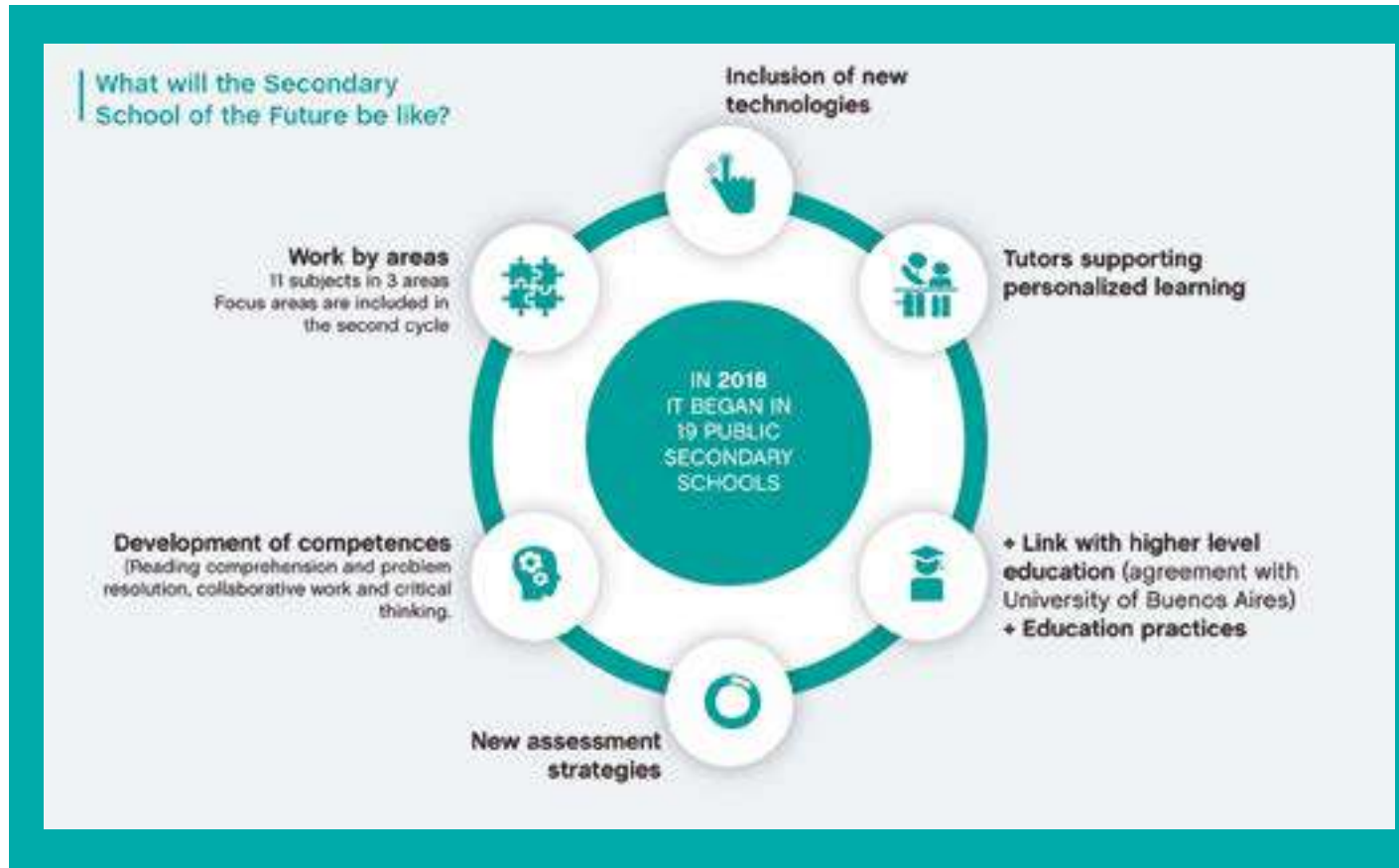
#### Actions

- Strengthen the transition from primary to secondary school.
- Work by areas of knowledge and by projects between different subjects and areas.
- Plan jointly among teachers of different subject areas and work in cooperation in the classroom.
- Build skills for development in the society of tomorrow.
- Support students individually through tutoring.
- Assess continuously knowledge learning and development of socio-emotional skills.
- Eliminate numerical marks as the only assessment guideline: conceptual, numeric and category marks by skill.
- Support to continue higher education and compulsory education practices.



## STRATEGIC OBJECTIVE 2.1:

Guarantee inclusive quality education providing students the skills required by the jobs of the future.



### REFERENCE

**Nueva York:** Developed an alternative secondary school whose main purpose is to offer students learning experiences encompassing the different resources and companies in the city. It is, thus, based on classroom work, training practices and preparing the portfolio for graduation.



## STRATEGIC OBJECTIVE 2.1:

Guarantee inclusive quality education providing students the skills required by the jobs of the future.

### 2.1.2

### COMPREHENSIVE DIGITAL EDUCATION PLAN

#### TIMEFRAME

 Short/Medium-term

#### STATUS

In progress

#### STAKEHOLDERS

- General Directorate of Education Technology (Ministry of Education and Innovation - MEIGC)
- Undersecretariat of Teaching Career and Professional Technical Training (Ministry of Education and Innovation - MEIGC)

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### PILLARS TO WHICH IT CONTRIBUTES

 Social and urban integration

#### QUALITIES OF RESILIENCE

 Reflexive  Robust  Inclusive  Integrated

 Resourceful  Redundant  Flexible

#### SHOCKS AND STRESSES

- Changes in macroeconomic trends
- Speedy technological progress

#### INDICATORS

- Number of netbooks/tablets delivered.
- Number of digital workshops delivered.
- Number of schools with digital areas.
- Percentage of graduated students from *Aprendé programando*
- Percentage of graduated students from *Codo a Codo*.
- Usage rate of learning platforms.

Focused on the pedagogical use of technology, the city of Buenos Aires developed the Comprehensive Digital Education Plan (PIED, for its acronym in Spanish) for students to acquire and develop the necessary skills to develop themselves in the world of today and tomorrow. Furthermore, it aims at training digital citizens through the implementation of a wide range of devices that enrich teaching and learning processes at initial, primary and secondary education throughout the public schools of the City.

Following this, the PIED consists of six pillars: digital workshop (initial level), Plan Sarmiento (primary and secondary level), digital areas such as schools' technology center -education, programming and robotics, and 3D media- (primary and secondary level), *Aprendé programando* (Learn by Programming, secondary level), *Codo a Codo* (Hand in Hand, a specialization course) and Education Platforms.

#### Actions

- Develop digital equipment (notebook, projector, speakers and microphone, digital cameras and y 30 tablets) at initial-level kindergartens and prioritize their use in five-year old preschool classroom.
- Furnish schools with the necessary technological infrastructure to build the required skills and competences in public primary and secondary schools in the City through Plan Sarmiento.
- Raise interest in programming and technology among students of the last years of secondary school.
- Train programmers every year with fast job placement through *Codo a codo*.
- Furnish primary and secondary schools with technologies and digital spaces to implement the education plans (robotics, programming, modeling and 3D printing, Arduino and design, among other technologies).
- Implement Management Platforms, Adaptive Platforms and digital content development for all levels.



## STRATEGIC OBJECTIVE 2.1:

Guarantee inclusive quality education providing students the skills required by the jobs of the future.

### SCHOOLS OF THE FUTURE

Understanding the environment where the education community develops is necessary to analyze the strategies to be implemented in order to achieve quality education. Furthermore, every institution should deal with situations of change, for instance, changes in infrastructure (refurbishment or extensions) that may affect students' learning goals in the long term. Hence, the availability of basic furniture as well as top quality classrooms not only impacts students' learning, but also builds education spaces that promote skills development of children and youth.

Transforming the school culture includes, therefore, rethinking institutional logics and dynamics, not only at curricular level, but also at infrastructure level. Building new schools requires considering what type of spaces will children and youth occupy and what quality and type of experience we want to offer them. Thus, we propose to redesign the spaces enabling the development of the skills of tomorrow and respond to students' individual needs, promote curiosity and further trust, collaboration and concentration, together with the Secondary

School of the Future and Teachers of the Future initiatives.

Bringing about the appropriate physical conditions for the development of teaching activities will prompt a better performance of the education community in the transmission of knowledge and generate a suitable environment necessary to obtain a first quality job.

#### Actions

- Adjust existing school infrastructure to new learning modes.

- Incorporate flexible furniture and infrastructure for the new public schools of the City.

- Open schools on Saturdays for participatory activities to include the neighborhood community in the activities and offer students a space to develop themselves and sharing outside school.



### 2.1.3

#### TIMEFRAME



Medium-term

#### STATUS

In progress with new resilient actions

#### STAKEHOLDERS

- University of Buenos Aires School of Architecture, Design and Urban Development.
- Ministry of Urban Development and Transport.
- Undersecretariat of Economic and Financial Management and Resources Administration (Ministry of Education and Innovation - MEIGC).

#### PILLARS TO WHICH IT CONTRIBUTES



Security and risk managements



Environment and sustainability

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

Unsuitable infrastructure

#### INDICATORS

- Number of new schools with infrastructure and flexible spaces.
- Number of existing schools with adjusted infrastructure and flexible spaces.

## STRATEGIC OBJECTIVE 2.1:

Guarantee inclusive quality education providing students the skills required by the jobs of the future.

### 2.1.4

### TEACHERS OF THE FUTURE

#### TIMEFRAME

 Short/Medium-term

#### STATUS

New

#### STAKEHOLDERS

- Undersecretariat of Teaching Career and Professional Technical Training (Ministry of Education and Innovation - MEIGC)
- Undersecretariat of Pedagogical Coordination and Educational Equity (Ministry of Education and Innovation -MEIGC)
- Undersecretariat of Education Planning and Innovation (Ministry of Education and Innovation - MEIGC)
- Teacher training institutes
- Specialists in education and evaluation

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



#### SHOCKS AND STRESSES

Lack of teaching vocation

Increase of exponential technologies

Late incorporation of technological changes into schools

Change of macroeconomic trends

#### INDICATORS

- Number of new teachers included in the education system.
- Number of participants in the Elegí Enseñar (Choose to Teach) and Programa Estimulo (Stimulus Program) programs.
- Number of graduates from the university system.
- Number of teachers trained in graduate and post-graduate studies.
- District performance in educational quality evaluations.

The future of education depends on having sound, autonomous, critical, creative and committed teachers and professors. However, the social perception of the profession is reflected in the difficulty to call for the candidates with the appropriate profile (CIPPEC, 2014).

Hence, teachers' training requires the incorporation of general knowledge and continuous update to conduct an appealing and motivating class. Innovation, social responsibility and human talent development converge into a student-centered teaching model, favoring the building of knowledge in a dialectical relationship among students as members of a learning community.

Thinking about a resilient city implies anticipating future challenges linked to new jobs and the development of the skills required therefore. It also entails rethinking the way in which teachers are trained, stay up-to-date and manage learning situations for their students. This strategy proposes fostering the transferring of skills for students to resolve problems and guarantee complete educational careers, through innovative methodologies for transferring knowledge and skills. The teachers of tomorrow will master teaching from an expert

and disciplinary knowledge while learning from the sociocultural exchanges generated by the interaction with students.

#### Actions

- Raise teaching vocation among secondary school students through the Elegí Enseñar (Choose to Teach) program.
- Train teachers through the Teachers School.
- Bring forward teaching practice immersion for teacher training students in Primary Education through Programa Estimulo (Stimulus Program).
- Develop teachers' skills in the use of new technologies.
- Learn about students' learning time and preferences to design contents and programs.
- Incorporate experiential learning as a teaching instrument.
- Create an innovative district university to train teachers in preschool and continuous education.
- Generate an evaluation system for teachers training institutes.
- Teacher training institutes y Specialists in education and evaluation.



## STRATEGIC OBJECTIVE 2.1:

Guarantee inclusive quality education providing students the skills required by the jobs of the future.

### PREDICTIVE ANALYSIS

The quantity and availability of data produced by citizens and government as well as the knowledge and existing tools for their use, are constantly increasing. In this context, and in order to better understand the problems and needs of residents to respond more effectively and efficiently, the city of Buenos Aires develops predictive analysis as tools that help the different areas of government to make better evidence-based decisions.

Predictive analyses involve the use of historical data to search for trends and identify patterns; according to which needs can be recognized, eventual problems may be prevented, priorities may be defined and/or the way in which services are provided to citizens may be reorganized. On the other hand, predictive analytics enable the construction of flexible strategies that may adapt their response to changing circumstances learning from past experiences for decision making.

Therefore, predictive analysis modes are valuable tools allowing risk assessment from a certain point of view and helping to increase communities' resilience. Using data mining and machine learning techniques, a model to anticipate stresses and take preventive actions to avoid their escalation will be developed. In this way, control boards will be used to view the specific situation for which the tool was designed. In turn, the control board will help analyze trends and improve our understanding of the phenomenon to strengthen City systems.



## 2.1.5

### TIMEFRAME



Medium-term

### STATUS

New

### STAKEHOLDERS

- Secretariat of Science, Technology and Innovation (Ministry of Education and Innovation - MEIGC)

### PILLARS TO WHICH IT CONTRIBUTES



Social and urban integration

### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

### SHOCKS AND STRESSES

Uncoordinated information systems



## STRATEGIC OBJECTIVE 2.2: Promote learning opportunities favoring access to quality jobs

### 2.2.1

### SEGUNDA VUELTA ACTIVA (ACTIVE JOB REINSERTION)

#### TIMEFRAME

 Medium-term

#### STATUS

In progress with new resilient actions

#### STAKEHOLDERS

- Human resources agencies
- Ministry of Economy and Finance
- Ministry of Government
- Secretariat of Science, Technology and Innovation (Ministry of Education and Innovation - MEIGC)
- Private sector

#### PILLARS TO WHICH IT CONTRIBUTES

 Diversity, gender and coexistence

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



#### SHOCKS AND STRESSES

- Unemployment
- Displaced population/migrants
- Unsuitable infrastructure
- Lack of investment

#### INDICATORS

- Number of partnerships with companies
- Number of training practices during the course
- Percentage of people over 45 incorporated into the market after the course

In 2016, 800,000 Argentines over 45 years old sought to return to work unsuccessfully (ILO). In addition, various studies agree that 80% of job offers are for people under that age. Being over 45 years old means having important qualities for the market (Adecco - employability after 45). However, the private sector does not consider people over 45 as a possible group to work proactively.

Thus, Segunda Vuelta (Job Reinsertion) is an initiative aimed at people between 35 and 60 years old in the City, to contribute to the strengthening of different skills that favor the reinsertion of those affected by the transformation of the labor market resulting from technological advances. In this way, anchored in the existing project, the resilience strategy proposes a public-private partnership to develop alliances with companies

that promote employability through internships for those who are part of the program, once the course or workshop is completed. Furthermore, it is also aimed at developing inclusion policies by communicating to businesses the benefits of incorporating this population: lower turnover, aware of future expectations or high level of commitment, among others.

In this regard, the partnership between government and businesses emerges as an opportunity to work on both, re-employment and the necessary restructuring ahead of the accelerated changes in the labor market. The resilient view in this proposal promotes the acquisition of technical knowledge and soft skills and increases the chances of employability and professional growth



#### REFERENCES

1. **Tomaya:** Provides employment opportunities for seniors and the disabled in companies through the creation of a human resources bank.
2. **Tulsa:** Promotes the implementation of the "Ban-the-Box" executive order to lead hiring practices for those requiring a second chance.





## STRATEGIC OBJECTIVE 2.2: Promote learning opportunities favoring access to quality jobs

### JOBS OF TOMORROW

In the City, 39% of companies have difficulties covering technical or operational positions. These are connected to the lack of technical skills, lack of applicants and the lack of experience (INET-GCBA, 2016). In turn, sectors that are expected to be more dynamic and have a larger labor demand are the pharmaceutical, software, communications, construction and health industries (INET-GCBA, 2016).

The city integrates training with job-specific knowledge through the Vocational Training Centers (CFP for its acronym in Spanish) so that people can access the labor market. The CFPs facilitate the development of an educational and employment future by offering trade courses and possibilities for social and educational inclusion.

The strategy seeks to promote training, education and certification in the above-mentioned sectors through scholarships, initial courses and professional practices that complement the CFPs to raise awareness about the demand and the characteristics they require. They also encourage the career choice by communicating the competitive advantage resulting from the inclusion in the sector.

In addition, the City implements practices so that technical school students consolidate,

integrate or expand their skills and knowledge in accordance with the professional profile for which they are being trained. This facilitates the transition from school into the future insertion in the labor market.

Therefore, stimulating and promoting training in these sectors can make a difference by generating talent adjusted to the possibilities for the city's production matrix and the jobs of tomorrow.

#### Actions

- Certify community child and senior care providers.
- Provide training grants on programming, software, sustainable building, nursing and new technologies.
- Professionalization internships to approach the world of work from experiences linked to school learning.
- Promote equal opportunities in labor insertion for adolescents from vulnerable groups.
- Organize meetings between scientists and the education community to motivate the scientific vocation and promote the involvement of women in these professions.



### 2.2.2

#### TIMEFRAME



Medium/Long-term

#### STATUS

In progress with new resilient actions

#### STAKEHOLDERS

- Secretariat of Science, Technology and Innovation (Ministry of Education and Innovation - MEIGC)
- Undersecretariat of Economic Development (Ministry of Economy and Finance - MEyF)
- Undersecretariat of Educational Planning and Innovation (Ministry of Education and Innovation - MEIGC)

#### PILLARS TO WHICH IT CONTRIBUTES



Social and urban integration



Diversity, gender and coexistence

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

Unemployment

Displaced population/migrants

Change in macroeconomic trends

Economic inequity

#### INDICATORS

- Number of people trained
- Number of certificates granted
- Number of grants awarded
- Number of courses provided

## STRATEGIC OBJECTIVE 2.2: Promote learning opportunities favoring access to quality jobs

### 2.2.3

### BA EMPRENDE (BA ENTREPRENEUR ACADEMY)

#### TIMEFRAME



Short-term

#### STATUS

In progress

#### STAKEHOLDERS

- Secretariat of Science, Technology and Innovation (Ministry of Education and Innovation - MEIGC)  
Undersecretariat of Economic Development (Ministry of Economy and Finance - MEyF)

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



#### SHOCKS AND STRESSES

Economic/financial crisis

Economic inequity

Unemployment

#### INDICATORS

- Number of training grants awarded
- Number of incubated projects
- Number of projects financed with seed money

Globalization and technological changes have presented small and medium-sized enterprises as engines of innovation, as they can be important vehicles for spilling knowledge of ideas, skills, products and strategies (Dahlstrand and Stevenson, 2010). In this sense, start-ups are an important source of employment growth, introduction of innovations, revitalization of the productive fabric, re-launching of regional spaces and channeling of society's creative energies (César and Villalobos, 2014).

In this context, Buenos Aires has developed programs for the different stages of business to promote the creation and management of enterprises that foster entrepreneurial and innovative talent as an engine of economic development for the City.

To stimulate and promote the strengthening and consolidation of ventures in the City, Buenos Aires provides customized support, financial assistance and access to a workspace through programs like *Academia BA Emprende* (BA Entrepreneur Academy), a free training program focused on entrepreneurial skills and dynamic methodologies), *Pograma de Integración Emprendedora*, (Entrepreneurial Integration Program - PIE for its acronym in Spanish, a free training in basic concepts of entrepreneurship such as business models, negotiation techniques, online marketing, etc.; access to new markets and mentoring) and *IncuBate* (customized support, financial assistance and the possibility of accessing a workspace

to boost entrepreneurship). These programs are intended for all those entrepreneurs who start their projects or enhance current ones by developing a minimum feasible product/service. Furthermore, *Ciudad Emprendedora* (Entrepreneurial City) works on liaison programs that can catalyze the relationship between entrepreneurs and other stakeholders in the society.

Thus, the support from the City government as a formal network is essential at any stage of the development process. In addition, the networks thus created work as a bridge between the structure of opportunities and entrepreneurs, and between them and the resources necessary to enhance and develop their project.

#### Actions

- Strengthen the entrepreneurial ecosystem of the city of Buenos Aires by:
  - teaching entrepreneurial skills at school;
  - developing and promoting entrepreneurship;
  - collaborating in the search of resources to implement it.

#### REFERENCES

1. **Barcelona Activa:** Promote entrepreneurship and assist companies providing support services to start a business through training activities, support to access funding and other resources for entrepreneurs to create a new sustainable and quality business.
2. **Glasgow Challenge Lab:** Support business development and new technologies through a number of hackathons for young people identifying clever solutions to address the specific challenges of resilience.



**STRATEGIC OBJECTIVE 2.2:**  
**Promote learning opportunities favoring access to quality jobs**

**Business Opportunities Map (action in progress)**



The business opportunities map (MOC, for its acronym in Spanish) of Buenos Aires is aimed at promoting the development of entrepreneurs with an online tool that enhances the economic development of the City. This open platform analyzes large volumes of data from strategic sources and allows risks detection and potential market opportunities identification.

## STRATEGIC OBJECTIVE 2.3:

### Foster innovation and generation of economic development opportunities of the City

#### 2.3.1

#### URBAN INNOVATION FUND

##### TIMEFRAME



Long-term

##### STATUS

New

##### STAKEHOLDERS

- Secretariat of Science, Technology and Innovation (Ministry of Education and Innovation - MEIGC)
- Secretariat of Management Planning, Evaluation and Control (Office of the Chief of Staff - JGM)
- Private sector
- Undersecretariat of Economic Development (Ministry of Economy and Finance - MEyF)
- Undersecretariat of Micro, Small and Medium-Sized Enterprises (Office of the Deputy Chief of Government - VJG)

##### PILLARS TO WHICH IT CONTRIBUTES



Social and urban integration

##### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

##### QUALITIES OF RESILIENCE



Reflexive

Robust

Inclusive

Integrated



Resourceful

Redundant

Flexible

##### SHOCKS AND STRESSES

Scarcely diversified economy

Lack of investment

Changes in macroeconomic trends

##### INDICATORS

- Number of startups financed
- Number of R&D projects submitted

There are many efforts in the City to develop venture capital from incubators, training and investors networks. Future challenges and accelerated changes transforming the cities will require even greater development of innovation industries for these economies to meet the socio-economic and cultural needs of its citizens as well.

In this sense, we propose the development of a reference and promoting body that supports, fosters and strengthens innovation with social impact and reinforces public policies related efforts. The body will have public-private funding and its mission will be to promote, finance and accelerate innovations that resolve the great challenges of the City such as those connected to future employment and

inequality. At the same time, the Fund will be the cross-disciplinary center for research and promotion of innovative social projects and will allocate resources in accordance with the City's strategic challenges by analyzing ideas and emerging technologies to suit the resolution of these challenges.

Hence, developing a space that generates and pulls innovation, and channels funds for research and development, positions Buenos Aires as an innovation reference in Latin America and as a new global hub.



# TECH CITY UK

Cities compete to become innovation and technological leaders. The United Kingdom, for example, opted for technological entrepreneurship as engines of development. According to Tech City UK, it has already invested USD 37 billion in digital business, 47% of which is concentrated in London. These findings are the result of government decisions that boost investment in risk ventures. Thereby, for example, Seed Enterprise Investment Scheme (SEIS) was developed as a scheme of tax incentives designed for the government to share with the private sector the risk of investing in new companies.

##### REFERENCE

**United Kingdom:** NESTA funds new ideas that are facing current great challenges in a practical and creative way. Its focus is on areas where the combination of digital technology, empowered people and better use of data and evidence can have the greatest impact.





## STRATEGIC OBJECTIVE 2.3:

### Foster innovation and generation of economic development opportunities of the City

#### INNOVATION PARK

There are barriers in Latin America and the Caribbean that prevent countries from taking advantage of the power of knowledge, innovation and entrepreneurship-intensive industries for economic development. On average, 0.78% of the region's GDP is spent on R&D, well below the 2.4% used by OECD countries in 2011 (MIF).

With the purpose of encouraging research and knowledge industry (higher education and applied scientific research), the City is building in the northern area the Innovation Park, while creating new green areas, and facilitating connectivity and mobility. The Park will work as a campus bringing together public and private institutions. An ecosystem of innovation and research will be created through this combination, bringing together students, scientists and scholars.

The creation of the Innovation Park promotes, on the one hand, the attraction, development and retention of talent from surrounding universities, favoring further scientific research and increasing the emergence of new related ventures. On the other hand, its development means integrating the University of Buenos Aires to the urban fabric and increasing public green spaces for the City.

#### Actions

- Establish organizations in the Innovation Park.



#### REFERENCE

Barcelona - @22 Districte de la Innovació. With the approval of a new urban planning, the city transformed the Poblenou industrial area into a center of new activity. It supports further buildings, more green spaces and use of social housing and replaces industrial activity with offices and services related to new technologies and knowledge.

## 2.3.2

#### TIMEFRAME



#### STATUS

In progress

#### STAKEHOLDERS

- Secretariat of Science, Technology and Innovation (Ministry of Education and Innovation - MEIGC)
- Innovation Park SPU (Office of the Chief of Staff - JGM)

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### PILLARS TO WHICH IT CONTRIBUTES

- Social and urban integration
- Environment and sustainability

#### QUALITIES OF RESILIENCE

- Reflexive
- Robust
- Inclusive
- Integrated
- Resourceful
- Redundant
- Flexible

#### SHOCKS AND STRESSES

- Unsuitable infrastructure
- Economic inequality
- Unemployment

#### INDICATORS

- Number of organizations based in the Innovation Park



## STRATEGIC OBJECTIVE 2.3:

### Foster innovation and generation of economic development opportunities of the City

#### 2.3.3

#### PUBLIC DATA POLICY

##### TIMEFRAME

 Long-term





##### STATUS

In progress

##### STAKEHOLDERS

- General Secretariat and International Relations
- Secretariat of Science, Technology and Innovation (Ministry of Education and Innovation - MEIGC)
- Undersecretariat of Systems and Processes (Office of the Chief of Staff - JGM)


##### PILLARS TO WHICH IT CONTRIBUTES

-  Social and urban integration
-  Security and risk management
-  Environment and sustainability
-  Diversity, gender and coexistence

##### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

##### QUALITIES OF RESILIENCE

-  Reflexive
-  Robust
-  Inclusive
-  Integrated
-  Resourceful
-  Redundant
-  Flexible

##### SHOCKS AND STRESSES

Change in macroeconomic trends

Unsuitable systems

Unsuitable infrastructure

##### INDICATORS

- Number of datasets collected
- Number of datasets published in the website
- Number of datasets downloaded from the website

Data are a valuable and strategic asset, and the basic input for decision making. The City produces day by day a large amount of public data, of varying quality and quantity, which are generally used for specific and limited purposes. Quality and easy to navigate data are also a key ally in the generation, development and implementation of public policies that build resilience.

In this regard, it is important to promote appropriate organization in the generation and transfer of data between areas of government (knowing who produces what data), and the generation of protocols that facilitate their exchange, especially in a context where public policies are increasingly interdisciplinary. This data policy will generate a positive impact on decision-making and in the quality, effectiveness and efficiency of resident-oriented initiatives.

In this context, the strategy highlights the need for coordination to further collaboration regarding data use practices. Thus, the BA Data initiative aims at promoting a data-focused culture, which will improve public policy quality and citizen participation, and encourage the development of new data-based opportunities. Data opening seeks to highlight the importance

of data to generate new business opportunities, promote evidence-based decision-making, or respond and meet the needs of citizens.

##### Actions

- Develop a table of data to generate and consolidate an internal community of data producers and users within the government.
- Carry out a survey and inventory of public data.
- Promote data-based decision-making.
- Boost and extend the features of the data.buenosaires.gob.ar portal.
- Promote data reuse economies.
- Promote the use of data by the private sector and the community.
- Define guidelines for public data governance.



##### REFERENCE

**Spain:** Since 2009, the Spanish government open data initiative seeks to promote the culture of data opening. This initiative aims to create the conditions for the development of the public sector data reuse market, as well as support administrative units to post it in the most reuse-friendly manner.



## STRATEGIC OBJECTIVE 2.3:

### Foster innovation and generation of economic development opportunities of the City

#### SOCIAL AND SUSTAINABLE PROCUREMENT

Governments acquire a wide range of goods and services to implement policies, turning them into influential agents of economic development. Many have thus observed that through their procurement systems not only supply goals can be met, but also plenty of opportunities can be offered to promote and contribute to other objectives, boosting a more sustainable development.

In this sense, *Compras Sustentables* (Sustainable Procurement) was developed by the government of the city of Buenos Aires as a process whereby needs are met using resources optimally so that benefits are generated not only for the organization, but also for society and the economy, minimizing in turn damage to the environment (GOV.UK, 2016). Governments, therefore, create incentives for the market to produce and supply these goods and services and reach more consumers, while promoting the improvement of the chain of value by example.

Therefore, the aim is to promote the procurement of services by the government from social

companies and cooperatives that employ and train vulnerable populations and generate social impact. At the same time, public tenders may be used to increase the participation of such organizations in the process and encourage their procurement. Social procurement will thus contribute to the promotion of inclusive practices, strengthening those policies that guarantee decent, non-discriminatory and fair working conditions.

#### Actions

- Conduct a workshop on sustainable procurement for CSOs and cooperatives to encourage their inclusion as suppliers of the city of Buenos Aires government.

- Promote the added value of procurement with social impact.

- Involve SMEs, MSMEs and social entrepreneurs as government suppliers.

## 2.3.4

#### TIMEFRAME



Medium-term

#### STATUS

New

#### STAKEHOLDERS

- City Housing Institute (Office of the Chief of Staff - JGM)
- Ministry of Human Development and Habitat
- Ministry of Economy and Finance

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### PILLARS TO WHICH IT CONTRIBUTES



Social and urban integration



Environment and sustainability

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

Marginalization of young people

Displaced population/migrants

Poverty

Unemployment

Lack of social cohesion

#### INDICATORS

- Number of organizations with social impact involved in sustainable procurement

## STRATEGIC OBJECTIVE 2.3:

### Foster innovation and generation of economic development opportunities of the City

#### 2.3.5

#### INDUSTRIES OF THE FUTURE

##### TIMEFRAME



Medium/Long-term

##### STATUS

In progress with new resilient actions

##### STAKEHOLDERS

- Ministry of Culture
- General Secretariat and International Relations
- Undersecretariat of Citizen Wellbeing (Office of the Deputy Chief of Government - VJG)
- Undersecretariat of Economic Development (Ministry of Economy and Finance - MEyF)
- Undersecretariat of Micro, Small and Medium-Sized Enterprises (Office of the Deputy Chief of Government - VJG)
- Undersecretariat of Health Planning (Ministry of Health - MSAL)

##### PILLARS TO WHICH IT CONTRIBUTES



Diversity, gender and coexistence

##### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

##### QUALITIES OF RESILIENCE



##### SHOCKS AND STRESSES

- Unemployment
- Scarcely diversified economy
- Aged population
- Economic inequity

##### INDICATORS

- Number of grants awarded
- Number of tourists visiting the City
- Number of graduated nurses/caretakers
- Number of major food fairs organized in Buenos Aires
- Number of companies based in districts

The adjustment of cities to changes in the future of employment is an essential condition for sustainable and equitable growth. Technological transformations foster the emergence of new jobs and sectors countering labor substitution processes, generating huge opportunities for development and well-being. Sectors such as the care economy, tourism, gastronomy, education and arts emerge as potential engines of economic development.

Population ageing and the shortage of nurses turns care into a booming economy with high demand. In turn, transforming the Buenos Aires cuisine into a symbol within the region becomes an opportunity for the growth of tourism and denotes the potential of the City to establish itself as a destination in Latin America. In addition, culture and creativity are identified as key elements to promote people-centered sustainable development (2030 agenda - SDG 11) and talent. Finally, given the new ways of

learning that stimulate students, teacher training becomes a profession that requires skills to conduct an appealing and motivating lesson.

Therefore, given the advance of automation and the development of information technology, granting training scholarships in the various sectors, offering certifications and loans for small and medium-sized enterprises to develop even further their economies, fosters and promotes the expansion of these sectors, which distinguishes Buenos Aires as a city that attracts and generates talent, and supports a more sustainable urban development adapted to the practical needs of the local population.



## STRATEGIC OBJECTIVE 2.3:

### Foster innovation and generation of economic development opportunities of the City

#### Actions

- Award training grants in the various sectors.
- Certify unemployed female community caretakers living in the City for early childhood and senior citizens.
- Grant credits to SMEs developing care, tourism, gastronomy and arts industries.
- Be member of the UNESCO Creative Cities Network.
- Improve accessibility, security, lighting and equipment in public spaces of the Arts District to promote cultural tours.
- Provide the Pase Cultural (Cultural Pass) to young people and teachers from public schools in the City.
- Bring culture to all areas of the City through Barrios Creativos (Creative Neighborhoods).
- Organize Feria Masticar (food fair) on an annual basis.





## STRATEGIC OBJECTIVE 2.3:

### Foster innovation and generation of economic development opportunities of the City

#### 2.3.6

#### NEW COLLABORATIVE ECONOMIES

##### TIMEFRAME

 Medium/Long-term

##### STATUS

New

##### STAKEHOLDERS

- Secretariat of Science, Technology and Innovation (Ministry of Education and Innovation - MEIGC)
- Undersecretariat of Economic Development (Ministry of Economy and Finance - MEyF)

##### PILLARS TO WHICH IT CONTRIBUTES

 Diversity, gender and coexistence

##### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

##### QUALITIES OF RESILIENCE

 Reflexive  Robust  Inclusive  Integrated

 Resourceful  Redundant  Flexible

##### SHOCKS AND STRESSES

Changes in macroeconomic trends

Thanks to technological progress, many people can work independently, connect with others, share resources, and generate non-traditional work alternatives by using tools available on the internet. Thus, new business and labor dynamics emerge from mobile applications that are part of digital sharing economies.

Today, smartphones provide information to consolidate new companies whose business model uses this structure. However, the success of these applications with even greater potential for growth and expansion has become a clear challenge for many cities regarding transport, tourism and trade. In Europe, the business volume of the so-called sharing economy or collaborative economy will be worth USD 570 billion by 2025 (PwC, 2016).

These changes have an impact on all areas and sectors of the economy. Thus, the combination of social changes in the way work is focused due to the possibilities brought by technology, challenges traditional business management

practices, and allows the generation of new interactions and opportunities.

In this context, the Resilience Strategy is aimed at placing Buenos Aires, as a global city and potential hub of new technologies, to anticipate the challenges of the future and the landing of these new economies that could generate disruptions in its development matrix. A regulatory framework will be developed to manage this new way of work and service production in the market to encourage good relations among traditional services and thus expand supply and boost development.





## STRATEGIC OBJECTIVE 2.3:

### Foster innovation and generation of economic development opportunities of the City

#### STUDY BA

The international mobility of students between 18 and 35 years old stimulates talent and knowledge flow worldwide. For young people, an academic, cultural immersion or internship trip is a turning point in their training process, preparing them to coexist in this interconnected world and develop the skills necessary to adapt to new social and cultural environments.

During 2017, 61,100 visitors from different parts of the world chose to travel to Buenos Aires to study, and other thousand young people were granted the "holiday and work" visa. These students generate revenues for the City and become, in turn, ambassadors for Buenos Aires throughout the rest of the world by sharing their experiences when they return to their hometowns.

Study BA is a program that provides international students arriving in the City support and integration with local talent, assisting them in generating a connection between them, their University, their classmates and the City. It also develops a platform to measure the phenomenon of international students' incoming mobility to

improve their experience according to economic impact, per cap spending, length of stay, type of course and reasons of choice.

#### Actions

- Promote the City and educational institutions abroad.
- Deliver welcome kits and conduct the event Es tu día (It's your day).
- Organize free activities.



## 2.3.7

#### TIMEFRAME



Short-term

#### STATUS

In progress

#### STAKEHOLDERS

- General Secretariat and International Relations

#### PILLARS TO WHICH IT CONTRIBUTES



Diversity, gender and coexistence

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

Marginalization of young people

Lack of social cohesion

Income for the City

#### INDICATORS

- Number of agreements signed with universities
- Number of welcoming kits delivered
- Income for the City
- Number of visas granted

## PILLAR 3

# Environment and Sustainability

A sustainable City that seeks better quality of life for its residents, committed to preserving its environment and using its resources efficiently.







### 3.1 DEVELOP AN INTEGRATED SYSTEM OF GREEN INFRASTRUCTURE



### 3.2 PROMOTE THE CITY'S ENERGY SUSTAINABILITY



### 3.3 IMPLEMENT AN INTEGRATED WASTE MANAGEMENT POLICY





*“Innovating in the development of new quality green spaces -such as green walls and roofs or privately-owned publicly-accessible green spaces- and increasing urban tree-planting are strategic elements to build a more resilient City.”*

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## Current Situation

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As any large global city, the city of Buenos Aires is responsible for the emission of greenhouse gases (GHG) that lead to significant climate changes. These are reflected in average temperature increase, more frequent heat waves and extreme rainfall.

According to the greenhouse gas inventory (APrA, 2015), the City's total amounted to 13,113,673 tCO<sub>2</sub>eq in 2015. Thus, Buenos Aires revealed that the energy (58%), transport (28%) and urban solid waste (14%) sectors are the major sources of carbon emissions.

The city of Buenos Aires generates more than 6,700 tons of waste a day. More than 55% is recovered, while the remaining portion is treated by the state-owned Company for Ecological Coordination in the Metropolitan Area (CEAMSE, for its acronym in Spanish), burying 3,017 tons/day. Pursuant to Act No. 1854 on "Zero Waste", waste separation is a legal obligation requiring the implementation of measures aimed at reducing generation, recovering and recycling of waste. The CEAMSE thus built the first mechanical and biological treatment plant in Argentina in the North III environmental complex to treat 20% of City waste in order to reduce the amount of waste disposed in the landfill.

On the other hand, a sustainable city has quality green spaces, strongly contributing to mitigating the effects of climate change. Population growth and densification of urban space in the City generate new challenges in terms of green space per capita, which is now around 5.9 m<sup>2</sup> (APrA, 2015). In this sense, innovating in the development of new quality green spaces -such as green walls and roofs or privately owned publicly-accessible green spaces- and increasing urban tree planting are strategic elements to build a more resilient City.

Furthermore, Buenos Aires internationally pledged to become a carbon neutral city by 2050, which implies a drastic reduction in daily emissions. In this context, 4 priority actions were identified at global level to promote climate action in the cities: decarbonize the network (renewable energy generation), optimize buildings' energy efficiency, allow clean mobility and improve waste management (McKinsey Center for Business and Environment and C40 Cities, 2017).

Therefore, the City is implementing various strategies to promote energy sustainability, expand recycling capacity (by means of a comprehensive waste management policy), and increase green infrastructure and sustainable building.

The resilience strategy incorporates a metropolitan vision to waste management and seeks to promote energy consumption reduction as well as the development of new and enjoyable green spaces that, by improving the quality of life for all residents, help to build a sustainable, modern city committed to the preservation of its environment.



## STRATEGIC OBJECTIVE 3.1: Develop an integrated system of green infrastructure

### 3.1.1

### GREEN ROOFS IN SCHOOLS

#### TIMEFRAME



Medium/Long-term

#### STATUS

New

#### STAKEHOLDERS

- Ministry of Environment and Public Spaces  
- Education for Sustainability SPU (Ministry of Education and Innovation - MEIGC)

#### PILLARS TO WHICH IT CONTRIBUTES



Innovation, talent and opportunities

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

Climate change

Lack of green spaces

Environmental degradation

Loss of biodiversity

#### INDICATORS

- Number of schools with green walls and roofs
- Number of schools with Green School certificate

With the aim of contributing to climate change mitigation and adaptation, and based on the Ministry of Education and Innovation Green Schools Program, the City carried out a study on the installation of green walls and roofs in 146 school buildings in communes 3, 5 and 10. These systems allow to increase green areas available in the City and contribute, in turn, to reduce GHG emissions, the risk of flooding, the urban heat island effect and the quality of the air as well as providing innovative educational spaces. The purpose of this study is to learn about the feasibility of installing green walls and roofs on selected school buildings, as well as the suitable type for each of them.

The study aims at becoming the starting point to enhance environmental education and management actions under the framework of the Green Schools Program such as the school gardens project and the “Green Schools” certificate. The installation of green walls and roofs would allow a better use of space and the development of new educational modalities. Furthermore, the analysis tool resulting from this study may be used for decision-making in the field of energy efficiency and increase of green spaces to mitigate the heat island effect, improve air quality, increase biodiversity and further slowdown storm runoff.

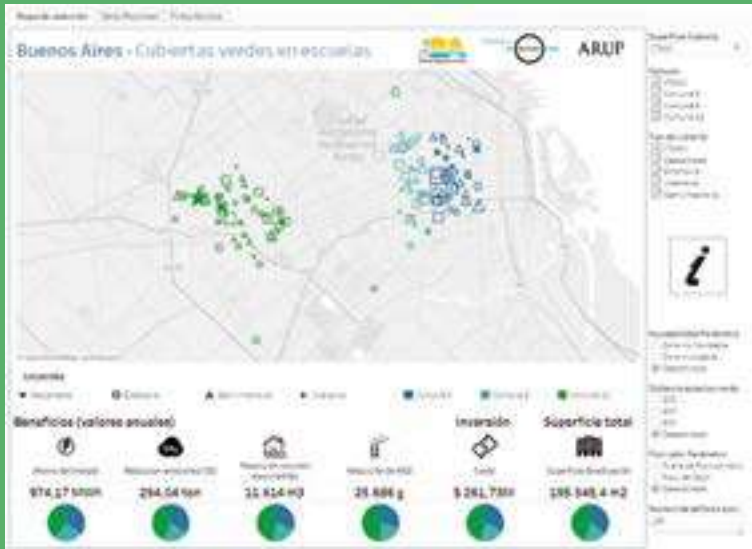


#### “Green School” certificate

This acknowledgment is based on a voluntary scheme whereby the incorporation of contents, practices and teaching strategies promoting environmental education is self-managed. This proposal is aimed at all public and private managed schools of all levels (initial, primary, secondary school) in the City.



### STRATEGIC OBJECTIVE 3.1: Develop an integrated system of green infrastructure



ARUP, tool developed under the framework of the study on the installation of green walls and roofs in schools for the city of Buenos Aires.

### Green walls and roofs - Impact analysis and calculation tool

The tool allows filtering schools analyzed according to different variables: commune to which they belong, type of green wall/roof proposed, available roof surface and location characteristics (floodable area, surface heat area, distance to green spaces, distance to means of transport). In turn, the tool shows the environmental impact derived from the implementation of the green roof and approximate cost.



### School gardens

There are more than 580 schools in the City involved in the School Gardens project. These educational projects promote the creation and enhancement of school green spaces and their use as teaching tool is one of the most motivational resources to stimulate the incorporation of environmental education at school.

## STRATEGIC OBJECTIVE 3.1: Develop an integrated system of green infrastructure

### 3.1.2

### URBAN TREE PLANTING PLAN AND METROPOLITAN BIO-CORRIDORS

#### TIMEFRAME



Short, Medium y Long-term

#### STATUS

In progress with new resilient actions

#### STAKEHOLDERS

- Environmental Protection Agency (Ministry of Environment and Public Space - MAyEP)
- Secretariat of Citizen Service and Claims (Office of the Chief of Staff - JGM)
- Private sector
- Civil society
- Undersecretariat of Public Space Maintenance (Ministry of Environment and Public Space - MAyEP)
- City neighbors

#### PILLARS TO WHICH IT CONTRIBUTES



Social and urban integration

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

Climate change

Lack of green spaces

Environmental degradation

Loss of biodiversity

#### INDICATORS

- Number of new planted trees
- Total number of trees
- Number of agreements with the private sector and civil society
- Percentage of forest cover
- Reduction rate of surface heat focus areas

The increase in global temperature also affects Buenos Aires. Building a city resilient to the effects of climate change implies developing measures to minimize potential threats to human health, infrastructure and economic development.

As a compact city, Buenos Aires also faces the challenge of building new green areas. In turn, the City's population growth outlook by 2050 requires developing new proposals contributing to generate social and environmental benefits promoting Buenos Aires as an example of sustainability.

In this sense, the Resilience Strategy wants to highlight the importance of a robust urban tree planting plan (public linear trees and green spaces tree planting) contributing to build a city more resilient to the effects of climate change and generate landscaping<sup>2</sup>, health<sup>3</sup> and social benefits<sup>4</sup>, as well as providing ecosystem services (temperature and microclimatic effects reduction, air pollutants reduction and carbon absorption, energy consumption reduction, water absorption and soil erosion reduction, noise abatement and increase of biodiversity). The strategic location of trees in the cities can help to cool the air between 2 and 8 degrees and reduce energy consumption.

The proposal for a resilient urban tree planting involves the selection and prioritization of species that help to mitigate the effects of climate change, the prioritization of areas with extreme weather events and the incorporation of native species. This proposal envisages also the maximum level of trees in the City, both in terms of quality and quantity.

One of the main actions this initiative promotes is the creation of bio-corridors that integrate urban landscape into green infrastructure. There are different levels of bio-corridors: neighborhood-city, allowing the design of local bio-corridors with high biodiversity nodes and connectors between them, and at metropolitan region level, connecting the City with its Metropolitan Area of Buenos Aires (AMBA, for its acronym in Spanish) through sustainable green infrastructure that generate mutual benefits for the neighbors of both districts.

The initiative proposes a collaborative strategy between the City government, the private sector, civil society and neighbors, through the promotion of civic engagement and involvement in planting and maintenance of trees.

#### Actions

- Organize planting days in prioritized areas.
- Generate bio-corridors in AMBA next to bicycle paths promoting sustainable mobility.
- Generate bio-corridors on the river banks.
- Engage citizens, civil society and the private sector to develop a resilient urban tree planting.

#### REFERENCE

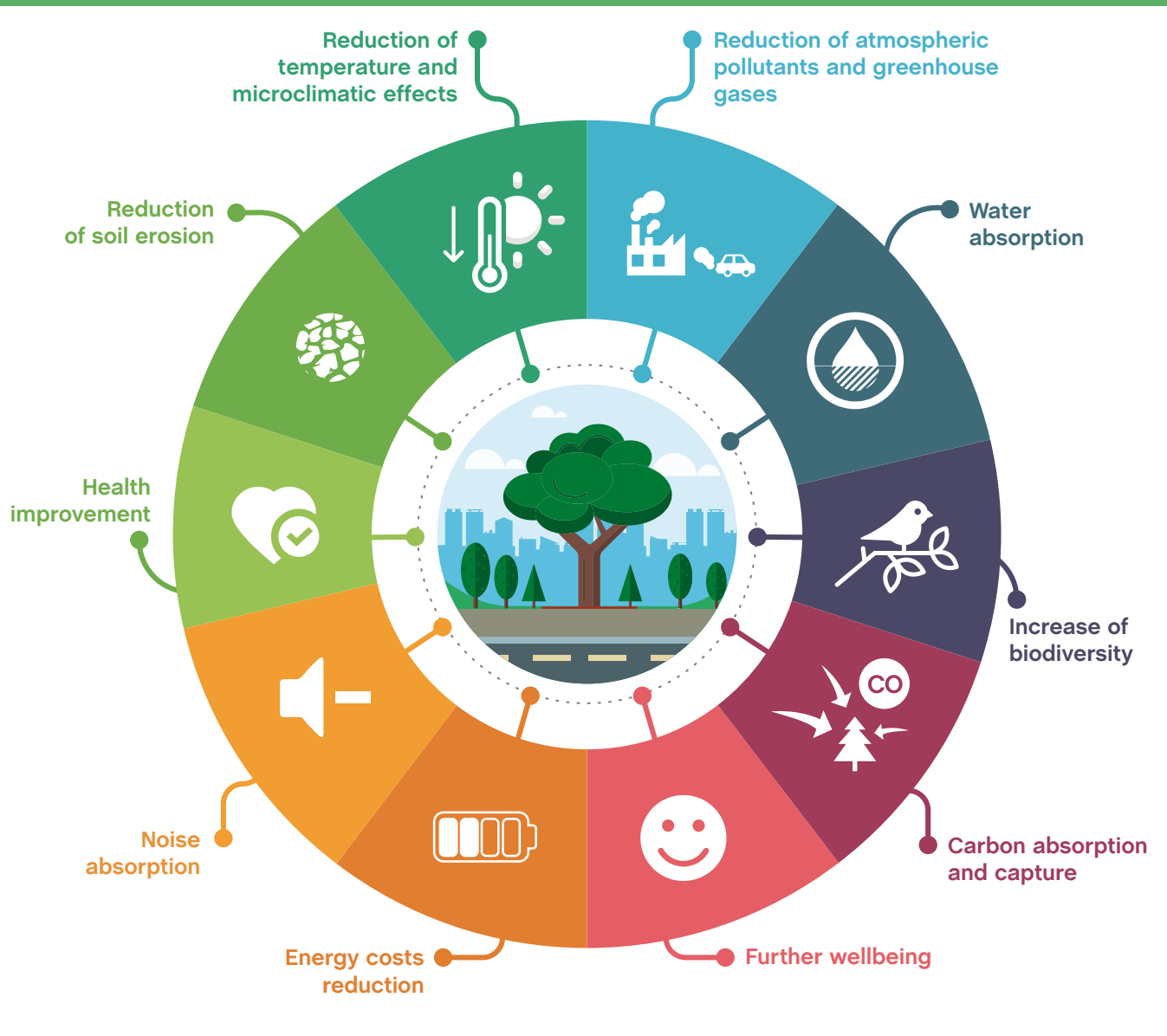
**Río de Janeiro:** The *Revitalizar Praças-Bosques* (Regenerate Parks and Woodlands) project aims at revitalizing and increasing tree density in 78 public parks, by planting a total of 50,000 trees.

**Santiago de los Caballeros:** The city conducts activities of reforestation and preservation of existing sinks with an annual reforestation of approximately 85,000 trees.



**STRATEGIC OBJECTIVE 3.1:**  
Develop an integrated system of green infrastructure

**Benefits of urban trees**



- 2 Reduction of cities artificialization. It provides contrast to buildings and contributes to the embellishment and identity of cities and their population.
- 3 Contribution to public health by improving the environment. It has positive effects on the psychic system by reducing stress.
- 4 Green areas support leisure, recreation and community living, reinforce culture and bring neighbors closer to nature.



## STRATEGIC OBJECTIVE 3.1: Develop an integrated system of green infrastructure

### 3.1.3

### PRIVATELY OWNED PUBLICLY-ACCESSIBLE SPACES

#### TIMEFRAME



Medium/Long-term

#### STATUS

New

#### STAKEHOLDERS

- Ministry of Environment and Public Spaces
- Ministry of Urban Development and Transport
- Private sector

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

Lack of green spaces

#### INDICATORS

Number of m<sup>2</sup>/hectares of privately owned publicly-accessible green spaces.

The growth of the City generates the need to develop new quality green spaces to promote residents' enjoyment and mitigate the effects of climate change. Therefore, the purpose of this initiative is to rethink the City and its design to improve urban environment and its infrastructure.

The Resilience strategy proposes generating partnerships with the private sector to promote and incorporate into the urban fabric privately owned publicly-accessible spaces (POPS) to complement the existing demand.

Privately owned publicly-accessible spaces are a specific type of open space, maintained by private parties but open to residents of the City. In this sense, one of the main objectives of the initiative is to promote the growth of privately owned publicly-accessible green spaces.

This initiative aims at generating incentive schemes to promote the opening of privately-owned spaces that can be used by the public. In

addition, these spaces continue promoting the development of a city that appreciates citizens' enjoyment and is committed to its environment.

#### Actions

- Remediate environmental liabilities to be appropriated by the City.
- Promote non-monetary incentives to include POPS in new buildings.
- Develop urban planning agreements and agreements with supermarkets, office buildings and other businesses.



#### REFERENCE

**New York:** APOPS|MAS seeks to activate privately owned publicly-accessible spaces to encourage owners of these spaces and other owners to act as sponsors of tourist, recreational and academic programs.



**STRATEGIC OBJECTIVE 3.1:**  
**Develop an integrated system of green infrastructure**

**NEW GREEN AREAS**

The city of Buenos Aires has a system of metropolitan parks and squares whose layout responds to large urban plans of early 20th century. Population growth and urban densification have shown the importance of developing new green spaces. Following this, the current administration has pledged to add 110 new green hectares and to create 12 new squares.

There are also large interstitial spaces in the City that have not yet achieved their ecosystem potential. Therefore, this initiative aims at

incorporating new, and enhance as many green spaces as possible to ensure improved access and quality of life to City residents.



**Station Park and Block 66** (action in progress)

The most important area in the development of Block 66 is intended for the creation of a new public square. This work is complemented by the Station Park, a new public space in the *Sarmiento* railway land of Once station providing 1.2 hectares of green area to the neighborhoods of Balvanera and Almagro. Both spaces were created jointly with the neighbors through qualitative surveys that defined their will of having a new green space for recreation in their neighborhood.

**REFERENCE**

**Melbourne:** The neighborhood project will provide 12 months training in developing skills, resources and advice to participating communities on how to turn underutilized lands into green spaces by incorporating training in design and project management. The action will transform 24 barely utilized spaces in 8 neighborhoods into useful community public spaces with the use of a tactical urban planning methodology.

**3.1.4**

**TIMEFRAME**

Short-term

**STATUS**

In progress

**STAKEHOLDERS**

- Ministry of Environment and Public Spaces
- Ministry of Urban Development and Transport

**CROSS-CUTTING THEMES**

- Metropolitan vision
- Data and technology
- Citizen participation

**PILLARS TO WHICH IT CONTRIBUTES**

Diversity, gender and coexistence

**QUALITIES OF RESILIENCE**

- Reflexive
- Robust
- Inclusive
- Integrated
- Resourceful
- Redundant
- Flexible

**SHOCKS AND STRESSES**

- Lack of green spaces
- Climate change
- Environmental degradation
- Loss of biodiversity
- Lack of social cohesion

**INDICATORS**

- Number of new green areas
- Number of enhanced green areas

**STRATEGIC OBJECTIVE 3.2:**  
**Promote the City's energy sustainability**

**3.2.1**

**SUSTAINABLE HOMES AND BUILDINGS**

TIMEFRAME

 Medium/Long-term

STATUS

In progress with new resilient actions








STAKEHOLDERS

- Environmental Protection Agency (Ministry of Environment and Public Space - MAyEP)
- Ministry of Urban Development and Transport

PILLARS TO WHICH IT CONTRIBUTES

 Social and urban integration

QUALITIES OF RESILIENCE

 Reflexive   
  Robust   
  Inclusive   
  Integrated  
 Resourceful   
  Redundant   
  Flexible

SHOCKS AND STRESSES

Climate change  
 Energy insecurity

INDICATORS

- Number of sustainable construction training programs
- Percentage of refurbished properties over the total number of properties in the City

According to the latest City Greenhouse Gas Inventory, the energy sector was the area with the largest impact on emissions by producing 58% of the total amount, and the residential sector is the one generating the largest impact.

Globally, the promotion of sustainable building and the rehabilitation of the existing building stock are identified as priority actions to achieve the commitment of a carbon neutral city by 2050. The reduction of energy emissions is a joint effort between the City government and the various stakeholders involved in construction processes. This partnership will contribute to the reduction of energy spending, mitigation and adaptation to climate change and will provide the City with resilient and sustainable spaces to live, work or enjoy.

More than half (55%) of CABA's building stock is over 40 years old. Consequently, the technologies used are outdated compared to current energy efficiency standards. At the same time, the city of Buenos Aires has the highest gas and electricity consumption (DGyC, 2014) of all large cities in the country. The per capita consumption indicators for City residents far outweigh those of the rest of the provinces.

In terms of resilience, this initiative fosters promotion and incentive strategies for the efficient use of energy, the incorporation of alternative energies, new building standards derived from the new Building Code and the refurbishment of the residential built environment in order to reduce stationary power production and consumption and mitigate the effects of climate change in the City.

This initiative also includes the creation of a "green window" to expedite procedures for projects that include sustainability criteria in their designs. It also proposes the development of a Certificate of Sustainable Buildings that will include scores according to a building sustainability range or index. This certificate

will allow, inter alia, to promote and boost the construction market itself to demand sustainable buildings by releasing properties' energy spending.

**Actions**

- Passing a new Building Code regulating sustainable building.
- Passing a new Urban Planning Code defining the environmental quota.
- Promote the reorganization of the existing building stock.
- Create a Sustainable Building Certification System.
- Incorporate a green window in government agencies.
- Assess tax exemptions to promote sustainable building.
- Develop a home energy efficiency awareness program.



**STRATEGIC OBJECTIVE 3.2:**  
**Promote the City's energy sustainability**



**Turn to LED program** (action in progress)

As part of its commitment to climate action and energy consumption reduction, the City pushed a program to exchange five million low consumption or incandescent light bulbs for LEDs for City residents. The use of this type of technology allows a 90% energy consumption reduction.



## STRATEGIC OBJECTIVE 3.2: Promote the City's energy sustainability

### 3.2.2

### SUSTAINABILITY CHALLENGE FOR BUSINESSES

#### TIMEFRAME



Medium-term

#### STATUS

New

#### STAKEHOLDERS

- Environmental Protection Agency (Ministry of Environment and Public Space - MAyEP)
- Argentine Business Association for Sustainable Development
- Private sector

#### PILLARS TO WHICH IT CONTRIBUTES



Security and risk managements

#### QUALITIES OF RESILIENCE



Reflexive

Robust

Inclusive

Integrated

Resourceful

Redundant

Flexible

#### SHOCKS AND STRESSES

Climate change

Environmental degradation

Energy insecurity

#### INDICATORS

- Number of companies participating in the challenges

Climate action requires the commitment and proactivity from all the stakeholders who inhabit and make up the city. The business sector, the manufacturing and construction industries, buildings and public lighting generate approximately 30% of the total GHG emissions and are thus priority sectors with which to work in order to promote a change of culture and utilization of resources.

In this sense, the City intends to promote an energy efficiency challenge that involves inviting all companies located in the district to establish a ranking of eco-efficient businesses. This initiative is aimed at rewarding the top 3 companies that incorporate energy sustainability practices in their commercial and office buildings.

By participating in this challenge, companies will collaborate in reducing energy consumption derived GHG emissions, contribute to energy security by promoting efficient energy consumption and contribute to climate action.

In this way, companies will tend to reduce their consumption expenditure and improve efficiency. They will also enhance their entry into new markets by providing low carbon products or services and receive other benefits, such as acknowledgement and positioning as a sustainable company.

The initiative proposes companies that want to participate in this challenge to apply to begin the City Office Sustainability Certification process

(CREAS for its acronym in Spanish). The results monitored in this challenge may be considered valid to prove the CREAS certification line linked to "Energy and sustainable construction".

#### Actions

- Develop an energy inventory among participating companies.
- Apply the carbon footprint calculation through the APra P+L (cleaner production) program to participating companies.
- Incorporate best practices in energy efficiency among participating companies.

#### REFERENCE

**New Orleans:** The city will partner with Downtown Development District to launch a Downtown Energy Efficiency Challenge, involving owners, businesses and employees in a one-year competition to reduce total energy consumption in New Orleans.



**STRATEGIC OBJECTIVE 3.2:**  
**Promote the City's energy sustainability**

**EFFICIENT PUBLIC BUILDINGS**

Pursuant to the commitments relating to climate change and greenhouse gas emissions reduction, the city of Buenos Aires proposes an Efficient Public Buildings program.

The purpose of this program will be to optimize energy consumption in public buildings so that, by example, citizens can be identified and empowered with measures promoting energy efficiency. Energy consumption and CO2 emissions are thus expected to be reduced in the City.

In line with the program, the government of the city of Buenos Aires is working on the relocation of some government agencies into their own buildings in the southern area. This relocation not only follows economic rationality criteria, but the move to modern buildings seeks to incorporate higher standards in the field of energy efficiency and sustainability.



**Actions**

- Visualize the role of building mayors as engines of change and responsible for the building's energy efficiency.
- Create a protocol of energy efficiency and rational use of energy and water in public buildings.
- Promote and raise awareness about waste reduction.
- Repurpose public buildings.
- Develop an energy and water consumption tracking board.



**3.2.3**

**TIMEFRAME**



Short, Medium y Long-term

**STATUS**

In progress with new resilient actions

**STAKEHOLDERS**

- Environmental Protection Agency (Ministry of Environment and Public Space - MAyEP)
- Ministry of Urban Development and Transport
- Education for Sustainability SPU (Ministry of Education and Innovation - MEIGC)

**PILLARS TO WHICH IT CONTRIBUTES**



Social and urban integration

**QUALITIES OF RESILIENCE**



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

**SHOCKS AND STRESSES**

Climate change

Unsuitable infrastructure

**INDICATORS**

- Number of public buildings with energy efficiency protocol
- Number of buildings with sustainable construction or with refurbishment/repurpose works
- KW of photovoltaic energy generated M2 of green walls and roofs in public buildings

**REFERENCE**

**Athens:** The city conducts energy-saving actions in its buildings to improve efficiency and reduce energy costs, as well as using renewable energy systems.

**Glasgow:** Preparation of guidelines on climate-related building refurbishment to promote its adoption by developers, planners and designers, focused on refurbishment to ensure its long-term operation.

## STRATEGIC OBJECTIVE 3.3: Implement an integrated waste management policy

### 3.3.1

### BA4R (REDUCE, REUSE, RECYCLE AND RECOVER)

#### TIMEFRAME



Short, Medium y Long-term

#### STATUS

In progress with new resilient actions

#### STAKEHOLDERS

- Subsecretaría de Comunicación
- Subsecretaría de Higiene Urbana (MAyEP)

#### PILLARS TO WHICH IT CONTRIBUTES



Social and urban integration

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

Climate change

Environmental degradation

#### INDICATORS

- Percentage of recycled and recovered material
- Percentage of landfill waste
- Number of tiles produced
- Number of app downloads

Since 2012, the City has been working to recover as much waste as possible and prevent landfilling in the Metropolitan area. Buenos Aires has thus developed a unique management model incorporating more than 5,324 workers recovering dry material on a daily basis. Waste pickers working in 15 Recycling Centers across the City, where they classify, pack and sell the material.

Likewise, the goal of dry material recovery the city proposed to achieve is 549 tons/month by 2019. To achieve this commitment, the first dry waste treatment plant in the City was opened recovering 10 tons of waste per hour and treating 30% of all waste with MRF (Material Recycling Facility) technology. The MRF is part of the City Recycling Center, created to treat different fractions of urban solid waste and thus avoid landfilling. The treatment depends on the type of waste analyzed; however, the main objective is always to value waste to transform it and reintroduce it in different industries. The initiative, therefore, also contributes to reducing GHG emissions generated by waste not buried in landfills.

To achieve this goal, Buenos Aires seeks to promote waste separation at source as a regular practice of all residents. Therefore, different options facilitate recycling and promote this practice by installing, for example, more than 200 recycling centers where residents can take their recyclable material, distributed across the 48 neighborhoods in Buenos Aires, forming an ever-expanding dynamic network.

The BA4R initiative aims to deepen what Buenos Aires has already been doing and add new

proposals to boost the optimization of waste through reduction, recycling, reuse and recovery. These actions will be framed in a system of circular economy and civic engagement where recyclable materials return to productive circuits to become new commodities and new products. The development of an app with information and news on recycling in the City is also proposed so that residents can be updated and dispose of their waste properly.

BA4R seeks to promote a cultural change that enhances values linked to awareness of recycling and environmental protection by considering that the shift towards a circular economy always begins through the adoption of new behaviors by each resident. In this way, the perspective on production and consumption schemes is understood under the motto of a regenerative and restorative economy allowing the generation of new sources of employment thanks to the collaboration and commitment of all the neighbors upon separating and classifying waste before final disposal.

#### REFERENCE

**Quito:** Program of mainstreaming principles of circular economy in production, regulatory and consumer processes.



**STRATEGIC OBJECTIVE 3.3:**  
**Implement an integrated waste management policy**



**Tile manufacturing with recycled materials** (action in progress)

Buenos Aires opened a new plant producing daily, by automated means, between 800 and 1000 40 × 40 cm tiles from the waste neighbors take to recycling centers and bins. The use of sand can be replaced by 10% with crushed glass, a material present in several recycled components. In tile polishing, buffing brushes need 32,000 liters of water to avoid scratching the work material. A sediment decanting pool was thus built in the plant, which, together with a piping and filters system treats the water used, to be constantly reutilized.

**Actions**

- Develop the *BARecicla* app providing recycling information in the City (what can be recycled, where to recycle, when to take out the garbage before the waste truck round and recycling news and developments in the city).
- Strengthen the differentiated urban dry solid waste collection system.
- Promote citizen participation in waste management.
- Promote incentives for separation at source.
- Develop policies to recover universal waste (toxic - hazardous).
- Promote waste management awareness and advocacy programs.



## STRATEGIC OBJECTIVE 3.3: Implement an integrated waste management policy

### 3.3.2

#### TIMEFRAME

 Medium y Long-term

#### STATUS

New

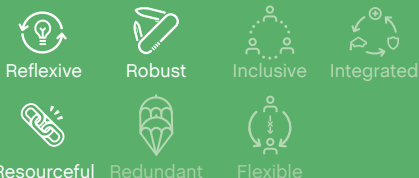
#### STAKEHOLDERS

Undersecretariat of Urban Health (Ministry of Environment and Public Space -MAYEP)

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



#### SHOCKS AND STRESSES

- Climate change
- Environmental degradation

#### INDICATORS

- Tons of thermal-treated waste
- Tons of landfill waste
- KW of energy generated

#### REFERENCE

This technology is widely used in Japan with 210 plants, Germany with 99 plants, France with 126 plants, rest of Europe and Russia with 276 plants, China with 225 plants, rest of Asia with 62 plants and United States where 99 Waste to Energy (WTE) plants operate, annually recovering 240 million tons of non-recyclable waste to produce electricity.

## WASTE TO ENERGY

The state-owned Company for Ecological Coordination in the Metropolitan Area (CEAMSE for its acronym in Spanish) announced in January 2017, that its landfill would collapse in five years and could no longer receive the waste generated by AMBA, covering 40 municipalities and the City, i.e. about 15 million people producing 18,500 tons of waste per day (by 2030 this number is estimated in 24,920 tons/day).

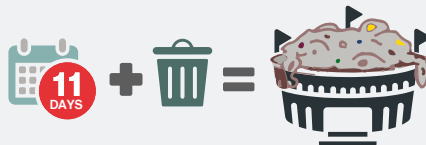
The city of Buenos Aires has, therefore, began to study new technologies to address this challenge. Pursuant to Law 5966, amending the Zero Waste Law, the treatment framework was expanded to allow the transformation of waste

in resources, after maximizing incentives for recycling and reuse.

The concept of Waste to Energy is understood as a last resource of a circular economy virtuous process, where all the material that can be recovered was previously reintegrated in the production chain. In the case of final disposal waste, the idea is to transform current garbage into energy.

### 2018

A stadium is filled every 11 days

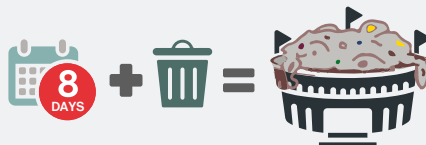


32 stadiums per year

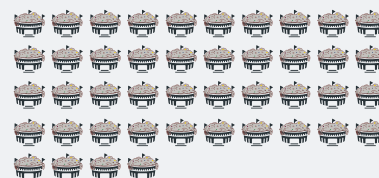


### 2030

A stadium is filled every 8 days



44 stadiums per year



**STRATEGIC OBJECTIVE 3.3:**  
**Implement an integrated waste management policy**

**TECHNOLOGY AND INNOVATION IN WASTE MANAGEMENT**

To generate a more efficient service and facilitate waste management, the City seeks to bring innovation into the various cleaning and waste collection services by incorporating technology. The use of technology for waste management also allows to automate waste loading, analyze routes completion and keep information up-to-date, centralized and controlled.

The City is developing a control system through global positioning devices in vehicles to generate specific and immediate georeferenced information reports.

Furthermore, the operation of almost 28,000 wet waste containers and around 3,000 dry or recyclable waste bins would be monitored through tag reading sensors. This will generate information on its operation, verifying clearing and sanitation. A data transmission system will also be implemented in an indication area in the City to identify who is using the container and control waste disposal.

This initiative is being integrated with other data-based decision-making systems, which

increasingly facilitate live operation performance management. Automated and integrated processes can thus be centralized, and real time information flow can be generated to facilitate resource planning and live operation of services.

**Actions**

- Set dynamic routes to collect waste from those containers whose sensor indicate they are full.
- Controlled disposal of waste through electronic devices.

**Pneumatic collection system at the Innovation Park**

The Innovation Park will include a pneumatic waste collection system granting a more efficient service with less environmental damage.



**3.3.3**

TIMEFRAME

 Long-term

STATUS

New

STAKEHOLDERS

Undersecretariat of Urban Health (Ministry of Environment and Public Space -MAyEP)

PILLARS TO WHICH IT CONTRIBUTES

 Social and urban integration

CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

QUALITIES OF RESILIENCE

-  Reflexive
-  Robust
-  Inclusive
-  Integrated
-  Resourceful
-  Redundant
-  Flexible

SHOCKS AND STRESSES

- Climate change
- Environmental degradation

INDICATORS

- Number of containers with sensors
- Number of dynamic routes added





# PILLAR 4

# Social and Urban Integration



An integrated city, without barriers and on a human scale, that grows in a sustainable and balanced way.





#### 4.1 IMPROVE ACCESS TO QUALITY HOUSING FOR ALL CITY RESIDENTS



#### 4.2 PROMOTE SUSTAINABLE MOBILITY AND A METROPOLITAN CROSS-MODAL SYSTEM



#### 4.3 DESIGN A PEOPLE-ORIENTED CITY WHICH PROMOTES COEXISTENCE AND ENJOYMENT







*“Thinking of a resilient Buenos Aires entails integrating the neighborhoods to the city and the city to the neighborhoods, promoting interaction among neighbors, facilitating mobility among and within neighborhoods, and generating options for enjoyment and coexistence in all the areas of the City.”*

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## Current Situation

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Social and urban integration of all the neighborhoods of the city of Buenos Aires is one of the main bases to build urban resilience and is inherent to the vision of the city that we want.

The population of the city of Buenos Aires remains stable since 1947, with around 3 million inhabitants, but its demographic structure and its housing stock have greatly changed since then. The city still faces the challenge of narrowing the gap in the access to housing and reaching a harmonious development of and among all its neighborhoods. Today, the City has the vision to boost its population growth in the next decades through a new planning, using a new urban planning code which promotes mixed uses, a balanced and harmonious development, and includes informal settlements as part of the City's urban fabric.

This new City concept goes together with initiatives that seek to facilitate access to housing. Thinking of and building an integrated city also entails improving the conditions to access the rental market. The number of tenants in the City represents 30% of total households and, with the growing demand, the market has increasingly been generating more requirements for tenants. However, various mechanisms that protect tenants and increase the offer of available housing, and that, in turn, facilitate access to this market, are being promoted by different areas of government. Such mechanisms are included in this document. Improvement of access to housing also entails integrating low-income neighborhoods to dynamics of the City. These neighborhoods have grown steadily since the 1980s and their population amounts to almost 7.6% of the total population (DGEyC, 2017), that is, around 200,000 people.

In addition, the City has experienced multiple interventions and plans that today pose challenges to urban development conceived on a human scale. The development of the port area with industrial equipment and of the railway and highway systems are some examples of infrastructure that today are planned to be reconverted and adapted to eliminate urban barriers and, thus, generating an integrated city, both at the urban and the social levels.

Within the context of this strategy, the dialogue between the city and its metropolitan area refers to the development of an integrated city. In this regard, resilience entails giving priority to the use of public transport and walkability, by discouraging the use of car vehicles and consolidating the metropolitan cross-modal system. The impact of these types of practices results in positive effects on traffic congestion in urban highways and in the downtown and greater downtown areas of the City, as well as in the reduction of commute times.

Ultimately, building an integrated city requires policies and initiatives that consider issues beyond infrastructure. Thinking of a resilient Buenos Aires entails integrating the neighborhoods to the city and the city to the neighborhoods, promoting interaction among neighbors, facilitating mobility among and within neighborhoods, and generating options for enjoyment and coexistence in all the areas of the City. An integrated Buenos Aires aims at improving access to quality housing for all residents, promoting the integration of low-income neighborhoods, thinking of a people-oriented city and growing in an orderly, balanced and resilient way.

## STRATEGIC OBJECTIVE 4.1: Improve access to quality housing for all City residents

### 4.1.1

### SOCIAL AND URBAN INTEGRATION OF LOW-INCOME NEIGHBORHOODS

#### TIMEFRAME



Medium y Long-term

#### STATUS

In progress

#### STAKEHOLDERS

- City Housing Institute (Office of the Chief of Staff - JGM)
- Secretariat of Social and Urban Integration (Office of the Chief of Staff - JGM)

#### PILLARS TO WHICH IT CONTRIBUTES



Innovation, talent and opportunities

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

Informal settlements

#### INDICATORS

- Number of improved housing
- Number of linear meters of improved infrastructure
- Number of housing built for the integration of neighborhoods
- Percentage of people living in informal settlements
- Number of people in low-income neighborhoods with access to basic utilities

In 2016, the City engaged in one of the most ambitious plans of urban and social integration of low-income neighborhoods in its entire history with the purpose of providing access to basic services to at least 80,000 people in 2019. Near 7.2% of the City population (DGEyC, 2017) resides in informal housing and have irregular access to essential utilities, in the more than 20 low-income neighborhoods existing in Buenos Aires.

The City is working intensely in two of the largest low-income neighborhoods of the district: Barrio 31 (Neighborhood 31) and Barrio 20 (Neighborhood 20). In these neighborhoods, interventions are being carried out on an unprecedented scale. Other neighborhoods are also included in this agenda: Lamadrid, Fraga, Rodrigo Bueno, Ramón Carrillo and 1-11-14.

The objective of the urban integration plan is to build new housing, improve the existing ones and develop infrastructure so that the people who live in low-income neighborhoods have the same quality services as all other neighbors. Moreover, the new housing will include sustainable design principles which will contribute to mitigate the effects of climate change, something which accounts for the cross-cutting approach offered by resilience. In turn, with the purpose of simplifying and reducing maintenance costs and promoting social integration and cohesion among the residents of the neighborhoods, workshops are organized before, during and after relocation to new housing. These workshops promote neighbor organizational actions for matters relating to housing administration and maintenance. Such practices indicate a social and urban integration process focused on the neighbors, the sustainable development of the

neighborhoods and the long-term vision of these initiatives.

Based on lessons learnt from past experiences, the integration processes incorporate inclusive components, among which we can point out the creation of participatory management working groups designed to include the neighbors in the transformation processes of their neighborhoods. This way, the neighbors' perspectives are included throughout the entire design and implementation process of the integration initiatives, generating an ongoing dialogue between neighbors and government officials to design the City we want. Participation in the design of their future housing is a key element to promote people's ownership and care of these new urban fragments still under construction and is crucial to meet their sustainability.

The integration of low-income neighborhoods also entails boosting education and health. In this regard, the City will build new educational institutions, and this will extend the network of primary healthcare centers and will generate mechanisms that will promote employability and the formalization of residents' jobs. This will allow fostering their economic and social development. The proximity to different facilities seeks to reduce access gaps and generate the necessary conditions for all residents to have the same development opportunities. Building a resilient city involves working to further social inclusion and the participative nature of social and urban integration processes, to transform them in another part of the City, where neighbors can live, work and enjoy.

#### REFERENCE

**Medellín:** Medellín City Hall incorporated tools of social urban planning to geographically include informal settlements which were previously isolated, through the construction of the *Metrocable* cable car and the construction of cultural facilities such as the Santo Domingo Library.



## STRATEGIC OBJECTIVE 4.1: Improve access to quality housing for all City residents

### ACTIONS IN PROGRESS

#### “María Elena Walsh” Educational Center

For the City to advance, it is essential that all residents have the same opportunities to grow, develop and live better. That is why the City has started a process to improve and integrate Barrio 31. Such process includes the creation of the “María Elena Walsh” Educational Center, where also the Ministry of Education will have offices. This Educational Center will feature a kindergarten, a primary school and an educational center for adults.

After the construction of the Educational Center and the new administrative offices of the Ministry of Education, it is estimated that 2,300 people will enter Barrio 31 daily, and this will foster its economic development. To that end, there has been a binding call for a preliminary design project to obtain the best architectural and economic proposal.



#### New Housing at Barrio 31

Within the framework of the urban integration works, 1,042 new housing units are being built to relocate the families that are currently living in the space under the Illia highway, a space which will be released and transformed into a line park. In addition, the City built 110 new housing units for those families, as well as activities located in the area where the new Illia Highway will bypass the Barrio 31.

The works are supplemented with a resettlement process that includes participative work with the families, who are also assisted by teams of social workers.

The houses are built in steel frame, with state-of-the-art technology which allows the residents to enjoy sustainable and quality housing. The new units, in addition, have photovoltaic panels and solar water heaters, a milestone in the use of renewable energies for the city of Buenos Aires. The neighbors will have cold and hot water even if there is a power outage.



#### Participative work in the design of the “Pope Francis” Housing Complex – Barrio 20

The main objective of the Barrio 20 integration project is to promote access to decent housing to 9,119 families and integrate the neighborhood to the city. The integration project involves the construction of 1,702 new housing units in the future “Pope Francis” Neighborhood, improvement of the existing housing, provision of basic utility services, opening of streets and installation of urban facilities. In addition, the integration project of the Barrio 20 is implemented under a participative scheme. To that end, participative working groups were created, formed by representatives of the City Housing Institute (IVC, for its acronym in Spanish), representatives of other areas of government or the concession companies, representatives from the Junta Vecinal (Neighborhood Committee), neighborhood leaders, delegates, neighbors and other organizations involved in different neighborhood activities. Each instance (design, implementation and follow-up of works) of the integration process is decided by consensus with the neighbors in these working groups..



#### Center for Entrepreneurial and Labor Development (CeDEL, for its acronym in Spanish)

CeDEL is a government office building located within Barrio 31, created to help drive the economic development of neighbors. It offers trades training, customized advice to entrepreneurs and a job bank which, through the Employment Integration Program, offers more opportunities to find formal employment.

More than 7,000 neighbors have visited CeDEL looking for different opportunities to develop their economies, either through training in courses or workshops, registration at the job bank or seeking advice for their entrepreneurial projects. 10% of the Economically Active Population (EAP) of Barrio 31 has received training and the Job Bank has 3,680 registered individuals, out of which 250 are already working in the formal economy.



#### Inter-American Development Bank new building

The new building of the Inter-American Development Bank in the Barrio 31 will create more than 1,000 jobs during its construction phase. After construction, more than 500 people will go in the neighborhood to work. The building will feature two main uses: the offices of the IDB and a pedestrian bridge for the City neighbors.

The structure will have three supporting points and will serve as a bridge to connect Barrio 31 with the Thays Park, from the Convention and Exhibition Center, and the School of Law station of the subway H line. The pedestrian accesses, at both sides of the building will have escalators and elevators. The bridge will have a green cover, generating 6,000 square meters of green spaces and will save around an hour of travel time to the neighborhood residents.



#### Barrio 31 New Commercial Center

The City is working to boost the commercial center in Barrio 31. Firstly, work was done to improve the infrastructure and new booths were installed for the exhibitors of the Feria Latina (Latin Fair), one of the main points of economic activity for the neighbors. Secondly, the City will create a new commercial market, the Mercado de Retiro (Retiro Market), which will offer gastronomy and producers' products, and will attract neighbors from around city. Finally, the Paseo Comercial (Commercial Promenade), the street with the greatest economic activity in Barrio 31, will be revamped. This revamping entails improving the external parts of the housing units and making interventions in the stores to improve their structures, security and hygiene conditions. Also, economic activity will be fostered, and jobs formalization will be promoted with the assistance of CeDEL.





**STRATEGIC OBJECTIVE 4.1:**  
**Improve access to quality housing for all City residents**

**4.1.2**

**ACCESS TO AFFORDABLE HOUSING**

**TIMEFRAME**

 Medium y Long-term

**STATUS**

New

**STAKEHOLDERS**

- Banco Ciudad
- City Housing Institute (Office of the Chief of Staff - JGM)
- Execution of Special Works – Special Projects Unit (UPE in Spanish) (Ministry of Urban Development and Transport -MDUyT)
- Youth Olympic Games UPE (Office of the Deputy Chief of Government -VJG)








**PILLARS TO WHICH IT CONTRIBUTES**

 Diversity, gender and coexistence

**CROSS-CUTTING THEMES**

- Metropolitan vision
- Data and technology
- Citizen participation

**QUALITIES OF RESILIENCE**

 Reflexive	 Robust	 Inclusive	 Integrated
 Resourceful	 Redundant	 Flexible	

**SHOCKS AND STRESSES**

**Lack of affordable housing**

**INDICATORS**

- Number of loans given by the First Home Program
- Number of loans given to develop affordable housing
- Percentage of new housing requested in the construction permits as per category

To create resilience, the City constantly develops resourceful and inclusive policies to generate new mechanisms that help bridge the gap between housing supply and demand. In this regard, it works to activate the housing sale and rental markets, with the objective of reducing access barriers and expanding the existing supply.

In the rental market, the City will seek to tackle the main institutional barriers existing to housing access. In addition, the current situation of the City's vacant housing will be analyzed to develop future lines of action that assist in promoting market activation. These actions result from a working group made up by the main civil society organizations, the real estate chambers and real estate developers.

The initiative seeks to generate tax exemptions and loan incentives to expand housing supply, particularly in the southern area of the City. Additionally, urban planning contributions will be implemented in new developments in already consolidated areas with the purpose

of expanding the supply of affordable housing. Finally, the City will promote soft loan lines to facilitate residents' access to their first dwelling.

**Actions**

- Reduce barriers to access the rental market: promote alternatives to the requirement of a home owner guarantor, offer free-of-charge signature certifications and publish sample rental agreements.
- Study the current situation of vacant housing in the City and promote actions for such vacant housing to reenter the market.
- Offer tax exemptions and loans to develop affordable housing.
- Perform urban planning contributions in new real estate developments in consolidated neighborhoods.
- Offer soft loans to promote access to the first dwelling.



**Primera Casa BA (BA First Home Loans)** (action in progress)

The City re-launched the Primera Casa BA (BA First Home) program, whereby loans are given to promote access to the first house to middle-class, the youth and women sectors. In this regard, in addition to modifying the credit line called Primera Casa UVA (First Home adjusted by the local reference unit called "UVA"), the City will add two new credit lines: Primera Casa Mujer (First Home Women) and Primera Casa Joven (First Home Youth). These credit lines, which aim to speed up and reduce requirements and facilitate financing, are directed at promoting gender equality and the access of young people to their own housing and, in turn, fostering the development of the City's southern area.



**STRATEGIC OBJECTIVE 4.1:**  
**Improve access to quality housing for all City residents**



**The legacy of the Olympic Village: 1,050 affordable housing** (action in progress)

One of the major legacies left by the Youth Olympic Games hosted by the City in 2018 is the reconversion of the 1,050 housing units of the Olympic Village, created to accommodate the athletes, into a permanent residential neighborhood. After the event, the apartments will be refurbished and by mid-2019 will start being transferred to City neighbors. In order to have access to these apartments, a loan system with the lowest interest rate in the market and installments similar to a rent was launched. The neighbors of the southern area of the City, Police employees and teachers of the City have priority to obtain access to these units. The loan system targets middle class individuals with both, formal and informal income.

## STRATEGIC OBJECTIVE 4.2: Promote sustainable mobility and a metropolitan cross-modal system

### 4.2.1

### INTEGRATED PUBLIC TRANSPORT

#### TIMEFRAME



Long-term

#### STATUS

In progress with new resilient actions

#### STAKEHOLDERS

- Ferrocarriles Argentinos S.E. (State-owned railway company - National Government)
- National Ministry of Transport
- Secretariat of Transport (Ministry of Urban Development and Transport -MDUyT)
- Subterráneos de Buenos Aires S.E. (State-owned subway company) (Ministry of Urban Development and Transport -MDUyT)

#### PILLARS TO WHICH IT CONTRIBUTES

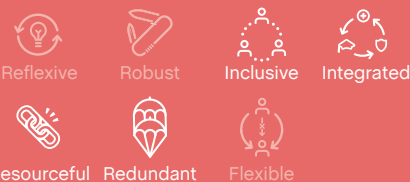


Environment and sustainability

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



#### SHOCKS AND STRESSES

- Vehicle congestion
- Climate change
- Poor air quality

One of the main challenges faced by the city of Buenos Aires is vehicle congestion, which produces impacts on the environment and travel time of those residing in or moving around the City. Buenos Aires is working on improving the supply and quality of public transport so that all residents who move around the city can do so in a more rapid, safe and sustainable way.

The City has created a Bus Rapid Transit (BRT) system, locally known as Metrobus, which combines buses with dedicated bus lanes and allows for efficient and comfortable transport networks. The system features near 62.5 km in the city of Buenos Aires and it is planned to reach near 80 km to benefit around 2 million users who will save between 30% and 50% travel time daily.

The City has committed to improve the frequency and quality of transport in the subway system. This challenge involved improving the infrastructure and rolling stock to reduce the average time between one subway and the other during rush hours to three minutes. This has benefited 70% of the passengers. In addition, work will be carried out to make subway stations more accessible to all City residents.

To generate an integrated transport system, the City will work, together with the national government, in the construction of a Regional Express Network (RER, for its acronym in Spanish) to combine the metropolitan railways into a single transport network. The network will

connect the railways which arrive into the City from the North, South and West, and this will generate a great node of regional connectivity. This entails the construction of near 16 km of new tunnels which will connect the more than 800 that already exist in the Metropolitan Region Railway System and will bring the network back to the level of excellence it historically used to have. In turn, it will allow passengers to connect with the subway, the Metrobus and the bicycle public transport system. With the RER, the number of railway passengers will be tripled to 5.1 million per day.

#### Actions

- Build the Regional Express Network.
- Expand the bikeways network and add new stations to the bicycle public transport system.
- Improve the infrastructure and add new technology to the subway network.
- Improve accessibility to subway stations.
- Expand the BRT (Metrobus) Network
- Reduce urban barriers by building underground level crossings, opening of streets and ground level crossings in the metropolitan railways.
- Promote the use of metropolitan railways for urban use.





**STRATEGIC OBJECTIVE 4.2:**  
**Promote sustainable mobility and a metropolitan cross-modal system**

**ELECTRIC MOBILITY**

Within the framework of the Clean Mobility Plan 2035, the city of Buenos Aires and the national government will jointly implement a pilot test with four bus lines (12, 34, 39 and 59) in early 2019, to evaluate the technical viability of this new form of mobility, as well as its operational, economic and environmental feasibility. There will be a total of eight buses, two per line, with different cargo and supplier technologies, which will be tested for one year in the city's traffic.

The results, which will be evaluated together with CAF, will be a key tool for the adoption of a larger scale plan in the Metropolitan Area of Buenos Aires, which has one of the largest fleets in the region, with 18,000 buses. It is important to highlight that the initiative is directed both at the use of electric transport and the creation of adequate infrastructure to promote the demand generation of this type of transport.

The incorporation of electric transport seeks also to reduce GHG emissions and contaminating gases (CO<sub>2</sub>, NO<sub>x</sub> y MP) generated by vehicles powered by fossil fuels, such as diesel, gasoline or CNG.

**Actions**

- Interventions for the installation of filling stations.
- Start-up of the pilot project in 4 bus lines



**4.2.2**

TIMEFRAME



Medium/Long-term

STATUS

Pilot project

STAKEHOLDERS

- Environmental Protection Agency (Ministry of Environment and Public Space -MAyEP)
- Transport companies
- National Ministry of Transport
- Secretariat of Transport (Ministry of Urban Development and Transport - MDUyT)

PILLARS TO WHICH IT CONTRIBUTES



Environment and sustainability

CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

QUALITIES OF RESILIENCE

- Reflexive
- Robust
- Inclusive
- Integrated
- Resourceful
- Redundant
- Flexible

SHOCKS AND STRESSES

- Climate change
- Poor air quality

INDICATORS

- Number of electric buses in the City.
- Number of filling stations.
- Percentage of GHG emissions reductions.



**STRATEGIC OBJECTIVE 4.2:**  
**Promote sustainable mobility and a metropolitan cross-modal system**

**4.2.3**

**BA CARPOOL**

**TIMEFRAME**

 Long-term

**STATUS**


New

**STAKEHOLDERS**

Secretariat of Transport (Ministry of Urban Development and Transport - MDUyT)

**PILLARS TO WHICH IT CONTRIBUTES**









 Environment and sustainability

 Innovation, talent and opportunities

**CROSS-CUTTING THEMES**

- Metropolitan vision
- Data and technology
- Citizen participation

**QUALITIES OF RESILIENCE**

-  Reflexive
-  Robust
-  Inclusive
-  Integrated
-  Resourceful
-  Redundant
-  Flexible
- 

**SHOCKS AND STRESSES**

- 
- 
- 

New ways of mobility are emerging in other cities of the world because of mobile applications and the dynamism of new digital economies, based on collaboration and crowdsourcing. It is important that the City evaluates different alternatives that allow for a sustainable transport model.

Among these new ways of mobility there is one that stands out: the use of shared motor vehicles that allow renting a car for a limited period. This mobility helps reduce not only the number of private vehicles in the cities, but also the need to have parking areas, since it helps free space in the city that can be used for other purposes.

**Actions**

- Generate new regulatory frameworks for the development of these services.
- Provide regulated or designated parking areas.
- Evaluate the information and data requirements to ensure vehicle control needs.



## STRATEGIC OBJECTIVE 4.2: Promote sustainable mobility and a metropolitan cross-modal system

### BA EN BICI (BA BY BIKE)

Through the Sustainable Mobility Plan, the City gives priority to public transport and active mobility means, such as cycling and walking. The use of bicycles, apart from having multiple health benefits, does not pollute and is an inexpensive means of transport that reduces vehicle congestion.

Although almost half of the City households have at least one bicycle, only 2% of the residents use bikes as the only means of transport, while another 4% use bicycles supplemented by another means of transport.

With the purpose of promoting the use of bicycles, the protected bikeways network was created in 2009, which today runs along 206 km and will extend to around 250 km in 2019. The network is specially designed to ensure cyclists a safer and more rapid mobility system, separated from the rest of the roadway, and to integrate strategic points of the City such as transfer centers, universities, schools and hospitals

In addition, the City has created a Bicycle Public Transport System (*Ecobici*) free of charge. The system has 2,500 bicycles and 200 automated stations operating 24/7. The *Ecobici* system is planned to expand to 4,000 bicycles and 400 stations in the near future. The stations

are in strategic locations in the City so that an increasing number of neighbors can have access to bicycles as a means of public transport. The *Ecobici* system has 290,000 registered users. It has a record of 9,500 trips daily and more than 8 million trips since its creation. .

#### Actions

- Expand the public bicycle and stations system.
- Extend the bikeways network to AMBA.
- Add new bicycles to the *Ecobici* system.
- Include public bicycle lockers at the main transfer centers.
- Give courses on basic mechanical concepts for bicycle users.
- Install bicycle racks in public buildings, hospitals, education institutions, banks and cultural centers.
- Evaluate access to the public transport system in non-business days and during non-rush hours.
- Develop an App to gain rewards points per kilometer ridden by bike to be exchanged for cultural vouchers.



### 4.2.4

#### TIMEFRAME

 Medium-term

#### STATUS

In progress with new resilient actions

#### STAKEHOLDERS

- Undersecretariat of Sustainable and Safe Mobility (Ministry of Urban Development and Transport -MDUyT)








#### PILLARS TO WHICH IT CONTRIBUTES

 Environment and sustainability

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE

 Reflexive   
  Robust   
  Inclusive   
  Integrated  
 Resourceful   
  Redundant   
  Flexible

#### SHOCKS AND STRESSES

#### INDICATORS

- Percentage of trips made by bicycle daily
- Number of users registered in the *Ecobici* system
- Number of daily trips in the Bicycle Public Transport System
- Number of *Ecobici* stations
- Number of bicycles in the *Ecobici* system
- Number of km of bikeways
- Number of basic mechanical centers

## STRATEGIC OBJECTIVE 4.3:

### Design a people-oriented city which promotes coexistence and enjoyment

#### 4.3.1

#### DEVELOPMENT OF PEDESTRIAN PRIORITY ZONES AND VEHICLE RESTRICTION IN THE DOWNTOWN AREA

##### TIMEFRAME



Medium-term

##### STATUS

In progress

##### STAKEHOLDERS

- Ministry of Environment and Public Spaces
- Ministry of Urban Development and Transport

##### PILLARS TO WHICH IT CONTRIBUTES



Environment and sustainability

##### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

##### SHOCKS AND STRESSES

Vehicle congestion

Climate change

Air quality

##### INDICATORS

- Number of environmental areas

The City is working to create a city on a human scale and has committed to build new pedestrian priority zones. These areas aim to promote walkability, sustainability, enhancement of heritage value and revitalization of public spaces through a comprehensive approach which will strengthen the identity of the neighborhoods.

This will result in the regeneration of urban spaces, revitalizing the neighborhoods and reactivating the local economies. In turn, the pedestrianization responds to the principles which establish macroblocks as Basic Sustainability Units and is in line with the city vision contemplated in the New Building Code and the New Urban Planning Code.

In addition, the City is promoting car vehicle restriction to reduce traffic congestion in the downtown area during rush hours. This restriction will gradually increase to restrict vehicle access during working hours and promote the expansion of pedestrian zones.

This seeks to discourage the use of automobiles and transform places that were previously used

for vehicle circulation into coexistence spaces or areas for the exclusive use of pedestrians and bicycles - something which will also contribute to protect the environment and work for the commitment to become Carbon Neutral by 2050.

##### Actions

- Develop new environmental areas in the following locations:

- Historic City Center

- Retiro

- Tribunales

- Once

- Microcentro

- Retiro

- Increase vehicle restriction in the downtown area.



#### Pedestrianization of "Tribunales"

(action in progress)

Pedestrian areas, such as the ones already implemented in the "Tribunales" Area, contribute to enhance environmental sustainability, enrich the quality of life of the neighbors, improve road safety and promote good coexistence in public spaces to create a City on a human scale.



## STRATEGIC OBJECTIVE 4.3:

### Design a people-oriented city which promotes coexistence and enjoyment

#### LAST MILE LOGISTICS

As new pedestrian priority areas and vehicle restriction to reduce traffic congestion during rush hours in the downtown area grow, new challenges are posed to supply logistics for stores and companies located in those areas. This logistics is a highly customized service, with complex routes and multiple stakeholders involved. The trend shows that with digital advances the need to distribute goods will progressively increase, and consequently the urban logistics traffic would tend to increase.

The vision of a City on a human scale demands offering greater order to the urban logistics activity, contemplating both the needs of shop owners as well as those of vehicles. The City is planning a comprehensive reorganization of loading and unloading operations, aimed at preventing vehicles from parking in unauthorized

lanes and seeking the optimization of operation time. To that end, the creation of new exclusive loading and unloading “blue” spots is being evaluated, as well as the generation of new cargo splitting points.

#### Actions

- Promote incentives to electric cars and active mobility in the downtown area for logistics.
- Install urban fixtures for logistics by bicycle (cargo and electric).



#### Electric mobility for “last mile” logistics (action in progress)

Some logistics companies are incorporating 100% electric vehicles to their physical distribution fleet. Such vehicles have 200 actual kilometers autonomy under normal use conditions and they reach a maximum speed of 130 km/hour. They are designed to reduce the environmental impact through a new noiseless, emission-free way of distributing goods, in densely populated and traffic congested regions.

#### 4.3.2

##### TIMEFRAME



Long-term

##### STATUS

New

##### STAKEHOLDERS

- Secretariat of Transport (Ministry of Urban Development and Transport -MDUyT)
- Private sector

##### PILLARS TO WHICH IT CONTRIBUTES



Environment and sustainability



Innovation, talent and opportunities

##### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

##### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

##### SHOCKS AND STRESSES

Vehicle congestion

Climate change

Air quality



## STRATEGIC OBJECTIVE 4.3: Design a people-oriented city which promotes coexistence and enjoyment

### 4.3.3

### BARRIO 31 HIGH LINE PARK

#### TIMEFRAME



Medium-term

#### STATUS

In progress

#### STAKEHOLDERS

- Autopista Urbana S.A. (Ministry of Urban Development and Transport -MDUyT)
- Ministry of Environment and Public Spaces
- Secretariat of Social and Urban Integration (Office of the Chief of Staff -JGM)

#### PILLARS TO WHICH IT CONTRIBUTES



Environment and sustainability



Diversity, gender and coexistence

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

- Informal settlements
- Vehicle congestion
- Urban degradation
- Environmental degradation
- Lack of social cohesion

#### INDICATORS

- Square meters of new green spaces
- Number of households relocated to permanent dwellings

Within the framework of the urban transformation that the City is carrying out in Barrio 31 (Neighborhood 31), a reconversion process of the highway infrastructure that runs across this low-income neighborhood is underway. The current location of the Illia Highway represents a physical barrier that divides the neighborhood in two, something which makes its integration difficult. The City has committed to modify the highway layout and is building a new rapid way that will bypass Barrio 31.

This new layout will promote interconnectivity and integration of the urban fabric among Barrio 31 and Barrio 31 bis, the port area and the Autonomous City of Buenos Aires. In turn, the circulation of the 5,900 cars that enter the city of Buenos Aires every day through that highway will improve, since it will feature three different exits that will help control the flow of vehicles going into the city. It will be a highway that will circulate between Barrio 31 and Libertador Avenue.

This initiative will allow for the revamping of the Illia Highway, since it will reconvert it from being an urban expressway into a High Line Park and will provide the City with a new green area. The construction of the High Line Park will improve the environmental conditions of the City of Buenos Aires and will generate a 343% increase in the public space per inhabitant in Barrio 31. The design proposal is the result of an International Competition and its bases were defined through citizen participation of neighborhood residents.

The High Line Park and the new Illia Highway are projects that aim to develop the highway in full harmony with its surrounding urban areas, which will generate environmental conditions favorable to the development of civic life and its socio-environmental viability and will contribute to the urban development of the city and its interaction with the port areas and the riverfront.



#### REFERENCE

**New York:** The High Line park is an elevated greenway park created on an old railroad with an extension of 2.33 km in New York.



**STRATEGIC OBJECTIVE 4.3:**  
**Design a people-oriented city which promotes coexistence and enjoyment**

**COMMUNE 8 ON A HUMAN SCALE**

Commune 8 is one of the 15 districts of the city of Buenos Aires, made up by the Villa Lugano, Villa Soldati and Villa Riachuelo neighborhoods. These neighborhoods were incorporated to the layout of the urban sprawl at very late stages and, due to the significant amount of available land in this area, they were a preferential location in the City for the construction of large facilities, the installation of big factories and the construction of social housing. These interventions resulted in a fragmented territory for vehicles.

Within the framework of the integration of the South of the City, a Master Plan was outlined for Commune 8. This Plan highlights the opening of new streets around the big premises to reduce urban barriers, promote mixed uses and revamp its green spaces. Today, Commune 8 is host to profound urban transformations because of the social urban integration projects in Barrio 20 and the creation of the Olympic Village (one of the most significant legacies of the Buenos Aires 2018 Youth Olympic Games).

To create a Commune on a human scale, the Resilience Strategy proposes to boost interventions that help turn these fragments of the city into spaces which promote walkability and enjoyment. In this case, building resilience entails promoting the articulation between current and past urban planning interventions, also evaluating the City's future challenges.

**Actions**

- Continue with the implementation of Commune 8 Master Plan.
- Drive the urban development of the districts' margins and integrate the motor race track to the neighborhood.
- Promote the Cargo Transfer Center.
- Open new streets.
- Promote mixed uses and new residential spaces.
- Reconvert the Olympic Village into a permanent neighborhood for 1,200 families.
- Reconvert the Olympic Park into the new National High-Performance Sport Center.
- Develop infrastructure for sustainable mobility.
- Improve urban outdoor furniture.
- Increase the number of urban trees and revitalize walkways.
- Revamp the Indo-American Park and the City Park.



**4.3.4**

**TIMEFRAME**

 Medium-term



**STATUS**

In progress with new resilient actions








**STAKEHOLDERS**

- City Housing Institute (Office of the Chief of Staff - JGM)
- Ministry of Environment and Public Spaces
- Ministry of Urban Development and Transport

**PILLARS TO WHICH IT CONTRIBUTES**

-  Environment and sustainability
-  Innovation, talent and opportunities

**QUALITIES OF RESILIENCE**

-  Reflexive
-  Robust
-  Inclusive
-  Integrated
-  Resourceful
-  Redundant
-  Flexible

**SHOCKS AND STRESSES**

-  Social breakdown
-  Urban decay

## STRATEGIC OBJECTIVE 4.3:

### Design a people-oriented city which promotes coexistence and enjoyment

#### 4.3.5

#### REFORM OF THE URBAN PLANNING AND BUILDING CODES

##### TIMEFRAME



Long, medium and short terms

##### STATUS

In progress with new resilient actions

##### STAKEHOLDERS

- Environmental Protection Agency (Ministry of Environment and Public Space - MAyEP)
- City Housing Institute (Office of the Chief of Staff - JGM)
- Undersecretariat of Urban Planning (Ministry of Urban Development and Transport MDUyT)
- Undersecretariat of Registry, Interpretation and Cadaster (Ministry of Urban Development and Transport)

##### PILLARS TO WHICH IT CONTRIBUTES



Environment and sustainability



Diversity, gender and coexistence

##### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

##### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

##### SHOCKS AND STRESSES

- Urban decay
- Population loss
- Uncontrolled urban growth
- Floods
- Intense storms
- Heat waves
- Environmental degradation
- Biodiversity loss

The City foresees that the population will grow to reach 5 million inhabitants by 2050. For this growth to be adequate and sustainable, the urban planning and building codes are currently being redefined.

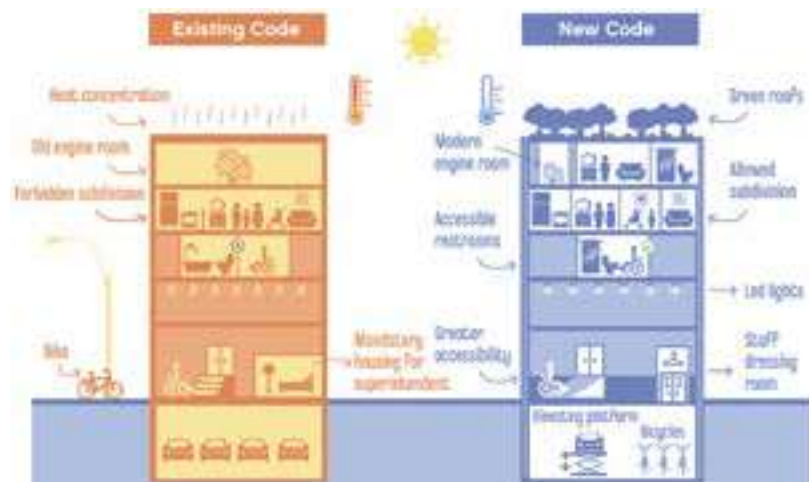
The proposed New Urban Planning Code and the New Building Code have been discussed in a participative manner through different neighbor forums, meetings at professional organizations and institutional contributions from universities and think tanks.

The main aspects of the proposed reform are updating the regulations and making a substantive change in the way in which growth and densification of the current housing stock are managed. The New Urban Planning Code leaves aside land use based on zoning and gives priority to the homogenization of the buildings and the intention of promoting mixed uses in the urban space. In this regard, higher buildings are sought but safeguarding sustainability criteria, promoting the reconstruction of the center of the blocks and the reconstruction of the continuous building line. In addition, the proposed reform establishes the principles of social habitat which seek the integration of informal settlements and water prevention

areas to incorporate mitigation mechanisms for heavy storms.

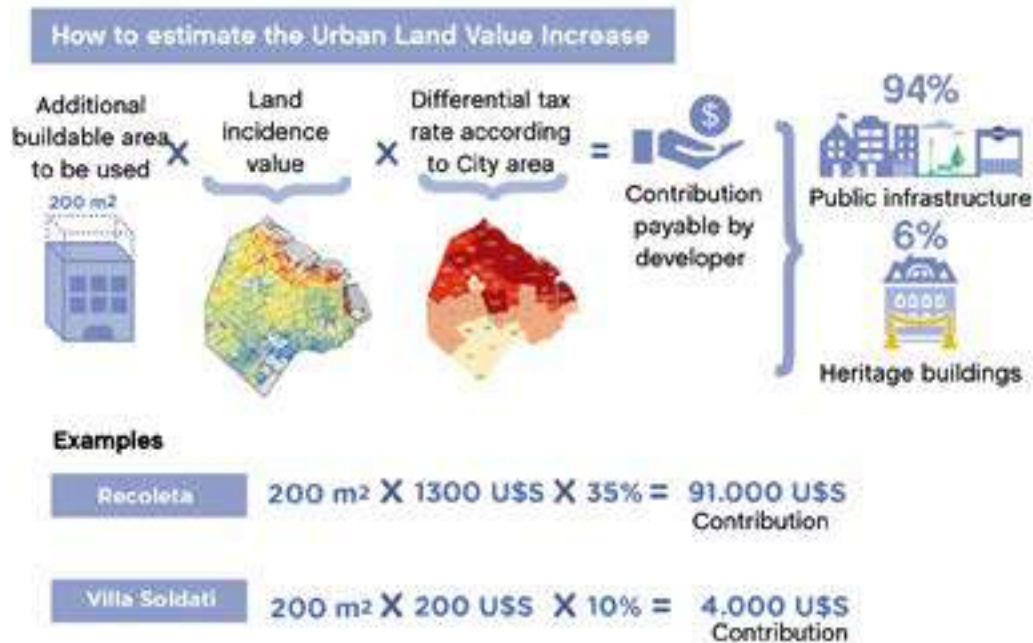
Regarding the New Building Code, this includes matters related to sustainable design and promotes energy efficiency standards through the regulation of the use of new technologies, the quality of materials and the installation systems. It also eliminates the obligation to make certain differentiations, such as restrooms differentiated by sex, with the aim of incorporating a gender perspective. This reform promotes simpler and more agile proceedings. It also entails a paradigm shift which will enable regular updates to meet current and future needs.

The vision underlying the new codes is the construction of an integrated city which offers the same opportunities both north and south of the City, protects our heritage, promotes a more sustainable city and generates instruments to adapt to and mitigate the effects of climate change. In this manner, the identity of neighborhoods will be preserved, the development of neglected areas will be driven, and a greater population density will be promoted.



### STRATEGIC OBJECTIVE 4.3:

#### Design a people-oriented city which promotes coexistence and enjoyment



With the update of the Urban Planning Code, the City is creating new tools to recover urban land value increase with the purpose of **generating resources to develop the necessary infrastructure to attain a sustainable and balanced growth.**

The passing of the New Urban Planning and Building Codes will grant a greater buildable area than the current one. The draft urban land value increase act proposes that the developer contributes to the growth and consolidation of the services and infrastructure of the City by paying a percentage of the profit it obtains due to the greater buildable area authorized by the City. The proposal states that 94% of the contributions collected be allocated to the Urban Development and Habitat Fund to be created by the Act and will be used only for funding:

- Social housing and facilities
- Works of transport and services infrastructure
- Public spaces
- Integration of vulnerable neighborhoods

The priority to use these funds will be determined by an “infrastructure ratio”, which will differentiate areas of the City according to amount and quality of access to public infrastructure (transport, hospitals, schools, public utilities, culture, etc.) This situation will balance urban development, focusing on the most vulnerable people.

The remaining 6% will be allocated to the *Fondo Estímulo para la Recuperación de Edificios Catalogados* (Heritage-Catalogued Building Recovery Promotion Fund), a fund which aims at protecting the City's architectural heritage.



## STRATEGIC OBJECTIVE 4.3:

### Design a people-oriented city which promotes coexistence and enjoyment

#### 4.3.6

#### ART IN NEIGHBORHOODS

##### TIMEFRAME



Long-term

##### STATUS

In progress

##### STAKEHOLDERS

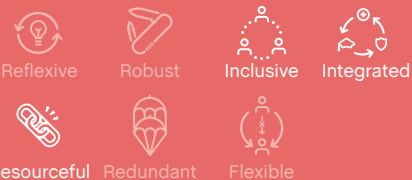
- City Housing Institute (Office of the Chief of Staff - JGM)
- Ministry of Culture
- Ministry of Urban Development and Habitat

##### PILLARS TO WHICH IT CONTRIBUTES

 Innovation, talent and opportunities

 Diversity, gender and coexistence

##### QUALITIES OF RESILIENCE



##### SHOCKS AND STRESSES

Lack of social cohesion

##### INDICATORS

- Number of workshops given
- Number of activities per neighborhood
- Number of cultural outings

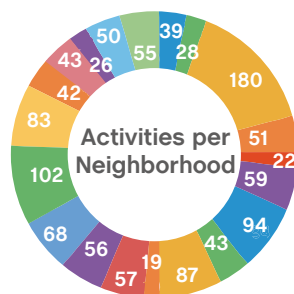
Promoting the City's social and urban integration requires adequate infrastructure and initiatives that foster the development of a united citizenship. In order to generate new audiences and to stimulate artistic education and creation in low-income neighborhoods, the city of Buenos Aires develops the Art in Neighborhoods Program which features more than 80 cultural trades workshops.

This program promotes cultural and creative production skills among the vulnerable sectors and takes the activities offered by the Ministry of Culture close to these sectors to guarantee universal access to culture for all the City residents.

In addition, this program seeks to drive the development of cultural trades by offering training and art workshops to children, young people and adults, with the purpose of training artists and specialists, and facilitating their current or future employment insertion.

##### Actions

- Promote cultural outings to encourage cultural demand in young people.
- Plan large scale events and strengthen neighborhood events.
- Give cultural trades training sessions and workshops.



## STRATEGIC OBJECTIVE 4.3:

### Design a people-oriented city which promotes coexistence and enjoyment

#### RECONVERSION OF EQUIPMENT AND URBAN REGENERATION

The City is currently working on the reconversion of infrastructure which does not meet the urban space current needs, with the purpose of building a city on a human scale. Some of these facilities have become unused urban spaces and even obstacles to a balanced growth. Therefore, promoting resilience entails driving a better utilization of these facilities in order to regenerate the urban space to further sustainable development.

#### Actions

- Design a Master Plan for the Livestock Market and regenerate Commune 7 to provide it with a human scale.
- Build the Mataderos Educational Center.
- Relocate and renew the Olympic Shooting Range Center and transform its current venue into the Innovation Park.
- Redesign the old City Amusement Park into an open metropolitan park.
- Relocate the Ministry of Human Development to the building locally known as *Elefante Blanco* (White Elephant).
- Promote public space regeneration in the neighborhoods of Chacarita, Agronomía and Paternal.



**Move the Ministry of Human Development and Habitat to the premises of the building locally known as *Elefante Blanco***

(action in progress)

The *Elefante Blanco* is a building, whose construction started in the late 1930s. It was designed to host the largest tuberculosis hospital in Latin America, but the project was cancelled, leaving an incomplete structure.

The project of the New Ministry of Human Development involves demolishing the remaining structure of the *Elefante Blanco* building to erect a public park in its place and a new building in the adjacent premises. The relocation of this ministry will be one of the elements that will be one of the transforming and integrating elements of Barrio 15 (Neighborhood 15). This work will give new impetus to the southern area of the City, with thousands of people who will go to work every day in the neighborhood and will boost the commercial activity in the area.

#### 4.3.7

##### TIMEFRAME



Medium-term

##### STATUS

In progress

##### STAKEHOLDERS

- Office of the Chief of Staff
- Ministry of Environment and Public Spaces
- Ministry of Human Development and Habitat
- Ministry of Urban Development and Transport
- Ministry of Education and Innovation

##### PILLARS TO WHICH IT CONTRIBUTES



Environment and sustainability

##### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

##### SHOCKS AND STRESSES

Urban decay

## STRATEGIC OBJECTIVE 4.3:

### Design a people-oriented city which promotes coexistence and enjoyment

#### 4.3.8

#### BA SIN BARRERAS (BA WITHOUT BARRIERS)

##### TIMEFRAME



Medium-term

##### STATUS

In progress

##### STAKEHOLDERS

- *Autopistas Urbanas S.A.* (Ministry of Urban Development and Transport -MDUyT)
- Ministry of Environment and Public Spaces
- Ministry of Urban Development and Transport
- National Ministry of Transport

##### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

##### PILLARS TO WHICH IT CONTRIBUTES



Environment and sustainability



Security and risk managements

##### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

##### SHOCKS AND STRESSES

Vehicle congestion

Climate change

Urban decay

##### INDICATORS

- Number of underground level crossings
- Number of viaduct km
- Number of regenerated areas beneath the highways

The City is crossed by urban barriers that hinder residents' mobility among the neighborhoods. Apart from the natural barriers placed by the Riachuelo river to the Metropolitan Area of Buenos Aires, there are other barriers that were built under mobility precepts, which resulted in the fragmentation of the city: the urban elevated and ground level highway system, and the railway network.

In order to make a people-centered city, the proposal is to continue working on the urban regeneration and improvement of the areas beneath the existing highways to prevent them from becoming neglected areas. In addition, to improve the circulation among neighborhoods split by the metropolitan railway system, new viaducts and underground level crossings will be built. Finally, new vehicle bridges that will cross the Riachuelo will narrow the gap between the City and the Metropolitan Area of Buenos Aires.

The elimination of barriers, the opening of streets and the new underground level crossings will result in the improvement of travel time,

connectivity, road safety and traffic flow. This will make the City a more integrated and connected space, with a more secure and ordered traffic. For this reason, new streets will be open to offer better access to the neighborhoods where the railway runs across, something which aims at eliminating urban fractures by 2023.

##### Actions

- Reduce the urban fracture produced by the railways, by building new underground level crossings and elevating the railways in viaducts.
- Continue with the beautification works beneath the existing highways, viaducts and underground level crossings.
- Promote connectivity in the South with new bridges and underground level crossings.
- Extend concessions beneath the highways to promote investments by tenants.



##### Art in the City – Urban regeneration beneath the highways (action in progress)

Through urban art the City works to beautify the areas beneath the highways to reduce the gaps offered by the highway system to the City fabric. The objective of the interventions is to enhance the value and beautify the areas under the bridges that connect the City with the neighboring municipalities.

The city is making art interventions in all the columns, ceilings and walls to generate patterns, emotions, rhythms and degradés which cause a pleasant experience. The designs were painted in nice colors functional to the subsequent lighting implemented.



**STRATEGIC OBJECTIVE 4.3:**  
**Design a people-oriented city which promotes coexistence and enjoyment**

**BA VUELVE AL RÍO (BA RETURNS TO THE RIVER)**

The City's consolidation process made it develop giving its back to the Río de la Plata river, using the coastal areas for the installation of industrial railway and port areas and big facilities such as Aeroparque city airport and the Electric Power Plant of the City.

In order to face the river and become a coastal City once again, interventions are required to generate safe and healthy spaces that allow the enjoyment, and enhance the development of the area, releasing part of the port area and the railway premises.

These interventions will aim at promoting mixed uses by generating urban development through new housing, stores and office buildings to integrate the area into the urban fabric through the opening of streets and the creation of public spaces.

**Actions**

- Design an urban development master plan and regenerate the coastline and port areas.
- Release the port area and develop the Port District.
- Release railway premises in the port area and regenerate the urban space in Catalinas Sur.
- Release railway premises in Retiro and develop Catalinas Norte II.
- Carry out a cadastral regularization.
- Increase the public space through landfill of the coastal area in Costanera Norte.
- Create the Youth District in Costanera Norte.
- Revamp the North Ecological Reserve.



**4.3.9**

TIMEFRAME



Medium y Long-term

STATUS

New

STAKEHOLDERS

- Ministry of Environment and Public Spaces
- Ministry of Urban Development and Transport
- Ministry of Government

PILLARS TO WHICH IT CONTRIBUTES



Environment and sustainability

CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

SHOCKS AND STRESSES

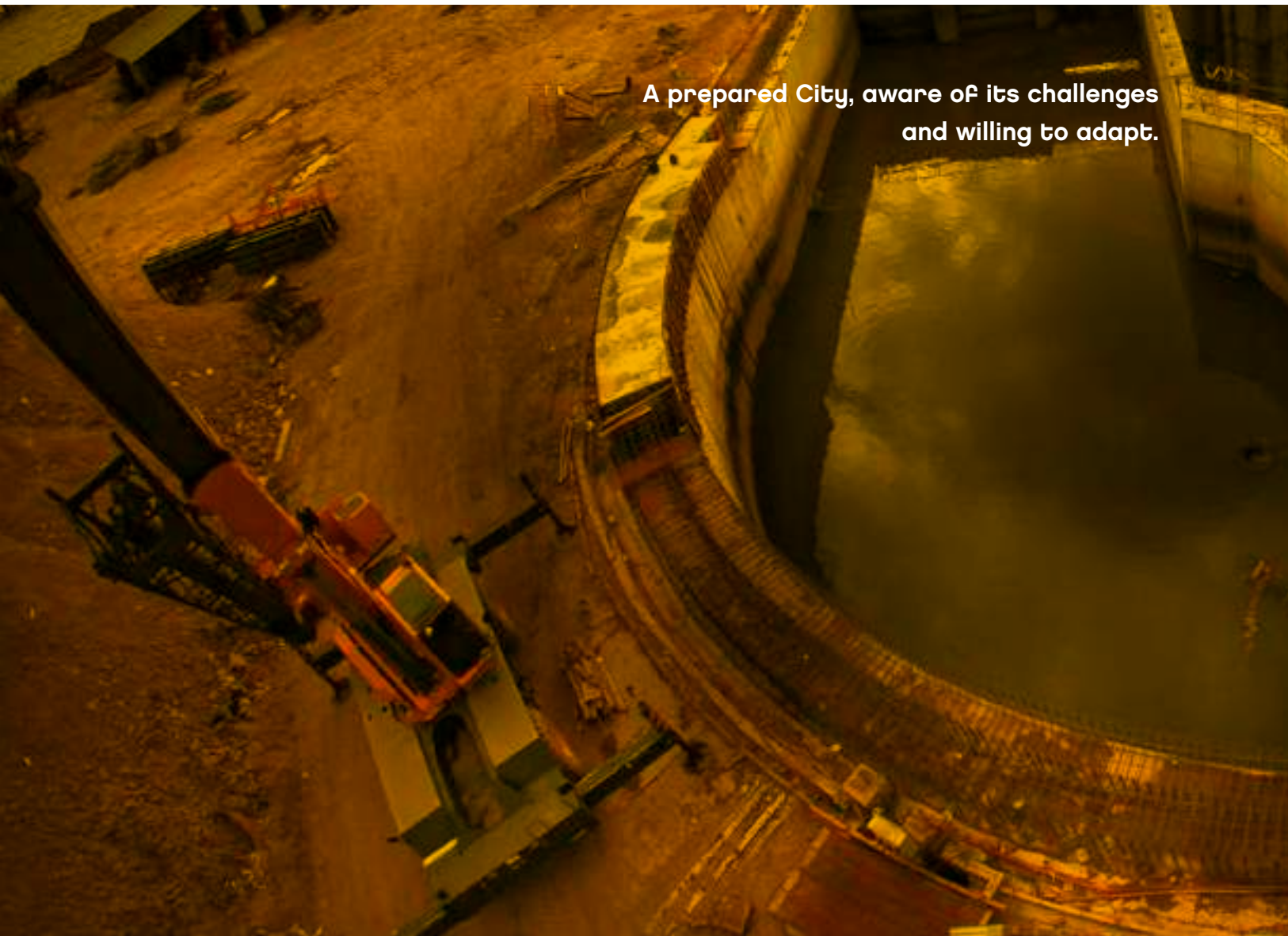
Urban degradation



An aerial photograph of a coastal area at sunset. A long pier extends into the ocean. In the foreground, there is a construction site with a large concrete structure under construction. The sky is filled with clouds, and the overall color palette is dominated by warm, golden-yellow tones.

**PILLAR 5**

# **Security and risk management**

A closer aerial view of the construction site. A large, curved concrete structure is the central focus, surrounded by construction equipment and materials. The scene is bathed in the same warm, golden light as the top image.

**A prepared City, aware of its challenges  
and willing to adapt.**





### 5.1 FOSTER CITIZENS WHO ARE INFORMED, PREPARED AND AWARE OF THE CHALLENGES THEY FACE

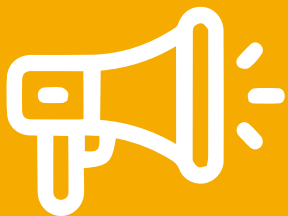


### 5.2 PREPARE THE CITY TO FACE THE IMPACTS OF CLIMATE CHANGE



### 5.3 DRIVE INNOVATION AND TECHNOLOGY TO BUILD SAFER SPACES





*“A prepared city promotes a comprehensive management of risks, with special emphasis on the tasks of awareness raising and communication with all its residents.”*

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## Current Situation

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The effects of climate change result in new challenges for cities, which continuously seek to be prepared to and anticipate threats in an adequate manner. A prepared city promotes a comprehensive management of risks, with special emphasis on the tasks of awareness raising and communication with all residents. In this manner, cities are capable of adapting and can overcome disruptive events.

Buenos Aires has developed infrastructure capable of reducing the impact of natural threats, although certain phenomena, such as the increasingly heavy and frequent rainfall increases the risk of floods. Its importance lies in the fact that almost 70% of the population of the City resides alongside one of the 11 basins that go across the city and, if faced with an extreme event, 25% of the City may be flooded. Consequently, the Master Emergency Plan (*Plan Director de Emergencias*) (Decree 695/2009) defines action protocols for 21 threats, among which heavy rainfall and floods are the main ones.

The City continues to work in adapting its infrastructure to build resilience through structural measures of the Hydraulic Plan to reduce water risk. However, it is essential to complement this type of infrastructure plans with non-structural measures that develop a better understanding of the risks by the residents of the city of Buenos Aires. Thus, this strategy will seek to direct efforts to raise risk awareness through creative and innovative citizen communication and participation plans that will allow citizens to know their environment and be better prepared.

As regards emergency communications, the City is currently implementing the Storm Warning System (SAT, for its acronym in Spanish) aimed at anticipating accurately and in real time the arrival of different extreme climate phenomena to the City. Considering that coordination and communication are decisive elements of emergency management, the Single Coordination and Control Center (CUCC, for its acronym in Spanish) was created as a mechanism to coordinate both emergency agents and neighbors in cases of disruptive events. The City also intends to work on generating a risk culture in schools to build response and preparedness capacity as well as to escalate the existing first responders' networks. At the same time, the City plans to implement specific funds for mitigation, management and recovery of disruptive events.

Jointly with these initiatives, the Resilience Strategy proposes innovation in the use of public space and urban regeneration. In turn, the development of an Integrated Public Security System based on technology, information and citizen participation highlights data generation and innovation as central channels in building a more resilient and prepared city.



## STRATEGIC OBJECTIVE 5.1:

Promote citizens who are informed, prepared and aware of the challenges they face

### 5.1.1

### KNOW BA

#### TIMEFRAME



Short-term

#### STATUS

New

#### STAKEHOLDERS

- Environmental Protection Agency (Ministry of Environment and Public Space -MAyEP)
- General Directorate of Civil Defense (Ministry of Justice and Security MJyS)
- Undersecretariat of Communication
- Ministry of Culture
- Hydraulic Plan Special Projects Unit (UPE in Spanish) (Ministry of Urban Development and Transport - MDUyT)

#### PILLARS TO WHICH IT CONTRIBUTES



Environment and sustainability

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

Heavy storms

Floods

Southeast blow

Climate change

Inadequate infrastructure

#### INDICATORS

- Number of communication actions related to climate change and risk management.
- Number of neighbors who participated in activities related to raising awareness of floods.

The effects of climate change result in new challenges for cities, which continuously seek to be prepared and to anticipate to threats adequately. The City of Buenos Aires is located over eleven basins: (Medrano, Vega, White, Maldonado, Radio Antiguo, Ugarteche, Boca-Barracas, Ochoa-Elía, Erézcano, Cildáñez and Larrazábal-Escalada. The first six drain their waters into the Rio de la Plata river, while the other five, into the Riachuelo river, the two most important rivers of the City. Buenos Aires is currently developing an ambitious hydraulic plan which promotes adaptation measures to reduce the impact of floods, one of the most significant climate challenges faced by Buenos Aires. In this regard, the Resilience Strategy proposes to make active awareness-raising campaigns simultaneously with the infrastructure works, to enable city residents to get to know and become familiarized with the environment where they live. It is through the creation of risk perception that we can promote prepared communities and build resilience at a local level.

#### Actions

- Design a comprehensive risk communication plan that informs the City's residents about their environment, the effects of climate change and offers them the tools to proceed adequately in case of extreme events (potential flooding or heat waves).
- Develop activities that highlight the basins and streams running under the City (for example: outdoor interventions, guided tours to experience centers and worksites to become acquainted with the environment in which we live, or to photography or virtual reality exhibitions in emblematic landmarks showing how the City looked like before piping the streams).
- Organize visits to the experience centers in the mouth of the streams to allow learning about the development of the works and the benefits they will bring to the future of the neighborhood.
- Organize guided tours to the CUCC to understand how the City monitors flood levels and stream flows, as well as the actions taken when faced with different situations.



**STRATEGIC OBJECTIVE 5.1:**

Promote citizens who are informed, prepared and aware of the challenges they face



Vega stream worksite.



Cleaning of the Cildañez stream.

## STRATEGIC OBJECTIVE 5.1:

Promote citizens who are informed, prepared and aware of the challenges they face

### 5.1.2

### SCHOOLS GET READY

#### TIMEFRAME



Short-term

#### STATUS

Pilot project

#### STAKEHOLDERS

- Environmental Protection Agency (Ministry of Environment and Public Space -MAyEP)
- General Directorate of Civil Defense (Ministry of Justice and Security- MJyS)
- Hydraulic Plan UPE (Ministry of Urban Development and Transport - MDUyT)
- Education for Sustainability UPE (Ministry of Education and Innovation - MEIGC)
- General Secretariat and International Relations

#### PILLARS TO WHICH IT CONTRIBUTES



Environment and sustainability

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

Climate change

Floods

Heavy storms

#### INDICATORS

- Number of schools where the program was implemented
- Number of children who participated in the workshop
- Number of teachers trained in risk management basic knowledge

The integration of the risk management approach in the education sector is essential to increase awareness about the effect and cause of disasters. Building resilience entails being prepared, and to that end, it is crucial to understand the challenges to which we are exposed as a city and to be able to anticipate them. Working with little children as agents of change and replicators in communicating risk is one of the central pillars for the development of resilient, prepared and safe cities.

In this regard, the Resilience Strategy proposes to take comprehensive risk management to schools. *La escuela se prepara* (Schools get ready) is a joint proposal of different areas of government which seeks to escalate the pilot project implemented in the Regular Primary School No. 21 "Cnel. Cornelio Saavedra" where a risk management ludic workshop was conducted with civil society stakeholders, as well as a flood self-evacuation drill led by 10 and 11-year old students.

Each student adopted a different leading role to learn how to act and respond in case of an

emergency in their school. This ludic proposal is a non-structural measure of communication and awareness-raising about the flood risk, which accompanies and complements the City's major infrastructure programs.

#### Actions

- Define and prioritize schools in floodplain areas.
- Sensitize and raise awareness of threats (floods, fire, heat waves) in schools.
- Update evacuation protocols.
- Conduct the activities in privately managed schools.
- Develop educational material for students and teachers supplemental to the school program.





## STRATEGIC OBJECTIVE 5.1:

Promote citizens who are informed, prepared and aware of the challenges they face

### NETWORK OF RESIDENTS IN THE FACE OF CLIMATE CHANGE

The General Directorate of Civil Defense is part of the events and disaster integrated assistance system of the City and develops different tasks related to comprehensive risk management and works both, on the reduction of risks (prevention, mitigation and preparation) and crisis management (warning and response). In addition, it provides emergency response in coordination with the other intervening agencies to safeguard the life and properties of the population and to mitigate the potential risks associated to events.

However, at the time of facing an extreme event, the neighbors and the population that are close to the event are generally the first ones to help. These first responders are critical at the time of acting in case of an emergency, not only because they are close to the scene of the emergency, but also because they are trusted people among the neighbors.

Consequently, the Resilience Strategy proposes to create a network of residents in the face of climate change, which will be composed of trained volunteers who will receive basic training to respond in case of emergencies that may impact their communities. In this respect, the City seeks to consolidate mitigation, preparation and response mechanisms which are effectively integrated into the general planning.

The Network's education and training will focus on providing a secure, responsible and effective

response in case of an emergency and giving support to the community during other events not considered an emergency. In this manner, Civil Defense will be able to work jointly with the Network of Residents during emergency situations, and this will allow the former to focus on more complex tasks.

#### Actions

- Create a network of residents.
- Develop mapping of particularly vulnerable residents.
- Conduct courses and practical training for volunteer residents.
- Boost campaigns to raise awareness on natural and human-caused disasters in the community.



### 5.1.3

#### TIMEFRAME



Short-term

#### STATUS

In progress with new resilient actions

#### STAKEHOLDERS

- Environmental Protection Agency (Ministry of Environment and Public Space -MAYEP)
- General Directorate of Civil Defense (Ministry of Justice and Security - MJyS)
- City Housing Institute (Office of the Chief of Staff - JGM)
- Ministry of Human Development and Habitat
- Secretariat of Social and Urban Integration (Office of the Chief of Staff - JGM)
- Undersecretariat of Communication
- City Neighbors

#### PILLARS TO WHICH IT CONTRIBUTES



Environment and sustainability

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

Heavy storms

Floods

Extreme heat

Power outages

Climate change

Energetic insecurity

Inadequate infrastructure

Lack of social cohesion

#### INDICATORS

- Number of volunteer resident members of the Network.
- Number of trained volunteer residents.



**STRATEGIC OBJECTIVE 5.2:**  
**Prepare the City to face the impacts of climate change**

**5.2.1**

**HYDRAULIC PLAN**

TIMEFRAME

 Medium-term

STATUS

In progress

STAKEHOLDERS

- Government of the Province of Buenos Aires
- Municipalities of the Metropolitan Area of Buenos Aires
- Network of Neighbors faced with Climate Change
- Secretariat of Communication
- Hydraulic Plan UPE (Ministry of Urban Development and Transport - MDUyT)

PILLARS TO WHICH IT CONTRIBUTES

 Social and urban integration

 Environment and sustainability

CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

QUALITIES OF RESILIENCE

-  Reflexive
-  Robust
-  Inclusive
-  Integrated
-  Resourceful
-  Redundant
-  Flexible

SHOCKS AND STRESSES

- Climate change
- Floods
- Heavy storms

INDICATORS

- New linear km of rainwater piping
- Percentage of Maximum Flooded Area over total City area

The City is built upon eleven basins that run across the city and drain into the Río de la Plata and the Riachuelo rivers. Because of climate change effects, storms are increasingly more intense and generate climate events which exceed the runoff capacity of rainwater infrastructure. Almost 70% of the population concentrates in the main basins running across the City (Maldonado, Vega and Medrano streams) and faced with an extreme event, 25% of the basin might be flooded.

To mitigate the disruptive effects and adapt to climate change, the City has conceived the Hydraulic Plan, a set of works (structural measures) and programs and actions (non-structural measures) with the objective of reducing the water risk in the city of Buenos Aires.

Among the structural measures, the City has worked on flood mitigation by building two alleviating tunnels of the main outfalls of the Maldonado stream. Likewise, the pluvial network of the Austria, Caaguazú and Escalada branches was extended, secondary branches were built in the Maldonado Stream Basin, the Boca-Barracas pumping station No. 5 and the Holmberg and Tronador branches in the Balbin Underground

Level Crossing.

Currently, two works are under way for the Basin of the Cildáñez Stream: Nágera, Villa 6, Asturias Sur and ARTEH branches (Surplus Water Retention Area) and the Second Outfall of the Vega Stream.

The City has committed to complete the works corresponding to the Secondary Branches of the Maldonado Stream Basin and the Secondary Branches of the Vega Stream Basin.

As regards non-structural measures, the City is working on the following:

- Development of an urban resilience map available to the public.
- Creation of a storm warning system and IVR messages.
- Raising awareness on water risk by means of experience centers and education.



**STRATEGIC OBJECTIVE 5.2:**  
**Prepare the City to face the impacts of climate change**

**EARLY WARNING SYSTEMS FOR STORMS AND HEAT WAVES**

With the purpose of mitigating flood risks, Buenos Aires has created a Storm Warning System (SAT, for its acronym in Spanish) within the framework of the Hydraulic Plan, aimed to anticipate accurately and in real time the arrival of storms, southeast blows and different extreme climate phenomena. This information will be processed at the Single Coordination and Control Center (CUCC, for its acronym in Spanish), which will create situation maps and generate early warnings to better prepare the emergency agents and the residents in case of emergency situations.

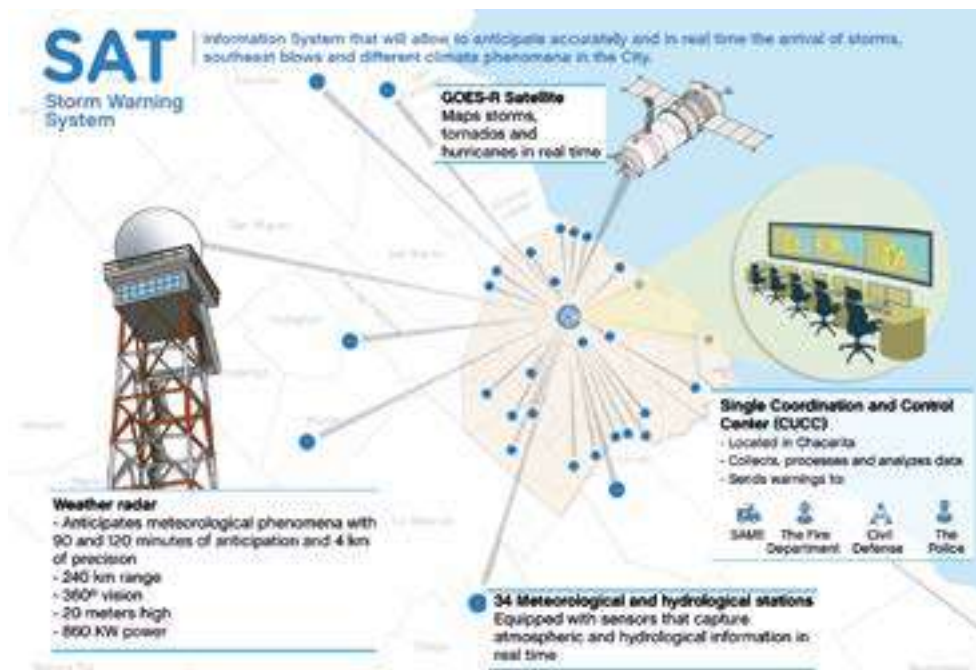
Through the analysis of big data, the SAT generates georeferenced information at the AMBA level regarding extreme meteorological events, with an accuracy of around 4 km and up to 2 hours in advance. Such devices survey the status of the City's groundwater and pipelines to assess discharge time and implement measures that range from reinforcement of sewerage cleaning to warnings to Civil Defense, the Police

and the Emergency Medical Services System (SAME, for its acronym in Spanish).

In addition, warning systems will be added to early inform the socially vulnerable population and the population living in risk areas on extreme meteorological events (rain, intense storms and heat waves). These systems will give information on how to be prepared, how to mitigate the effects of an extreme event and how to respond to emergency situations.

**Actions**

- Incorporate a weather radar and new weather and hydraulic stations in the City and AMBA.
- Create a real time information repository shared with AMBA's emergency teams.
- Enter into agreements with telephony companies to generate warnings through the UMTS and with Google to include geolocation of individuals and warning agents.
- Develop an IVR type early warning system.



**5.2.2**

**TIMEFRAME**

Medium-term

**STATUS**

In progress with new resilient actions

**STAKEHOLDERS**

- General Directorate of Civil Defense (Ministry of Justice and Security - MJyS)
- Telephone companies
- Government of the Province of Buenos Aires
- Municipalities of the Metropolitan Area of Buenos Aires
- Network of Neighbors faced with Climate Change
- Secretariat of Science, Technology and Innovation (Ministry of Education and Innovation - MEIGC)
- Emergency Medical Services System (SAME) (Ministry of Health - MSAL)
- National Weather Service
- Undersecretariat of Communications
- Hydraulic Plan UPE (Ministry of Urban Development and Transport - MDUyT)

**PILLARS TO WHICH IT CONTRIBUTES**

Environment and sustainability

**CROSS-CUTTING THEMES**

- Metropolitan vision
- Data and technology
- Citizen participation

**QUALITIES OF RESILIENCE**

- Reflexive
- Robust
- Inclusive
- Integrated
- Resourceful
- Redundant
- Flexible

**SHOCKS AND STRESSES**

- Climate change**
- Floods**
- Heavy storms**
- Heat waves**

## STRATEGIC OBJECTIVE 5.2: Prepare the City to face the impacts of climate change

### 5.2.3

### RISK CONTINGENCY AND PREPAREDNESS FUND

#### TIMEFRAME



Medium and Long terms

#### STATUS

New

#### STAKEHOLDERS

- Office of the Chief of Staff
- Ministry of Economy and Finance
- Undersecretariat of Emergencies (Ministry of Justice and Security -MJyS)

#### PILLARS TO WHICH IT CONTRIBUTES



Environment and sustainability

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

Climate change

Unsound municipal finance

Inadequate infrastructure

Since 2004, the city of Buenos Aires has an Emergency Flood Subsidy Fund, aimed at meeting the needs derived from damages caused by extraordinary weather phenomena generating floods and overflows in different areas of the City. Specifically, the Resilience Strategy proposes to establish financial instruments for disaster contingency and preparedness, through the creation of a Fund designed for Comprehensive Risk Management, an Emergency Fund and a City Recovery Fund managed by the City's Office of the Chief of Staff.

The purpose of the Comprehensive Risk Management Fund will be to finance projects designed to prevent or reduce disaster risks, understanding risk in a broader sense. Consequently, it would include actions and measures to mitigate the impacts and increase community resilience, such as risk assessment, risk reduction and initiatives to build risk-prevention capacities.

Additionally, the creation of an Emergency Fund has the purpose of financing emergency activities during disasters, while the City Recovery Fund will fund recovery and reconstruction activities after the disaster occurs.





**STRATEGIC OBJECTIVE 5.2:**  
**Prepare the City to face the impacts of climate change**

**SINGLE COORDINATION AND CONTROL CENTER**

During emergency management, coordination and communication are crucial elements. That is the reason why the City has created a Single Coordination and Control Center (CUCC, for its Acronym in Spanish) to respond to various types of crisis. CUCC is a multiagency emergency coordination center which gathers in the same facilities all the agencies in the City with jurisdiction over a crisis. CUCC enables a quick and comprehensive response in case of an emergency.

It has a state-of-the-art information technology platform and a communications system for the exclusive use of the security and emergency forces. In this cutting-edge center, warning calls are received, with over 2,000 incoming calls daily, requesting intervention in civil and medical emergencies, as well as in emergencies related to security, homeless people, building collapse, overflows, fire, among others. In addition, CUCC works articulated with the City Monitoring Centers controlling more than 7,000 cameras distributed

in subways, buses and outdoors.

In case of a massive event, this center has a Crisis Room designed to concentrate in the same facilities all the authorities responsible of determining which actions will be taken to manage the incident.

To promote resilience, this Strategy proposes to supplement the CUCC with the creation of a crisis committee in which civil society organizations, first responder networks and utility companies participate.

**Actions**

- Create a multi-agency coordination center with participation of the civil society and utility companies.
- Strengthen the emergency call center.
- Achieve the installation of 10,000 cameras in buses, subways and outdoors.



**5.2.4**

**TIMEFRAME**

Short-term

**STATUS**

In progress with new resilient actions

**STAKEHOLDERS**

- Utility companies
- Civil society organizations related to risk management
- Undersecretariat of Emergencies (Ministry of Justice and Security - MJyS)

**PILLARS TO WHICH IT CONTRIBUTES**

Environment and sustainability

**CROSS-CUTTING THEMES**

- Metropolitan vision
- Data and technology
- Citizen participation

**QUALITIES OF RESILIENCE**

- Reflexive
- Robust
- Inclusive
- Integrated
- Resourceful
- Redundant
- Flexible

**SHOCKS AND STRESSES**

- Floods
- Heavy storms
- Climate change



## STRATEGIC OBJECTIVE 5.3: Drive innovation and technology to build safer spaces

### 5.3.1

#### TIMEFRAME



Short-term

#### STATUS

New

#### STAKEHOLDERS

- Neighbors organizations
- Secretariat of Transport (Ministry of Urban Development and Transport - MDUYT)
- Undersecretariat of Citizen Security (Ministry of Justice and Security - MJyS)
- Undersecretariat of Maintenance of Public Space (Ministry of Environment and Public Space - MAyEP)
- Undersecretariat of Communications
- City neighbors

#### CROSS-CUTTING THEMES

- Metropolitan vision
- Data and technology
- Citizen participation

#### PILLARS TO WHICH IT CONTRIBUTES



Diversity, gender and coexistence



Social and urban integration

#### QUALITIES OF RESILIENCE



Reflexive



Robust



Inclusive



Integrated



Resourceful



Redundant



Flexible

#### SHOCKS AND STRESSES

Urban degradation

Insecurity

## TRANSFORMATION OF PUBLIC SPACES THROUGH TACTICAL URBANISM

Building resilience entails generating innovative tools that enable developing new flexible, resourceful and civic engagement proposals, which promote the appropriation and use of public space by the City residents. These innovative and transformation proposals aim at responding effectively to the neighbors' needs, since they prevent that urban fabric spaces remain unused or result in abandoned or insecure places.

Tactical urbanism offers tools to change the existing space through temporary interventions, with the purpose of revitalizing underused spaces and promoting the re-appropriation of the public space by the neighbors. This initiative proposes identifying underutilized spaces or spaces that need to be reconsidered in conjunction with neighbors, with the aim of generating short-term actions directed at transforming the way in which residents use and move around the City.

#### Actions

- Create mobile libraries.
- Having a parking day available: reconversion of parking areas into public space for limited time.
- Promote massive weed elimination: participative beautification of walkways by planting native vegetation.
- Involve citizens in planting urban trees.
- Promote community plant/vegetable gardens in walkways.
- Increase emblematic vertical and horizontal signaling.
- Develop new outdoor restaurant decks and bus stop platforms.
- Take food events to the Buenos Aires downtown area.
- Boost the Street Market Fairs (FIAB, for its acronym in Spanish).
- Develop bicycle temporary parking for mass events.



**STRATEGIC OBJECTIVE 5.3:**  
**Drive innovation and technology to build safer spaces**

**INTEGRATED PUBLIC SECURITY SYSTEM**

Security is one of the main concerns of both the neighbors and the Government of the City to continue improving urban coexistence and utilizing the public space as a gathering and integration place. To achieve that, it is necessary to have reliable and quality information on criminal acts.

The City is currently implementing the Integrated Public Security System, a comprehensive plan which ranges from training the new City Police to strengthening the State's presence in the streets, social integration and promotion of transparency, and civic engagement through the latest technology and information tools. It is also a plan that coordinates all the Buenos Aires' law enforcement agents (the Police, firefighters, transit and prevention agents, park guards, and emergency agents).

**Actions**

- Train and prepare agents.
- Create a single event reporting system to generate transparency.
- Use different technology devices and systems for communications and information development.
- Allow civic engagement in decision-making related to security matters at neighborhood level.



**Crime Map** (action in progress)

The generation of reliable criminality statistics is crucial for the creation of more effective public security policies. Thanks to these data, it is possible to dimension the problem of insecurity, establish patterns, make accurate diagnosis, and evaluate the effectiveness of our responses. In addition, being able to have access to public information is a right of all citizens, as it allows them to control and increase their knowledge about the actions of the government and security forces.

**5.3.2**

**TIMEFRAME**

Short-term

**STATUS**

In progress

**STAKEHOLDERS**

- Secretariat of Security (Ministry of Justice and Security - MJyS)

**PILLARS TO WHICH IT CONTRIBUTES**

Diversity, gender and coexistence

**CROSS-CUTTING THEMES**

- Metropolitan vision
- Data and technology
- Citizen participation

**QUALITIES OF RESILIENCE**

- Reflexive
- Robust
- Inclusive
- Integrated
- Resourceful
- Redundant
- Flexible

**SHOCKS AND STRESSES**

**Insecurity**





**Next  
steps**



**The Buenos Aires Resilience Strategy is the result of the joint work of multiple stakeholders (local, national and international) who have invested an invaluable amount of time, knowledge and experience to contribute to the development of the City we want. This combination of knowledge-based collaborative work and management to generate better public policies, which not only focus on current issues but also anticipate future challenges, is the key of this resilience strategy and a work methodology which must be continued and strengthened.**

In addition to the cross-sectorial methodology, the actions reflected in this document contribute to a global discussion which, despite having its own objectives established at City level, contributes to a central debate in other cities, that is, how to build more sustainable societies, with a balanced social and economic development in harmony with the environment.

After publishing the document, we will continue working to further a resilient Buenos Aires at different levels, driving the implementation of the strategy and spreading resilience at city, national and international levels.

At City level, we will seek to enhance the synergies within the public administration achieved through experiences such as the Cross-Ministerial Resilience Committee and the special working groups, which drove policies requiring multi-dimensional solutions, such as gender equity or affordable housing. At this stage, we will seek to further connect the stakeholders who participated in the strategy's joint creation process by generating joint commitments with the private sector, bringing together the experience and knowledge of the civil society and academia, and generating citizen participation spaces in the territory. The partnership made with the AVINA Foundation and the MIF to identify opportunities for joint projects with the private sector in pursuit of the City's resilience is a good example of this.

In addition, this strategy aims to transcend the physical boundaries of the city of Buenos Aires. Not only because it is a strategy with a metropolitan perspective, but also because the challenges it responds to are framed in a global debate of resilience construction. Thus, we will drive the work started with international partners, such as the 100 Resilient Cities Network and the United Nations. These institutions, among others of which we are already members, allow us to have methodological and financial resources, as well as access to knowledge. We also want to liaise with other resilient cities which can inspire us and with which we can work in order to face the multiple and constant urban challenges. In particular, we will seek to collaborate in developing more resilient cities in Argentina and the region.

The construction of resilience in Buenos Aires will continue to be a living process and a tool for the City's international insertion and projection to the world, and will highlight its commitment to gender equity, diversity and sustainability, while continuing to promote innovation, talent and opportunities for City residents.

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# Annexes

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## Acronyms

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100RC: 100 Resilient Cities

AMBA: Metropolitan Area of Buenos Aires

APrA: Environmental Protection Agency of Buenos Aires

BRT: Bus Rapid Transit

CABA: Autonomous City of Buenos Aires

CAF: Development Bank of Latin America

CEADS: Argentine Chapter of the World Business Council for Sustainable Development

CEAMSE: Coordinación Ecológica Área Metropolitana Sociedad del Estado (State-owned Company for Ecological Coordination in the Metropolitan Area)

CESAC: Centro de Salud y Atención Comunitaria (Health and Community Center)

CFE: Consejo Federal de Education (Federal Council of Education)

CFP: Centros de Formación Profesional (Vocational Training Centers)

CIM: Centro Integral de la Mujer (Comprehensive Care Center for Women)

CIPPEC: Centro para la Implementación de Políticas Públicas para la Equidad y el Crecimiento (Center for the Implementation of Public Policies Promoting Equity and Growth)

CRF: City Resilience Framework

CSE: Comprehensive Sex Education

CSO: Civil Society Organization

ECLAC: Economic Commission for Latin America and the Caribbean

GCBA: Government of Buenos Aires

GDP: Gross Domestic Product

GGP: Gross Geographic Product

GHG: Greenhouse Gases

ICPD: International Conference on Population and Development

ICT: Information and Communications Technology

IDB: Inter-American Development Bank

ILO: International Labor Organization

INDEC: Argentine National Institute of Statistics and Censuses

IOM: International Organization for Migration

ISVD: Índice de Vulnerabilidad Social frente a Desastres (Social Vulnerability to Disasters Index)

IVC: Instituto de Vivienda de la Ciudad (City Housing Institute)

JGM: Office of the Chief of Staff

LGBTI: Lesbian, Gay, Bisexual, Transgender and Intersex

MAyEP: Ministry of Environment and Public Space

MDHyH: Ministry of Human Development and Habitat

MDUyT: Ministry of Urban Development and Transport

MEIGC: Ministry of Education and Innovation

MEyF: Ministry of Economy and Finance

MGOB: Ministry of Government

MIF: Multilateral Investment Fund

MJyS: Ministry of Justice and Security

MSAL: Ministry of Health

MSMEs: Micro, Small and Medium Enterprises

NES: Nueva Escuela Secundaria (New Secondary School)

PIO: Planes de Igualdad de Oportunidades (Plans for Equal Opportunities)

PRA: Preliminary Resilience Assessment

SAME: Sistema de Atención Médica de Emergencia (Emergency Medical Services System)

SDGs: Sustainable Development Goals

SIGBA: Sistema de Indicadores de Género de la Ciudad de Buenos Aires (Gender Indicators System of the City of Buenos Aires)

SISU: Secretariat of Social and Urban Integration

SME: Small and Medium Enterprise

UN: United Nations

UNESCO: United Nations Educational, Scientific and Cultural Organization

UNISDR: United Nations Office for Disaster Risk Reduction

UPE: Unidad de Proyectos Especiales (Special Projects Unit).

VJG: Office of the Deputy Chief of Government

## A. Methodological Process

---

The construction of the Resilience Strategy for the City of Buenos Aires entailed a process comprising 3 main aspects: bibliographic review, participatory process and development of pilot projects.

### 1. Bibliographic Review

**a) Review of documents and government plans:** The different bibliographic documents that refer to the Strategy's pillars and that contributed to develop the current situation were analyzed. Additionally, the strategic government plans and those that guide the GCBA's vision prepared by the different agencies, were also considered. These documents allowed to survey guidelines for the creation of a comprehensive outlook of the City's resilience.

**b) Review of existing actions and initiatives:** 530 public and private actions developed in the City were identified through an in-depth analysis of the Comprehensive Management Plan, and such actions were grouped and catalogued by topics. Based on the main actions, interrelations and synergies were established under the resilience lens to develop different initiatives included in this strategy.

**c) Review of Resilience Strategies of the 100RC network:** The Resilience Strategies published by the member cities of the network were analyzed with the aim of identifying shared challenges and surveying opportunities for public policies.

**d) Identification of good practices:** Based on the review of the existing Resilience Strategies, the reports of the specific studies and the tools of the Network used, good practices of other cities around the world were incorporated and may be replicated in Buenos Aires. This work seeks to generate both inspiration and nourishment from international resilient practices which can contribute to the development of Buenos Aires.

### 2. Participatory Process

**a) With the purpose of identifying strengths and weaknesses of the City of Buenos Aires in the diagnostic phase, a perception analysis was conducted:**

. Interviews: 50 exploratory interviews were conducted with key stakeholders of the public sector (56%), the private sector (16%) and the civil society (29%).

. Focus groups: 8 focus groups were conducted with 3 socio-economic segments (vulnerable sectors, middle class and lower middle class).

. Telephone surveys: citizen perception surveys conducted to a sample of 1,200 residents of the City were analyzed.

**b) With the collaboration of the 100RC network partners, ideation instances and theme workshops were implemented thanks to the use of tools provided by the network.**

• Ideation workshops: With the collaboration of Pacífico, 4 ideation workshops were organized in which more than 130 people from the government, civil society organizations, the private sector and residents participated. More than 500 ideas were proposed to nurture the City's Resilience Strategy. In turn, with the support of the Argentine Chapter of the World Business Council for Sustainable Development (CEADS, for its acronym in Spanish) an ideation workshop was organized with 8 private-sector companies in which more than 40 actions were conceived.

• 100RC Tools:

- **Problem Framing.** With the support of Citymart and 100 RC, a workshop was developed to identify innovation opportunities aimed at improving urban solid waste management. 27 stakeholders from different sectors participated at the workshop and 33 initiatives were ideated. Based on the identified opportunities, 3 reports on initiative strengthening, comparison of best practices across cities and recommendations to follow by the City of Buenos Aires were made out.

- **Buenos Aires Housing System Studio.** With the support of ARUP and 100RC, a multi-sectorial workshop was organized with government officials, civil society organizations and the private sector to strengthen and identify action proposals related to the promotion of affordable housing in Buenos Aires. Sixty people participated in this workshop, 198 initiatives were ideated, 6 opportunity were identified, and related lines of action were designed.

- **Tactical Urbanism.** With the support of Street Plans and 100RC, a workshop was organized where the strategies to regenerate the public space through citizen participation and temporary architecture were presented. Twenty officials from the Ministry of Justice and Security, the Ministry of Public Space, the Secretariat of Transport, and the Housing Institute of Buenos Aires participated in this workshop.



### 3. Applied Resilience

**a) Specific Studies.** With the collaboration of ARUP, 3 studies were conducted to strengthen specific topics.

- **Incentives for sustainable construction.** A report was made based on an in-depth case study of the cities of Mexico and New York, both cities internationally renowned for their sustainable design practices. The study outlined appropriate recommendations applicable to the local context aimed at fostering sustainable construction in the regulations of the New Building Code.

- **Teachers of the future.** A study was conducted to understand which skills will be required from teachers in the future to enable them to prepare young people for the jobs of the future. Through research of global innovative trends and 11 in-depth interviews to international and CABA key representatives, the report gives several recommendations for three instances of teaching: teacher attraction, teacher training, and teacher retention.

- **Green walls and roofs in schools.** A study was developed to evaluate the feasibility of installing green roofs in 146 public schools in the City's Districts 3, 5, and 10. The study developed a tool that enables quantifying the environmental benefits and costs related to the installation of the roofs.

**b) Resilient pilot projects.** Three pilot projects were carried out together with different stakeholders of public agencies and the private sector, civil society organizations and residents, which enabled materializing resilience in the City of Buenos Aires.

- **Chatbots Programming.** With the purpose of linking young people to the world of employment and companies, the students from Technical High School No. 35 of the City participated in

the "Chatbot for Good" initiative developed by the GCBA and Oracle Argentina. This initiative sought to apply design and programming concepts to solve social and urban issues through artificial intelligence.

- **Mobility and gender participatory mapping.** With the support of Nexo – a civil society organization –, work was done during two days with 60 women neighbors from Barrio 20 (Neighborhood 20) and officials from the IVC to survey the main mobility-related challenges faced by women from the neighborhood, using technology and georeferencing tools. A report and a web repository were made where mobility and gender paths and challenges can be visualized in a georeferenced manner.

- **Risk management workshop and drill exercises in schools.** With the support of Nexo – a civil society organization –, and together with the General Directorate of Civil Defense of the City of Buenos Aires, the Climate Change Operations Management Office under APrA, and the Education for Sustainability UPE under the Ministry of Education, a workshop to raise awareness was conducted and a flood self-evacuation drill game was played with 30 students from grade 4 from Primary School No. 14 "Cornelio Saavedra", School District No. 1.

**c) Social vulnerability to disasters map.** With the support of the School of Geography of the University of Buenos Aires and Claudia Natenzon, PhD, the City made out a report on social vulnerability to disasters and specific risks in the City of Buenos Aires. With the contribution of different government areas, a Social Vulnerability Atlas was created in a GIS-type web repository, consisting of 6 social vulnerability to disasters maps and 2 ground heat spots and flood risks atlas.

## B. Validation Process

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**1. Cross-Ministerial Resilience Committee:** Resolution No. 22 passed by the General Secretariat and International Relations which created the "Resilient Buenos Aires" program considers the importance of developing a cross-cutting urban resilience strategy for the City, working in a coordinated manner with all government ministries. The resolution establishes the *Cross-Ministerial Resilience Committee*, composed of representatives from each area of government, and acknowledges that the Strategy requires the knowledge and technical expertise of all ministries and agencies which contribute with their policies and projects to build resilience in the City

The committee is made up by the Office of the Deputy Chief of Government, the Office of the Chief of Staff, and the Ministries of: Government; Urban Development and Transport; Environment and Public Space; Culture; Education and Innovation; Health; Human Development and Habitat; Economy and Finance; Justice and Security..

MINISTRY	AREA	LAST AND GIVEN NAMES
Office of the Deputy Chief of Government	Secretariat of Citizen Development	Bertoni, Jorgelina
	Undersecretariat of Human Rights and Cultural Pluralism	Bárbara, Mercedes
Office of the Chief of Staff	Secretariat of Planning, Assessment and Management	Casas, Florencia
	Secretariat of Citizen Culture and Civil Service	López, Ileana
	Housing Institute	Roca, Elisa
Government	Undersecretariat of Inter-Jurisdictional Affairs and Metropolitan Policy	Cohen, Graciela
Urban Development and Planning	Minister Unit	Lobos, Inés
	Minister Unit	Serigos, Facundo
	Minister Unit	Sandoval, Lién
	Secretariat of Transport	Baker, Tomás
	Undersecretariat of Sustainable and Safe Mobility	Bramuglia, Julieta
	Undersecretariat of Planning	Pérsico, María Emilia
	Hydraulic Plan UPE	Viana, Alejandro
Environment and Public Space	Environmental Protection Agency	Corizzo, Abigail
	Environmental Protection Agency	Himschoot, Patricia
	Environmental Protection Agency	Rueda, Alejandro
	Secretariat of Urban Hygiene	Minervini, Benjamín
	Secretariat of Pedestrian Walkways	Sáenz Reale, Alejandro
Human Development and Habitat	Undersecretariat of Social Promotion	Corgnati, Ariana
Education and Innovation	Ministry Unit	Bernassar, Felicitas
	Education for Sustainability UPE	Gómez Pizarro, Angélica
	Secretariat of Science, Technology and Innovation	Maggiore, Agustina
	Undersecretariat of Smart City	Battista, Diego
	Undersecretariat of Smart City	Casabella, Mariana
Health	Emergency Medical Services System	Cagliolo, Mariela
	Undersecretariat of Planning	Callejas, Claudia
	Undersecretariat of Health Planning	Flax Marcó, Florencia
Justice and Security	Undersecretariat of Emergencies	Garnica, Raúl
	Undersecretariat of Emergencies	Soria, Diego
Economy and Finance	Ministry Unit	Travaini, Ivanna
Culture	Ministry Unit	Goldberg, Gabriela
	Undersecretariat of Communications	Gago, Gloria



Since the creation of the program, the City called the Cross-Ministerial Resilience Committee for more than 10 meetings. Such meetings had different objectives, but mainly focused on presenting progress made in the Resilience Strategy creation process, presenting and giving away international good practices, exchanging experiences or participating and getting involved in specific studies, pilot projects or in the development of the social vulnerability map.

**2. Bilateral meetings with undersecretaries.** Bilateral meetings were held with different government undersecretaries with the purpose of reviewing pillars, objectives and initiatives with the different areas and incorporating their proposals and projects from a resilient perspective.

**3. Cabinet of Ministers.** Within the framework of the Cabinet meetings held weekly by the City's Ministers with the Chief of Government, the Resilience team presented the Strategy with the objective of aligning the vision and initiatives of each area of government. In addition, the inclusion of the long-term plans designed by the City were sought to be included in the document

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An aerial photograph of a city, likely New York City, showing a dense urban landscape with numerous high-rise buildings and a prominent domed structure. A large, semi-transparent blue circle is overlaid on the right side of the image, partially obscuring the city view. Two horizontal white lines are positioned above and below the word 'Bibliography'.

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