

SIMPLIFY FEIRA DE SANTANA, BRAZIL



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1 Introduction

Against the background of Feira de Santana's rapid urbanization and ensuing challenges, the municipal government has chosen to invest in urban mobility as a fundamental enabler of the city's economic growth and development.

Quality of life is a top priority for the municipality. Adequate, advanced planning has become necessary to guarantee a higher quality of life for citizens as the city grows rapidly and the demand for services intensifies.

With the approval of the City Council, and in conjunction with the initiatives taken within the framework of the Municipal Development Master Plan, the Urban Development Master Plan and the Sanitation Master Plan, the municipality now turns to concrete tools to help the city in its accelerated urban expansion.

By embracing the SiMPlify Project, the City Hall of Feira de Santana demonstrates, in a clear and unmistakable manner, the importance for its population to benefit from solutions that are capable of constantly improving their well-being and the development of healthy socio-economic dynamics.

(Portuguese version)

Ao escolher a mobilidade urbana como um instrumento essencial e fundamental para o seu desenvolvimento, o governo municipal projetou, antes de tudo, continuar alavancando o crescimento de Feira de Santana, com a utilização de ferramentas capazes de superar as dificuldades que as grandes cidades estão enfrentando, com a rápida ocupação de sua área urbana.

Com a aprovação, por parte da Câmara de Vereadores, do Plano Diretor de Desenvolvimento Municipal, do Plano Diretor de Desenvolvimento Urbano e do Plano Diretor de Saneamento, o município passou a contar com instrumentos capazes de enfrentar a acelerada expansão urbana, que vem trazendo grandes transtornos para a municipalidade e dificultando a implementação de políticas públicas capazes de melhorar a qualidade da população, em

função do grande dispêndio que vem fazendo para atender a demanda de seus serviços, sem um adequado planejamento.

Ao abraçar o Projeto SiMPlify a Prefeitura de Feira de Santana, demonstra, de uma maneira clara e insofismável, o quanto é importante para o seu desenvolvimento e para sua população, ter soluções capazes de melhorar ainda mais o bem estar de seu povo, o seu crescimento, assim como a sua dinâmica socioeconômica.



Mr. Colbert Filho, Mayor of Feira de Santana

One of our central philosophies at Pirelli is to become a part of the community. To us, being a good member of the community means caring for peoples' health, safety and welfare, as well as protecting their environment.

From this standpoint, contributing to the development of sustainable urban mobility in Feira de Santana - where Pirelli has a recently modernized factory that has been in the group since 1986 – was both a valuable opportunity and a privilege. With its fast growth and strategic location in Brazil's transportation network, Feira is taking a proactive and fully committed approach to developing its transportation systems to meet future challenges.

Supporting Feira de Santana's future transportation needs will require new technologies and innovation. As with SIMPLify, Pirelli's approach to innovation is moving more and more in the direction of digitalization, big data and connectivity, to enable flexibility and the ability to capitalize on new emerging trends. A multiplicity of mobility

solutions - such as driverless vehicles, electric and hybrid cars and trucks, shared city cars and so on – will require sophisticated management and integration.

The complexity of the challenge is easily grasped. By 2050, the world's population will grow by 30%, reaching over nine billion. At the same time the number of people living in cities will also increase significantly. Efficient mobility will be one of the foundations for our future prosperity and well-being, and it must be sustainable. This means, among other things, reducing its impact on the environment, reducing road accidents (which currently cause over one million fatalities per year) and reducing traffic congestion.

That's quite a daunting to-do list and no single player is going to be able to do it all, which brings me to the other ingredient

that will be of vital importance in the development of viable solutions: collaboration. The SIMPLify project was not only a great opportunity to apply and test the methodology for sustainable mobility, developed in the WBCSD context with the contribution of the sector's major players, but also an invaluable occasion for multi-stakeholder engagement.

The methodology enabled the city of Feira di Santana to meaningfully involve all levels of stakeholders. This is the best guarantee of high-quality solutions and, ultimately, of safer, more accessible and cleaner transportation for its citizens.

I would like to thank the city of Feira de Santana for participating in this SIMPLify project and WBCSD – both for the work they do and for helping us all to do better.

Filippo Bettini, Chief Sustainability and Risk Governance Officer, PIRELLI



Efficient mobility will be one of the foundations for our future prosperity and well-being, and it must be sustainable.

Filippo Bettini, Chief Sustainability and Risk Governance Officer, PIRELLI

Today, 60% of us already live in cities. By 2050 this number will rise to 70%. Ensuring there is safe, clean, efficient and accessible mobility in cities is a fundamental element to achieving our vision: a world where 9 billion people can live well, within the boundaries of the planet, by 2050.

Developing sustainable cities is the only way that we can ensure a good quality of life for much of the planet's population. This will be achieved only if cities have access to the tools and resources that will allow them to leap forward on all fronts. The private sector has a crucial role to play in developing and providing sustainable solutions that cities can implement quickly and easily.

SiMPLify is one of those solutions. It provides cities with a free, data-based, independent analysis and more than 300 solutions that can help improve their mobility systems. It promotes stakeholder engagement and ensures citizen participation, enabling everyone to work in a co-creation process

where business can help to accelerate the transition towards safer, cleaner, more efficient and fully accessible mobility systems.

SiMPLify was recently deployed in Feira de Santana, Brazil. Feira de Santana is a fast-growing city determined not only to contribute to achieving the Sustainable Development Goals but also to becoming a future-proof, sustainable city.

Feira used SiMPLify to assess their existing mobility plans, to involve their citizens in planning and to add innovative solutions. The government has now committed BRE 100 million (USD\$26 million) to implementing a truly sustainable mobility plan.

The citizens of Feira are about to benefit from safer roads, more opportunities for active mobility (such as sidewalks and cycleways), more secure and accessible public transport and a cleaner environment.

I would like to thank our long-standing WBCSD member Pirelli for their support in Brazil and in helping to deliver these tools to the city of Feira de Santana. Pirelli is a large employer in the city, and their engagement, along with that of all other companies involved in developing this methodology, shows that citizen-oriented public-private collaboration can achieve real progress.

Peter Bakker,
President & CEO, WBCSD



Developing sustainable cities is the only way that we can ensure a good quality of life for much of the planet's population.

Peter Bakker, President & CEO, WBCSD

② Executive summary



2 Executive summary

Feira de Santana is a fast-growing city in Brazil's northern region of Bahia, with a population of approximately 600,000. Its proximity to Salvador makes it a crucial transport node for goods and people all over Brazil, but as a consequence of its fast growth, the city mobility system is facing increasing challenges.

Public transport networks are few and far between, and citizens rely heavily on single use vehicles or informal transport to get around the city. Congestion considerably slows traffic at peak times, which in turn aggravates air pollution. Poor road safety and infrastructure, and a deep sense of insecurity, prevent citizens from walking or cycling as well as from using the existing public transport network more extensively.

In the face of these challenges, the Prefecture of Feira de Santana has been working on developing a more robust

public transport network which includes implementing a Bus Rapid Transit system.

As a significant employer in Feira de Santana, WBCSD member Pirelli has a keen interest in supporting the city to deliver safer, cleaner, more efficient and accessible mobility to its citizens. To this end, WBCSD and Pirelli have worked together with the Prefecture of Feira to develop an innovative and inclusive Sustainable Urban Mobility plan using WBCSD's SiMPlify methodology.

The SiMPlify methodology engages all relevant stakeholders and involves citizens in the development of inclusive sustainable urban mobility planning. By deploying SiMPlify's system of indicators, combined with an extensive outreach campaign and regular consultations, the Prefecture of Feira de Santana was able to develop a detailed analysis of the current mobility system and tap into SiMPlify's 300 mobility solutions to develop a plan that would meet its needs.

This process provided several ideas for initiatives that would complement the existing plans:

- developing infrastructure to promote cycling and walking;
- improving public areas;
- implementing additional public transport infrastructure and proximity services at major passenger hubs;
- delivering safer streets by introducing speed reduction zones and traffic restricted areas; and
- ensuring better security by installing LED lights in the central area of the city and at bus stops.

A publicly accessible mobility portal keeps citizens updated and allows them to interact with the municipality and report traffic-related issues in real time.

Leveraging the findings from the SiMPlify analysis and involving all stakeholders, the city of Feira de Santana is now deploying BRL 100 million (USD \$26 million) to implement its Sustainable Mobility Plan.



3 Context



3 Context

Cities are primary engines of global economic growth. Today, urban areas occupy just 2% of the earth's total land area but are responsible for 70% of GDP growth worldwide. They are also responsible for 70% of greenhouse gas emissions, 70% of global waste and 60% of the world's energy use.¹

In an increasingly urban world, developing sustainable cities has become a crucial condition to supporting global growth that respects planetary boundaries and supports human development.

In September 2015, Brazil adopted the 2030 Agenda for Sustainable Development, along with all other 192 United Nations member States.

The Agenda sets an ambitious course of action to transform our world by 2030 to guarantee peace and prosperity for both people and planet. The document outlines 17 Sustainable Development Goals (SDGs) that aim to improve all aspects of life.

Goal 11 is specifically focused on the development of Sustainable Cities, along with the UN-Habitat's New Urban Agenda. These objectives have been reinforced by Brazil's commitment to curb greenhouse gas emissions to limit the rise in temperatures, as agreed, with all other UN member states, in Paris in 2015.

Meeting the urban agenda is especially crucial for Brazil. In 2017, 86% of Brazilians lived

in cities² and this number is expected to increase to 90% by 2030.³ This will make Brazil the most urbanized country in Latin America, which is already the most urbanized region of the world.

Latin America is also one of the most unequal⁴ regions worldwide. Inequality is reflected in urban development, where insecurity, lack of access to health, education, jobs and basic infrastructures translate into overall poor quality of life for citizens. Today, only 23.9% of the population in the biggest cities of Brazil enjoy a good quality of life while living standards are defined as poor to mediocre for over 72.5 million citizens.⁵



④ Feira de Santana



4 Feira de Santana

Feira de Santana is a city with just over 600,000 inhabitants, sitting at a crucial crossroads in the northern region of Bahia, Brazil. As the second largest city in the region, its proximity to Salvador makes it a crucial transport node for goods and people in and out of Brazil.

Feira de Santana is also one of Brazil's fastest growing cities. It has a complex economic structure, with different sectors playing a fundamental role in the overall urban dynamics. Industries, services and commerce support the

economic development of Feira de Santana and the surrounding regions, and this has a direct impact on mobility.

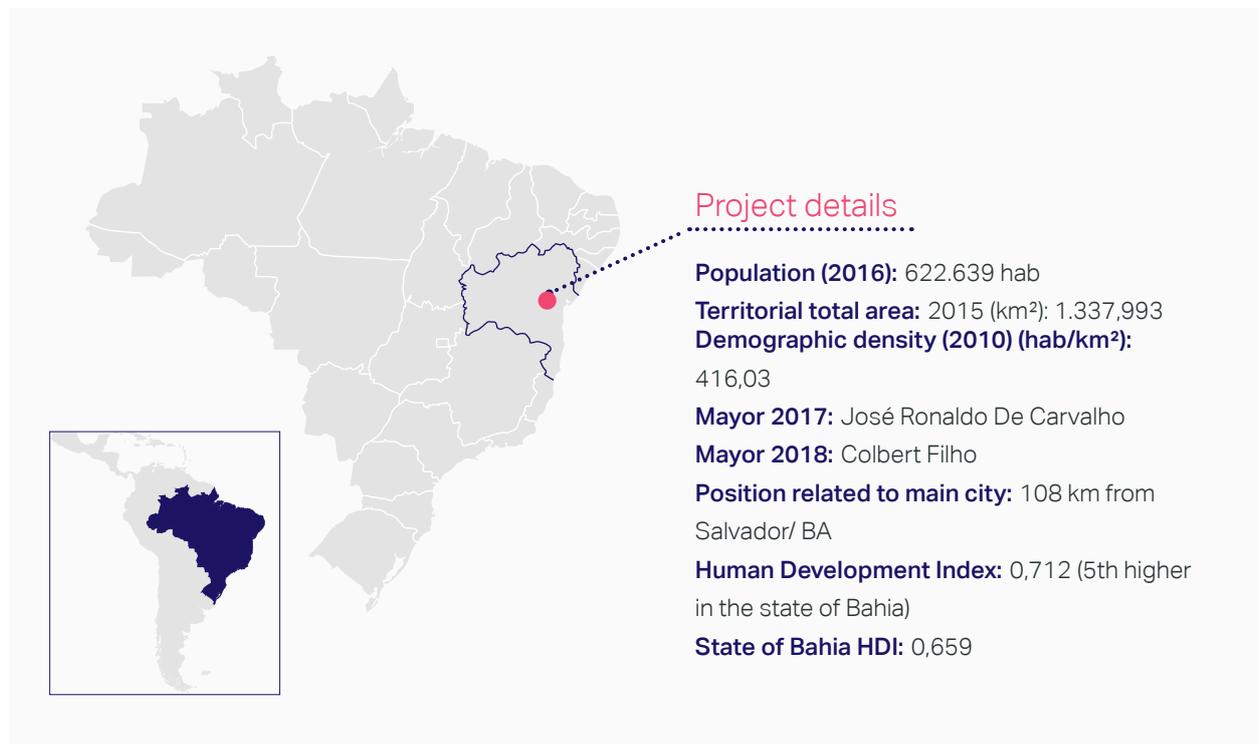
Agriculture continues to play an important role in the local economy, but Feira de Santana's recent fast economic growth is due to industrial investment and services. It is a crucial hub connecting the whole region, in a country that as early as the 1950's decided for a car-oriented development.

In March 2013, Feira de Santana established a dedicated sustainable development office to take responsibility for

developing policies that would help make it a sustainable city.

As part of this program, the SiMPLify project was launched as an opportunity to support the city in realizing SDG 11, target 11.2. This target is to "provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons by 2030, and to support the improvement of global urban indicators and quality of life."

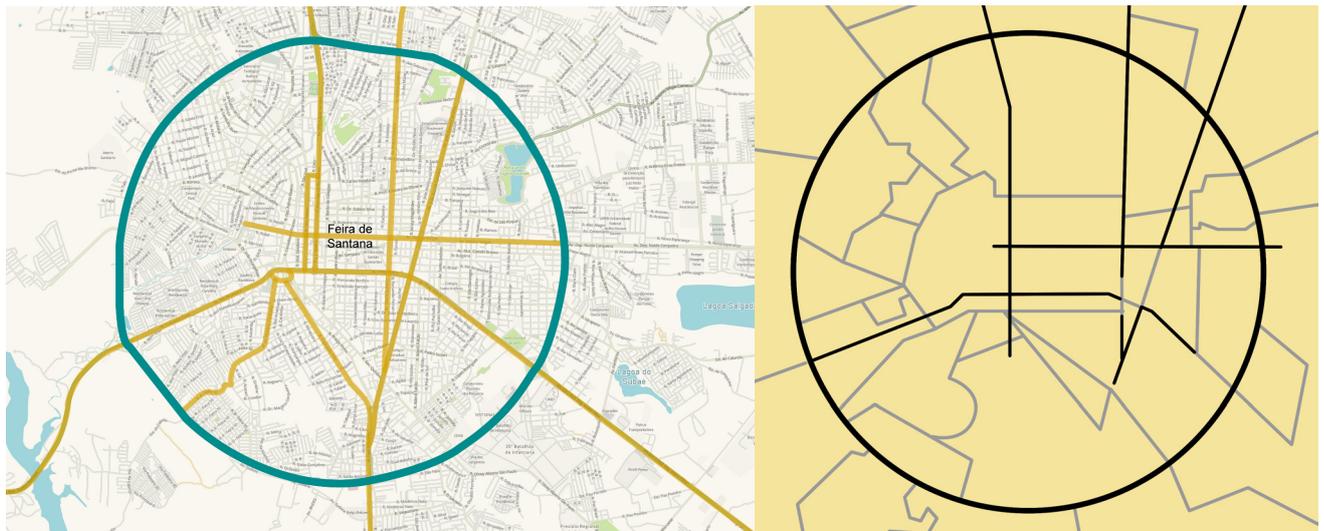
Figure 1: Feira de Santana city's characteristics
Enel Annual Report 2018



In Feira de Santana, mobility has the potential to tackle a wide list of issues and related SDGs:

TOPIC	SDGS	IMPACTS
Climate Change Mitigation	7 9 11 13	Decrease GHG emissions and diversify energy sources
Health	2	Decrease air-pollution related diseases
Safety	3 9 11	Reduce the number of traffic accidents
Economic development	3 11 16	Improve urban infrastructure, focusing on safer streets and improvement of public spaces
Gender	8 9 10 11	Improve access to urban facilities and services, binding the peripheric areas with urban centers and connect urban development with mobility planning, enabling access to economic opportunities to the whole population
Safety	5 10 16	Plan mobility and urban development targeting the decrease in urban violence, mainly related to gender and race

Figure 2: Feira de Santana metropolitan region



Feira de Santana has the second biggest road crossing in Brazil, after São Paulo. Three structural federal roads (BR-116, BR-324 and BR-10) and six state roads (BA 052, BA 502, BA 503, BA 499, BA 504 and BA 526) intersect in the city area.

This confluence of roads was fundamental for the overall structure of the city and still supports its regional and national importance, bringing people, goods and investments to the region. Owing to its high influence on road traffic, the city is characterized by large avenues, with car use as the preferred mode of transport.

The municipal area is delineated by the Anel de Contorno, a federal circular avenue, that connects the main structural streets. With urban sprawl, the avenue was absorbed by the urban fabric, although it keeps the profile of a federal road and lacks a coherent urbanization plan. Despite traffic flow issues and congestion concerns, there is an ongoing project to double the length of this federal road to accommodate the increase in car traffic.

FEIRA DE SANTANA'S MOBILITY VISION

Feira de Santana aims to deliver sustainable, universal, fair and equal use of public spaces where priority is given to non-motorized transportation and the use of public transport over private vehicles is encouraged.

Feira de Santana's municipality intends to allow broader and more democratic access to public spaces, ensuring universal accessibility for citizens, equality of rights and duties over the use of mobility systems, traffic safety and free circulation of people and goods, always oriented towards social inclusion.

Following a strong will by the administration to improve the city's mobility, an existing Urban Mobility Plan by the municipality of Feira de Santana recognizes mobility as fundamental for its citizens and their quality of life, the environment and to support its economic development.

Launched in April 2018, Feira de Santana's urban mobility plan established the principles and guidelines for the integration between modes of transportation and the

improvement of accessibility and mobility of people and products in the city. It considered the different sectorial plans, norms and actions from public institutions and incorporates their targets into the mobility plan perspective.

Among several projects and strategies, the plan justified and explained the case for implementation of a Bus Rapid Transit (BRT) system for the city. This is "a high-quality bus-based transit system that delivers fast, comfortable, and cost-effective services at metro-level capacities. It does this through the provision of dedicated lanes, with busways and iconic stations typically aligned to the center of the road, off-board fare collection, and fast and frequent operations."⁷

Implementation of the BRT system is planned in the main streets of the city with a crucial, unprecedented shift in space usage from cars and motorbikes to public transportation. The project consists of an overall extension of eight kilometers, linking the two main axes of urban growth for the city, with new terminals deployed to areas of recent sprawl.



THE BUS RAPID TRANSIT (BRT) MAP:

At the core of the city's planning and vision for mobility was the need to achieve a fundamental shift from individual private modes (single use cars and motorbikes) to a higher use of

public transportation and active mobility (e.g. walking and cycling).

The urban mobility plan aims to decrease the use of individual motorized vehicles by 18.4% and foster a 200% increase in cycling and public transportation.

A series of initiatives and projects are to be implemented and/or are already in train to achieve these targets.

SOLUTION	MAIN ACTIONS	STAGE	VISION
BUS RAPID TRANSIT SYSTEM	PHASE 1 <ul style="list-style-type: none"> Implementation of BRT corridor – Avenida Getúlio Vargas and Avenida João Durval; Implementation of Intelligent Transportation Systems 	Under conclusion (1st semester 2019)	Medium-term (18 months)
	2ND PHASE <ul style="list-style-type: none"> Implementation of BRT corridor – Bairro Tomba. 	Project	2023 (5 yr)
STPAC (Alternative and Complementary System of Public Transportation)	System regularization and reorganization - complementing the Transport Intelligent System under implementation, and GPS implementation Building of alternative transportation terminals in the district and rural areas - connect the urban services with the region	Public auction: January 2018	Short-term



The BRT map: blue and red - BRT lines proposed. Green - areas for integration.

INFORMAL AND SEMI-INFORMAL TRANSPORTATION SYSTEMS

Along with the BRT project, the municipality has begun the important work of evaluating and regulating informal or semi-informal transportation systems.

In Feira de Santana these are mostly medium-size road vehicles (transit vans) that ensure people living on the outskirts and in rural areas can access the city center.

These enable accessibility to economic opportunities in the city, but their informal nature

has no guarantee of safety, security or accountability. The local government aims to reduce informal and semi-informal services while at the same time increasing access, accountability or trust in the overall public transportation system.

TODAY	SHORT-TERM (<5a)	MEDIUM-TERM (5<10)	LONG-TERM(10<20)
<ul style="list-style-type: none"> walking 36.8% cycling 4.9% public transportation 20% individual motorized 38.4% 	<ul style="list-style-type: none"> walking 30% cycling 6% public transportation 32% Individual motorized 32% 	<ul style="list-style-type: none"> walking 30% cycling 8% public transportation 35% Individual motorized 27% 	<ul style="list-style-type: none"> walking 30% cycling 10% public transportation 40% Individual motorized 20%

Source: PMMU Feira de Santana, 2018



5 SiMPLify in Feira de Santana



5 Feira de Santana

WBCSD' SiMPLify is a global city-business collaboration that fosters innovation for easy, safe and clean urban mobility systems for all. It offers a free, online mobility planning tool that helps cities develop fact-based and integrated sustainable urban mobility plans, using 19 sustainable mobility indicators.

The indicators have been developed by a core group of experts from different industries involved in urban mobility. The indicators have been endorsed by the European Union.

SiMPLify is enabled by a [mobility tool](#) that cities can use to insert data and run surveys. The tool then matches indicators with over 300 solutions based on experiences worldwide. This helps cities evaluate their mobility plans and identify additional solutions.



In Feira de Santana, SiMPLify provided a data-based, integrated approach to developing a sustainable urban mobility plan. Alongside the municipality's existing mobility plans, SiMPLify helped to develop an inclusive mobility vision by enabling stakeholder engagement and citizen participation.

The SiMPLify analysis requires engagement of all stakeholders in city management and planning. A city task force was formed by the mayor's office, key staff from the departments of transport and urban planning. The office for achieving the SDGs in Feira de Santana followed the process from the beginning to the end and ensured full engagement of all key stakeholders. Using the data-based indicators required all city departments to collaborate, and the survey-based indicators were obtained by running the first-ever online city survey.

SIMPLIFY: SUSTAINABLE URBAN MOBILITY INDICATORS

The SiMPLify methodology is focused on a set of 19 indicators that comprehensively describe sustainable mobility in cities.

The indicators span four dimensions:

- Global environment (G)
- Quality of life (Q)
- Economic issues (E) and
- mobility System performance (S)

In some cases, indicators may have an impact on two, three or even four dimensions of sustainable mobility. For example, congestion increases air pollution, and impacts negatively on a city's GDP as well as on commuters' quality of life, while also limiting economic opportunities.

The methodology is grounded in science and highly inclusive. The indicators are based on data as well as on a survey that engages the population in providing feedback on their user experience. A list of all indicators and how they measure in Feira de Santana is available in table 1.

The data was gathered from primary sources, existing plans and publications. In some cases, data was not available in the municipality and was gathered for the first time. The standard units of measurement used by SiMPLify were not always applicable to the existing data, and some adaptations were made, in indicators such as Air Pollution, GHG and Energy Efficiency, thus leading to proxy results.

SOLUTION	DIMENSIONS		SCORE	UNITS	SOURCE
1. Affordability of public transport for the poorest people	S	Q	5.79	%	DATA
2. Accessibility for mobility impaired groups	S	Q	2.88	%score	SURVEY
3. Air polluting emissions	Q		10.00	NOx eq/ cap	DATA
4. Noise hindrance	Q		7.76	% hindrance	DATA
5. Traffic safety	Q		8.51	fatalities/cap	DATA
6. Access to mobility services	Q		1.10	%	DATA
7. Quality of public area	Q		2.78	% score	SURVEY
8. Functional diversity	Q	E	5.15	score	DATA
9. Commuting travel time	Q	E	6.43	minutes	DATA
10. Economic opportunity	Q	E	3.43	%	SURVEY
11. Net public finance	E		10.00	%	DATA
12. Mobility space usage	Q	E	7.55	m ² /cap	DATA
13. Emissions of greenhouse gases (GHG)	G		9.97	GHG/cap	DATA
14. Congestion and delays	G	S	9.47	congestion index	DATA
15. Energy efficiency	G	S	10.00	energy/km	DATA
16. Opportunity for active mobility	G	S	0.16	%	SURVEY
17. Intermodal integration	S		2.74	%score	SURVEY
18. Comfort and pleasure	S	Q	2.48	%score	SURVEY
19. Security	S	Q	1.74	%score	SURVEY

SIMPLIFY: POPULATION ENGAGEMENT, A BEST PRACTICE

Implementing a survey to gather feedback from citizens about the mobility situation in the city is a crucial element of the SiMPLify methodology. The survey involves the population at large and includes questions that are specific to vulnerable groups, such as the elderly, the disabled and pregnant women.

With the support of the municipality, an extensive campaign on local media (tv, radio, posters, etc.) was designed and implemented all over the city of Feira de Santana.

This was an innovative approach to engage citizens for mapping the priorities and urgent topics with respect the city's urban mobility.

A dedicated website was developed to collect the results. While the survey was widely accessible online, volunteers also went out to collect responses from neighborhoods without internet access. Broadly promoted on social media platforms, the survey became an opportunity for the municipality to begin a direct and frank conversation with the population on issues related to mobility.

Local authorities made an extensive effort to reach out to a representative sample of the population.

For Feira de Santana, this was an opportunity to take a qualified and systemic new approach to citizen engagement in evaluation, planning and decision-making.

2067 people accessed the survey, with total of 1128 completed responses. Responses highlighted some crucial aspects that had not previously been considered. There was a clear sense of discontent with the current status of Feira de Santana's mobility system.

The responses were evaluated with all stakeholders, in order to reach common ground in the interpretation.

INDICATORS	DIMENSIONS		SCORE	SOURCE
Accessibility for mobility impaired groups	S	Q	2.88%	SURVEY
Quality of public area	Q		2.78%	SURVEY
Economic opportunity	Q	E	3.43%	SURVEY
Intermodal integration	S		2.74%	SURVEY
Comfort and pleasure	S	Q	2.48%	SURVEY
Security	S	Q	1.74%	SURVEY

The most striking aspect highlighted by the survey was the deep sense of insecurity people felt when using public spaces and transport. In daylight as well as during the night, walking, cycling, inside the buses, at bus stops or terminals, the fear of aggression and violence was pervasive.

This sense of insecurity negatively influenced several other indicators such as the quality of public areas, comfort and pleasure and economic opportunity.

SIMPLIFY: RESULTS

The SiMPLify mobility tool uses all gathered data and responses to produce a spider-chart that allows cities to visually identify their most glaring issues.

In the case of Feira de Santana, the spider-chart highlights important challenges with respect to overall access to mobility - and especially active mobility, access to economic opportunities, quality of public areas, security, comfort and pleasure, congestion and multimodal integration.

SIMPLIFY: PRIORITIZATION AND IDENTIFICATION OF SOLUTIONS

Through extensive consultations, stakeholders agreed on the priorities for their Sustainable Urban Mobility Plan. Solutions from the existing municipal urban mobility plan were matched with the solutions proposed by SiMPLify's mobility tool.

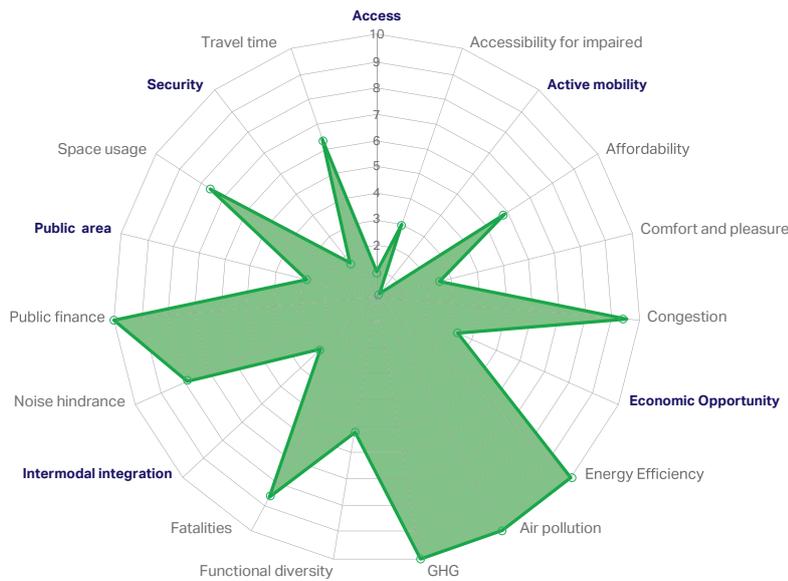
Impact on the SDGs, local priorities and a strategic approach to ensure integration with existing plans were key considerations in developing Feira de Santana's Sustainable Urban Mobility plan.

PRIORITIES

Based on the responses from the survey, as well as data analysis and consultations with the local taskforce, security was identified as the most fundamental topic to be addressed in Feira de Santana's Sustainable Urban Mobility plan.

With the primary intention of improving security, the municipality selected active mobility, public spaces and intermodal integration as the next priorities for further investment.

Figure 3: Feira de Santana mobility spider chart



INDICATORS	DIMENSIONS	SCORE	SOURCE
Accessibility for mobility impaired groups	S Q	2.88%	SURVEY
Quality of public area	Q	2.78%	SURVEY
Economic opportunity	Q E	3.43%	SURVEY
Intermodal integration	S	2.74%	SURVEY
Comfort and pleasure	S Q	2.48%	SURVEY
Security	S Q	1.74%	SURVEY

Improving security on public transport and public spaces requires an integrated and coherent approach that considers governance, use of space and available technology. Alongside a study to enable a deeper understanding of security in mobility, its impacts and consequences,

Feira de Santana decided to take a targeted approach by implementing a pilot project that would allow them to test some solutions in the short and medium-term. The project provides for improved intermodality, renewal of public spaces, safer bus stops, an increase in public lighting, and a focus on enabling active mobility.

INDICATORS		IMPACT ON SECURITY
SECURITY	Active mobility	Improve use of public spaces, street occupation and security for pedestrians. Decrease the pace of mobility, with slower modes of transportation, while increasing safety for pedestrians and other active modes.
	Public space	Improve security in public spaces during the day and the night (for pedestrians, bicycles, use of squares and sidewalks, etc..)
	Intermodal integration	Increase predictability in bus schedules, reduce waiting time in streets and at bus stops during day and night time

⑥ Solutions and strategies



6 Solutions and strategies

As a result of the SiMPLify project, mobility is being tackled as a priority for the municipality of Feira de Santana, in an integrated manner with short-, medium- and long-term actions and plans.

Engaging with SiMPLify and its solution toolbox provided additional ideas to the municipality of Feira de Santana for integrating their existing plans, especially with respect to improving security in public spaces and providing opportunities for active mobility.

SOLUTIONS: SHORT-TERM

POLYGON

Engaging with SiMPLify led the municipality to decide on implementing a pilot project in the central area of the city, named "POLYGON", that extends for a total of 700.000m². The project involves the following actions:

- Developing three kilometers of new cycle pathways
- Renewing and improving four public squares for a total of 18.000m²

- Installing LED lighting in the overall area
- Installing bike parking facilities in the BRT terminals and in the public squares
- Reducing speed limits

Some measures will extend to the overall perimeter of the city:

- LED lighting at bus stops
- Friendly bus stops (improvement in public transport facilities and comfort)
- Increase in traffic lights (first in the crossings of the BRT lines)

Figure 4: Area of the "polygon", city center of Feira de Santana.



MOBILITY PORTAL

Another important initiative is directed at fostering better engagement with the citizens of Feira de Santana. This will allow the municipality to understand pain points, where security problems are most acute and raise awareness amongst citizens about moving in a more sustainable way.

The municipality launched a campaign to raise awareness about mobility behaviors for the overall population of Feira de Santana.

The campaign is both online and offline and focuses on the importance of mobility and intermodality for both security and safety as well as wellbeing.

The online website originally created for the implementation of the SiMPlify's survey now works as a platform for information and open dialogue with the population on mobility issues - monitoring construction works, priorities, results, etc. The portal provides information on progress for mobility

construction works and useful information on mobility flows in the city. In the medium-term, the portal will connect with the Operational Control Centre.

The portal provides for the opportunity to map insecurity, focus areas of harassment, robbery and violence in the city and to collect and respond to complaints from the population. It is a tool that will enable better understanding of the status of insecurity, the territory and the overall dynamics in the city.

Figure 5: The dedicated website created by Feira's municipality for the SiMPlify mobility survey is now being used as a portal on urban mobility focusing on fostering dialogue with the population and as a tool to collect and share data.



SOLUTIONS: MEDIUM AND LONG-TERM

For the medium and long-term, the municipality decided to include security in all revisions of existing urban plans and in the next developments and projects in all stages of mobility action and all modes of transportation, including walking, cycling, public buses, cars, etc.

IMPLEMENTATION

Plans

An Urban Mobility Plan has been developed with targets and plans for the next decade, focusing on the overall urban improvement and active mobility, improvements in traffic safety and infrastructure for

all modes, and integrating the transportation system of the city.

Feira de Santana's Master Plan for economic development is in progress.

7 Conclusion

Through the SiMPlify project, the city of Feira de Santana benefited from a new approach towards sustainable mobility and better quality of life for citizens. As part of their existing plan to improve mobility in the city, they were able to run an independent, data-based analysis and involve their citizens with the planning.

SiMPlify brought additional solutions to the table and underlined ways to make the city's mobility planning into a fully-fledged sustainable urban mobility plan. This experience galvanized stakeholders and helped decision-making by highlighting the urgency of acting on improving mobility in the city and helping the city map priorities and solutions.



Endnotes

¹ <http://habitat3.org/the-new-urban-agenda>

² <https://data.worldbank.org/indicator/sp.urb.totl.in.zs>

³ <http://www.brasil.gov.br/cidadania-e-justica/2016/10/em-2030-90-da-populacao-brasileira-vivera-em-cidades>

⁴ <https://wir2018.wid.world/files/download/wir2018-summary-english.pdf>

⁵ <http://g1.globo.com/jornal-nacional/noticia/2017/12/maioria-da-populacao-urbana-do-brasil-vive-em-mas-condicoes-diz-o-ibge.html>

⁶ Feira de Santana is ranked in the 1546th position nationally, among 5.565 cities of Brazil. The national HDI is 0,755, ranking Brazil 75th globally. (<http://www.br.undp.org/content/brazil/pt/home/idh0/rankings/idh-global.html>)

⁷ <https://www.itdp.org/library/standards-and-guides/the-bus-rapid-transit-standard/what-is-brt/>

ABOUT WBCSD

WBCSD is a global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world. We help make our member companies more successful and sustainable by focusing on the maximum positive impact for shareholders, the environment and societies.

Our member companies come from all business sectors and all major economies, representing a combined revenue of more than USD \$8.5 trillion and 19 million employees. Our global network of almost 70 national business councils gives our members unparalleled reach across the globe. WBCSD is uniquely positioned to work with member companies along and across value chains to deliver impactful business solutions to the most challenging sustainability issues.

Together, we are the leading voice of business for sustainability: united by our vision of a world where more than 9 billion people are all living well and within the boundaries of our planet, by 2050.

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SIMPLIFY: SUSTAINABLE URBAN MOBILITY

As the world becomes increasingly urban, helping cities to become more sustainable has become one of the defining challenges of our time. People live in and move to urban areas to access a better life, but along with urbanization come challenges related to congestion, pollution and inequitable access.

Decisions taken today in cities across the world will shape the future of humankind. Realizing sustainable urban mobility in cities is about ensuring a better quality of life, a cleaner environment, equal access to services and economic opportunities.

In order to enable more effective and inclusive decision making in response to today's urban mobility challenges, WBCSD developed, SIMPLify: a set of tools to help cities improve their overall mobility system performance, with a specific focus on improving commuter's quality of life, lower environmental impact and improve air quality.

PIRELLI

Founded in Milan in 1872, Pirelli is the only global tire manufacturer entirely focused on the consumer market for cars, motorcycles and bicycles. With a distinctive positioning in the high-value segment, Pirelli is a global brand with strong Italian roots, valued for its cutting-edge technology, high-end production excellence, passion for innovation and constant and rising attention to low-environmental impact products and services.

In 2018, Pirelli invested 6.1% of its high value revenue in research and development, one of the highest levels of R&D investment in the tire industry. With 19 plants in 12 countries and 31.500 employees, in 2018 Pirelli revenues reached 5.2 billion, a net income of 442.4 million and a distribution network of 15,900 points of sale in over 160 countries.

Pirelli supports over 350 sports events and is the exclusive supplier of the Formula One championship since 2011. The company's slogan: "Power is nothing without control," encompasses Pirelli's mobility vision as it strives to conjugate safety, performance and care for the environment. Constantly engaged in improving its sustainability performance, in the last few years Pirelli has substantially improved its energy efficiency, revenues from green performance products, savings in use of natural resources and increased training hours for its employees worldwide.

In 2004, Pirelli joined the United Nations Global Compact, the Corporate Social Responsibility Europe network (CSR-Europe) and the World Business Council for Sustainable Development (WBCSD). Its commitment to sustainability has received international recognition: Pirelli's environmental leadership in the auto components sector is recognized by the Dow Jones Sustainability Index and the 2019 Sustainability Yearbook. In recognition for its engagement in the fight against climate change Pirelli is a CDP Climate A listed company.

DISCLAIMER

This publication is released in the name of the WBCSD and its partners. It is the result of a collaborative effort by WBCSD, senior executives from Pirelli, the Prefecture of Feira de Santana and other institutional partners and is intended to represent the wide range of discussion and perspectives among these stakeholders.

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