

ATENÇÃO
50 VELOCIDADE
MÁXIMA
PERMITIDA

FORTALEZA'S
CORPORATE BIKE SHARE STRATEGY
HEALTHY AND MOBILITY



WHO AM I?

VICTOR MACEDO

BRAZILIAN, 28 YEARS OLD

.....
CIVIL ENGINEER AND MASTER IN TRANSPORTATION
ENGINEERING

.....
CURRENTLY WORKING AT FORTALEZA CITY HALL





Bicicletar
Corporativo



**Prefeitura de
Fortaleza**

**Partnership *for*
Healthy Cities**

**Bloomberg
Philanthropies**



Serttel

FORTALEZA CITY



POPULATION
2.7 MILLIONS

5TH
NO BRASIL



ROAD NETWORK
4,400 KM



TOTAL CAR FLEET
1,1 MILLION



MOTORCYCLES
300,000



AREA
314 KM²



HISTORICALLY

FORTALEZA

GREW TO BE A

CAR ORIENTED CITY

64

MINUTES IS THE AVERAGE DAILY TIME HOME-WORK
DISPLACEMENTS TAKE

THE AVERAGE TRAVEL TIME INCREASES BY
APPROX. 30% FOR LOWER INCOME PEOPLE
WHEN COMPARED TO HIGH INCOME.*



*IPLANFOR — FORTALEZA 2040

**WHAT IF THE CITY
CHANGED PARADIGMS BY**



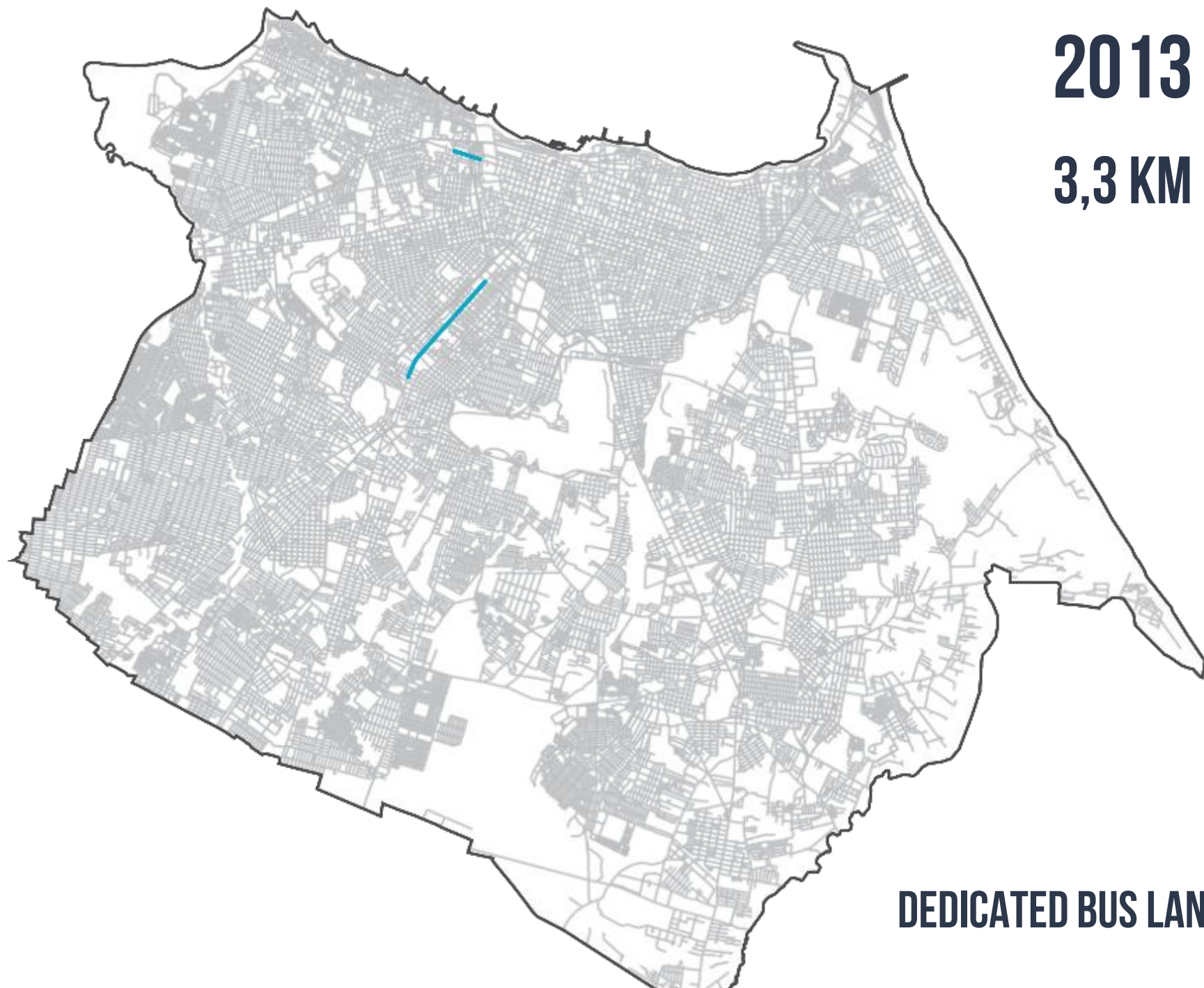
INVESTING IN

SUSTAINABLE MOBILITY?





DEDICATED BUS LANES

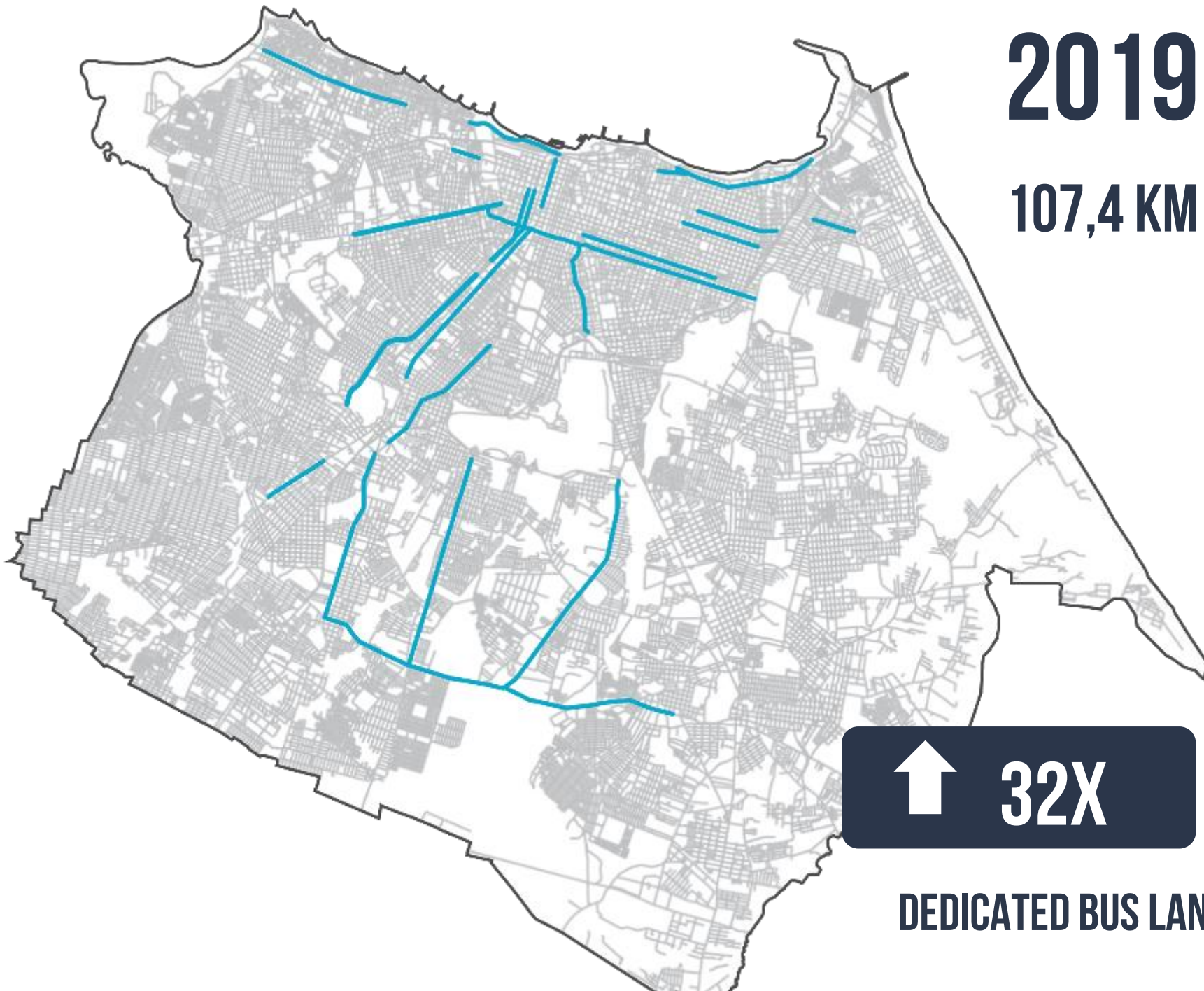


2013

3,3 KM



DEDICATED BUS LANE



2019

107,4 KM



32X

DEDICATED BUS LANE



'BRT-LITE'

2 SECTIONS IMPLEMENTED



VEHICLE FLEET



100% WI-FI



35% AIR CONDITIONING





POLICIES FOR

URBAN CYCLING



MAKE FORTALEZA

THE MOST BIKEABLE CITY

IN BRAZIL

EXPANSION OF THE CYCLING NETWORK



Av. Leste-Oeste

GROWTH OF 282% IN 6 YEARS

260 KM
MAR/2019

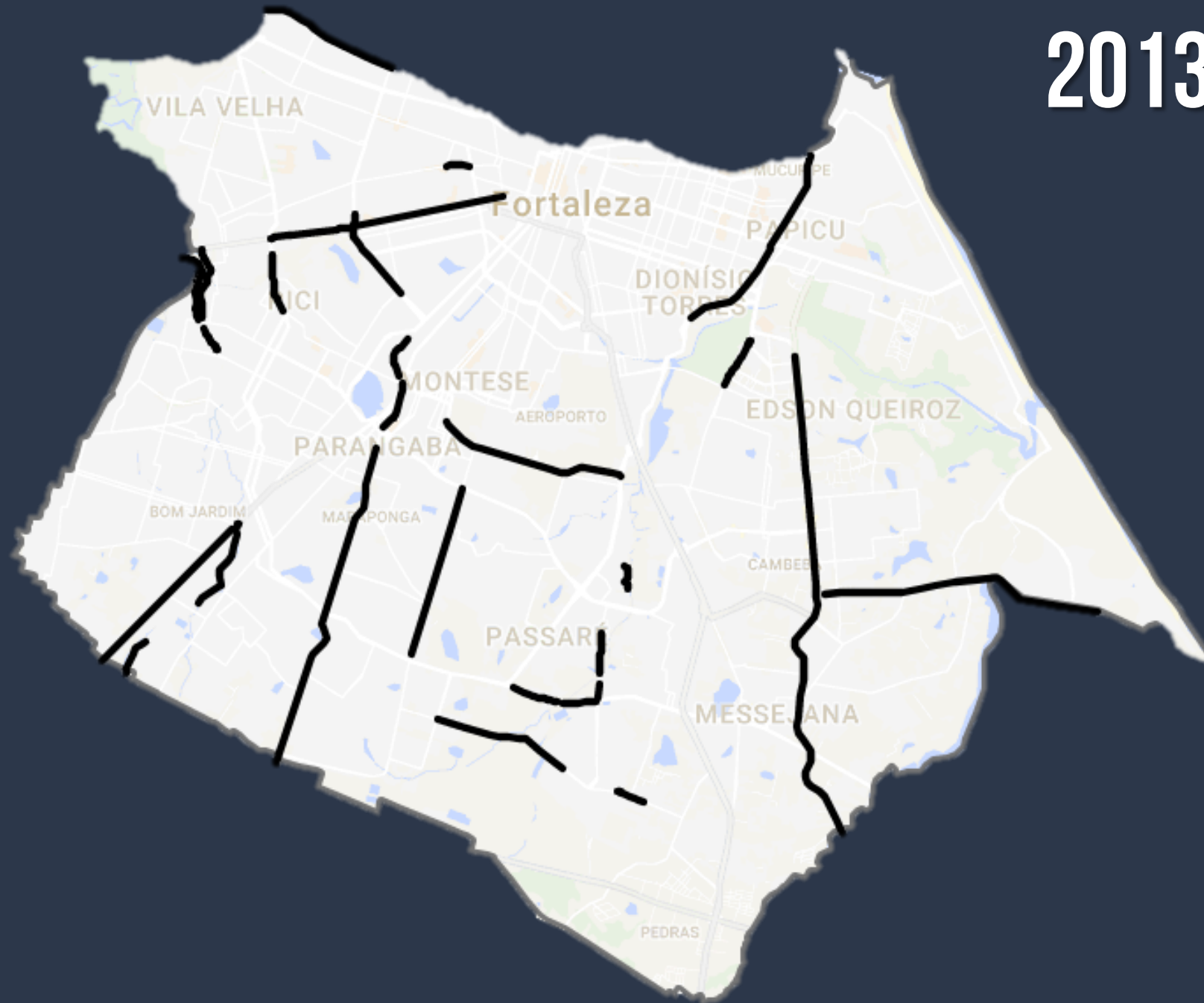


68 KM

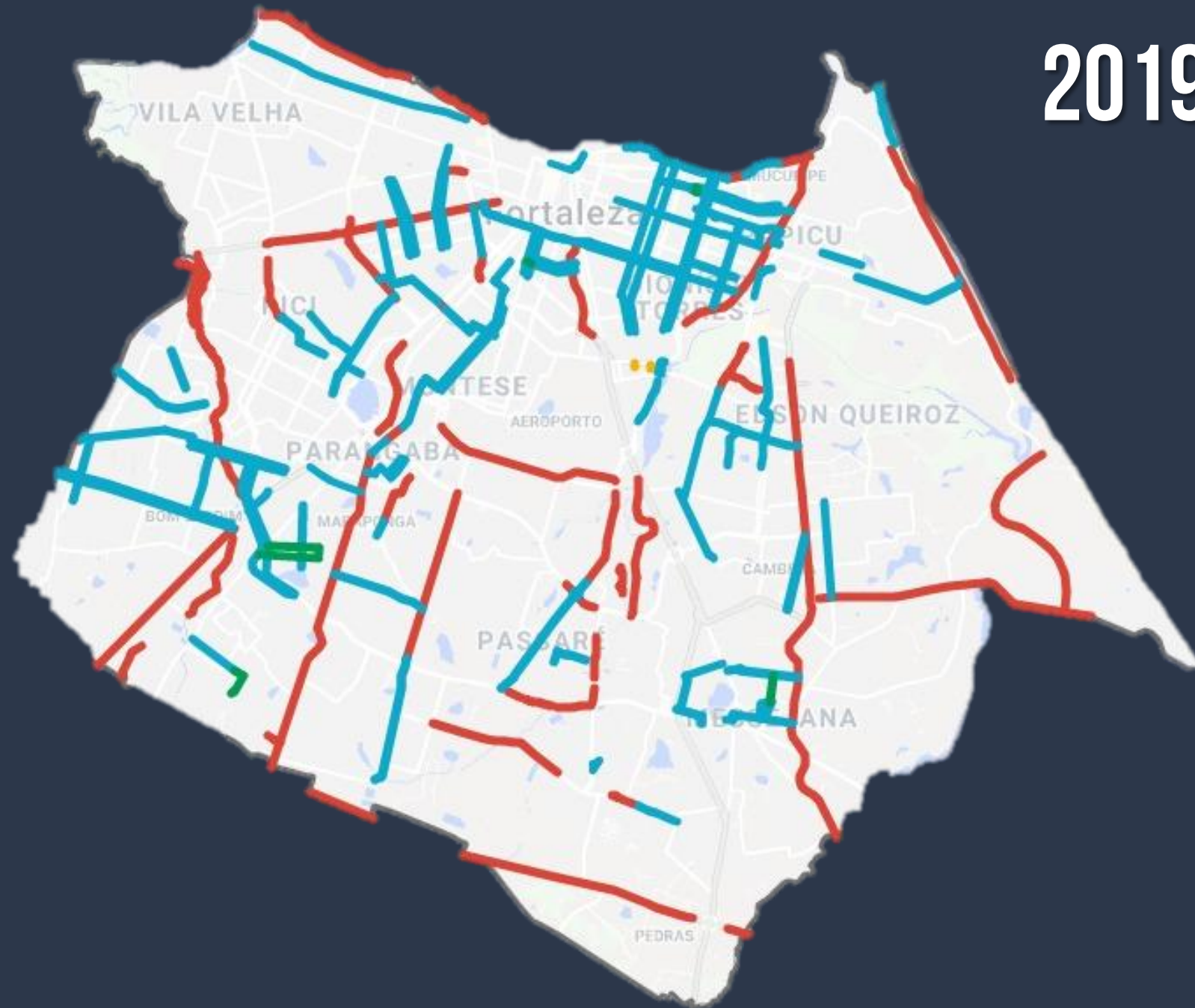
JAN/2013



2013



2019





60%

OF THE POPULATION OF FORTALEZA
LIVES AT A MAX. DISTANCE OF 300
METERS FROM THE CYCLING NETWORK

FONTE: PLATAFORMA MOBILIDADOS (ITDP)



VILA MANOEL SÁTIRO



AV. LESTE OESTE



ATENÇÃO
50
VELOCIDADE
MÁXIMA
PERMITIDA

AV. LESTE OESTE



AV. VIRGÍLIO TÁVORA



AV. BEIRA MAR



TRAFFIC CALM AREA

RODOLFO TEÓFILO



Petropolis →
↑
Memoria Centro

ATENÇÃO
30 km/h
ÁREA DE TRÂNSITO CALMO

↑
↘

↑

SUA ATITUDE
FAZ A DIFERENÇA



RESTAURANTE
CARVALHO MELO



E
TAXI
31 VAGA

FAIXA ELEVADA





CITY FOR PEOPLE

REDESIGNING STREETS FOR THE PEOPLE

DRAGÃO DO MAR, AGO/2018







SUNDAY LEISURE CYCLING LANE

ENCOURAGING URBAN CYCLING



← ALL RESOURCES FROM CAR PUBLIC PARKING

EXCLUSIVELY

FOR BIKE RELATED POLICIES



+ A PERCENTAGE OF THE DIGITAL PLATFORMS REVENUES



BICICLETAR



MINI BICICLETAR



4 BIKE SHARED SYSTEMS

BICICLETA INTEGRADA



BICICLETAR CORPORATIVO



BICICLETAR: PUBLIC BIKE SHARED SYSTEM



SINCE DEC/2014

**ONE OF THE MOST
USED SYSTEMS**

IN BRAZIL



MINI BICICLETAR

BIKES FOR CHILDREN

DESDE JUL/2017





MINI BICICLETA - PICTURE: VÓS/ IGOR DE MELO, 2017

BICICLETA INTEGRADA

PUBLIC BIKE LENDING SYSTEM THAT ALLOWS A USE OF UP TO 14H
- SOLUTION FOR LAST MILE AND COMPLEMENT OF PUBLIC
TRANSPORT



Estação 07

Terminal do Antônio
Bezerra

www.bicicletaintegrada.com

Horário de funcionamento
Todos os dias das 06:00 às 20:00h (7 dias por semana)

SAC 4003 0386
WhatsApp: +55 11 9997 8448

Regras de Uso
- Cadastrar e validar o usuário
- Utilizar a bicicleta seguindo as regras de uso



Após utilizar a Bicicleta
- Devolver a bicicleta em qualquer estação

Penalidades

- Não devolver a bicicleta em qualquer estação
- Não devolver a bicicleta em horário de funcionamento
- Não devolver a bicicleta em local não autorizado

Como liberar a bicicleta?



Atendimento: 4003 0386



Disponível em: Google Play e App Store



DESDE JUL/2016





bicicleta integrada



Prefeitura de Fortaleza

TERMINAL SIQUEIRA



TERMINAL LAGOA



BICICLETAR CORPORATIVO

WHAT'S THE PARTNERSHIP FOR HEALTHY CITIES?

GLOBAL NETWORK OF CITIES
COMMITTED TO SAVING LIVES THROUGH
THE PREVENTION OF
NON-COMMUNICABLE DISEASES (NCDs)

Partnership *for* Healthy Cities



Prefeitura de
Fortaleza

**Bloomberg
Philanthropies**



**World Health
Organization**

Partnership for Healthy Cities

4/2/2018



Programs

- Speeding
- Survey of NCD Risk Factors
- Reduce Sugary Drinks
- Ban Tobacco Advertising, Promotion, and Sponsorship
- Healthy Food for All
- Drink Driving
- Air Quality
- Walkable/Bikeable
- Smoke-free Cities
- Seat-belt/Helmet Use
- Cleaner Fuels for Cleaner Indoor Air

FORTALEZA IS PART OF A GLOBAL ROAD SAFETY NETWORK OF CITIES HAVING ACCESS TO BEST PRACTICES AND SUPPORT FROM A VARIETY OF PARTNERS

**Bloomberg
Philanthropies**

 **Vital
Strategies**

 **JOHNS HOPKINS
BLOOMBERG
SCHOOL of PUBLIC HEALTH**


**World Health
Organization**

 **WRI BRASIL**

 **International
Transport Forum**

 **NACTO**  **Global
Designing
Cities
Initiative**


**GLOBAL
ROAD SAFETY
PARTNERSHIP**
Middle East and North Africa


GRSF
Global Road Safety Facility

 **GLOBAL NCAP**
FOR SAFER CARS
www.globalncap.org

 **OECD**

W.H.O IDENTIFIES NCDs AS
ONE OF THE **LEADING CAUSES**
OF DEATH **IN THE WORLD**

NCDs ARE

RESPONSIBLE FOR

7 OUT OF 10

DEATHS IN THE WORLD



87% OF DEATHS
IN BRAZIL

ARE CAUSED BY NCDs

NON-COMMUNICABLE DISEASES

WHAT ARE NCDs?

A SET OF DISEASES IN WHICH THE CAUSES ARE NOT BASED ON TRANSMISSION MECHANISMS OF ETIOLOGICAL AGENTS (IE, NON-INFECTIOUS DISEASES), SUCH AS:

 **CARDIOVASCULAR DISEASE**

 **OBESITY**

 **DIABETES**

 **RESPIRATORY DISEASES**

2030

- 1º ISCHEMIC HEART DISEASE
- 2º STROKE
- 3º CHRONIC LUNG DISEASES
- 4º RESPIRATORY INFECTIONS
- 5º TRAFFIC INJURIES
- 6º LUNG CANCER
- 7º DIABETES



1,3 MILLION

PEOPLE DIE EVERY YEAR IN THE WORLD
IN ROAD CRASHES



IS IT ESTIMATED THAT

50 MILLIONS

PEOPLE INJURED IN ROAD CRASHES PER YEAR

BRAZIL



IS THE **4TH** OF
THE COUNTRIES THAT
KILL THE MOST IN TRAFFIC

IN FORTALEZA

**1 IN 3 EMERGENCY
SERVICE ARE DUE TO
TRAFFIC ACCIDENTES**





Bicicletar
Corporativo



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Serttel



EXCLUSIVE SYSTEM FOR MUNICIPAL EMPLOYEES

**STIMULATE EMPLOYEES TO
ADOPT A HEALTHIER LIFESTYLE
BY USING BIKE TO WORK**

**STIMULATING PRIVATE
COMPANIES AND INSTITUTIONS
TO ADOPT SIMILAR
PRACTICES FOR CYCLING**

**SOCIETY ALSO HAS A
KEY ROLE IN RELATION TO
SUSTAINABLE MOBILITY**

SYSTEM FEATURES





FREE USE

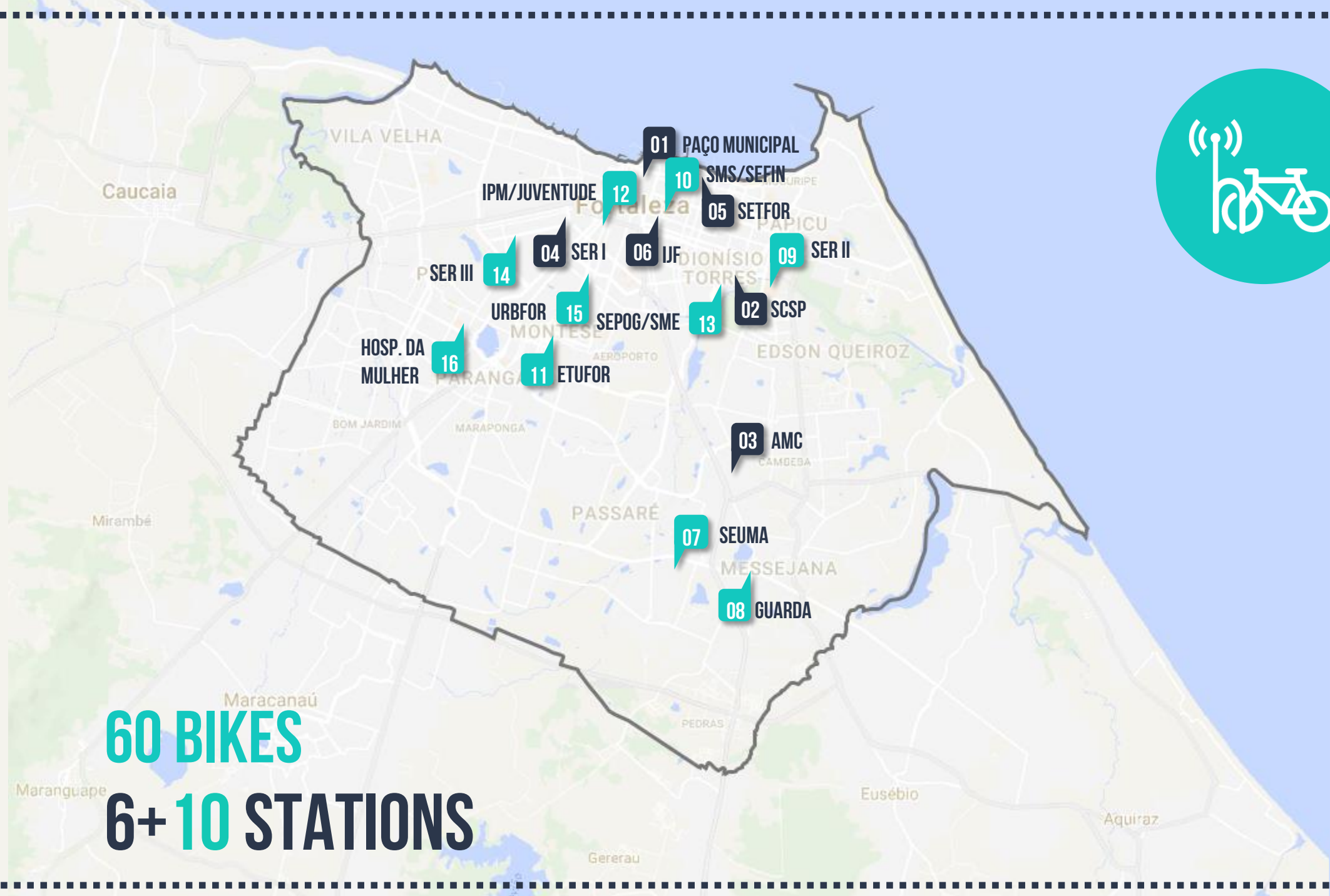


VIRTUAL STATIONS WITH DOCKLESS TECHNOLOGY



SOLAR ENERGY POLE





60 BIKES

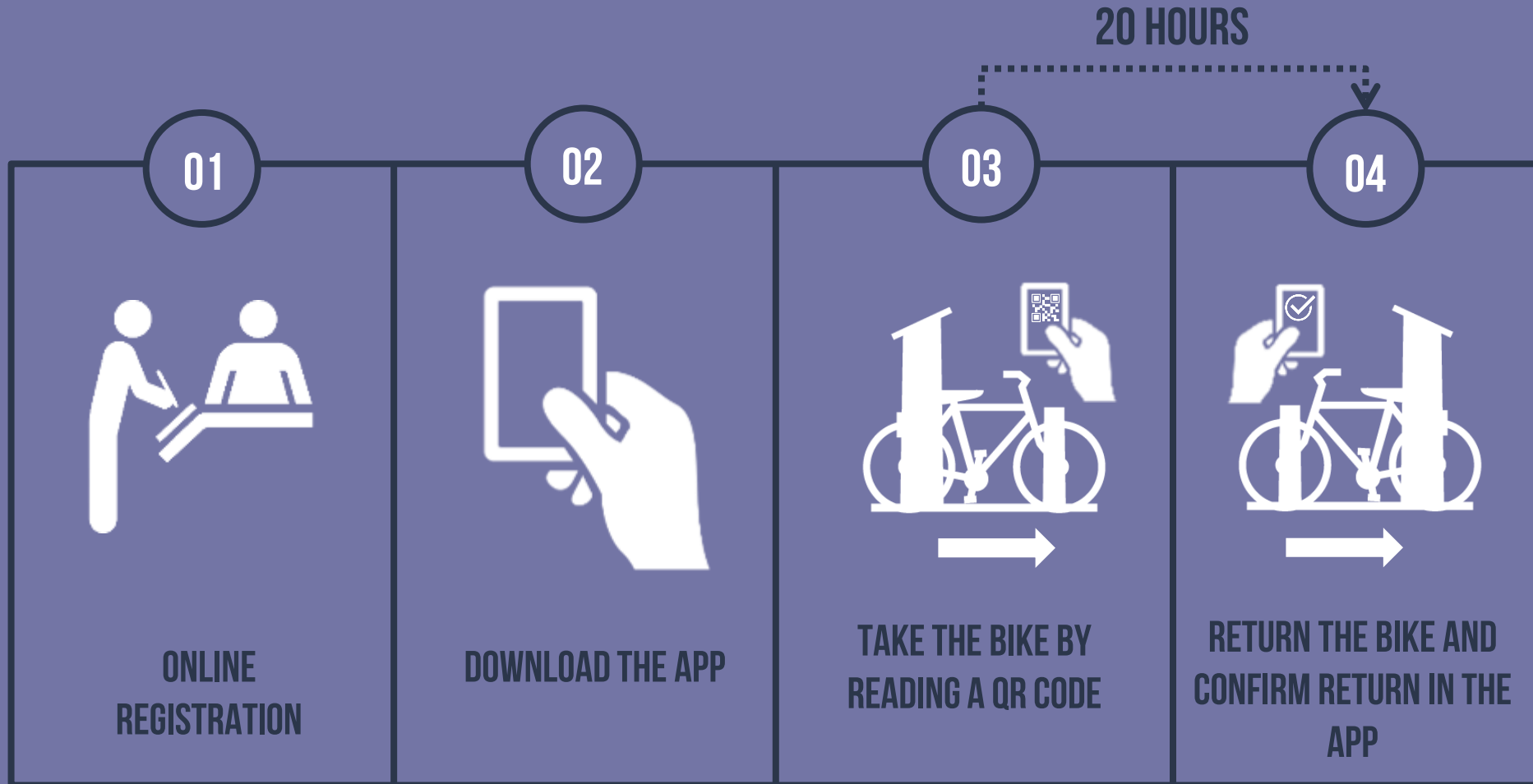
6+ 10 STATIONS





**USERS CAN STAY WITH
THE BIKE FOR UP TO
20 HOURS**

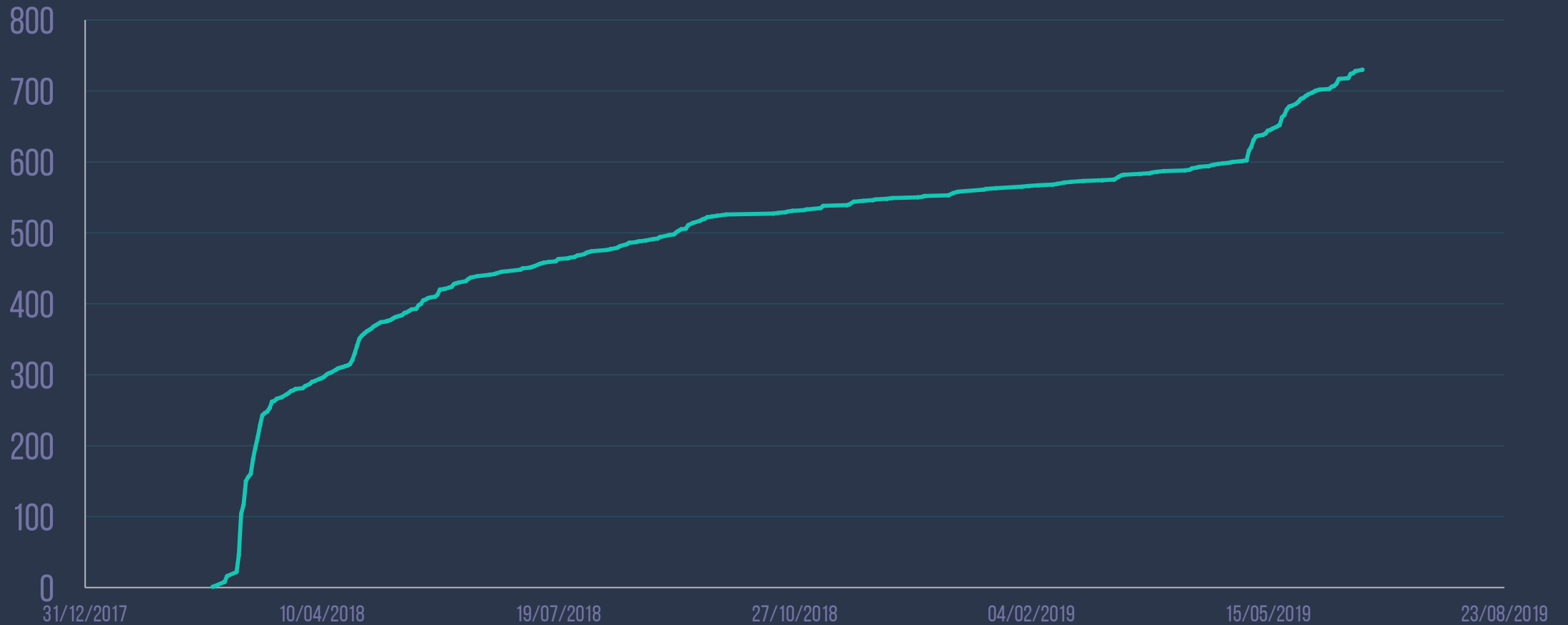
SYSTEM WORKING



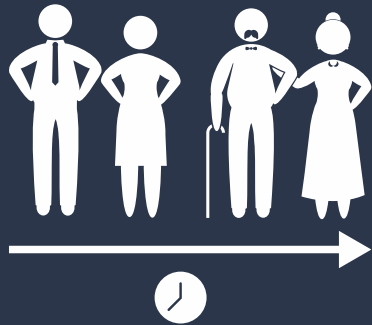
740 REGISTERED USERS



REGISTERED USERS



USERS PROFILE



50% BETWEEN 35-44 YEARS OLD

40% BETWEEN 45-60 YEARS OLD



58% MEN

42% WOMEN





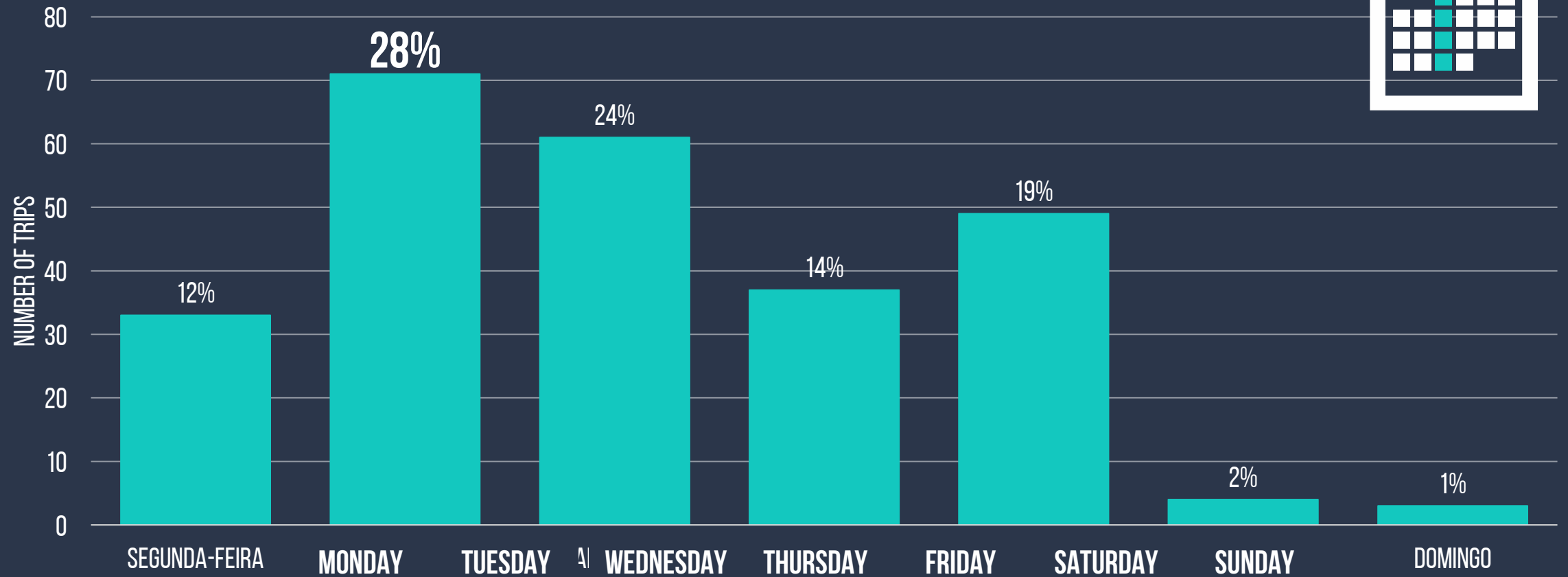
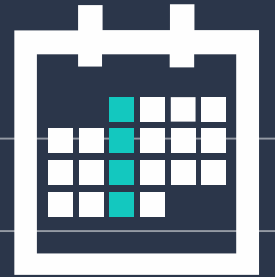
4,000
TRIPS IN 14 MONTHS

ON AVERAGE, **HALF OF THE BIKES*** ARE USED EVERY DAY

*ABOUT 0.5 TRIPS / BIKE / DAY



85% OF TRIPS ARE BETWEEN TUESDAYS AND FRIDAYS

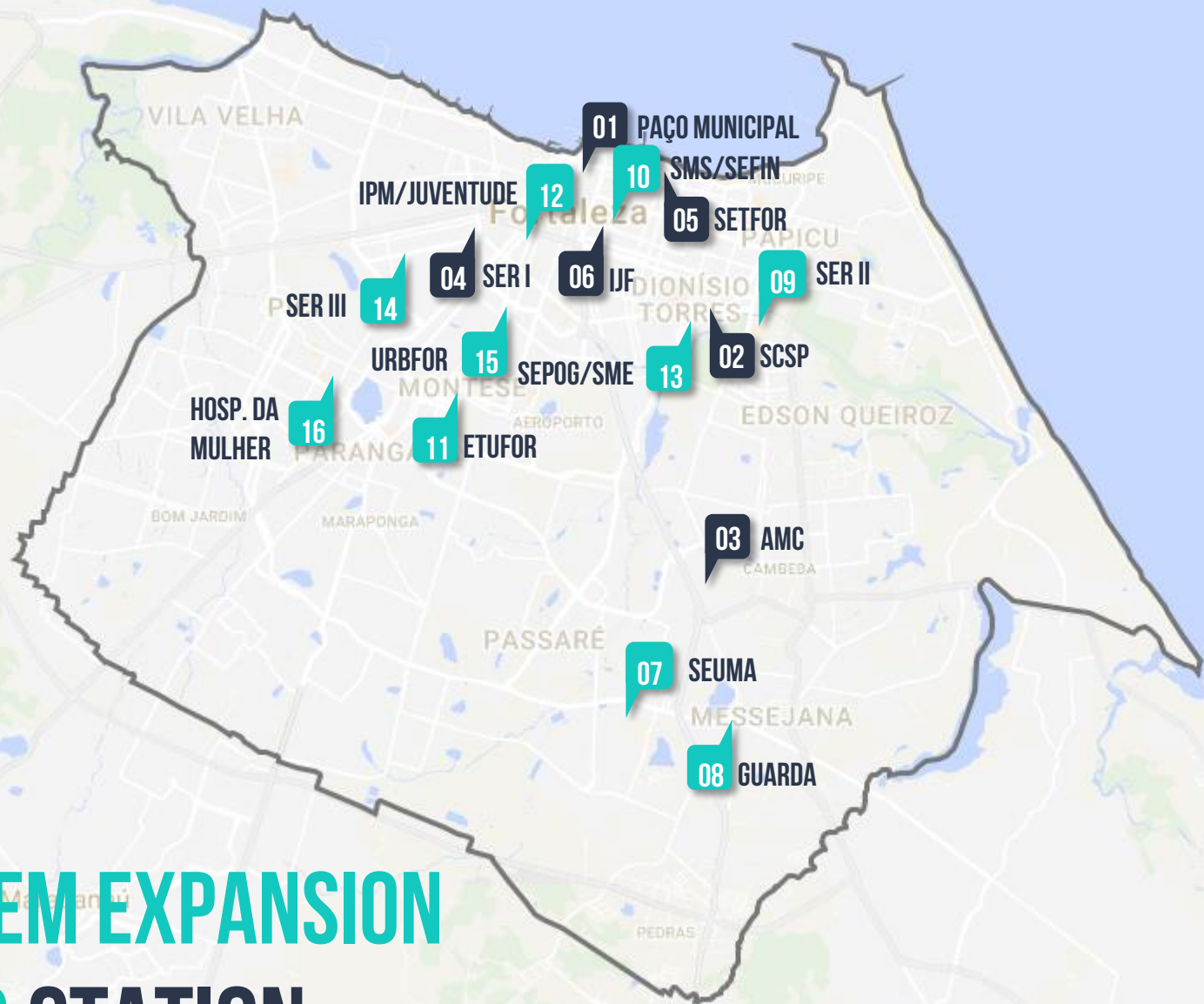


PHASE II: NEXT STEPS



SYSTEM EXPANSION

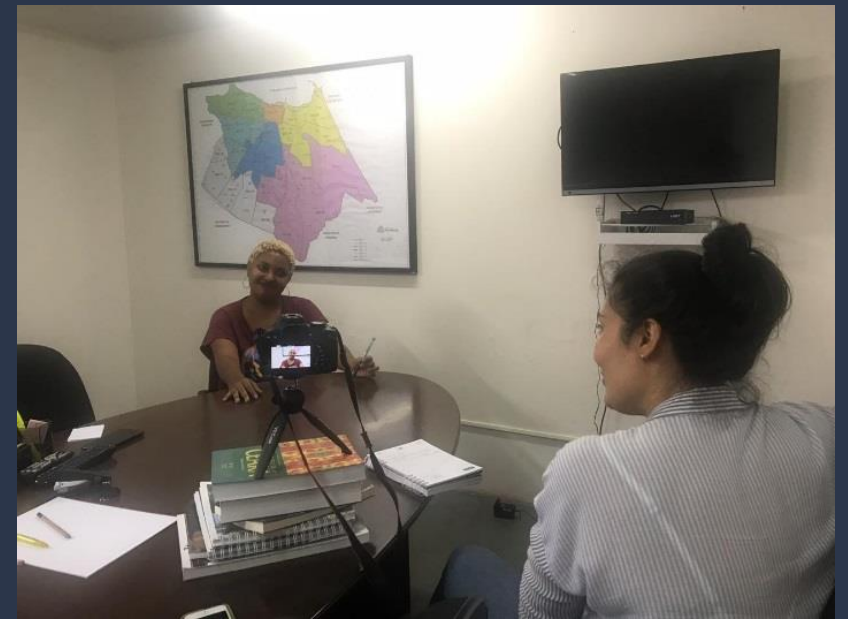
6+ 10 STATION



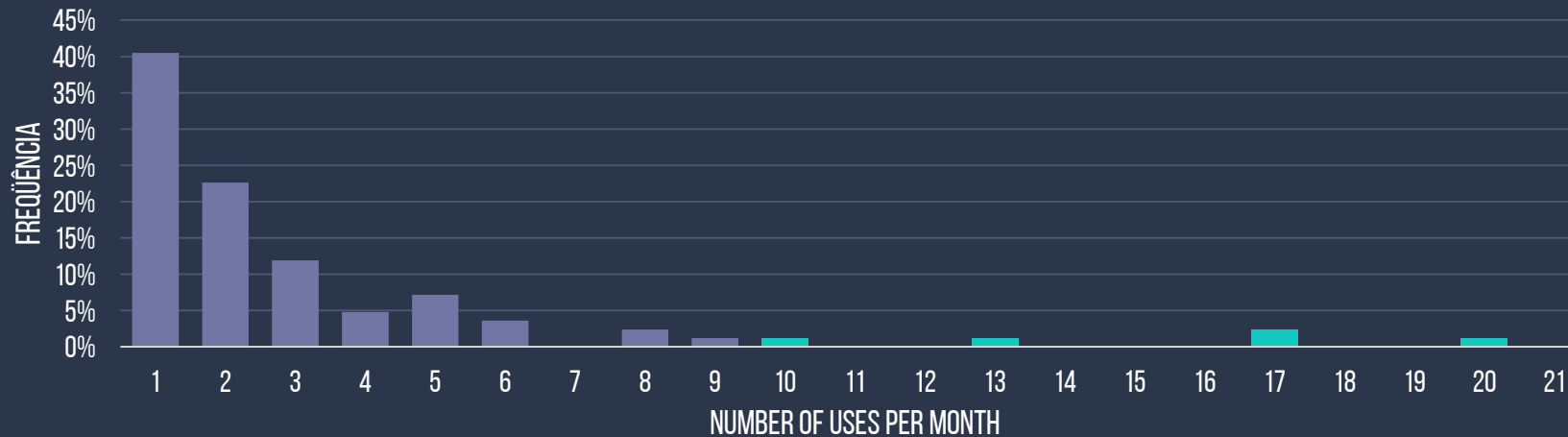
BICICLETAR CORPORATIVO — USERS INTERVIEW

DIFFERENT PROFILES:

- MEN AND WOMEN
- MORE FREQUENT USERS
- USERS WHO WERE FREQUENT AND DECREASED USE
- USERS WHO STARTED TO USE THE SYSTEM ONLY RECENTLY

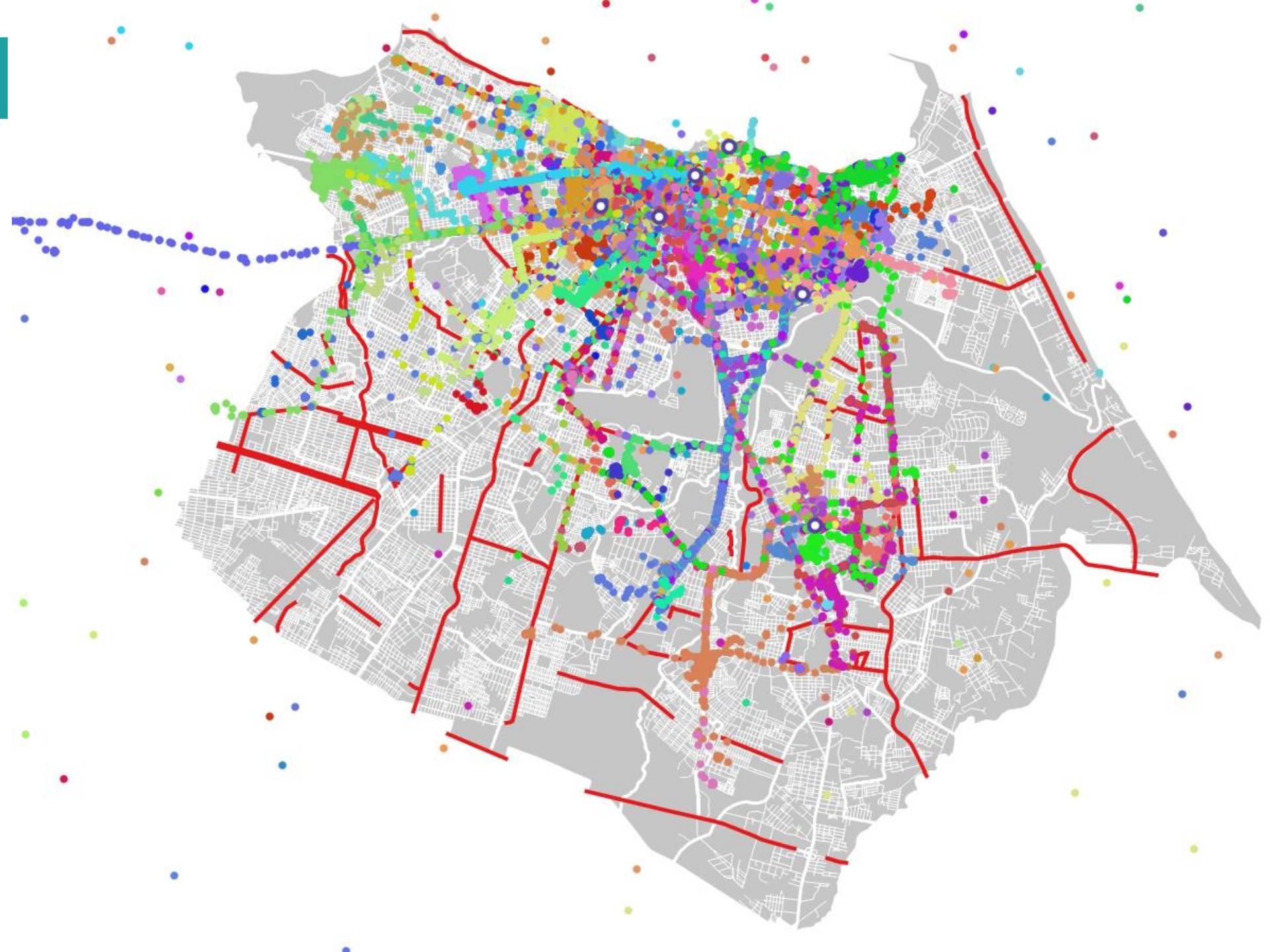


THE MOST FREQUENT USERS



**THESE USERS WILL BE MONITORED
IN ORDER TO QUANTIFY THE BENEFITS
OF THE PROJECT FOR THEIR HEALTH**

GPS DATA



USERS MONITORING



PARTNERSHIP WITH UNIVERSITIES



WHEN A CITY RETHINKS
ITS MANY MODES OF
TRANSPORT THE **RESULTS**
START TO SHOW



Fortaleza, Brazil Wins 2019 Sustainable Transport Award

June 29, 2018



The Power of Paint: Bringing Life to the Streets of Dragão do Mar

BIG STORY 10 JUNE 28, 2018 / 5:11 PM / 8 MONTHS AGO

Brazil's bike-friendly beachfront city Fortaleza wins major transport award

Fortaleza's Progress Shows that Change is Still Possible in Brazil

By Clarisse Cunha Linke, ITDP Brazil

The capital of Ceará sees traffic fatalities drop to the lowest level in 15 years after creating a mobility strategy with speed reduction interventions, priority bus lanes, and cycling infrastructure.

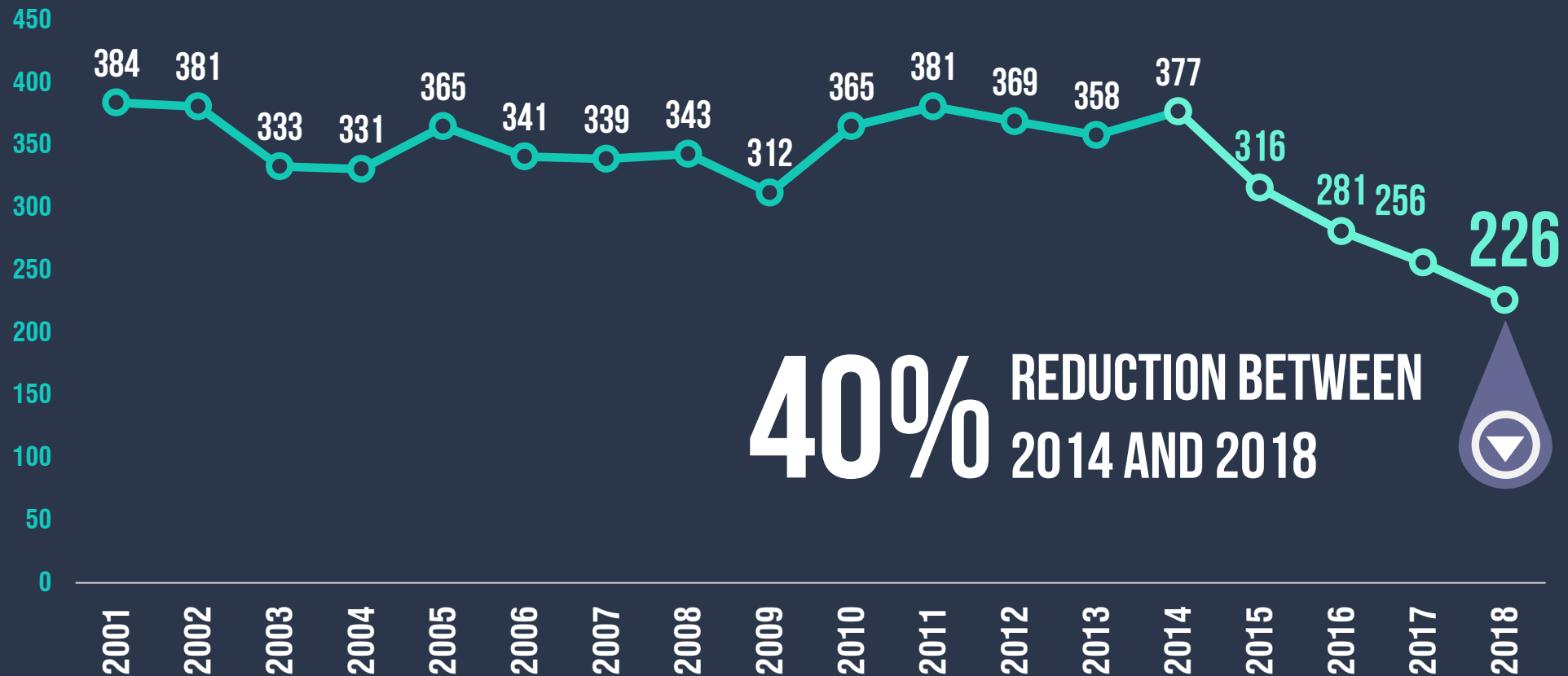


SOCIETY JUN 29, 2018

How the Brazilian city of Fortaleza became a role model for urban transportation

BY THE BRAZILIAN REPORT

ABSOLUTE NUMBERS OF TRAFFIC DEATHS IN FORTALEZA



**ALL APPLIED ENGAGEMENT
RETURNS THE MOST VALUABLE
RESULT**

423

**LIVES
SAVED**





**FIRST, WE SHAPE
CITIES,**

**AND THEN THEY
SHAPE US**

- JAN GEHL



Prefeitura
Fortalecida



Prefeitura de
Fortaleza

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OBRIGADO!
THANK YOU!

