FORTALEZA ON THE PATH TO SUSTAINABLE URBAN MOBILITY
A MULTIMODAL CITY
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*
<table>
<thead>
<tr>
<th>City</th>
<th>Population per Motorized Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fortaleza</td>
<td>2.4</td>
</tr>
<tr>
<td>Recife</td>
<td>2.4</td>
</tr>
<tr>
<td>São Paulo</td>
<td>1.5</td>
</tr>
<tr>
<td>New York</td>
<td>4.1</td>
</tr>
<tr>
<td>London</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Fortaleza has 2.4 inhabitants for each motorized vehicle.
What if the city changed paradigms by investing in sustainable mobility?
What if it were possible to transform positively the public transport system in just 6 YEARS?
CHEAPEST INTEGRATED BUS SYSTEMS TARIFF
WITHOUT PUBLIC SUBSIDY

BILHETE ÚNICO
DEDICATED BUS LANES

107,4 KM (2019)
3,3 KM (2013)
32X GROWTH

DEDICATED BUS LANES
GROWTH OF 32x IN 6 YEARS

3,3 KM 2013

107,4 KM 2019
IN 6 YEARS

2013
3,3 KM

2019
107,4 KM

SANTOS DUMONT AVE – AFTERNOON PEAK (Km/hr)

207% VELOCITY GAIN IN SANTOS DUMONT AVE

BEFORE
4,4 Km/hr

AFTER
13,5 Km/hr
‘BRT-LITE’
2 SECTIONS IMPLEMENTED
100% WI-FI

30% AIR CONDITIONING
REFURBISHED BUS TERMINALS
Button to report sexual harassment in Meu Ônibus app
What if there were continuous policies for URBAN CYCLING?
EXPANSION OF THE CYCLING NETWORK
GROWTH OF 276% IN 6 YEARS

68 KM
JAN/2013

256 KM
MAR/2019
Bezerra de Menezes Ave at 7:30 am:

**APPROXIMATELY 4,000 DAILY CYCLISTS**
40% of the population of Fortaleza lives at a max. distance of 300 meters from the cycling network.

Fonte: Plataforma Mobilidades (ITDP)
ITDP SURVEY IS THE HIGHEST PERCENTAGE BETWEEN BRAZILIAN CAPITAL

Percentage of residents up to 300 meters distant from cycle infrastructure - 2017 (Source: mobilidados - ITDP)

- Fortaleza: 40%
- São Paulo: 24%
- Curitiba: 23%
- Rio de Janeiro: 22%
- Salvador: 20%
- Recife: 17%
- Belo Horizonte: 15%

Source: Plataforma Mobilidados (ITDP)
4 BIKE SHARED SYSTEMS

BICICLETA INTEGRADA

MINI BICICLETA INTEGRADA

BICICLETA CORPORATIVO

BICICLETA CORPORATIVO
+ 2,5 millions trips with the 4 systems

689,8 TONS OF CO² STOPPED FROM BEING RELEASED IN THE ATMOSPHERE*  
* DEZ/14 – MAR/19
SUNDAY LEISURE CYCLING LANE

ENCOURAGING URBAN CYCLING
ALL RESOURCES FROM PUBLIC PARKING EXCLUSIVELY FOR BIKE RELATED POLICIES
EXPANSION OF THE BIKE SHARED SYSTEMS AND CYCLING NETWORK
What if we could test shared electric mobility concepts?
FIRST PUBLICS ELECTRIC CAR SHARED SYSTEM IN BRAZIL

LOCATION

18 SHARED STATIONS
25 USERS PER VEHICLE

4,220 TRIPS
What if **PEDESTRIANS** would get **more space** for their displacements?
TRAFFIC CALMING ZONES

Rodolfo Teófilo
RAISED CROSSINGS
REDESIGNING STREETS FOR THE PEOPLE
4 0 0 0 s q m of space reconquered for pedestrians.
RESHAPING ROADS
MORTALITY RATE DUE TO TRAFFIC ACCIDENT

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>14.2</td>
</tr>
<tr>
<td>2005</td>
<td>15.4</td>
</tr>
<tr>
<td>2006</td>
<td>14.1</td>
</tr>
<tr>
<td>2007</td>
<td>13.8</td>
</tr>
<tr>
<td>2008</td>
<td>13.9</td>
</tr>
<tr>
<td>2009</td>
<td>14.9</td>
</tr>
<tr>
<td>2010</td>
<td>15.4</td>
</tr>
<tr>
<td>2011</td>
<td>14.8</td>
</tr>
<tr>
<td>2012</td>
<td>14.0</td>
</tr>
<tr>
<td>2013</td>
<td>14.7</td>
</tr>
<tr>
<td>2014</td>
<td>12.2</td>
</tr>
<tr>
<td>2015</td>
<td>10.8</td>
</tr>
<tr>
<td>2016</td>
<td>9.8</td>
</tr>
<tr>
<td>2017</td>
<td>8.6</td>
</tr>
<tr>
<td>2018</td>
<td></td>
</tr>
</tbody>
</table>

40% reduction compared to 2014

RESHAPING ROADS
What if these policies were LONG TERM sustainable?
What are the NEXT STEPS?
MICRO MOBILITY: ELECTRIC SCOOTERS
MICRO MOBILITY: SHARED ELECTRIC BIKES
ELECTRIC BUSES
EXPANSION OF EXISTING PROGRAMS:
PEDESTRIANS, CYCLISTS AND PUBLIC TRANSPORT

TACTICAL URBANISM
CIDADE DA GENTE
CALÇADA VIVA

TRAFFIC CALMING ZONES
PRAIA DE IRACEMA
EXPANSION OF EXISTING PROGRAMS: PEDESTRIANS, CYCLISTS AND PUBLIC TRANSPORT

+ 20 KM OF DEDICATED BUS LANES

+ 140 KM OF CYCLING NETWORK
EXPANSION OF EXISTING PROGRAMS:
PEDESTRIANS, CYCLISTS AND PUBLIC TRANSPORT

<table>
<thead>
<tr>
<th>BICICLETAR</th>
<th>MINI-BICICLETAR</th>
<th>BIKE RACKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ 130 STATIONS</td>
<td>+ 15 STATIONS</td>
<td>2000 BIKE RACKS</td>
</tr>
</tbody>
</table>

[Images of bicycles and bike racks]
Fortaleza is in rapid transition to become a MULTIMODAL city.
Fortaleza is in rapid transition to become a MULTIMODAL city.
When a city rethinks its many modes of transport the **RESULTS** start to show
Fortaleza, Brazil Wins 2019 Sustainable Transport Award

June 29, 2018

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.

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

BY THE BRAZILIAN REPORT

Society

JUN 29, 2018
Fortaleza vence prêmio de mobilidade urbana sustentável

Medidas como bicicletas compartilhadas e faixas exclusivas para coletivos renderam conquista à Capital

As ações de Fortaleza para se tornar uma referência brasileira em segurança viária

21/06/2016

Ao longo de pelo menos uma década, entre 2004 e 2014, a capital do Ceará registrou uma média de 350 mortes no trânsito a cada ano. Os números aterrorizaram a cidade, que desde então tem implementado uma série de ações para promover a mobilidade sustentável.

Fortaleza no caminho da mobilidade sustentável: iniciativas beneficiam moradores e otimizam a integração modal

By A Book 4 de Abril de 2017

Fortaleza recebe projeto de mobilidade elétrica

Projeto já é uma realidade em muitos países da Europa e consolidará o sistema de carros elétricos compartilhados como ação de mobilidade urbana

Pode parecer audacioso, mas Fortaleza tem o objetivo de se tornar a cidade mais cicável do Brasil. Nesse caminho, a mobilidade da capital do Ceará passa por mudanças que beneficiam tanto os moradores quanto os turistas que, além das belas...
First we shape cities and then they shape us.

- Jan Gehl