LOW COST AND HIGH IMPACT INTERVENTIONS
THE CASE OF FORTALEZA
meet fortaleza

**Population:**
2.6 million – 5th in Brazil

**Area:**
314 km²

**Density:**
8,290 hab./km² [1st in Brazil]

**Vehicle fleet:**
1.1 million vehicles [2.4 inhabitants for each motorized vehicle, road crashes are the 5th cause of death]

**Road Network:**
~ 4,000 km

**CO2 emissions:**
5,139,514 tons [61% from the transportation sector]
The city's sustainable urban mobility policy strategy was based on three main dimensions:

- **Equity**: more equitable division of road space
- **Environment**: environment-friendly transport modes
- **Public Health**: prevention of road deaths and serious injuries
four factors were key to promote change in fortaleza

- political commitment
- technical expertise
- International support
- media engagement
pilot projects with constant monitoring and communication of results were key for paradigm shift.
public transit priority for buses
single-fare ticket

temporal integration system with unlimited transfers within two hours
dedicated bus lanes

more than 100km of transit dedicated lanes implemented in 5 years
bus dedicated lanes promoting faster and more reliable transit trips

207% speed growth in Santos Dumont avenue

2013
3km

2019
107.4km
bus vehicle improvements

100% of buses with wi-fi

30% of buses with air conditioning
refurbished bus terminals

more confort and safety for transit transfers
transit mobile app

estimated arrival time and panic button to report sexual harassment
expansion of the cycling network

40% of Fortaleza residents lives up to 300 meters from cycling infrastructure, being it the highest percentage between Brazilian capital cities.

276% growth in 6 years

257.7 km

68 km
bike sharing systems

bicicletar
main bike sharing system

bicicleta integrada
bike sharing system integrated with public transport

mini bicicletar
bike sharing system for kids

bicicletar corporativo
corporate bike sharing system
all resources from public parking

exclusively

for bike related policies

expansion of the bike shared systems and cycling network
road safety
safer streets for all road users
Interventions

traffic calming zone

low speeds and different elements to protect vulnerable road users
pedestrian-safety interventions

traffic calming zone
1,980 m² of reclaimed space for pedestrians
67% reduction on crossing distances
Pedestrian-safety Interventions

Tactical urbanism: temporary road redesigns to test new concepts with the population.
pedestrian-safety
Interventions

tactical urbanism
59.7% more children walking and using the public space
50% reduction on car speeds
speed reduction

two pilots implemented in 2018, results show 83.3% reduction in pedestrian crashes
what if these solutions were sustainable in the long term
First we shape the cities, then they shape us

- Jan Ghel
obrigado
thank you