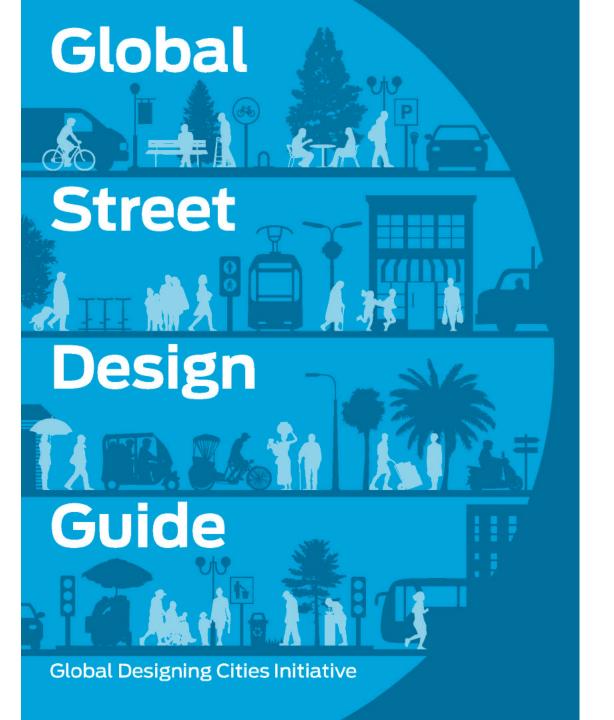




INITIATIVE FOR GLOBAL ROAD SAFETY





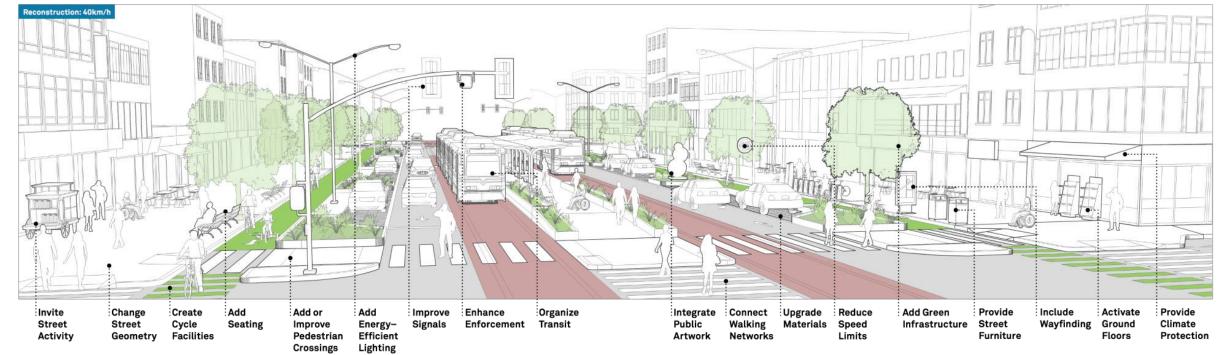
# **Global Expert Network**



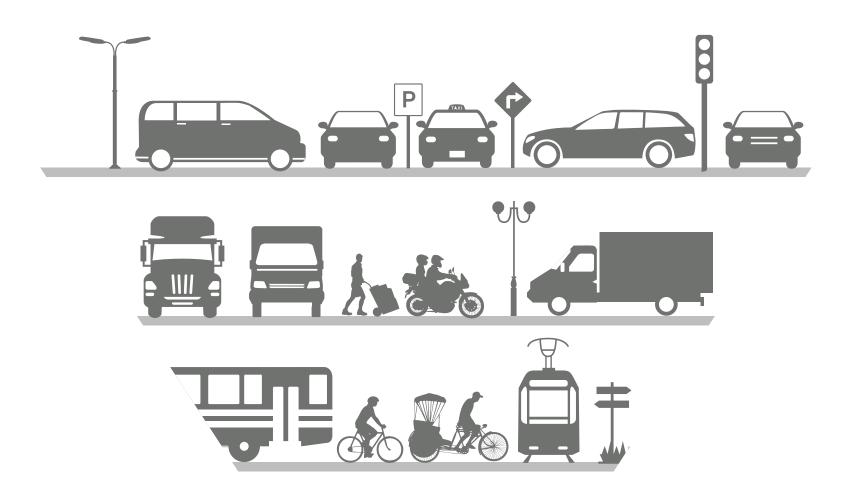
#### What is Possible?























#### As of May 2017

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#### **Endorsed by:**

# 35+ Cities and 25+ Organizations





















# São Paulo Brasil





# Fortaleza Brasil









## Policy and Design Guidance

# Capacity Building and Community Engagement

Interventions and Transformations



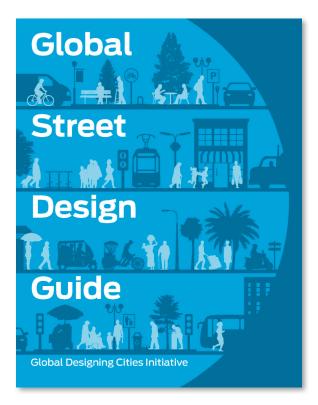


# Policy and Design Guidance

# Capacity Building and Community Engagement



**Metric Collection and Evaluation** 



Phasing and Interim Strategies

#### 2.7 | Phasing and Interim Strategies



Interim design strategies offer an opportunity to quickly demonstrate change, allowing communities to experience an alternative condition and see progress in a short time frame.

Changing decades of ambadded practice in designing urban streets can be challenging. A lack of proven local pracedents, limited funding, and regulatory restrictions can lead to hesitation in the face of innovative solutions. Lengthy construction periods and frustrating wait times for nearly residents and businesses further add to reluctance toward implementation.

Interim materials or phased solutions provide opportunities to quickly demonstrate change, at a lower cost, and are therefore more easily approved. Before and after comparisons reveal solutions that work and ones that don't. Interim phasing should be used to inform long-torm solutions.

Some cities brand the interim design as a pilot or test phase for a project, and othersview the design as equivalent to permanent reconstruction. While a majority of these pilot projects go on to become permanent capital projects, some are altered or redesigned in the process based on their performance. This results in a better final product and saves the expenditure of future improvements or revisions.

Shaping Reports
Phasing and Interim Strategies

#### Interim Elements and Material

During the life cycle of a street, the original design and roadway geometry may no longer meet the need of the community. To address the need for roadway retrofits and urban traffic calming, use inexpensive, easily deployable, and non-permanent solutions that work on an area-wide coales.<sup>2</sup>

#### Modular Curbs

Small concrete dividers or parking bumpers can be installed for overnight transformation of streets to reflect the desired configurations, without expensive and permanent infrastructure.

#### Flexible Bollards

Plastic delineators are easy to install and remove. They can help in directing traffic flows and offer resistance to vehicular speeding without posing a risk. These also augment other vertical devices such as stone bollards and jersey barriers.

#### Paint and Thermoplastic

Surface materials can be applied quickly and relatively inexpensively. They do not create a physical barrier and may be combined with other elements for that purpose. These generally set as visual devices that force drivers to slow down, carefully read the roadbad for movement, and yield to pedestrian.

#### Planters

Planters can be used to create inexpensive yet aesthetically pleasing installations that define medians, islands, curb extensions, plazas, footpaths, and cycle tracks. Planters also add vegetation and greenery to the street.

#### Temporary Site Interventions

Temporary interventions can be implemented and tried on site for varying durations, from a few hours, a day, or even aweek. They help street users visualize alternate uses of the street space and can be effective tools for public engagement.

#### Moving the Curb

Many streets have a curb to indicate a separation of space between pedestrians and other modes of transport. Rethinking the curb and moving it to better balance all the users of the street can transform how the street functions, looks, and feels. Interim streetsgies allow streets to adapt quickly to changing contexts. Use the following strategies to transform streets and intersections to make them safer and more convenient for sustainable mobility choices.

#### Parklets

Parklets are public seating platforms that replace several parking spaces. They serve as a gathering place for the community and can revitalize local businesses. See 10.3: Pedestrian-Priority Spaces.

#### SidewalkWidening

Sidewalks can be expanded using interim materials, such as epoxied gravel, paint, planter beds, and bollards, easing pedestrian congestion in advance of a full reconstruction.

#### Intersection Redesign

Interim markings with bollards or planters can change the geometry of an intersection and help revitalize a neighborhood, while increasing accessibility and making mobility more interest.

#### Traffic Calming

Temporary traffic calming devices may be installed using pedestrian curb extensions at mid-block crossings or at street corners, or by using landaceping and narrow drainage channels. These may be designed as quick, inexpensive elements using paint and plastic bollards, or with use of permanent elements such as raised islands.

#### Cycle Corrals

Cycle corrais typically replace one parking space at the request of a local business or property owner and accommodate 12–24 cycles. Corrais can be installed at corners to increase visibility. 2

#### Vendors and Food Trucks

Vendors and food trucks can provide valuable services where they are lacking. Areas close to key destinations such as transit stations may dedicate parking spaces for these uses so that clear walking paths may be safely maintained.



Moveble chairs and table reclaim pedestrian space in a parking loc.



Flexible bollards delineate an Interim bike lane.



Parklet installed to provide additional pedestrian space.



Planters and paint used to create an interim plaze.

32 GLOBAL STREET DESIGN GUIDE 33

# Comein many shapes and sizes!

#### **Intersection Redesigns**

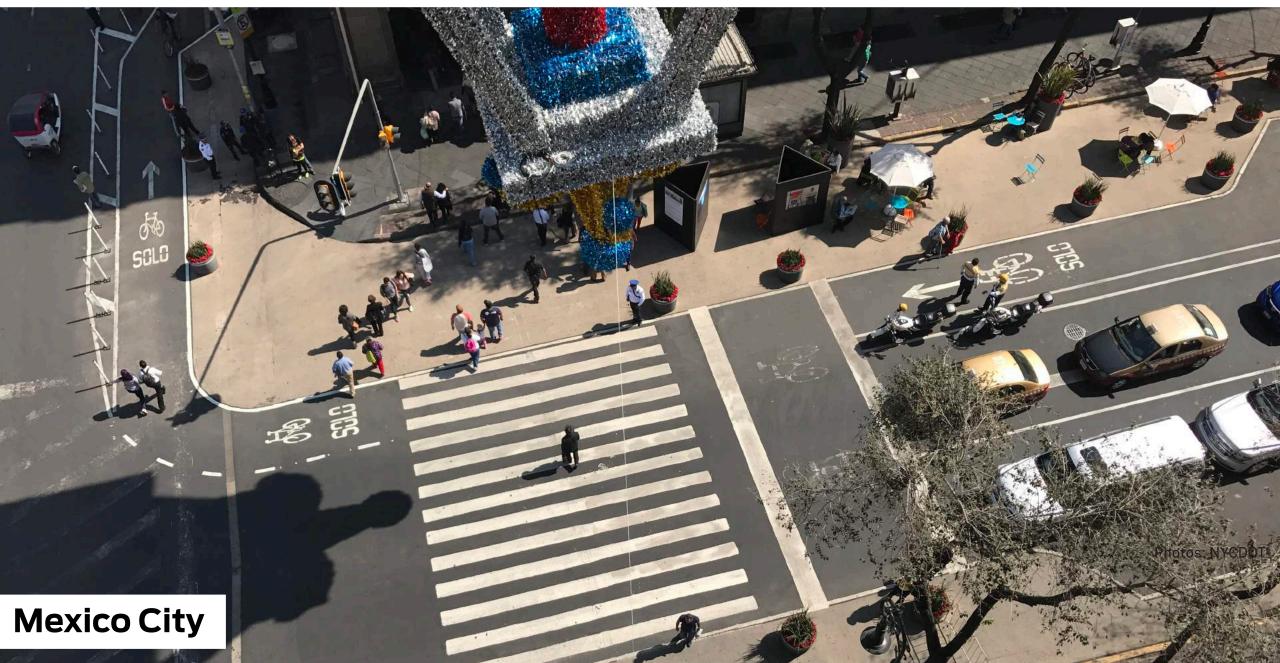




Photos: NYCDOT

### **Traffic Calming Strategies**





#### Mid-block crossings







São Paulo, Brazil

#### **Transit Streets**



#### **Bike Lanes**



#### **Parklets**





# **Pedestrian Only Streets**

























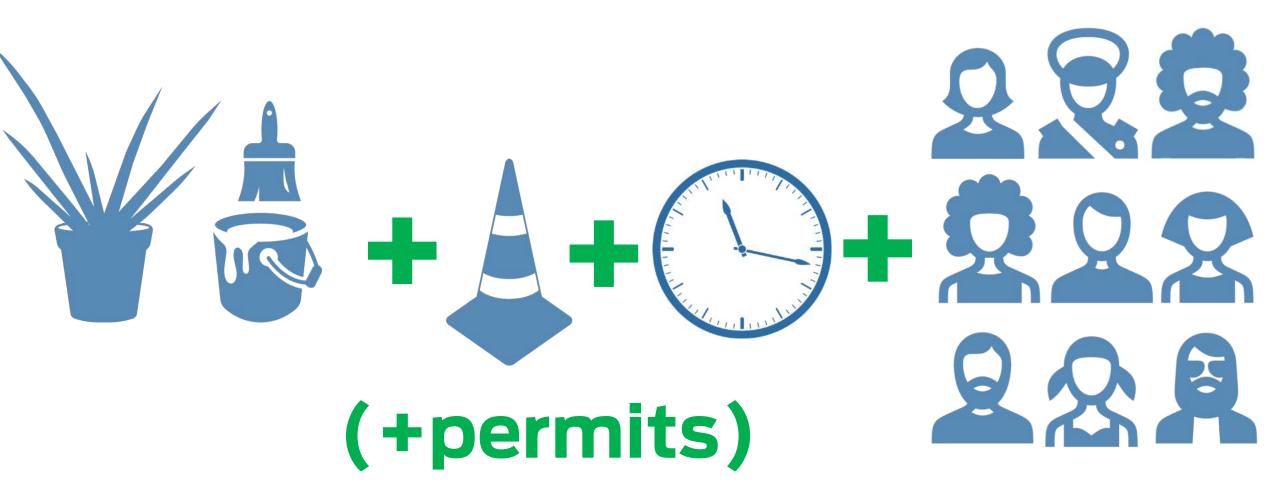
# 

#### **Duration / Length**

Chiefin hervention 99 (bob.nb)



# Simple Recipe



## **Toolkit:** The basics





Chalk, Paint, Buckets, Rope, Brushes, Water and Tape (or official city paint)

# **Toolkit:** Planters and Surface Treatments







## Toolkit: Additional features for place-making











Seating

**Tables** 

**Umbrellas** 

**Kiosks/ Vendors** 

# Most Importantly - People!!











# **Site selection**



**Plan ahead** 



**People + partners** 



**Collect metrics** 



Programming



**Implementation Plan** 





# **Site selection**

- Manageable scale?
- Can you test innovative new ideas? Have an impact?
- What are you trying to achieve
  - have goals in mind
- Can you use this as an interim step to a longer term project?
- Check any permits required
- Place where people can activate the space





- Check dates (holidays/ strikes etc)
- Plan for enough staff support
- Make a materials checklist
- See what other projects / affecting this area?
- Spend time on site to observe Check dimensions
- Develop scaled drawings
- Let people know what's happening (flyers etc)

#### Materials for painting

#### Print and check

Print the list of materials and verify you have
all you need before the implementation date

- Chalks
- □ Gypsum
- Food coloring (if you'd like different colors than just white)
- Buckets
- □ Brushes
- Brooms (Ideal for large surfaces like crossing)
- Water (verify if access to water)
- String (to do straight lines)
- □ Traffic Cones
- Measuring Tape
- Masking Tape
- Stirring paddle or paint mixers (to mix the gypsum with the water)
- Yellow tape "do not cross line" (delimitate/protect painted surface)
- Some rags/ towels (for wiping/cleaning hands etc)
- Gloves (to protect hands)



# **People + partners**

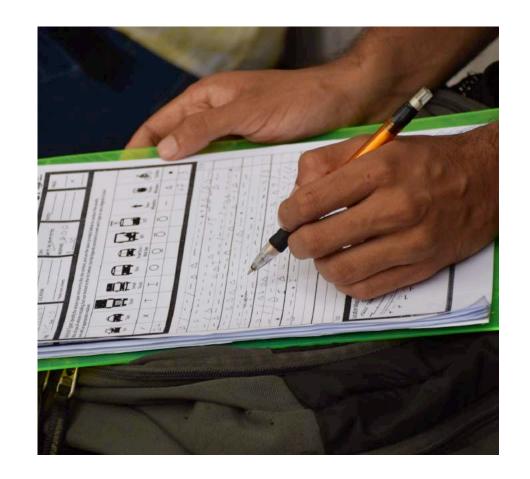
- Local residents + businesses
- Which city agencies?
- Police?
- Local NGO's
- Universities/ academic groups
- Schools
- Artists
- Nursery to lend plants
- Invite media





### **Collect Metrics**

- Allocate resources wisely?
- What are you trying to demonstrate?
- Counts
- Speeds
- Surveys
- Perceptions
- Photos/ videos
- Particular users?
- (Do the same for during)





# Programming

- One day or longer period?
- Music
- Artists
- Outdoor movies
- Games for kids
- Health clinics
- Outdoor Classes
- Dance/ Yoga etc
- Boards for community feedback





## **Implementation Plan**

- Game day (or night) plan!
- Meeting time and place brief staff
- Delivery of furniture/plants etc
- Programming schedule
- Coordinate crossing painting with low traffic (or do in two parts)



# 

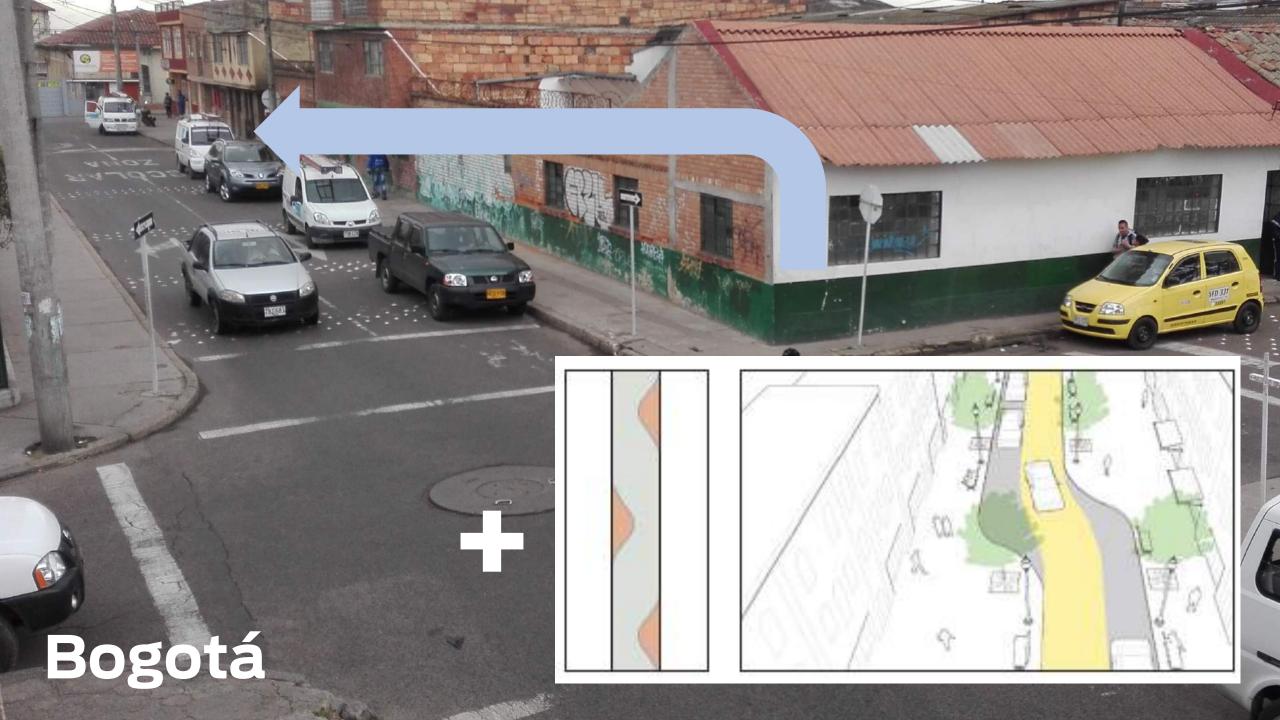
























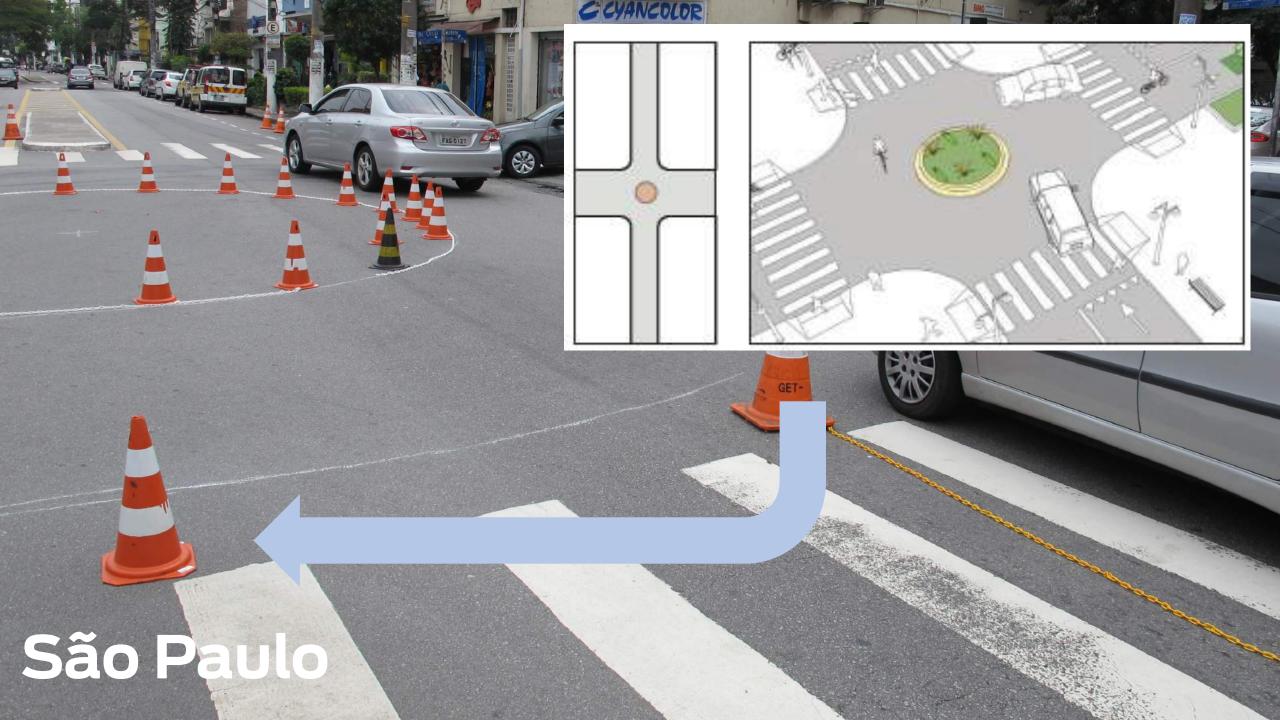


#### Now seeing local engineers applying this strategy!









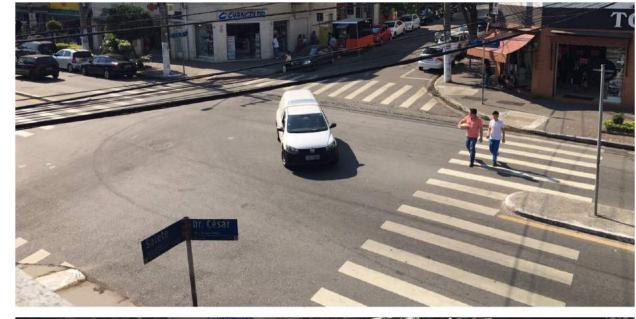






#### São Paulo









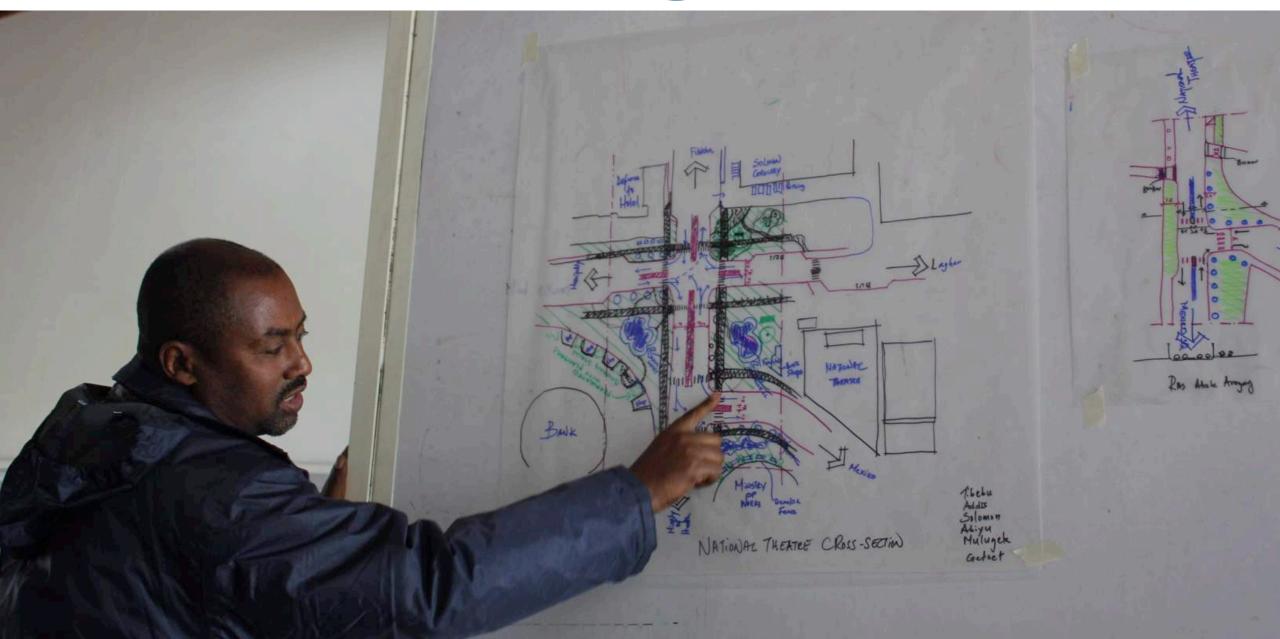
#### Can lead to change practices and manuals!



#### Addis Ababa.....Indoor training + workshops



#### Addis Ababa.....draft design proposals on paper



#### to experimenting on site!





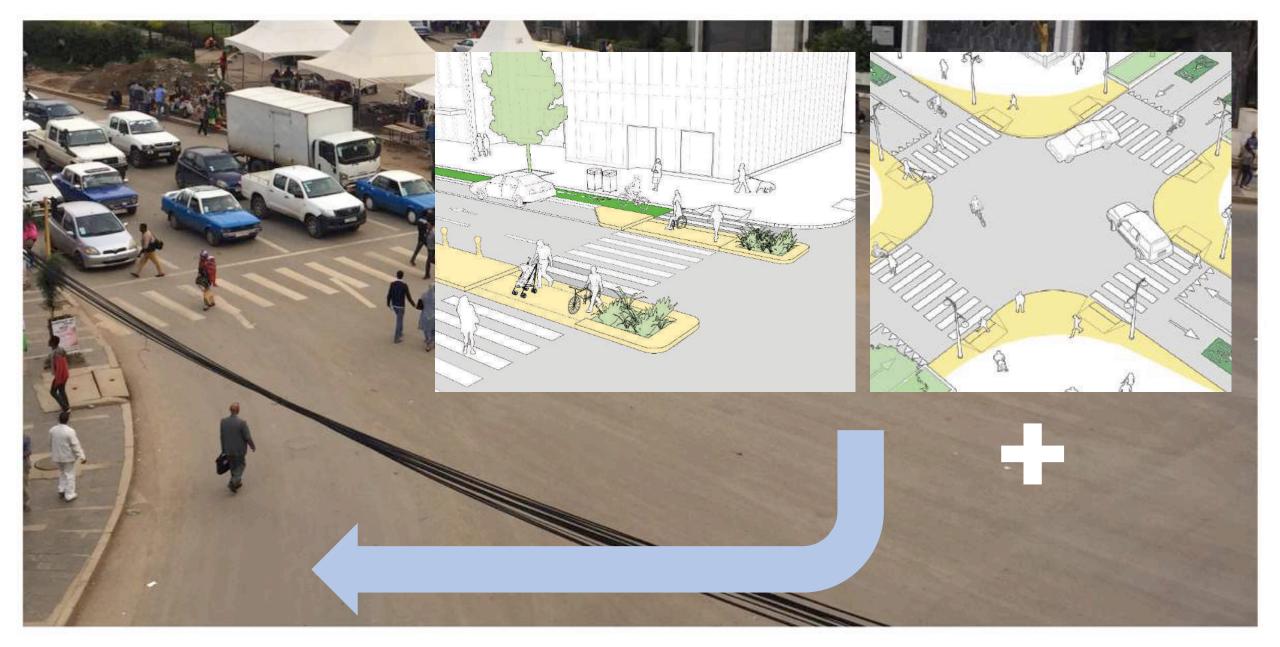


#### Learning through doing











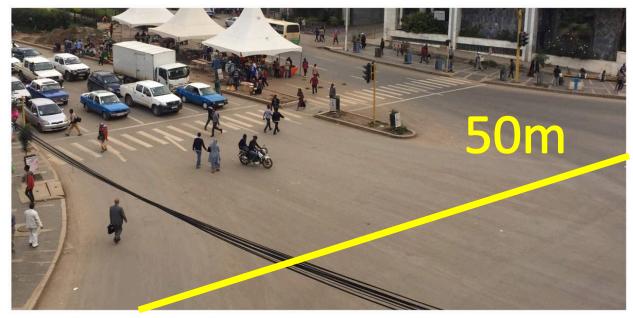














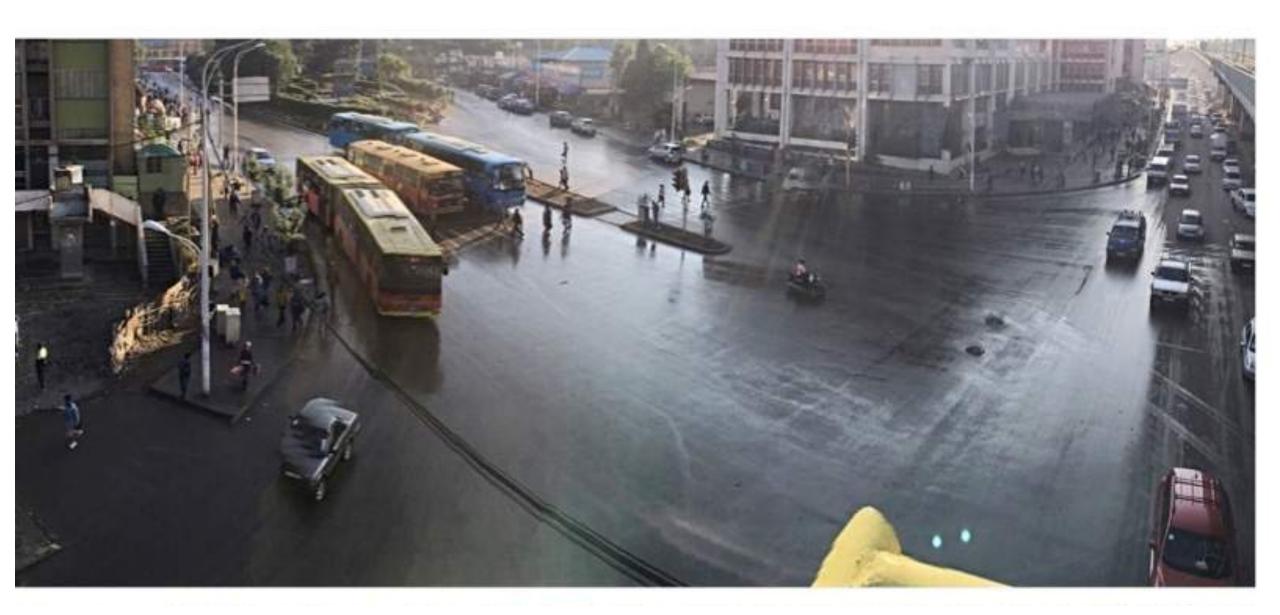






Addis Ababa, Ethiopia





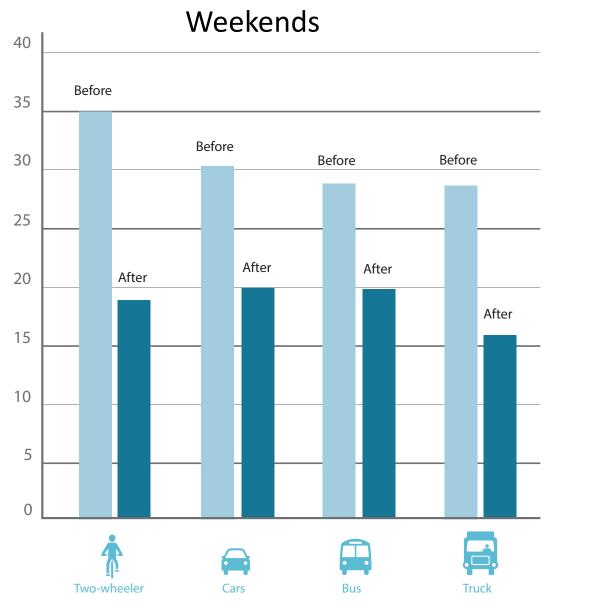


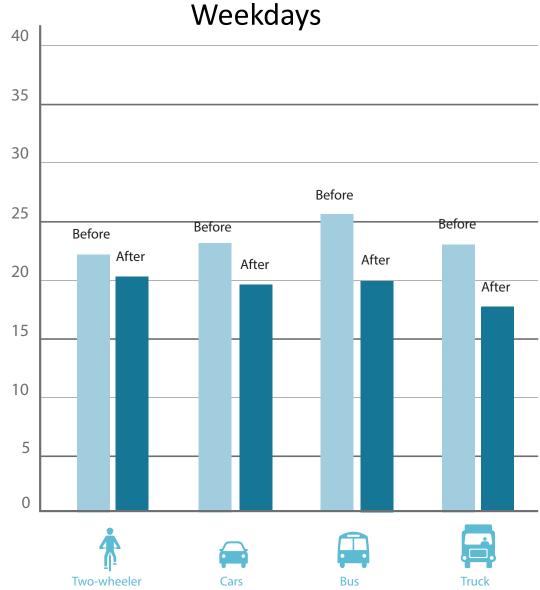




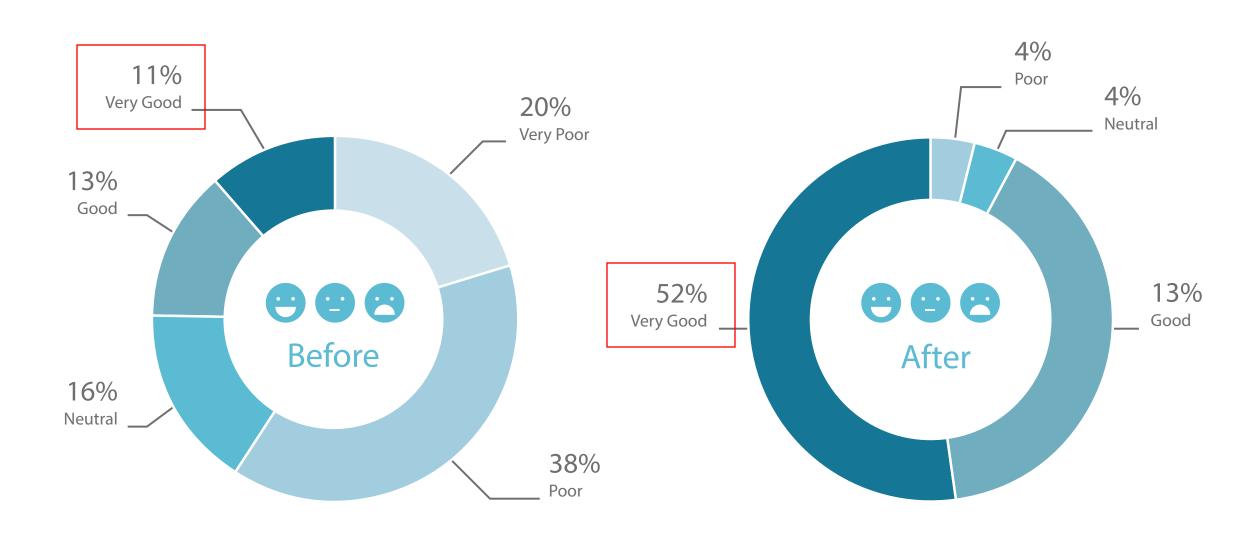


#### **Turning Speed Observations**





# Road users' responses on the comfort, convenience, safety, and attractiveness of intersection before and after transformation



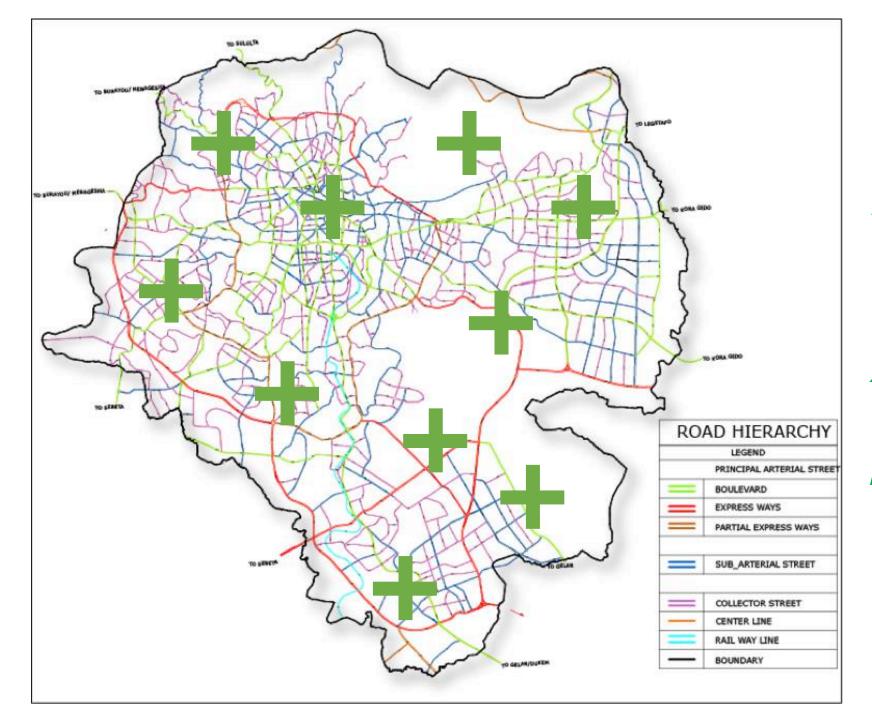












# Scaling Up X10 per/year









# If you can't measure it, you can't manage it.

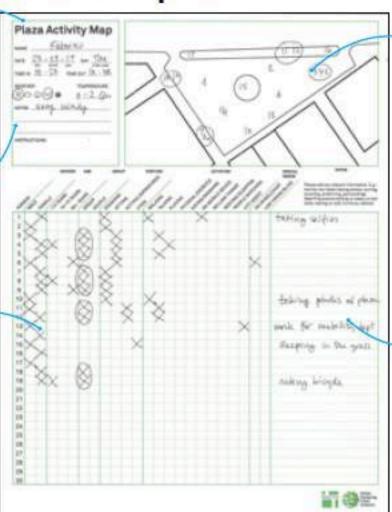
Michael Bloomberg

#### Form example

Different forms for each metric

Timeframe, date and surveyors information

> Clearly register the according metrics

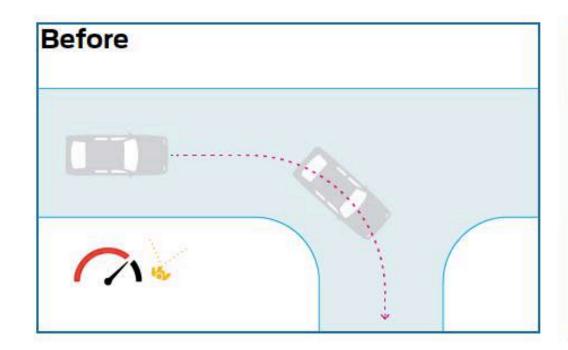


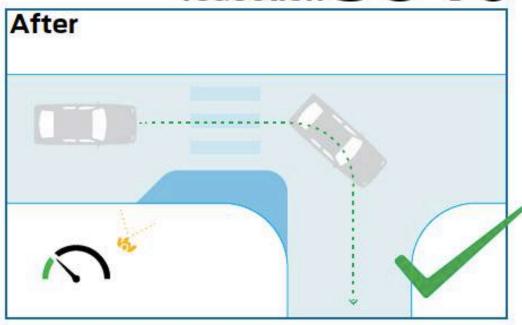
Key location maps

Space for surveyor notes and observations

#### Design strategies impacts

# Speed 30%





# Intersection A



- Surveyor 1
- Surveyor 2
- Surveyor 3

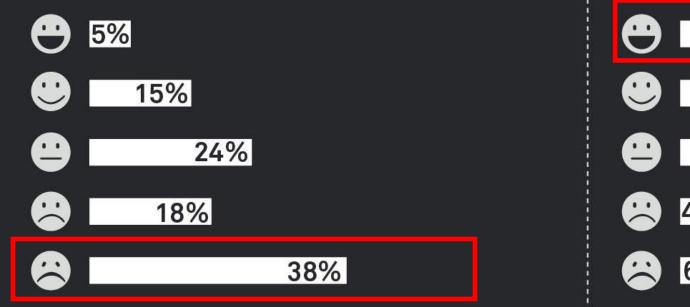
#### Intersection B

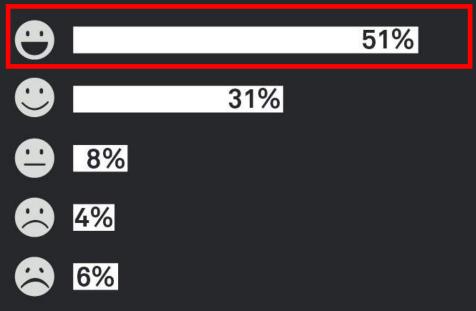


- Surveyor 4
- Surveyor 5
- Surveyor 6









#### How safe to you feel on the sidewalks?







#### How safe to you feel on the crosswalks?







# Avergage speeds reduced by 30%







#### From considering only one user.....



#### .....to considering all users

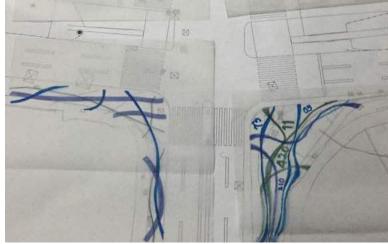




Inclusive. Quantitative. Qualitative. Contextual

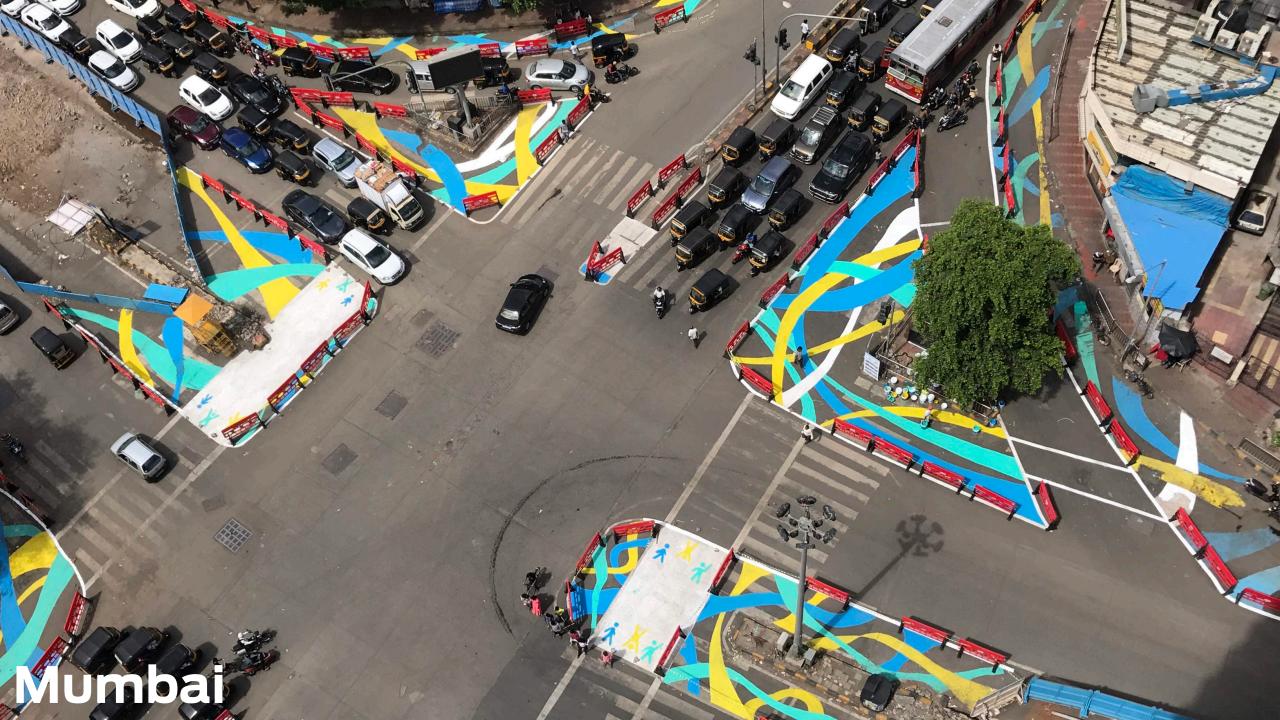
#### Most Importantly - People!! (Local art/ design schools)











## Getting the media involved

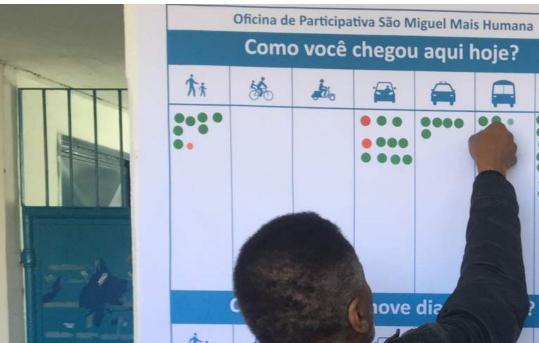




## Learning from local expertise









#### What's happening, when, why, for how long....



## During the event - inviting leaders





## During the event - talking to people

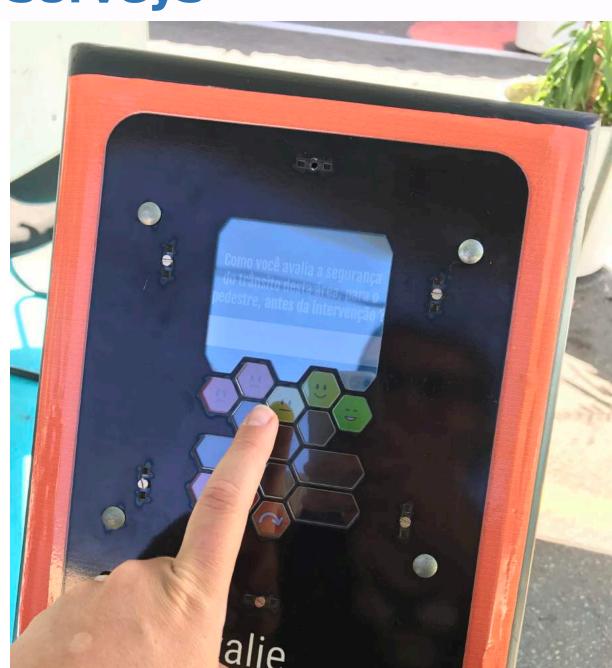


## During the event - learning what people care about



## During the event – digital surveys





## During the event - branding



## **During the event - partners**









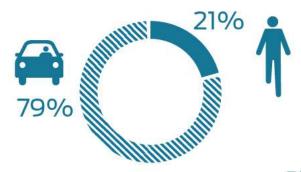


#### **Fortaleza**

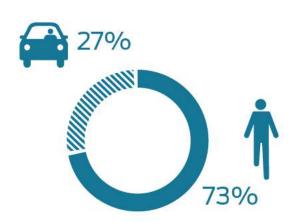
Quantitative survey

Pedestrians Share of the Street

Cidade 2000



**BEFORE** 

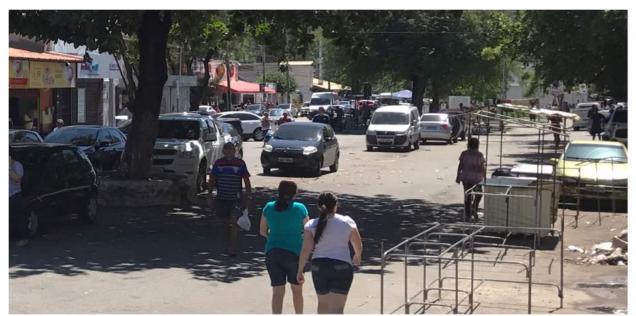


**AFTER** 

















Cidade 2000, Fortaleza















Cidade 2000, Fortaleza









#### **Fortaleza**

Quantitative survey

Cidade 2000





97%
Believe Pedestrians
should be prioritized
over motorized traffic



















## Thank You!

Download the guide at www.globaldesigningcities.org

Skye Duncan skye@nacto.org



