Mastering Mobility: Reflecting about barriers and co-creating solutions for active and walkable cities

December 7th | 16-17:30 CET

European Commission

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety of the Federal Republic of Germany

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2021 Mastering Mobility Series!

- ✓ Learn
- ✓ Exchange
- ✓ Connect

02.11.2021	Data types and data collection methods for an urban mobility diagnosis
10.11.2021	Tramways as sustainable mass-transit systems: Ex-post evaluation of Moroccan tramways
16.11.2021	Understanding air quality and its role in urban transportation
23.11.2021	Integrating air quality into sustainable mobility planning
29.11.2021	Reforming paratransit with MobiliseYourCity's newest catalogue of measures
30.11.2021	Getting to know your potential: Conduct a financial assessment of your city
07.12.2021	**Reflecting about barriers and co-creating solutions for active and walkable cities**

Simultaneous translation (French-English provided)

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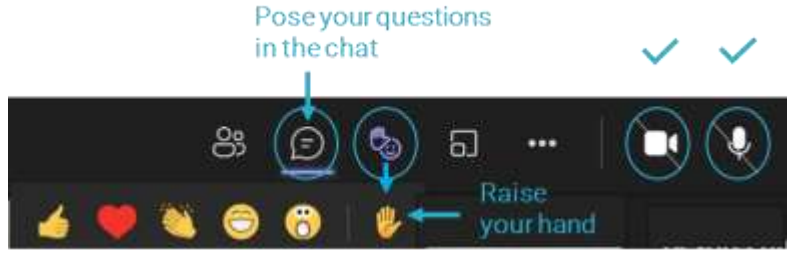
Some general notes on this session



Make sure you are muted and your camera is turned off

This session will be recorded. You will not appear in the recording if your camera is kept off

Include your questions in the chat, we will pose them in the Q&A if time allows

Feel free to share any material from your organization or other contributions in the chat!

Session is only available in English!

Please have a look at our past sessions that were offered in French and English here

Mastering Mobility Series

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Objectives of the session

- Communicate the benefits of active modes of transport for urban mobility.
- Identify core concepts, approaches, and tools towards increasing active transport.
- Learn from practices and processes showcased during the session about barriers and potential solutions for active mobility.
- Exchange on barriers and co-create solutions for active and walkable cities

Agenda

16:00 Opening and Welcome

Verena Knoell (MYC)

16:15 Defining active mobility and understanding its importance

Aimee Gauthier (ITDP)

16:25 Co-Identifying barriers for active mobility in your city

All participants

16:35 Solutions / What have some cities done to foster active mobility and how have they succeeded?

Aimee Gauthier (ITDP) | Chris Kost (ITDP)

16:45 Q&A

All participants

16:55 Case Study: Green Mobility Corridor, Kochi, India

Vincent Lichère (SUEZ)

17:05 Q&A

All participants

17:10 Co-creating solutions

All participants

17:25 Wrap up and farewell

Verena Knoell (MYC)

Speakers

Speaker

Aimee Gauthier

Chief Knowledge Director

ITDP

Speaker

Vincent Lichère

Director

SUEZ Consulting Mobilities

Speaker

Chris Kost

Africa Director

ITDP

Facilitator

Verena Knöll

Associate Mobility Expert

MobiliseYourCity

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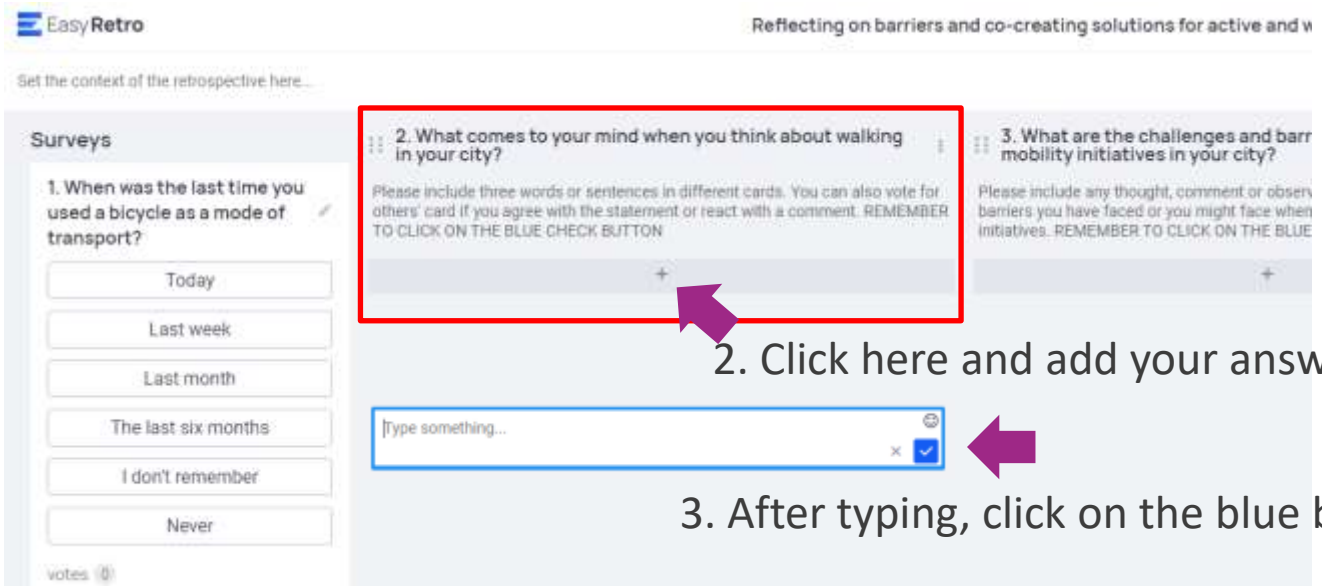
Icebreakers

Go to the board (link)



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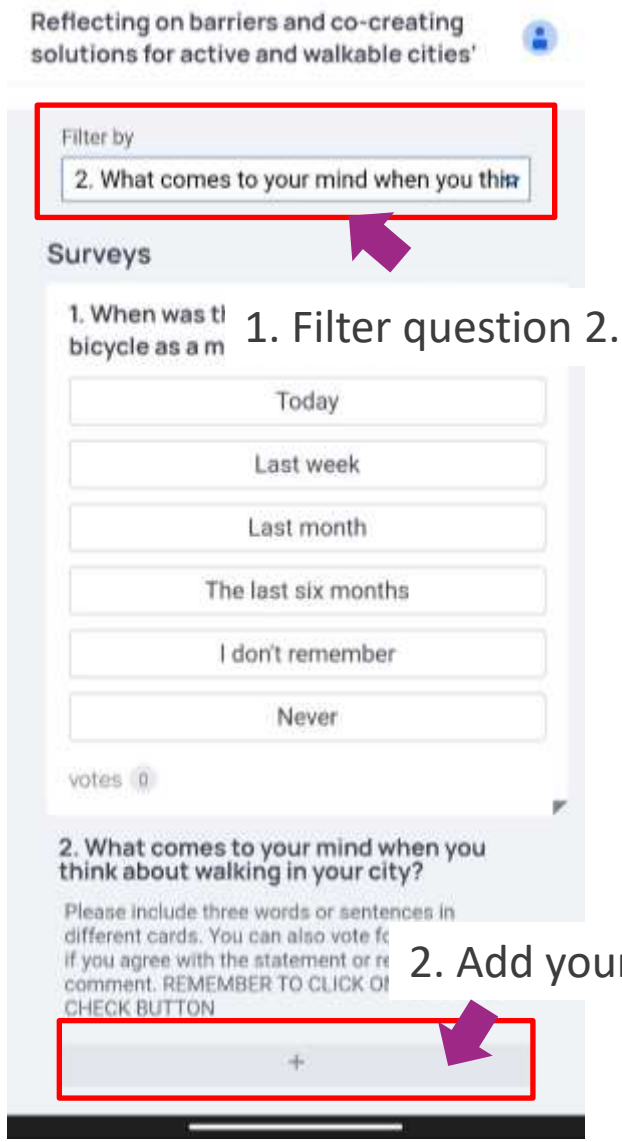

1. Filter question 2.

2. Add your answer

From Barriers to Solutions: Active and Walkable Cities

7 December 2021

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Contents

Mobilise Your City

Why Walking and Cycling?

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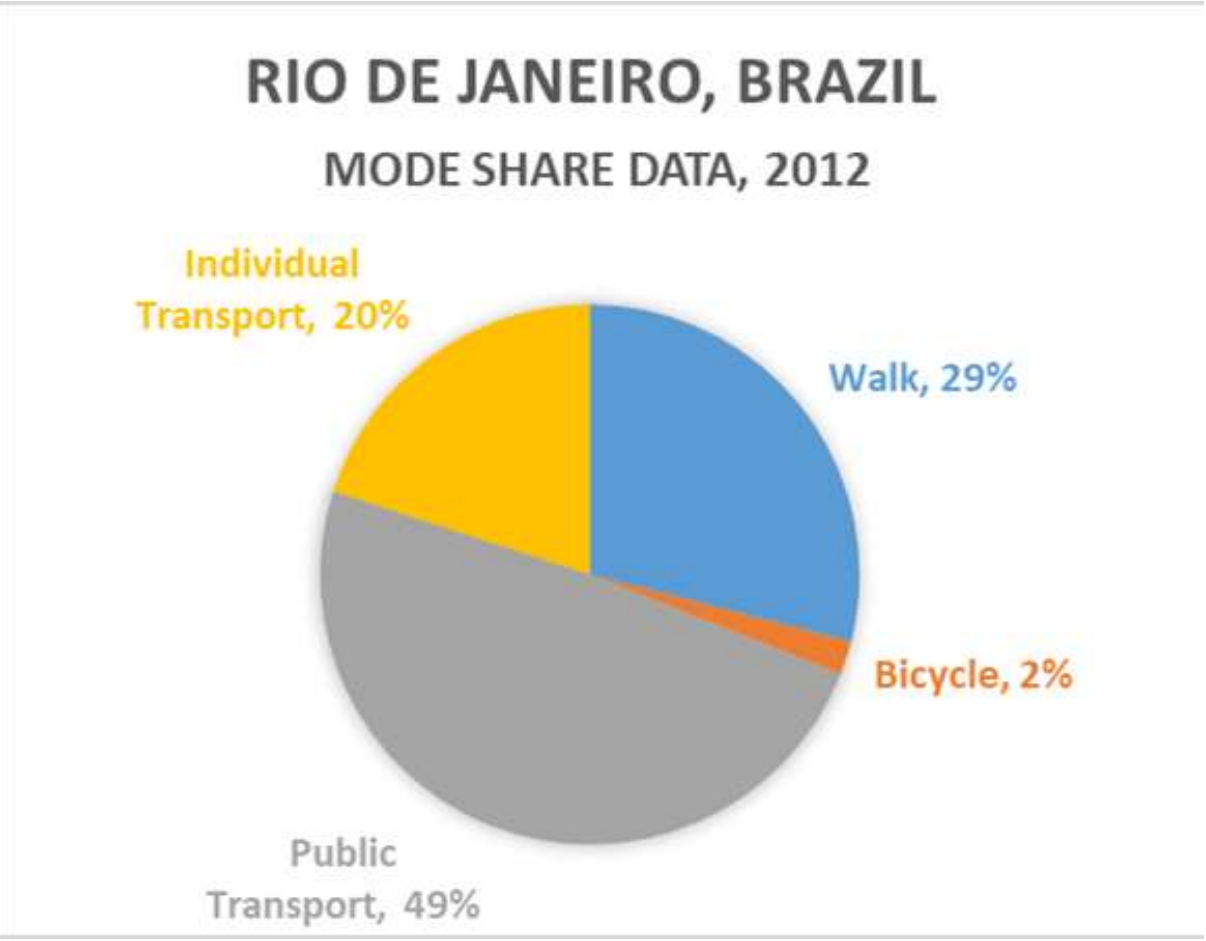
#1 - Walking is the foundation of a city

- Everyone is a pedestrian at some point in their journey.
- And walking constitutes a high mode share in many cities.


Mumbai, India

Many Brazilian cities range from 30 - 40 % mode share for walking and cycling




Rio de Janeiro, Brazil

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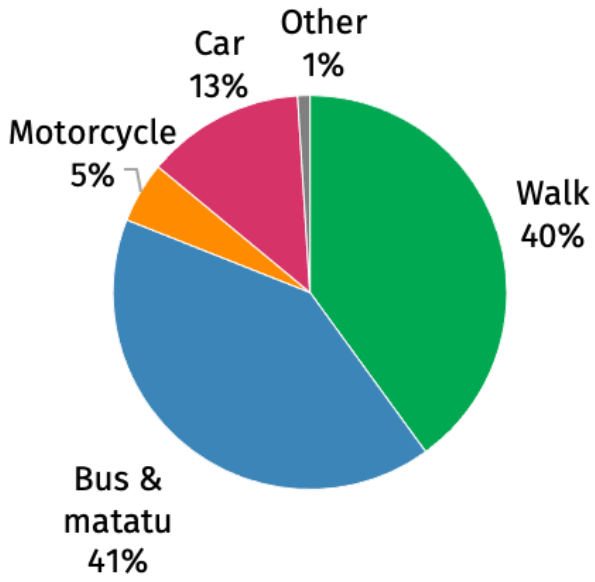
Many cities in countries in Africa have a very high mode share for walking

Nairobi, Kenya Mode Share




Nairobi, Kenya

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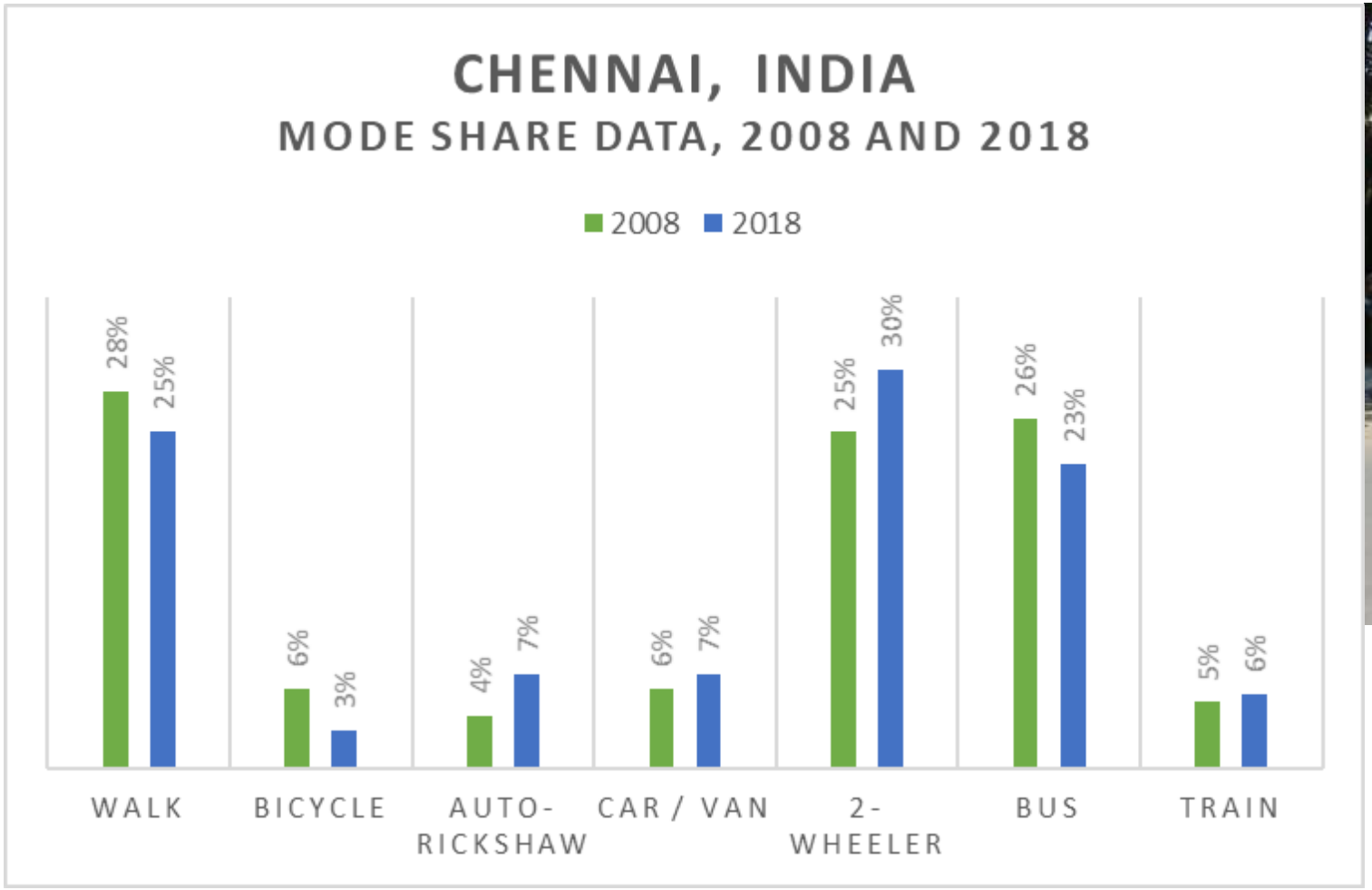
As do many cities in India, but we are seeing walking and cycling mode share decline over time, too



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#2 - Many trips in a city are short trips

- Almost half of all car trips in U.S. cities are less than 3 miles (~5kms).
- Over 30% of car journeys in Europe cover distances of less than 3 km; 50% cover less than 5 km.

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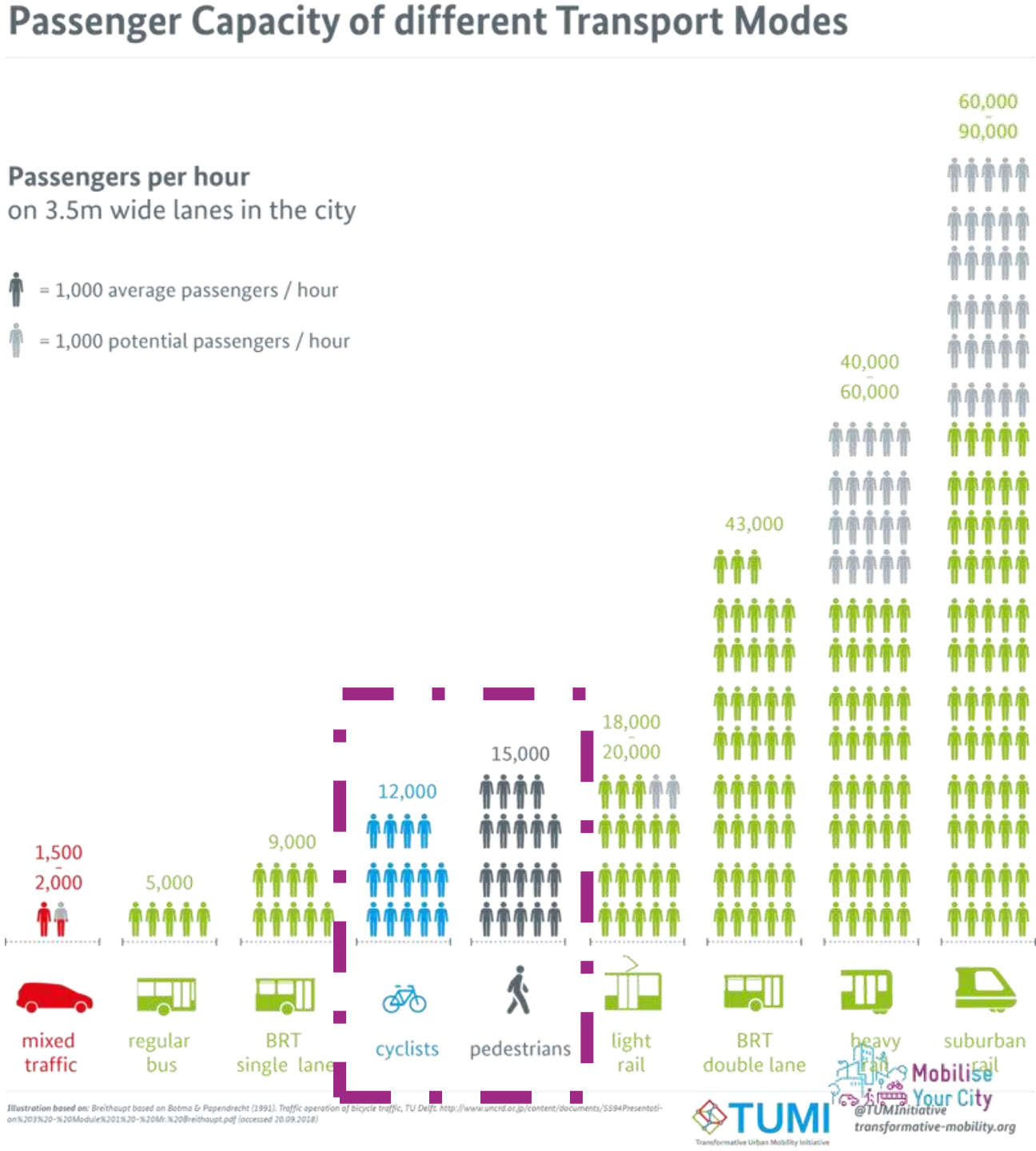
#3 - Walking and cycling are space and cost efficient

- Costs to the individual are much lower for walking and cycling
- Costs to the city are much lower to provide and maintain infrastructure for walking and cycling

- Walking and cycling move more people per same amount of space than cars



#4 - Walking and cycling do not contribute to air and noise pollution

The global cost of air pollution is estimated at $2.9 trillion, or 3.3% of global GDP

#5 - Walking and cycling are inclusive and equitable

The most affordable forms of transport

Available to older and younger alike

#6 - Walking and cycling promote health and well-being

- **Noncommunicable diseases (NCDs) kill 41 million people each year, equivalent to 71% of all deaths globally.**
- **77% of all NCD deaths are in low- and middle-income countries.**

#7 - Walking and cycling generate more local economic development

- In Seoul, South Korea, after Yonsei-ro, once a heavily-congested four lane road, was redesigned as a pedestrian-priority and bus-only corridor, commercial businesses saw an 11% increase in revenue-generating transactions
- Cities in Germany, Denmark, France, and the United Kingdom have also reported retail sales increases following pedestrianization and cycle-supportive redesigns.

#8 - Walking and cycling are resilient forms of transport

- Pandemic
- Natural disasters
- Climate events

After the earthquake in Mexico City, cycling was one of the ways that first responders were able to get around the city

Barriers and Challenges

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Transportation systems are designed for the male, non-disabled commuter and the motorized trip

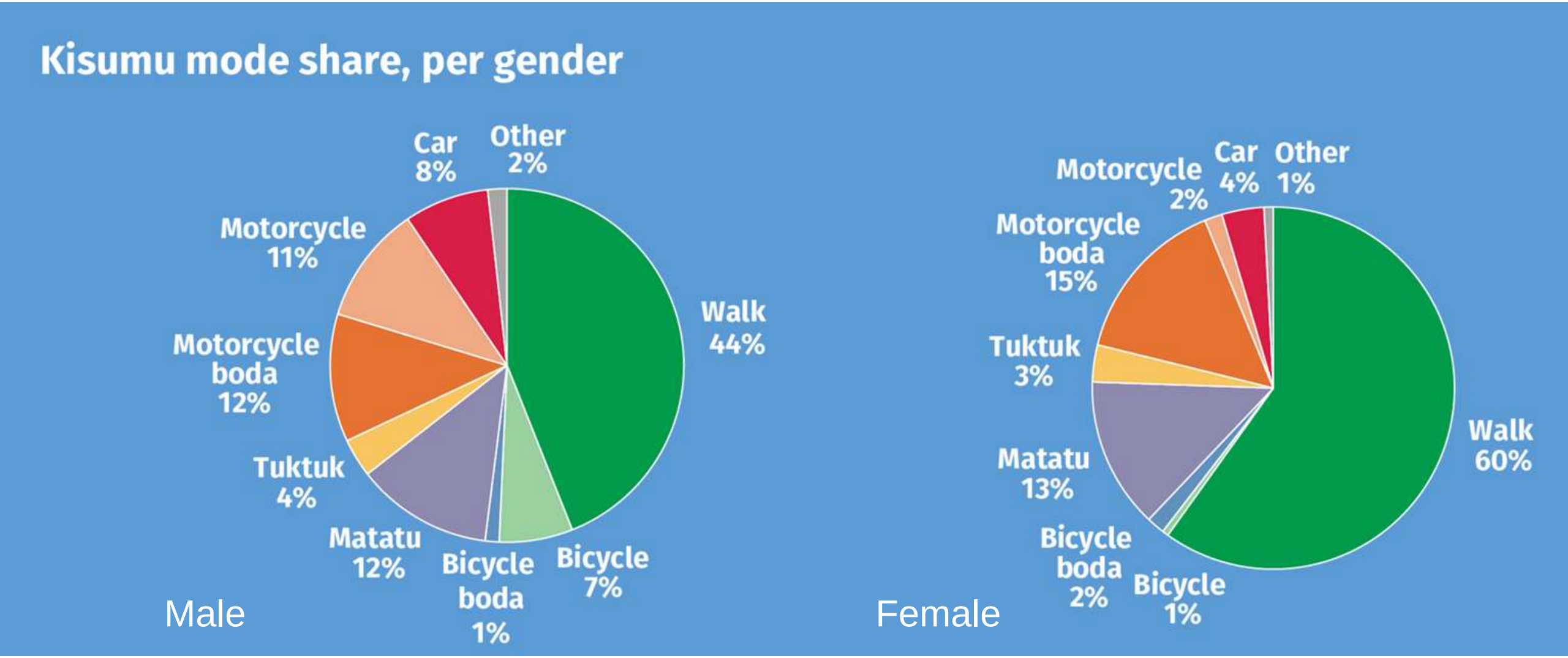
47% of all trips in Santiago are for caregiving activities

(source: Lake Sagaris, Pontificia Universidad Católica de Chile)

Just 16% of all trips in the US are commuting trips

(source: Steven E. Polzin and Alan E. Pisarski, Commuting in America 2013)

Just a note that you need to disaggregate by user



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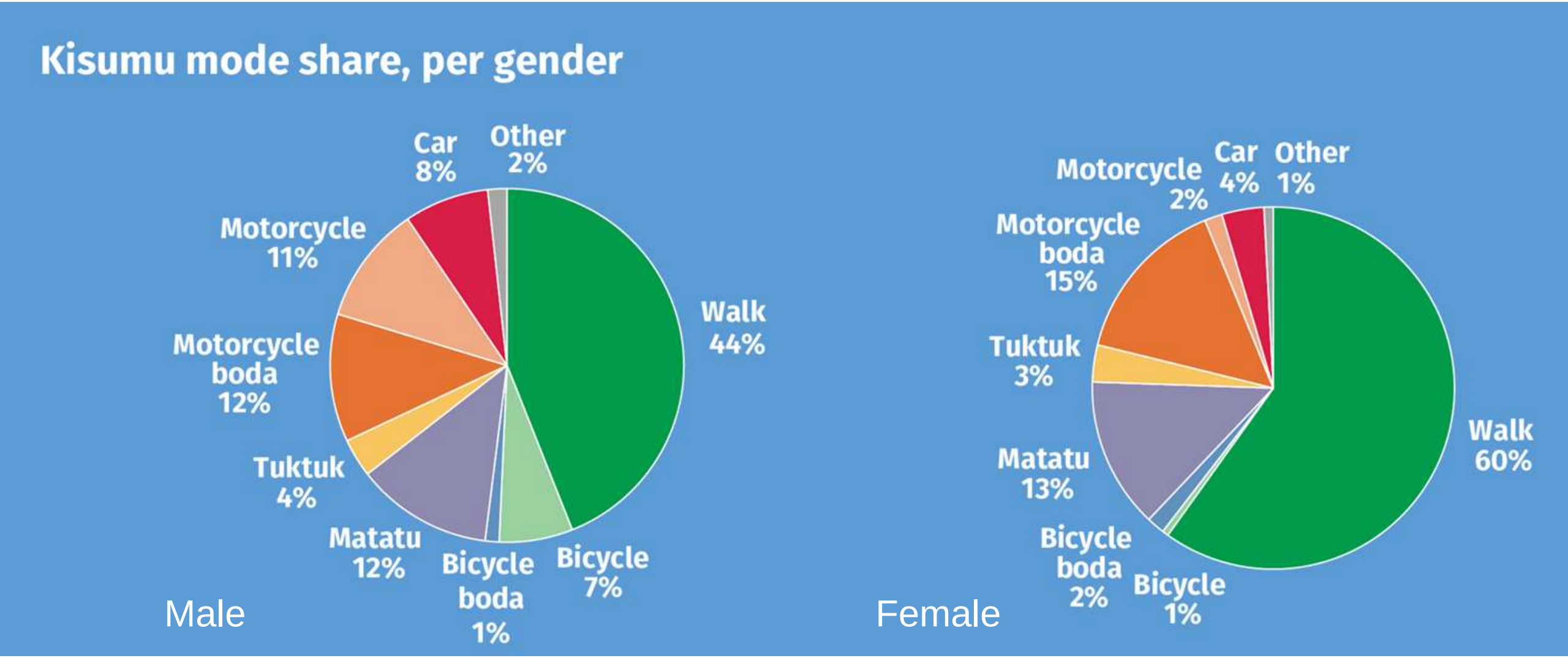

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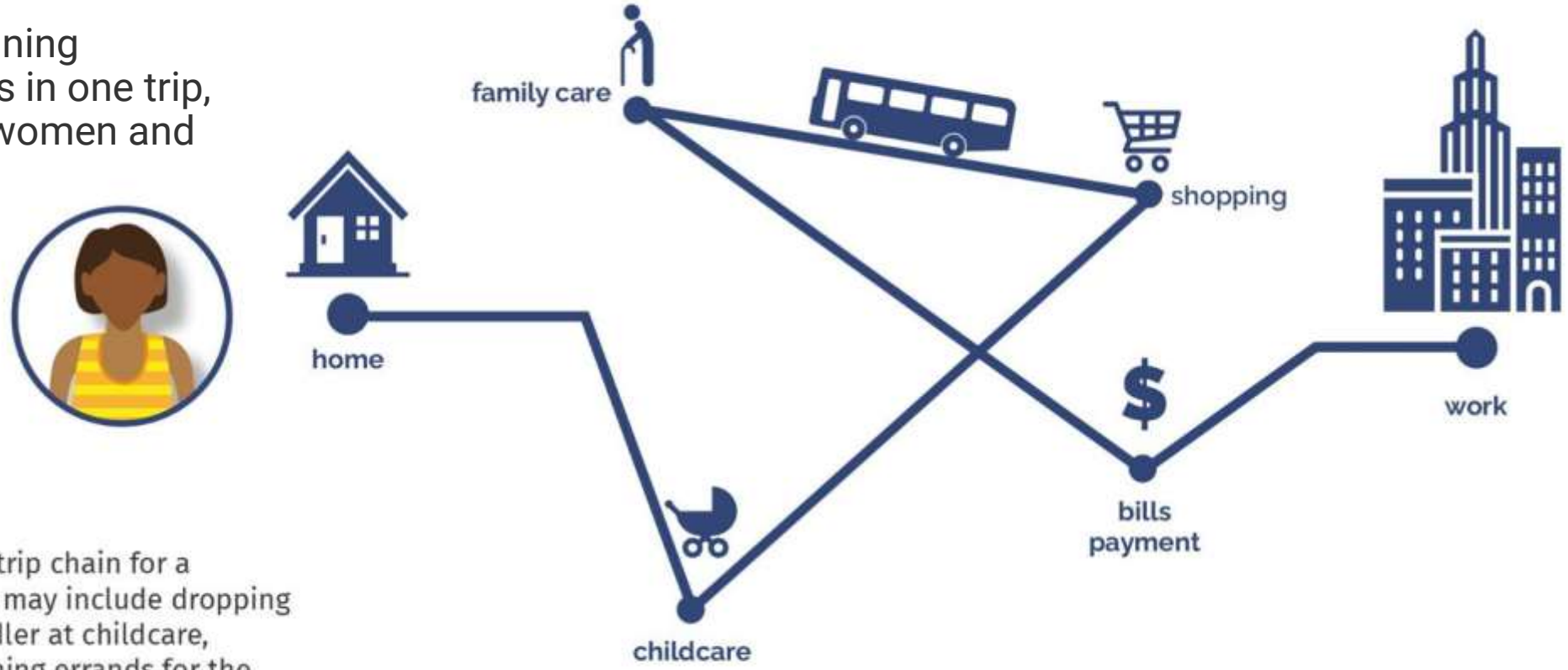
Different people experience public space differently and have different trip characteristics

Trip chaining, combining multiple destinations in one trip, is common among women and caregivers



A typical trip chain for a caregiver may include dropping off a toddler at childcare, then running errands for the household before going to work. Source: Women and Children's Access to the City, ITDP, 2018.

Street space prioritizes cars

Yichang, China


Salmiya, Kuwait

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No space dedicated for walking and cycling

Kampala, Uganda (source: Carlos Pardo)

Tiruchirappalli, India

When there is, it is often discontinuous, narrow, obstructed, or poorly maintained

Recife, Brazil


Jakarta, Indonesia

Often this space gets encroached by vehicles, freight, and informal vending

Left: Tema, Ghana; Top right: Shebin El Kom, Egypt; Bottom right: Rio de Janeiro, Brazil

Air and noise pollution creates a poor, unhealthy, and stressful environment

Chaotic and dangerous crossings, fast traffic

No places to walk to

Hostile environments for walking

Lack of basic services:

- Stormwater management
- Sewage
- Garbage disposal
- Basic street network

Nairobi, Kenya

Rio de Janeiro, Brazil

Co-identifying barriers for active mobility

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Co-identifying barriers for active mobility

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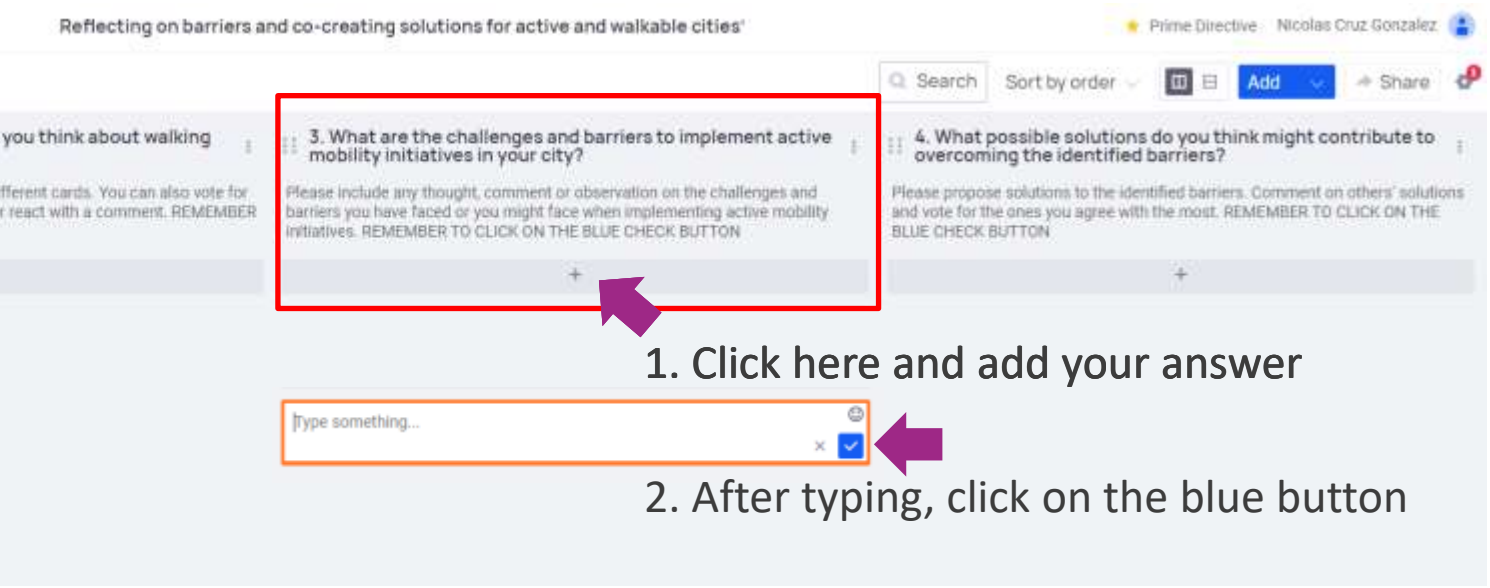

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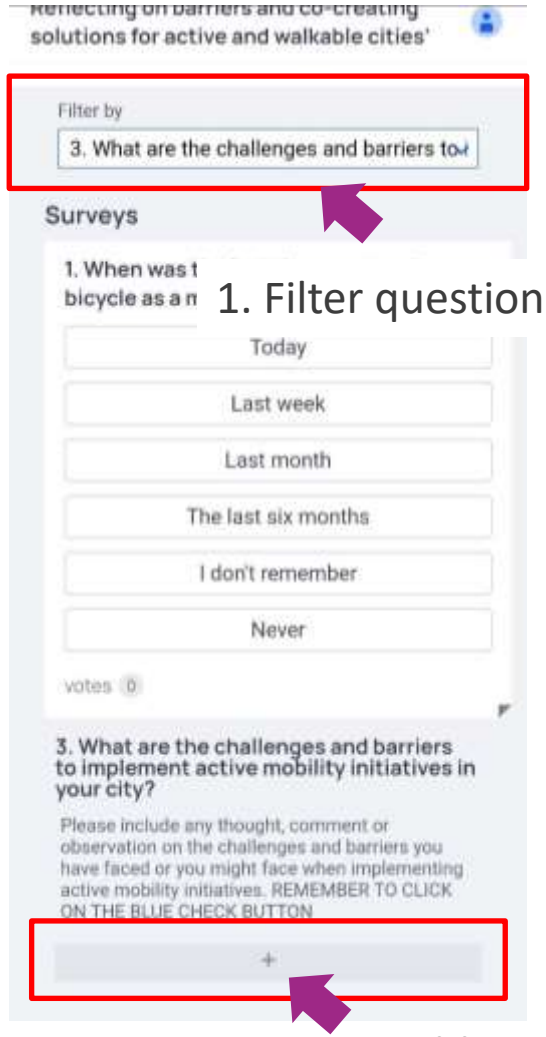

1. Filter question 3.

2. Add your answer

What are the solutions?

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The basics!

A fine grain street grid served by basic utilities, including water, sewage, stormwater management

Pedestrian and cycle only paths between main roads in Guangzhou, China create a fine grain grid.

Storm water drainage in a kampung in Jakarta, Indonesia.

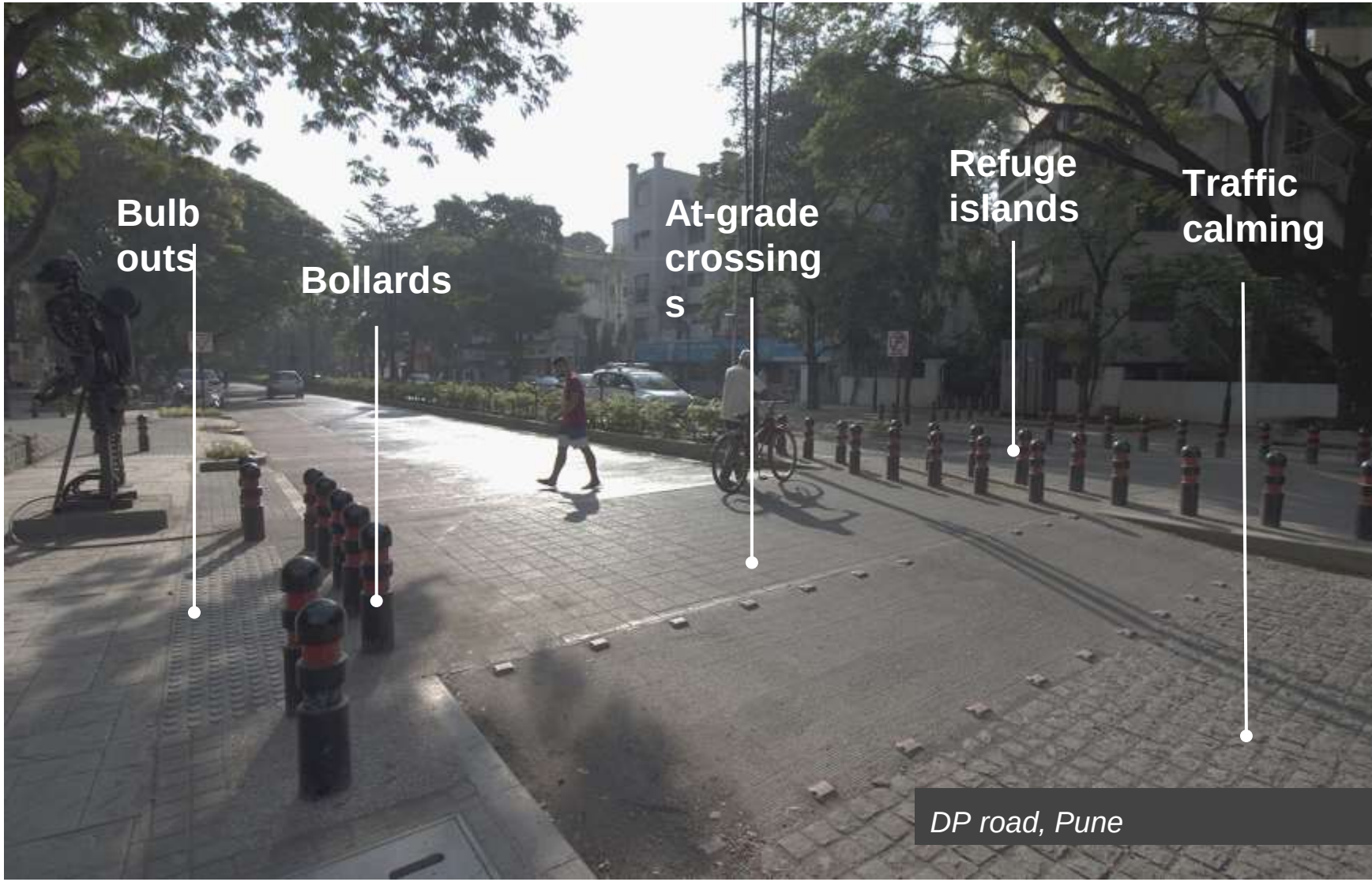
Dedicated, protected, networks for both walking and cycling

Left: Protected cycle lane in Mexico City, Mexico
Right: Wide crossing to protected sidewalks in Rio de Janeiro, Brazil

Fortaleza, Brazil

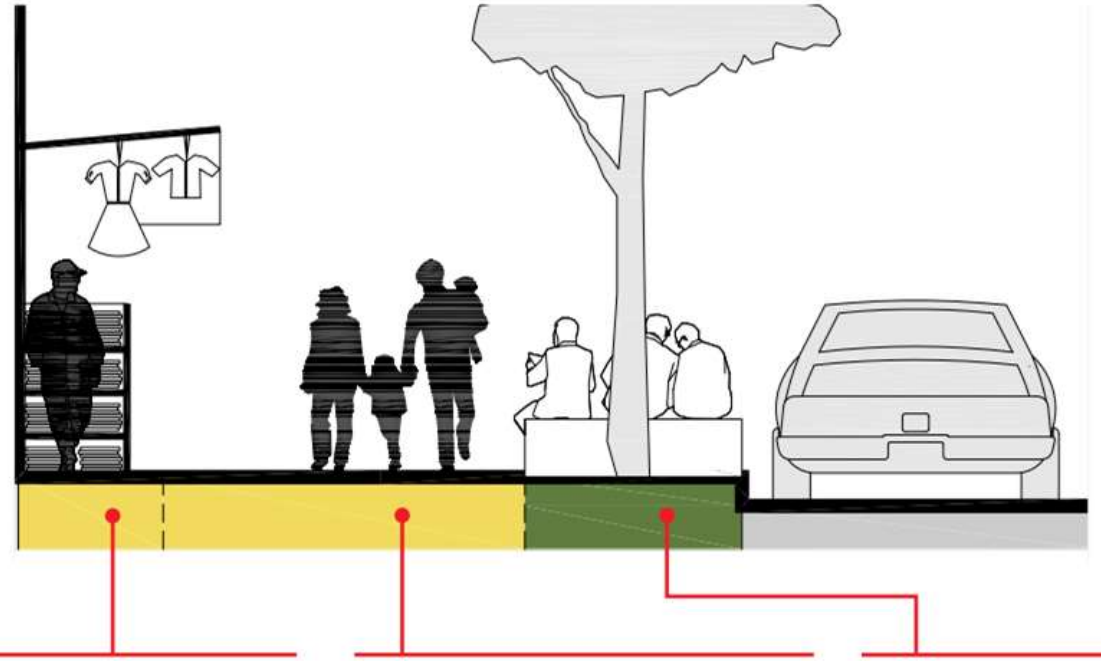
Crossings and intersections need to be safe by design

Source: BicycleDutch



Sufficiently wide

Monterrey, Mexico



Frontage zone
The frontage zone can vary from a minimum width of 0.5 m along a compound wall to 1.0 m or more in commercial zones.

Pedestrian zone
The pedestrian zone provides continuous clear space for walking. The clear width must be at least 2 m in order to accommodate two wheelchair users at the same time and must be entirely free of obstructions.

Furniture zone
Manholes, trees, benches, utility boxes, and other potential obstructions should be placed outside the path of travel along a continuous line.

Parking for people and bikes

Pune, India

Wide and comfortable (shading, seating)

JM road, Pune

Bike share and bike lanes in Mexico City integrated with public transport

Wide, well-lit sidewalk in Chennai with active frontages

Wide, protected, shade, activities nearby, seating

Nairobi, Kenya

Slow down traffic and reclaim space from cars

Buenos Aires, Argentina extended the curb with planters and bollards, tightening the turning radius for cars, slowing them down, and giving more space to pedestrians.

Sao Paulo, Brazil's tactical urbanism efforts reclaimed space for people, making crossings safer and slowing down cars. This has led to them becoming permanent and replication.

Reclaim space for cycling and walking

New protected bike lane in Jakarta, Indonesia

Tactical urbanism site in Belo Horizonte, Brazil

Destinations within walking and cycling distance

- Visually active frontages
- Activated streets

Left: Guangzhou, China; Right: Buenos Aires, Argentina

Promote walking and cycling

- Bike share
- Car free days
- Tactical urbanism
- Outreach and educational activities

Macleta, women's cycling school in Santiago de Chile.

Ciclovía in Bogotá, Colombia

Active and walkable cities are cities for our future

Thank you!

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Active mobility case studies

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Kisumu, Kenya


ACMG
Low Sulphur Diesel 78.80
Unleaded Premium 90.60
Kerosene 48.00
K-LUBE
K-gas
JUBILEE INSURANCE IS:
Live Free!

Traffic crash black spots on recently upgraded corridors

Kisumu Sustainable Mobility Plan

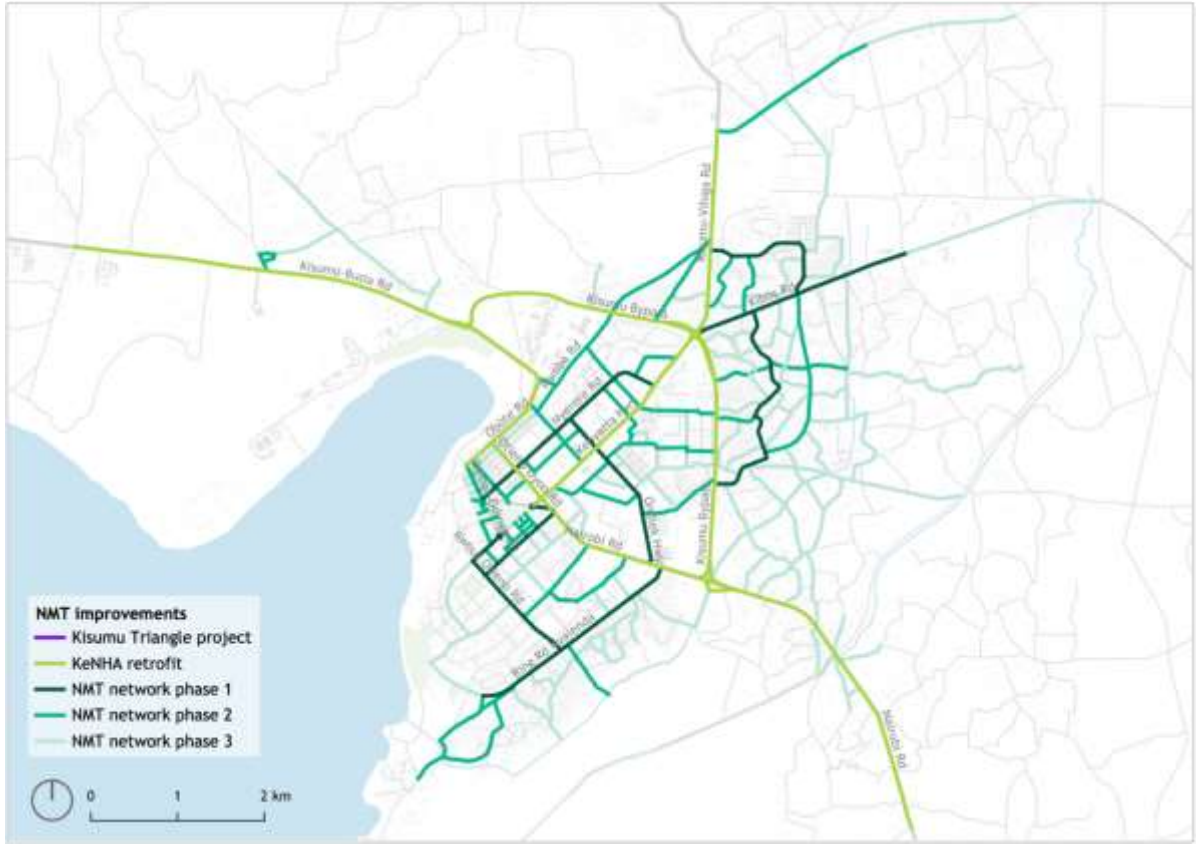
Complete pedestrian realm:
100 km

Cycle tracks:
31 km

Greenway:
3.7 km

Highway safety retrofits: 28 km

School zone safety improvements



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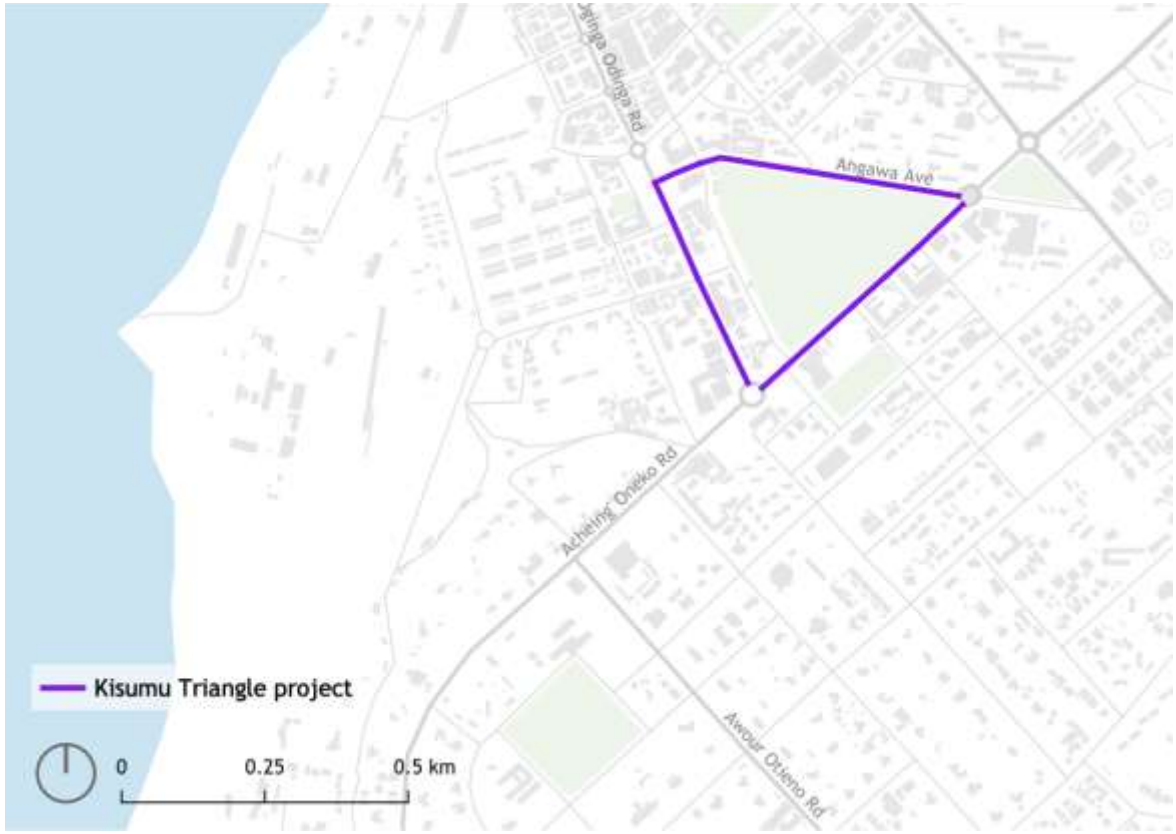
Kisumu Triangle Project

First phase: 1.5 km

KES 241 million (USD 2.2m)

Financed through World Bank Kenya Urban Support Project



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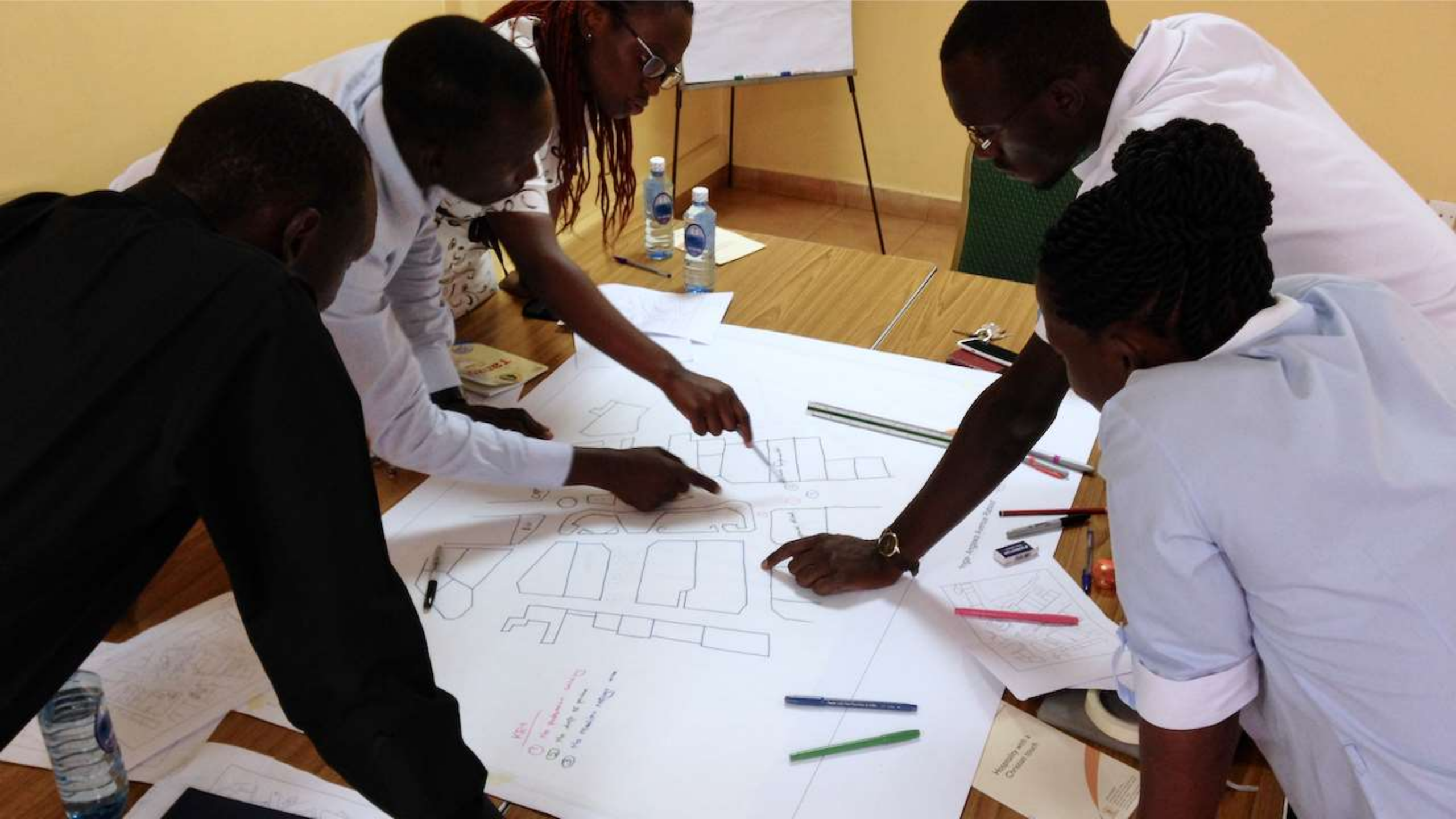
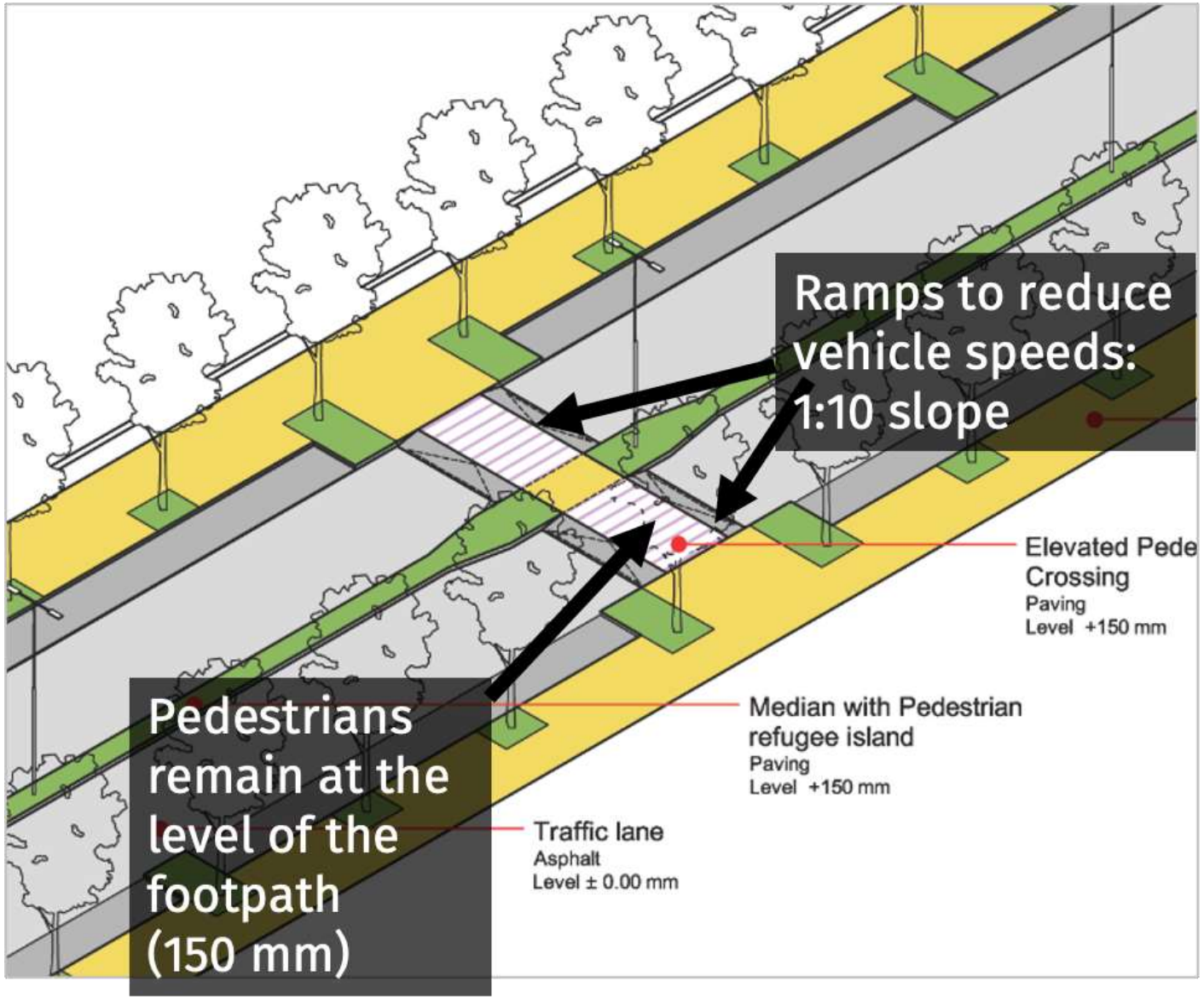



ICE CREAM
AVAILABLE HERE

Raised zebra crossing




TECNO CAMON 16
next level camera evolution
Infinix
NYALI INVESTMENT
itel
TECNO
Telkom
oppo
OPPO RENO4
S16
TECNO Mobile
HUAWEI
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Phase 2 currently under construction

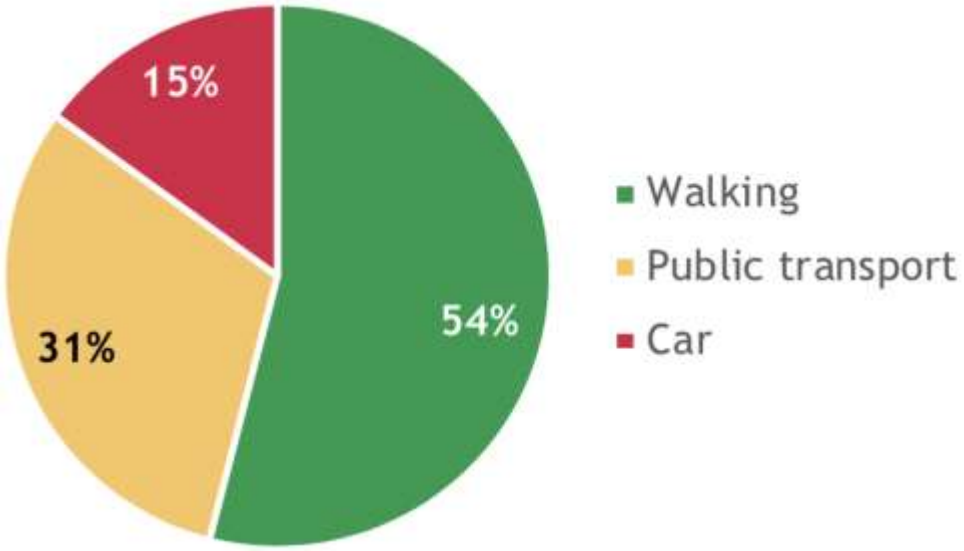
Addis Ababa, Ethiopia

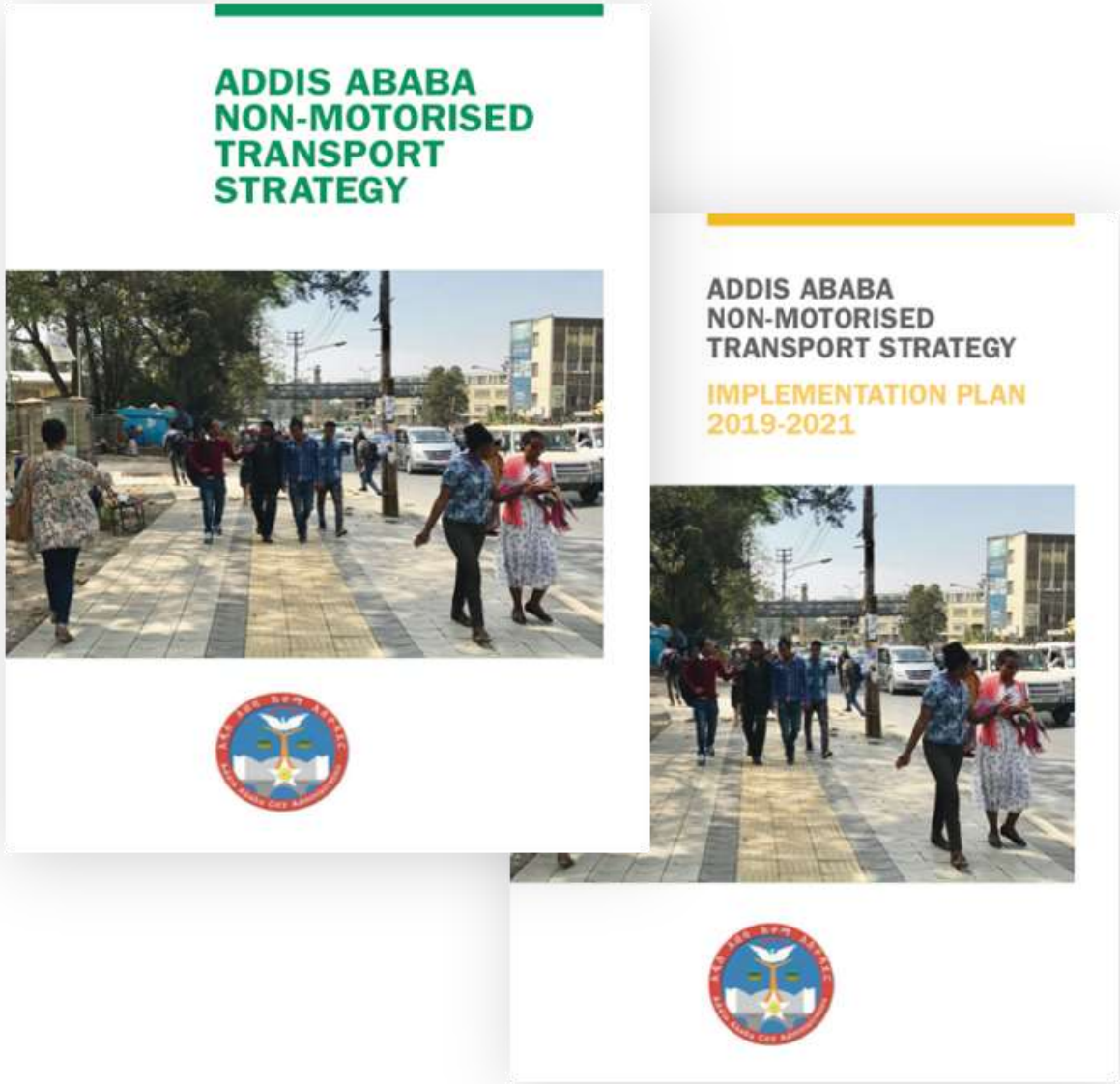

SLOW


YEKA SUBCITY ADMINISTRATION

Addis Ababa NMT Strategy

- The NMT Strategy was launched in Apr 2019
- The Implementation Plan was launched in Dec 2019





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Addis Ababa NMT Strategy

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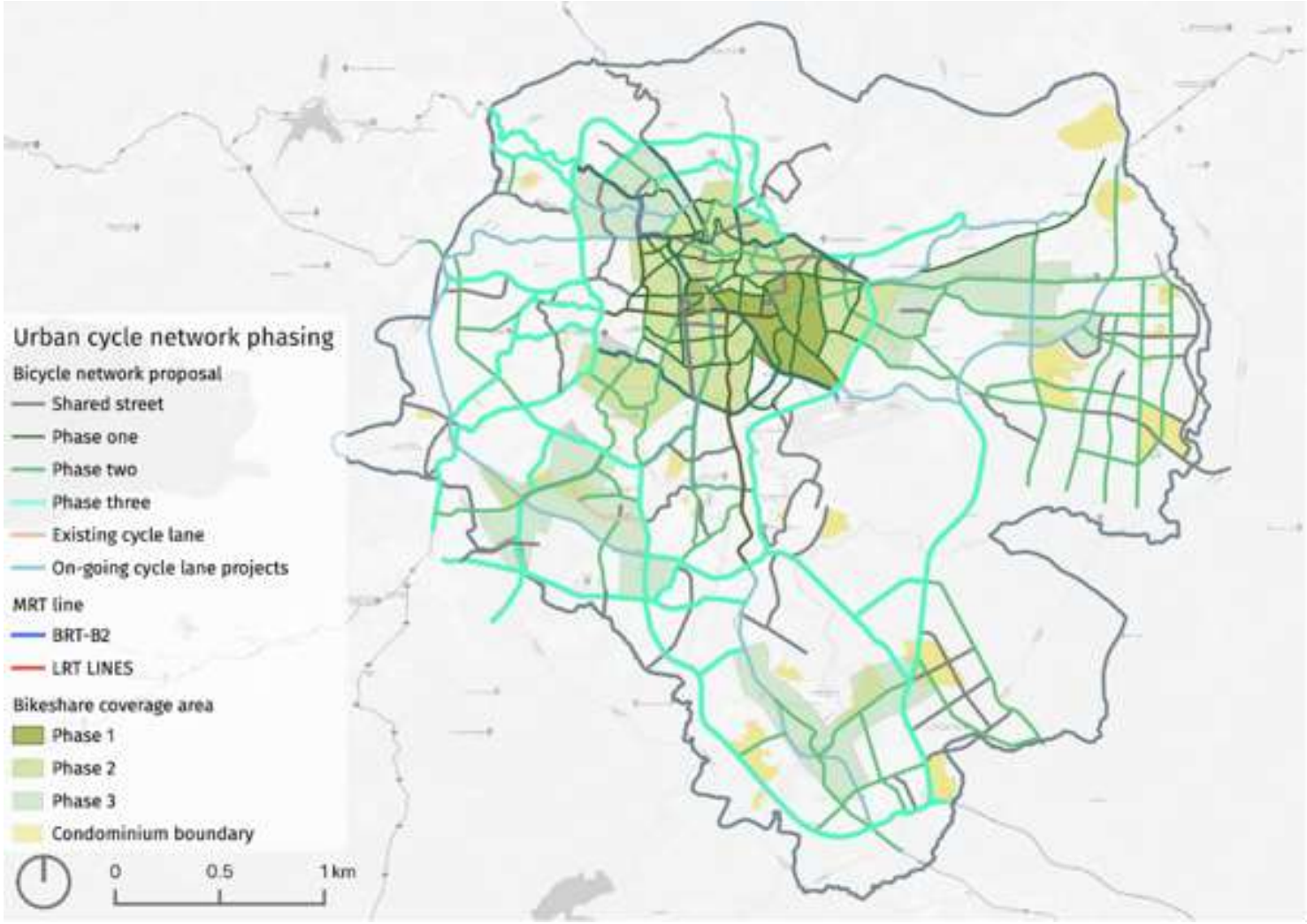
Addis Ababa NMT Strategy targets

Initiative	10-year goal
Pedestrian network	600 km of streets have a continuous pedestrian realm
Bicycle network	200 km of streets have cycle tracks
Bicycle sharing	10,000 cycles
Public transport access	Safe at-grade crossings with signals or traffic calming at all BRT & LRT stations
Parking management	30,000 parking spaces managed through an IT-based parking system
Vendor management	Comprehensive vending management system implemented
Street design standards	Revised geometric design standards prioritise pedestrians
Review of building control & planning regulations	Regulations reformed to encourage pedestrian friendly built form and compact development along rapid transit lines
Outreach & communications	Regular open streets events Active marketing campaigns transform image of NMT City residents have access to information about on-going projects
Institutional development	Capacity building - NMT implementing Agencies

Cycle network plan

Phase	Length (km)
Existing cycle facilities	5.1
Ongoing projects	60.4
Phase 1	90.8
Phase 2	145.2
Phase 3	155.0
Total	456.5




Jemo-Lebu tactical bike lane

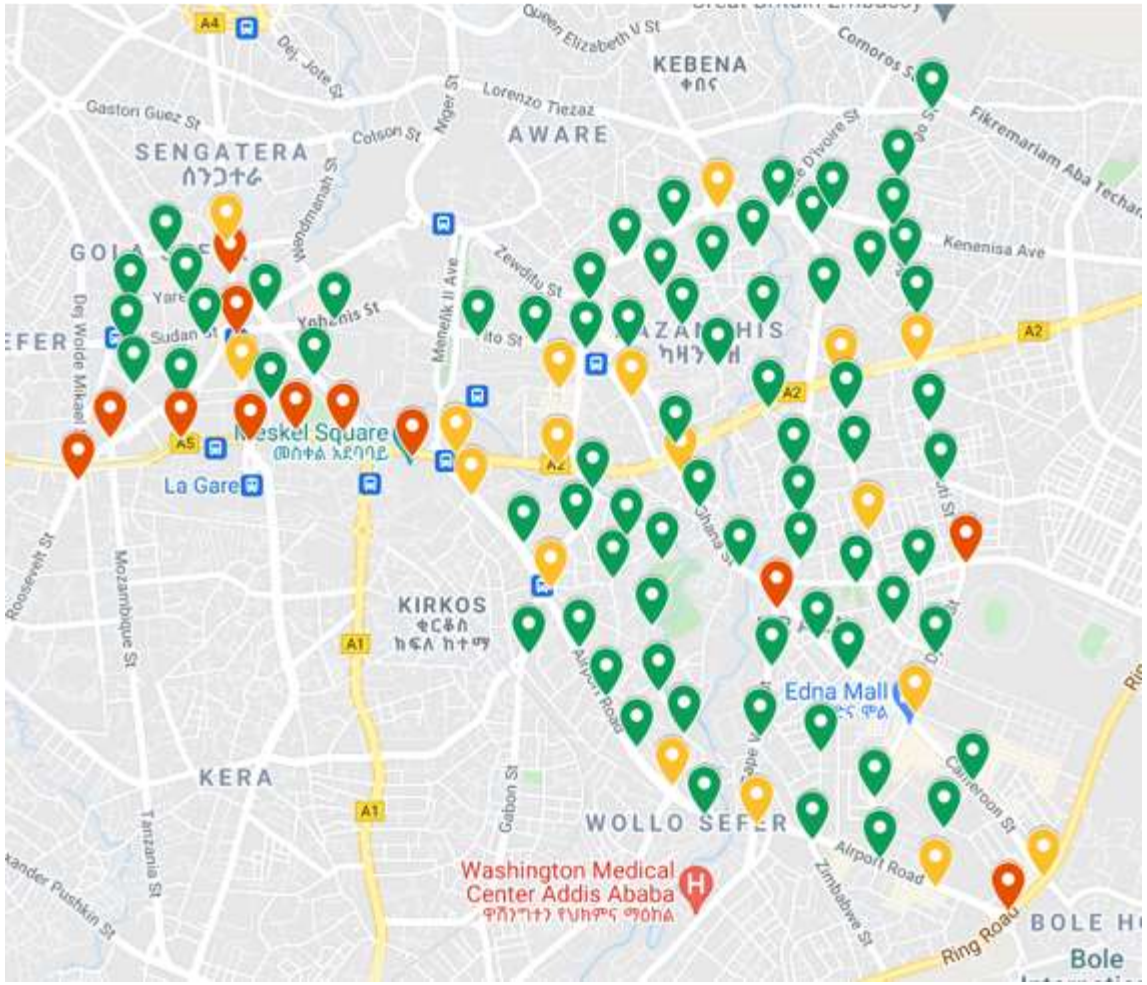

Jemo-Lebu after upgrade

Bole-Goro project (under construction)


Churchill Ave
DUDE

Addis Ababa bikeshare

- 10.3 sq km coverage area
- 103 stations
- 730 cycles
- Proposed business model: service contract with quality incentives



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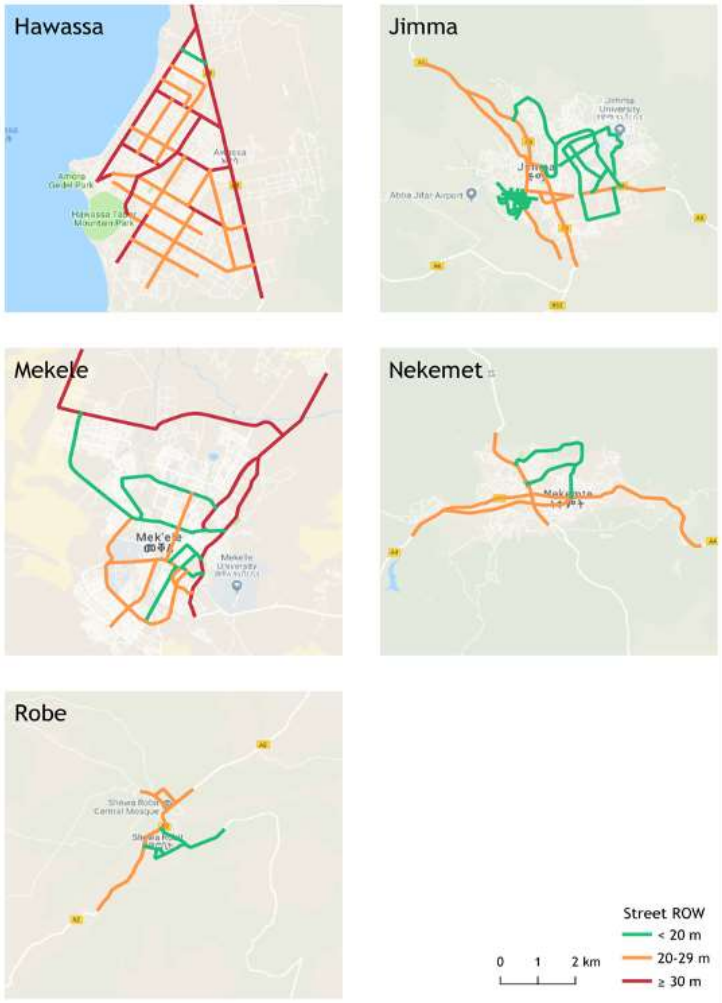
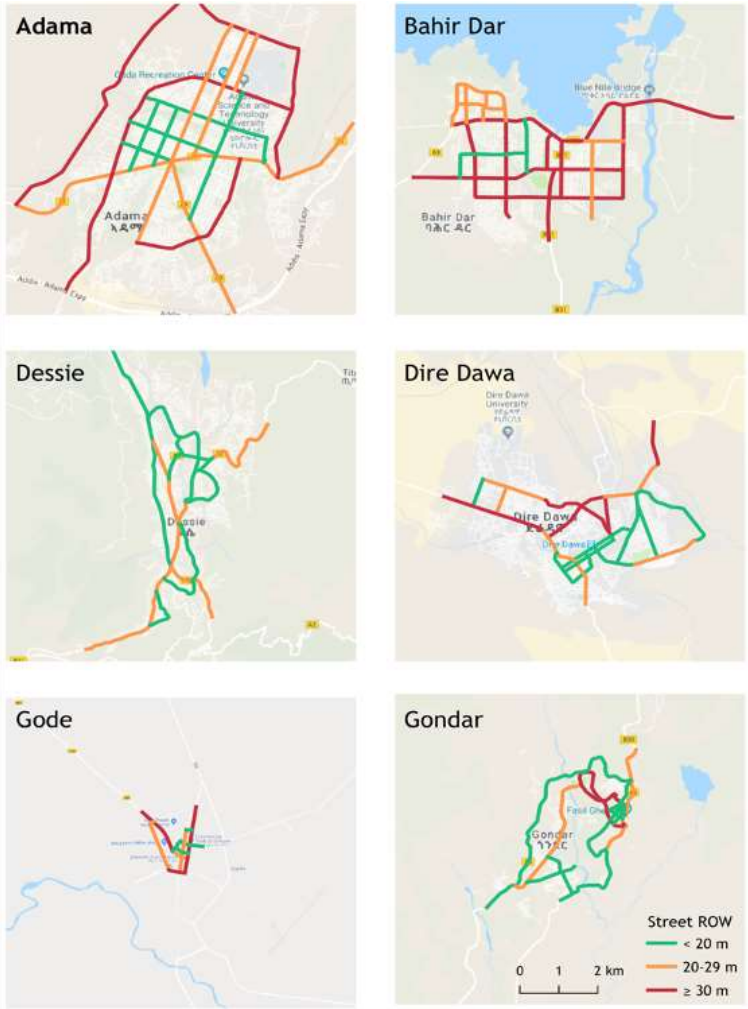
Car-free days

Scale-up to secondary cities: National NMT Strategy





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Thank you!

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Q&A

© Matt Walsh, Unsplash

Case study: the Green Mobility corridor in Kochi (India)

Vincent Lichère – Suez Consulting

suez

Mobilise Your City

A study developed…

For

Kochi Municipal Corporation

Within

Mobilise Your City

Implemented by

AFD
AGENCE FRANÇAISE DE DÉVELOPPEMENT

With financial support from

Made by

suez

CPPR
Centre for Public Policy Research

The corridor

At the heart of the city centre, but difficultly accessible, impossible to manage correctly, dangerous (pedestrians on the tracks, safety concerns at night)

Insufficient connectivity between the KSRTC bus terminal and the railway and metro stations

Metro Station

Lisie Hospital

2.5 km

North Railway Station

Ambedkar Stadium

KSRTC Terminal

KSRTC Depot

South Railway Station

Metro Station

0.6 km

Need to open up the area!

MG Road

The corridor

Much more than a mobility project

Connectivity

Creating or improving links between the bus terminal and the railway and metro stations, access to Ambedkar Stadium and Lisie Hospital, connection between both railway stations, links with city centre, less congestion on parallel roads...

Urban management

Improving safety and security for all, cleanliness, better control and surveillance by Authorities, improvement of the drains

Inclusion in the city

Step by step, turning a backyard area into a lively urban space, including social and economic activities

4 components

1. Development of a green corridor adapted to non-motorised transportation

2. Development of e-rickshaw services

3. Development of hubs and connections to the city centre

4. Development of social and commercial activities

Study process

Data collection

Site reconnaissance

Topographic survey

Mobility surveys

Land ownership

Urban and mobility diagnosis

Objectives of the project

Development of the Mobility Improvement Plan

Evaluation of the Mobility Improvement Plan

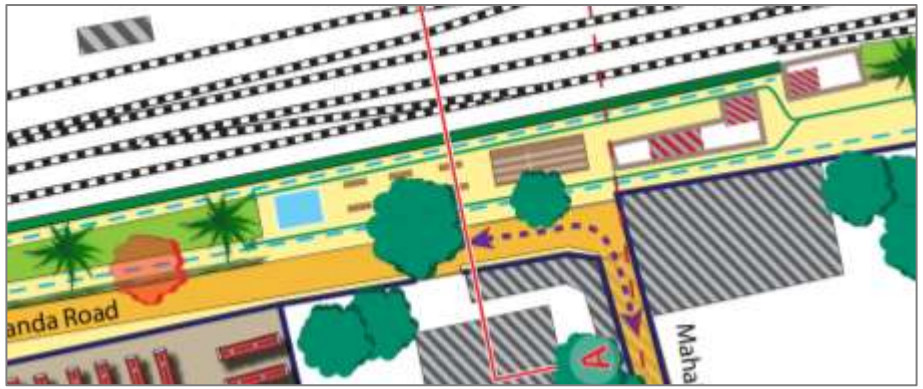
Design principles

- As much as possible in the existing right-of-way
- Universal access
- Materialisation of limits
- Vegetation, alignment of trees
- Lighting, illumination plan
- Multiservice wood structures: shops, services, toilets, technical utilities

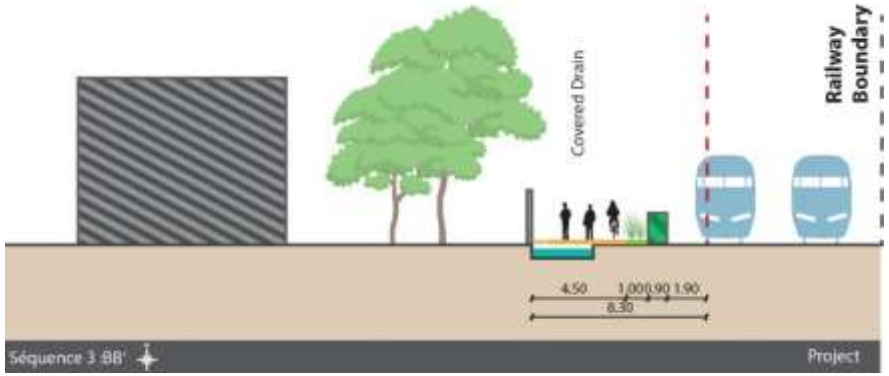




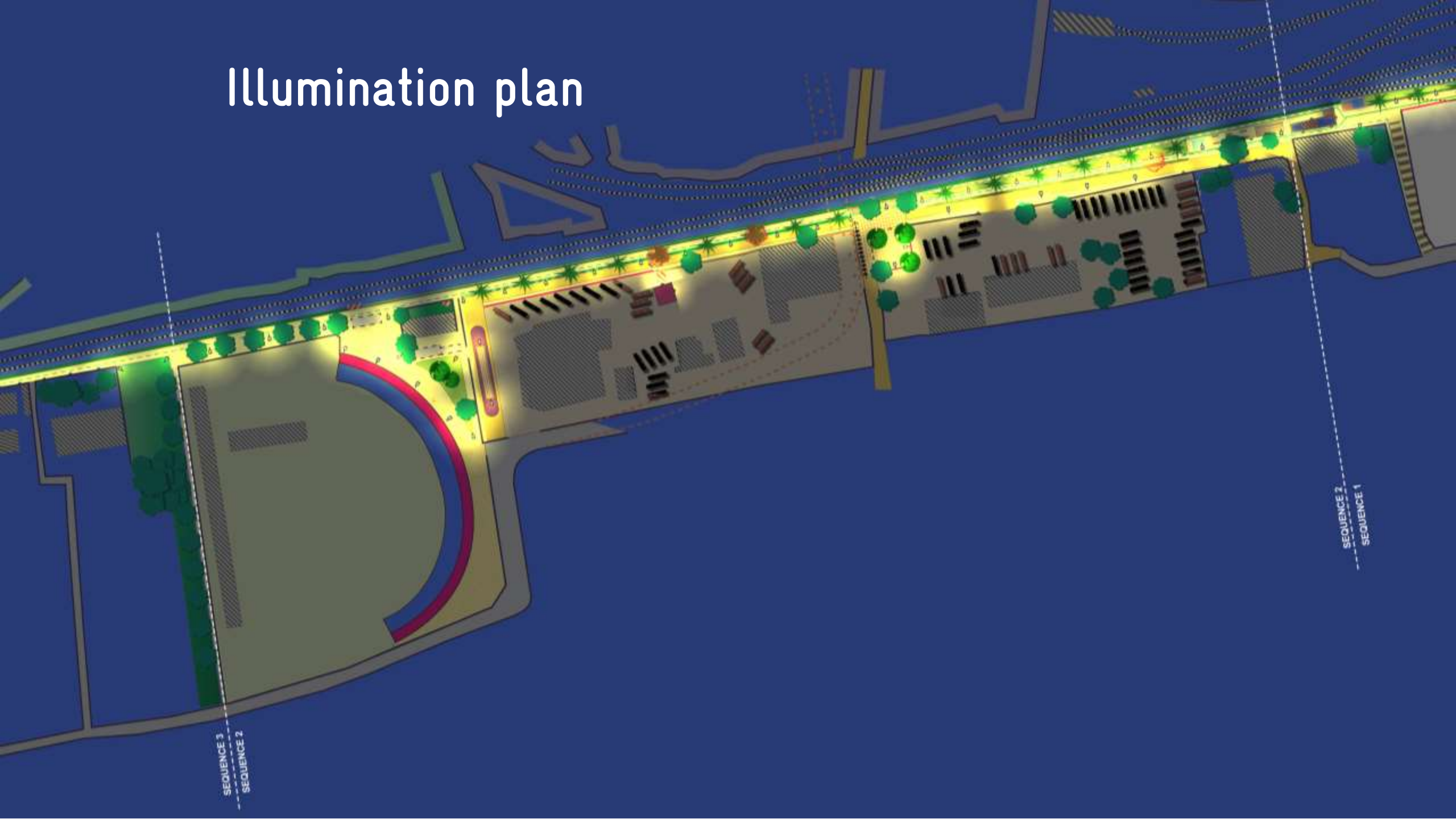

Creation of plazas in wider spaces



Simple pathway on narrower sections



Illumination plan



Frequentation and impacts

4 categories of users:

Former non-motorised transportation users

Who would continue to use it but with much improved conditions.

Former autorickshaw users

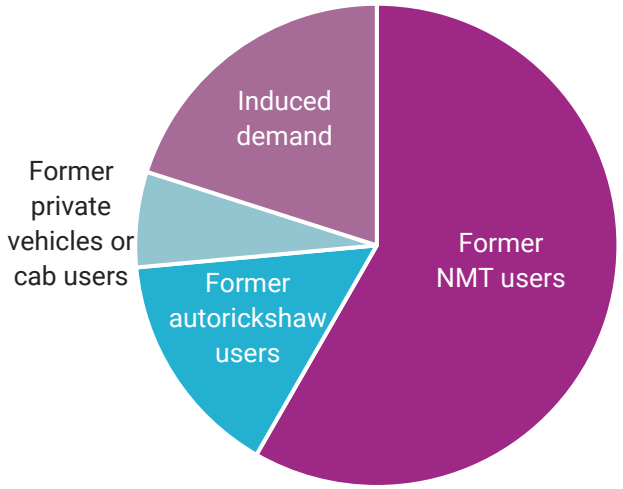
Travelling on the roads close and parallel to the railway corridor. A part of them would transfer to walking, cycling or using e-rickshaws.

Former private vehicles (motorised two-wheelers, private cars) or cab (Ola, Uber) users

A part of them would also transfer to walking, cycling or e-rickshaws.

People who are presently not travelling on the corridor due to the current bad conditions

But who would use it when it is constructed: "induced demand".



- Daily frequentation and usage of green modes estimated at 11,000
- 20,000 people living within 500m of the corridor, about 30,000 including people having daily activities
- 2,840 veh.-km transferred daily to green modes, 84 tonnes of CO_2 emissions saved every year

And more...

- **The project could be implemented at short term**, with limited land acquisition. It could also easily be constructed by stages.
- **It would bring comfort, safety and security to the numerous existing users of the corridor, and will attract new ones**, including people transferring from less environmental-friendly modes to non-motorised transportation and e-rickshaws.
- It would also considerably **improve the urban quality and landscape** of the corridor and would help **develop new social and economic activities**. The area would be better included in the city and better connected to the city centre.

Present status

- The project was **reviewed and updated by the technical department of Kochi Municipal Corporation**.
- A preliminary broad-level **assessment of the land ownership** and a primary **survey of buildings** was made (capturing ownership, building height, building use etc.)
- The study was **presented at the City Council for approval**. The Detailed Project Report process for **further implementation** of the project will be launched soon.

Key take aways

Mobility is often seen as an issue of vehicles.

Active mobility projects appear secondary, not so important.

While these projects are very cost-effective and can impact a large part of urban trips, and solve issues well beyond mobility.

Do not disregard active mobility projects!

Q&A

Co-creating solutions

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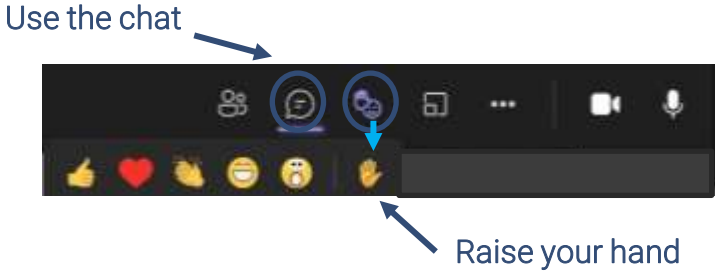
Share your ideas & solutions!

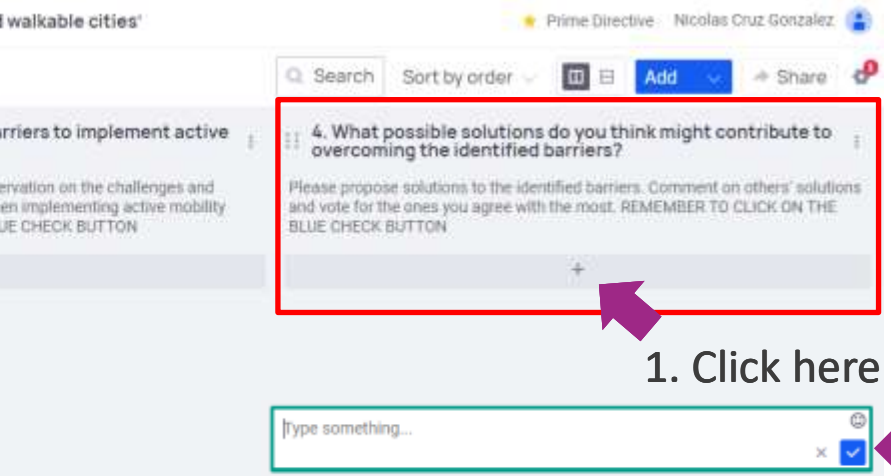
Follow the link in the chat or scan the QR-code

Or raise your hand, unmute yourself and share your ideas and comments



Co-creating solutions

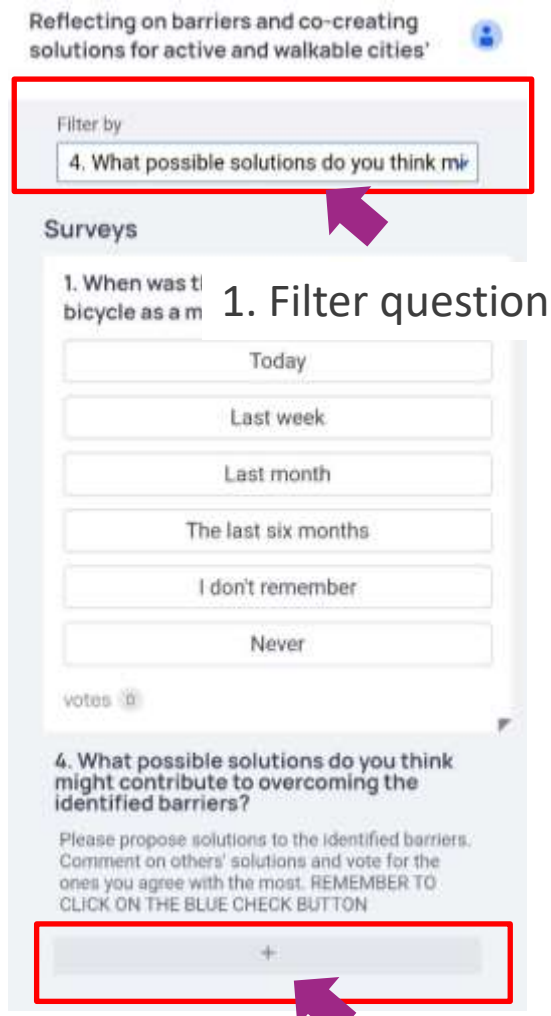
Go to the board (link)



1. Click here and add your answer

2. After typing, click on the blue button

On your phone



1. Filter question 4.

2. Add your answer

Thank you for your attention!

Keep in touch

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