

Young Leaders in Sustainable Transport

30 January 2020

VREF
VOLVO RESEARCH & EDUCATIONAL FOUNDATIONS



Partnership on Sustainable
Low Carbon Transport

Young Leaders in Sustainable Transport



Build bridges between the transport community and young professionals

Create an interface between knowledge, policy and practice

Conduct research through evidence-based policy analysis

 www.slocat.net/youngleaders



About the Young Leaders in Sustainable Transport



Zahira Abounoas
Morocco



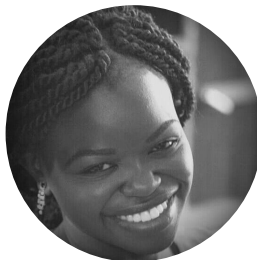
Xiomara Acevedo Navarro
Colombia



Hiroataka Koike
Japan



Thomas van Laake
The Netherlands



Edna Odhiambo
Kenya



Seema Singh
India



HLPF 2019

COP25



Comments to be provided by:



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Zahira Abounoas

Transport Emissions in the Arab region



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Content

- Data collection
- GIS database
- Examples of analysis:
 - Data analysis Fossil transport CO2 emissions
 - Temporal Evolution
 - Spatial Distribution
 - Macroscopic Status
 - Data analysis Non CO2 Emissions

Data Collection Method

- **Tool:** An electronic survey was designed be shared with the Focal points of 4 ministries (transport, planning, environment, and energy) through UN-ESCWA.
- **Coverage:** 18 Arab countries members of UN ESCWA.
- **The questionnaire axes:**
 - Country data (population, GDP, vehicles, roads...etc.)
 - Fossil fuel consumption in transport
 - Emissions by sector (Heat and electricity, industrial production, transport)
 - Transport emissions (Roads, Rails, Aviation, Maritime)
- **Actual Status:** The Survey was delivered to ESCWA, but no results resaved.
- **Full survey (Annex 1) and available via the link** <https://ee.kobotoolbox.org/x/#yxpehFaL>

KoboToolbox Choisir votre langue: English

Survey on transport emissions in the Arab region 2019 (En/Ar)

1. General information

COUNTRY NAME:
select element select element

MINISTRY:
select element select element

2. Information about the person filling in the questionnaire

FULL NAME

ORGANIZATION SECTION DIVISION

POSITION

EMAIL ADDRESS

PHONE NUMBER

3. Total of population resident in the country (if available to your ministry)

2014

2015

2016

2017

2018





4. GDP in US\$ (if available to your ministry)

GDP	NOMINAL GDP	REAL GDP
2014		
2015		
2016		
2017		
2018		

Preliminary Data base (Annex 2)

Data was collected manually (2003-2017) using some PDF statistical annual reports and web-databases (when available) of each country.

Collected Attributes:

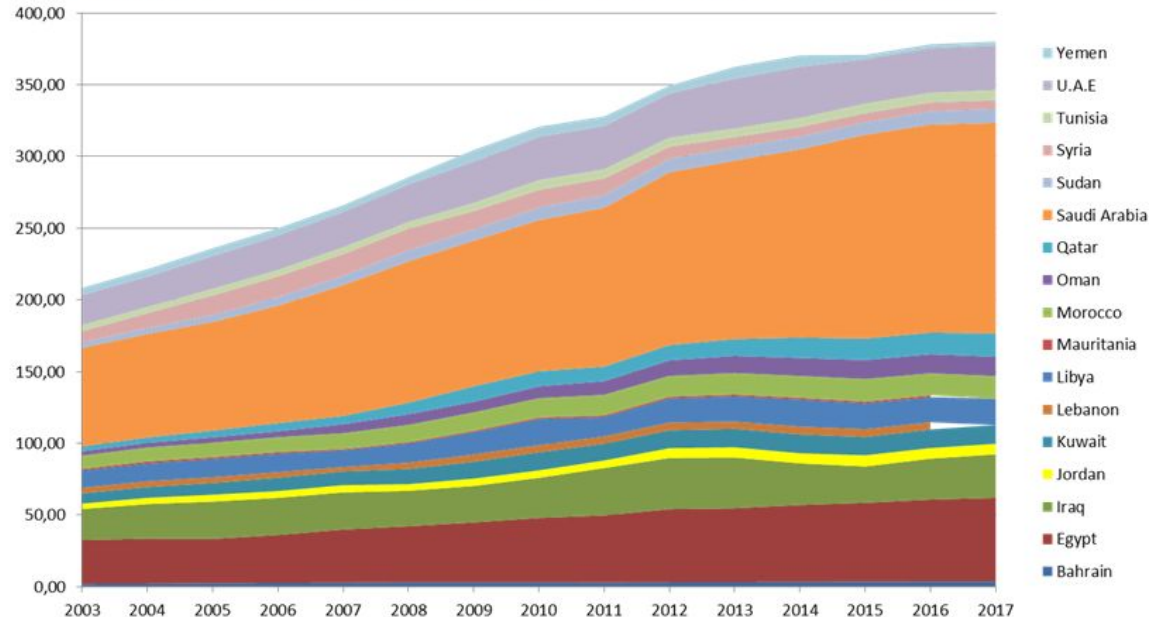
- | | | |
|---|---|---|
| ❖ Country | ❖ Roads length | |
| ❖ Year |  | |
| ❖ GDP | ❖ Rail-Number-Pass | |
| ❖ Population | ❖ Rail-Passenger-KM | |
|  | ❖ Rail-Average-Distance-Travelled-By-Passenger |  |
| ❖ Passenger-Cars | | ❖ Transport-emission-CO2 |
| ❖ Busses | | ❖ Transport-emission Non CO2 emissions (CO. NOx) |
| ❖ Goods-Vehicles |  | |
| ❖ Motorcycles | ❖ Aviation-Landing | |
| ❖ Other-Vehicles | ❖ Aviation-Departing | |
| ❖ Total-Vehicles | ❖ Aviation-Total Movement | |

The collected data is incomplete, specially data emissions because the **inventories** periodicity is not annual (instable situations)--→ EDGAR data

I-CO2 Emissions

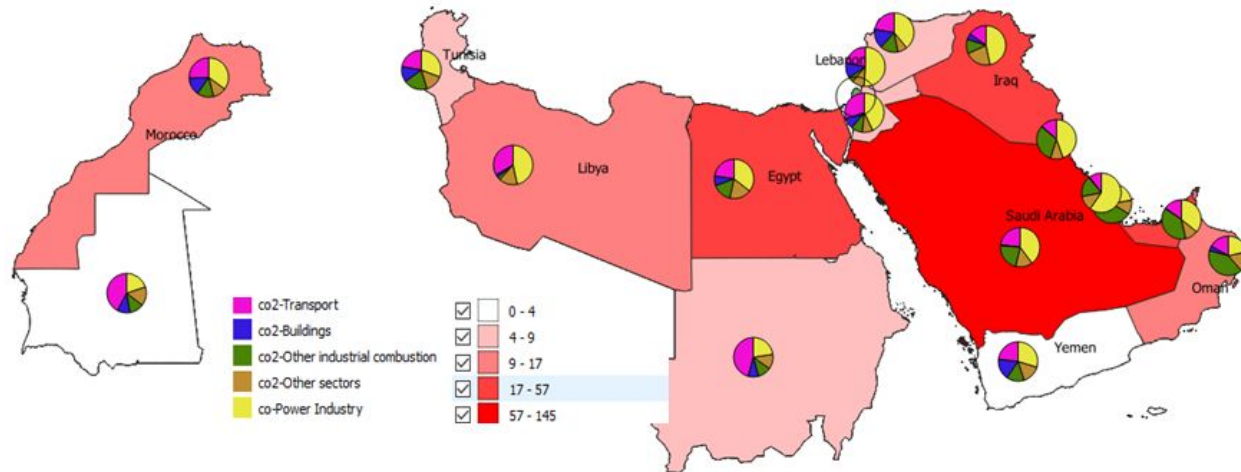
Temporal Evolution- Transport CO2 emissions (Fossil)

- **In the Arab region (2017):** transport sector is a major contributor of CO2 emissions from burning fossil fuels (20%) .
- During the last 10 years Co2 transport emissions increased by **31%**



I-CO2 Emissions

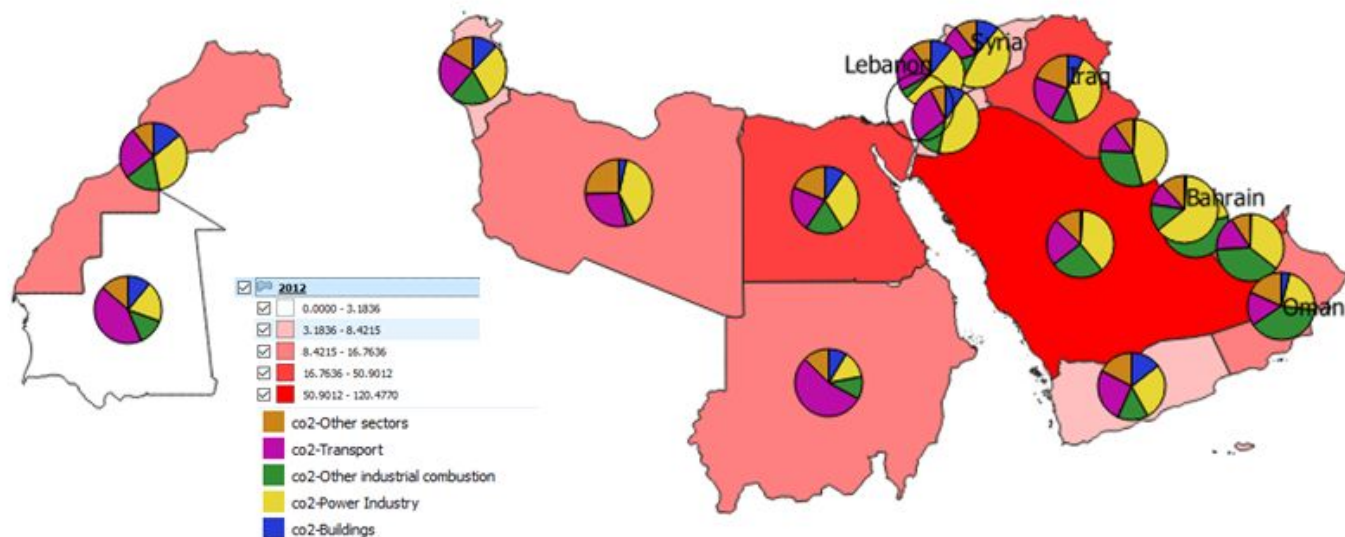
Geographical Distribution – Sectorial repartition



- Transport belong to the **3 top sources** of CO2 fossil emissions
- Which countries are responsible for the most transport CO2 emissions?

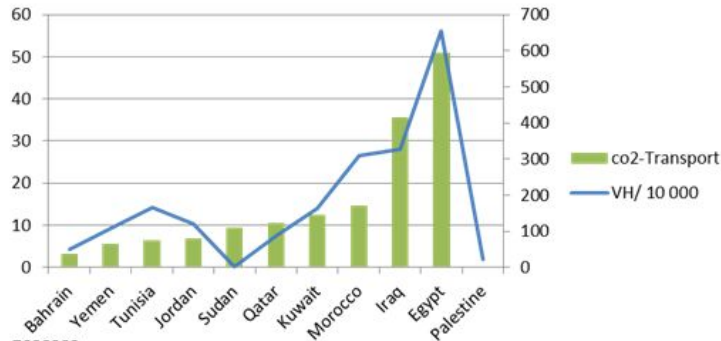
I-CO2 Emissions

Geographical Distribution – Sectorial repartition

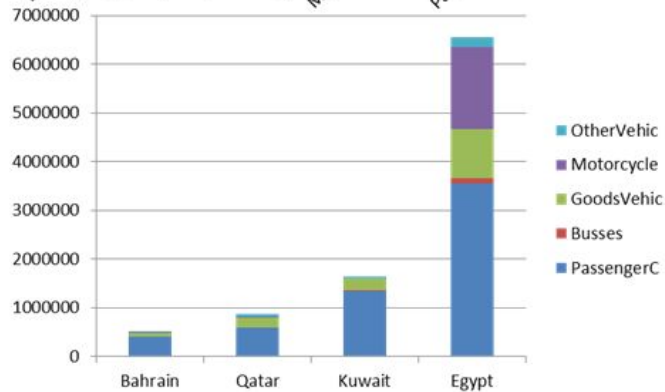


I-CO2 Emissions

Macroscopic status-Transport(2012)

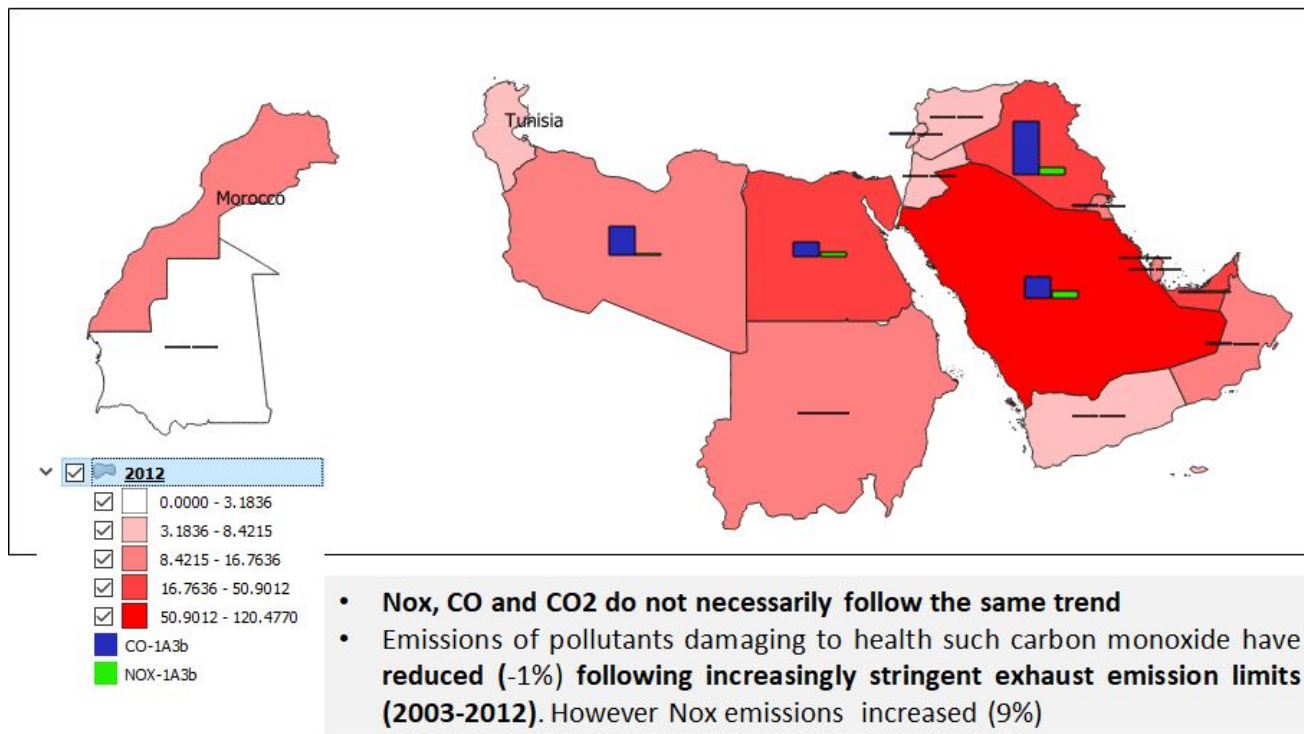


- Increasing demand for private vehicles → growing congestion and air pollution (e.g. Bahrain and Egypt)



II- NonCO2 Gases

Geographical distribution -road transport
(CO, NO_x)



Future possible analysis

Two types of analysis are possible (Once the data base is completed in the future using the survey) :

- Comparison between countries during a fixed period
- Performance of a country over time

General characteristics of Transport

- Motorization rates
- Road vehicle-kilometres per capita (2013)
- Total passenger-kilometres by transport mode (rails,
- Total tonne-kilometres by transport mode
- Passenger-kilometres per GDP by transport mode
- Tonne-kilometres per GDP by transport mode
- Average occupancies of road passenger vehicles
- Average loads of road freight vehicles

Land transport emissions:

- Transport GHG emissions per capita
- Transport CO₂ emissions per capita
- Transport NO_x emissions per capita
- Passenger transport GHG per PKM
- Passenger transport CO₂ per PKM
- Passenger transport NO_x per PKM
- Freight transport GHG per TKM
- Freight transport CO₂ per TKM
- Freight transport NO_x per TKM

advanced analysis

- Patterns
- Correlations
- Previsions
- Modeling

**MOU
Slocat-UNE
SCWA**



Xiomara Acevedo Navarro

Pact for sustainable transport, mobility and public space in Pasto, Nariño, Colombia

Supported the declaration and call for participants. Joint initiative between citizens organizations in the municipality of Pasto (bicired, yo gobierno, CAPA).



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[@Xiomy_Acevedo](https://twitter.com/Xiomy_Acevedo)

Meeting and signing of the citizen initiative “Pacto por la movilidad sostenible y el espacio público”



Fecha: 25 de Septiembre 2019 **Hora:** 6:00 pm

Lugar: Auditorio RESTAURANTE LA MERCED,
Carrera 36 #12-14 - Av. PANAMERICANA

Organizan:



colectivo
a pata
pastuso

Apoyan:



página10.com
periodismo digital



➤ Action plan for the transport sector especially the one between municipalities to reduce their emissions. More ambition needed than the national NDC.

➤ To declare 17 august as the pedestrian day.

➤ To declare Sustainable Mobility as an intersectoral and inter-institutional approach to articulate and evaluate projects and policies in the municipality.

➤ To regard the public bicycle system as part of the public transport service.



➤ Action plan to improve connectivity in 60% of the cycling and pedestrian infrastructure in the city.



Hiroataka Koike

An Introductory Guide to Advocacy for the Transport Sector in the context of the SDGs



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Background:

Engagement in the UN Sustainable Development Processes

- Involved in the negotiations for the Sendai Framework for Disaster Risk Reduction, Post-2015, New Urban Agenda, and the High-level Political Forum.
- Diving into transport is a new area to myself. Also, there is less discussion on transport than other issues, like housing.
- Decided that my contribution to this community of YLST and the transport sector is utilising my experiences.



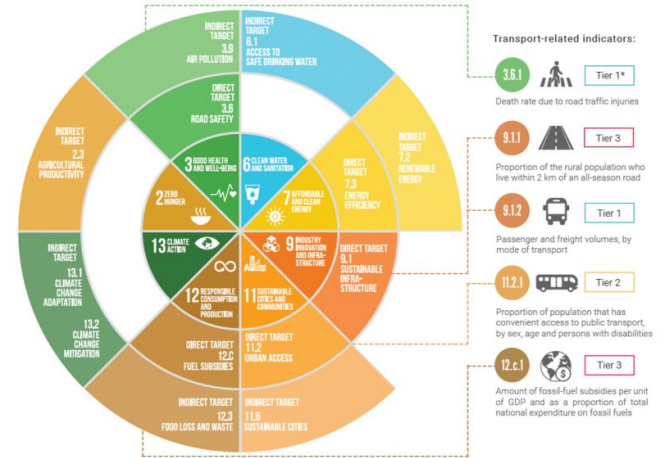
The Power of Advocacy in Non-Transport Arena

- Global conversations are around Paris Agreement and the SDGs. Transport is vital to both. However, not being mainstreamed.
- To push ambitious changes to how countries design and implement the transport policy, **advocacy is must**. - A successful case is from Climate Change.
- **Advocacy for 3 purposes:** 1. Mainstreaming transport in intergovernmental and other policy discussions, 2. Establishing new partnerships and bolstering existing ones, and 3. More investment.



Effective Advocacy

- “Knowing the enemy and yourself will keep you unscathed through a hundred battles.” (idiom, from Sunzi’s The Art of War)
 - Transport-related goals and targets
 - Political and Scientific Processes relevant to the SDGs
 - Engaging Major Groups and Other Stakeholders to Mainstream Transport Issues across Different Non-State Actors.



Political and Scientific Processes relevant to the SDGs

- Political Processes relevant to the SDGs
 - “Goals-Specific Track”
 - “Regional Track”



- Scientific Process: Global Sustainable Development Report (once every 4 years)

Engaging Major Groups and Other Stakeholders to Mainstream Transport Issues across Different Non-State Actors.

- **Multiplier Effects** - Make Transport Ubiquitous
 - 1. Understand who plays a role in global agenda-setting?
 - 2. Prepare materials to convince stakeholders
 - 3. Continue to work with Major Groups and Other Stakeholders to articulate messages clearer.



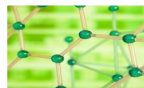
BUSINESS & INDUSTRY



CHILDREN & YOUTH



FARMERS



SCIENTIFIC & TECHNOLOGICAL
COMMUNITY



WOMEN



WORKERS & TRADE UNIONS



EDUCATION AND ACADEMIA



INDIGENOUS PEOPLES



LOCAL AUTHORITIES



NON-GOVERNMENTAL ORGANIZATIONS



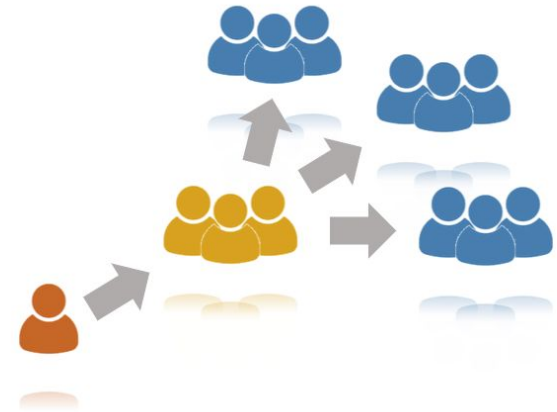
PERSONS WITH DISABILITIES



VOLUNTEERS



AGEING





Thomas van Laake

Sustainable transport for human development, human transport for sustainable development

Active travel, motorization and global sustainable transport policy



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[@vanLaakeT](https://twitter.com/vanLaakeT)

‘Safe, efficient, low carbon, and affordable mobility
for all is essential to sustainable human
development’

SLoCaT, 2019

Parallel crises

- **Climate crisis** - transport sector at 23% of total energy emissions and continue to increase
- **Urbanisation** - majority of world population, continued growth esp. in Southern cities
- **Motorisation** - global private vehicle fleet at 1.2 billion, set to surpass 2 billion by 2030

Road deaths, congestion, resource consumption, air pollution continue to increase

What is the global policy response?

I focus on the 'global policy framework' - understood multilateral organizations and development banks with the power to shape global policy-making

Sustainable transport policy

- Increasing global policy attention - but limited results so far
- Sustainable transport 'paradigm' (i.e. Banister, 2008)
 - Motorisation as prime driver of unsustainable transport
 - Clear understanding of *what must be done*
 - Active travel - walking and cycling - is key to sustainable urban transport

Does global transport policy recognize the role of active transport in achieving sustainable and inclusive mobility, and achieving wider development goals?

1. Defining sustainable transport

What is sustainable?

- Sustainability is more than just operational emissions
 - Sustainable Mobility for All (SuM4All) refers to 'accessible, efficient, safe, green'
- Focus on lower carbon emissions ignores lifecycle emissions, i.e. electric cars

What is transport?

- Global policy frameworks are reluctant to problematize travel behaviour and modal choice
 - Transport activity growth creates *new needs*, rather than respond to *existing needs*
- Transport is not a good in itself, it is a means to an end: 'access' - new paradigm
- Transport systems have wider effects and interdependencies - and development pathways

2. Moving beyond emissions

- There is little recognition of the effects of transport systems on sustainable development
- SDGs: at least 8 SDGs are related to transport, though there is no direct goal
- Active transport is not mentioned at all - nor is motorisation
 - This is despite targets such as road safety (3.6) and urban access (11.2)
- SLoCaT (2019) has shown that SDG reporting - VNRs - do not support sustainable transport
 - Only 10% of VNRs ('16-19) report active modes, many tout indicators such as roadway km
- Active travel is key to human development - due to activity and scale
 - Health, efficiency, no skill, no cost, no pollution, no emissions, strengthens public realm

3. Putting motorisation in question

- Individual motorised mobility remains a symbol of entry into consumption class
- Clear individual benefits of private vehicles - vanish when motorisation reaches tipping point
 - Massive societal externalities not priced in, particular effects in cities
 - Design of cities around cars marginalises other modes & undermines promotion efforts
- Global urban policy is blind to cars
 - New Urban Agenda does not mention 'cars', 'automobile', 'motorisation'
- Ironically, cars are a major concern for local policymakers
 - Automobile level of service is key indicator for transport planning
- 'Technological fixes' offered by automotive industry is business-as-usual and a major distraction

4. The realities of implementation

- Development banks constitute executive arm of policymaking - especially in Southern contexts
 - Most scope for action on active travel in these growing and motorising cities
- Promising initiatives - track record?
- Review of World Bank projects 2007-16: 297 projects, none focused on active mobility
 - 22% included some kind of 'activities'. Yet poor record on road projects
 - BRT project in Cali - WB lending failed to ensure cycling integration (Mosquera, 2016)
- If the role of transport is to stimulate economic growth, this naturalizes motorisation
- Analysis focused on comparison between countries, rather than transport systems/modes

5. Local initiatives take up the slack

- Cities are taking leadership in active mobility & reversing car dependence
 - Many areas of cities are already car-free and oriented to active travel
 - In Southern cities: support from key NGOs and philanthropic organisations
- Promising initiatives and models of best practice
- What is needed for transformative change is a corresponding change in mindset and planning practice
 - Requires data on walking and cycling
 - Frameworks such as A-S-I, inverted hierarchy, push-pull

Active modes can achieve sustainable transport for human development

- The limits of twentieth-century transportation paradigm are clear
 - Excellent opportunity for global action on sustainable transport
 - Yet opportunities for change are foreclosed by continued business-as-usual
- Global policy should take a leading role in pushing for change at different levels
 - Break 'transport taboo' and question travel behaviour, esp. car dependence
 - 'Promotion' of active modes not likely to have effect without transformative change
 - We should recognize, rather than avoid, the difficulties (cultural, economic, social)
 - The limitations of automobility can be leveraged for wider change



Edna Odhiambo

Multi-level Governance on Non-Motorized Transport in Nairobi

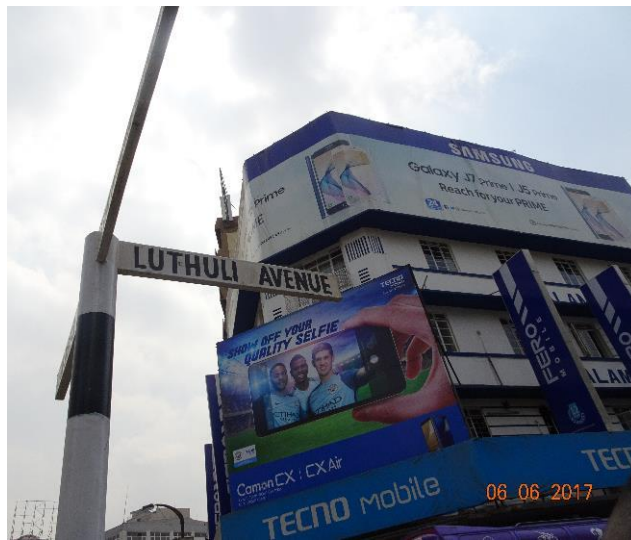


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Pedestrians 39%

1390

20% Motorcyclists

725

Drivers 9.5%

345

19.5% Passengers

704

Pedal 2%

Cyclists

74

10% Pillion

Passengers

348

Who call the shots?



- Who can legitimately program, plan, coordinate, and make decisions about NMT projects?
- Who owns and builds the infrastructure, facilities, or services?
- Who borrows, and who makes payments?

Constitutional Mandate for Nairobi County



- Co-operation and Consultation
- Access delivery
- Power and self governance to the people
- Transparency and accountability
- Checks and balances
- Separation of powers
- Reliable revenue sources for service delivery
- Development and management of infrastructure.

VIEWS ON SUBNATIONAL GOVERNMENTS

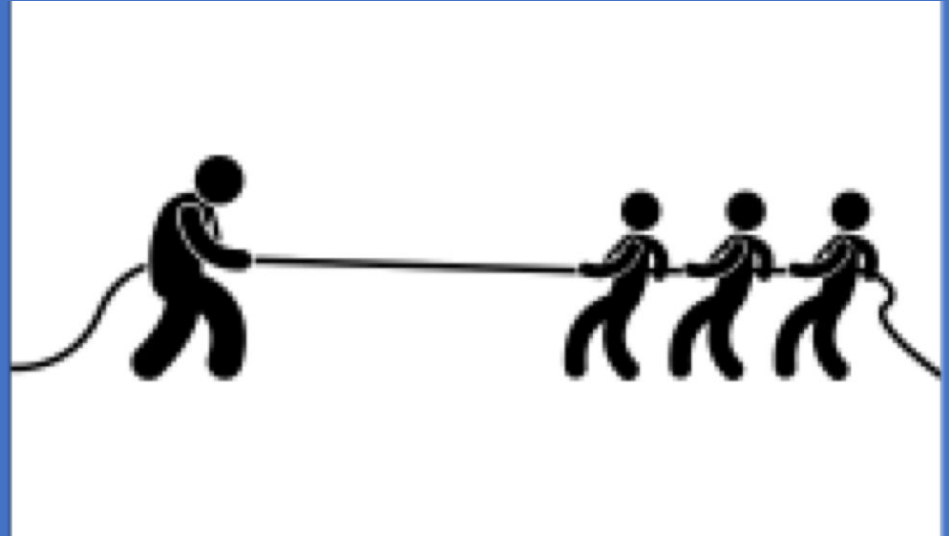
...spending is more “deconcentrated” or “delegated spending” made on behalf of central government than decentralized spending

...administrative and fiscal decentralization remain weak, thus undermining the authority of local governments...local governments have “no real responsibility for land management and no power over public utilities and pricing”.

...low fiscal capacities of local authorities and notes that capacity building for local administration officials is imperative if decentralization will be attained.

Regulatory Mandate for Nairobi County

- Constitutional mandate
- County Government Act
- Urban Areas and Cities Act
- County Government Public Finance Management Act
- County Revenue Allocation Act
- County legislation
- County Integrated Development plans, sectoral plans, spatial plans and city plans



Institutional overlap



- Kenya Roads Board
- Kenya National Highways Authority
- Kenya Urban Roads Authority
- National Transport & Safety Authority
- Nairobi Metropolitan Transport Association
- Nairobi City County- Roads department

Where's the Finance ?

- County Budgets from national govt
- Raising their own revenue- taxes, levies
- Corruption and transparency
- National govt guaranteeing loans and grants.
- Creditworthiness





Seema Singh

Barriers to Women's Mobility: Case of Panchkula, India



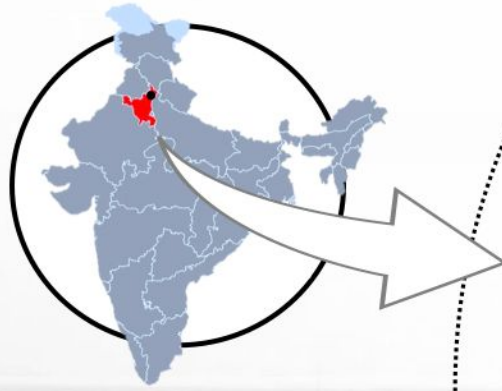
ss3625@cornell.edu



<https://www.linkedin.com/in/seema-singh-526a9218/>



PANCHKULA INDIA



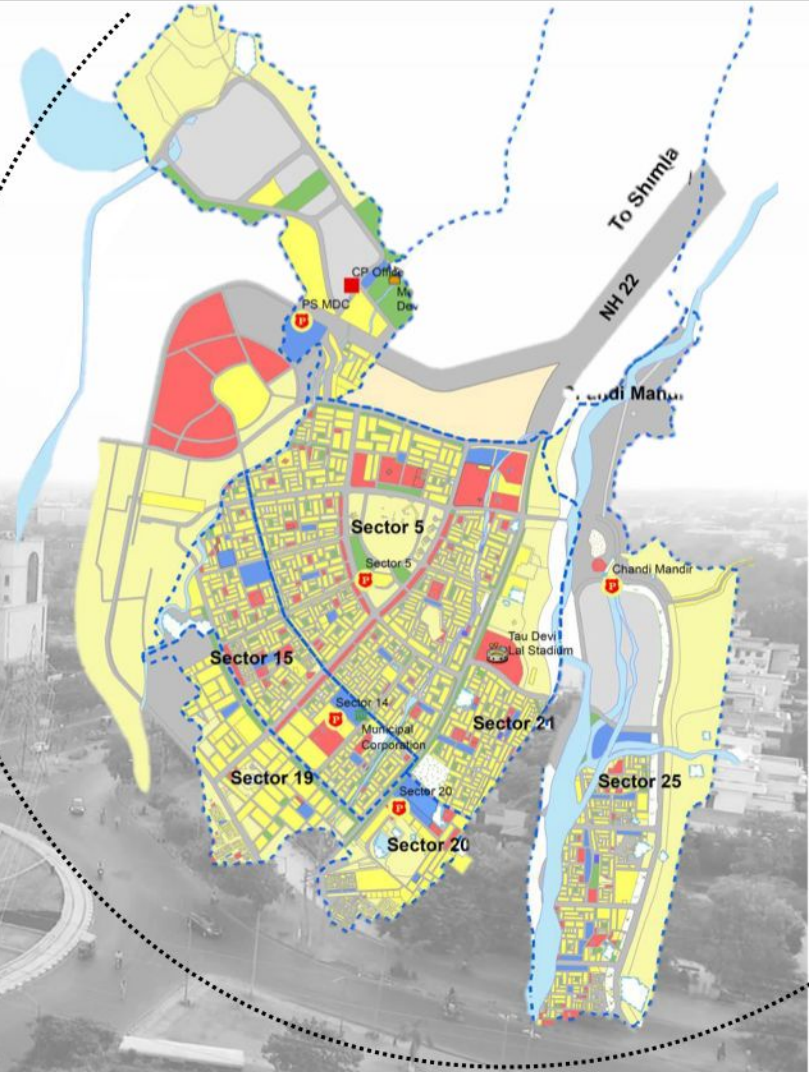
0.45 million persons (2018)

72.5 sq. km

48% women population

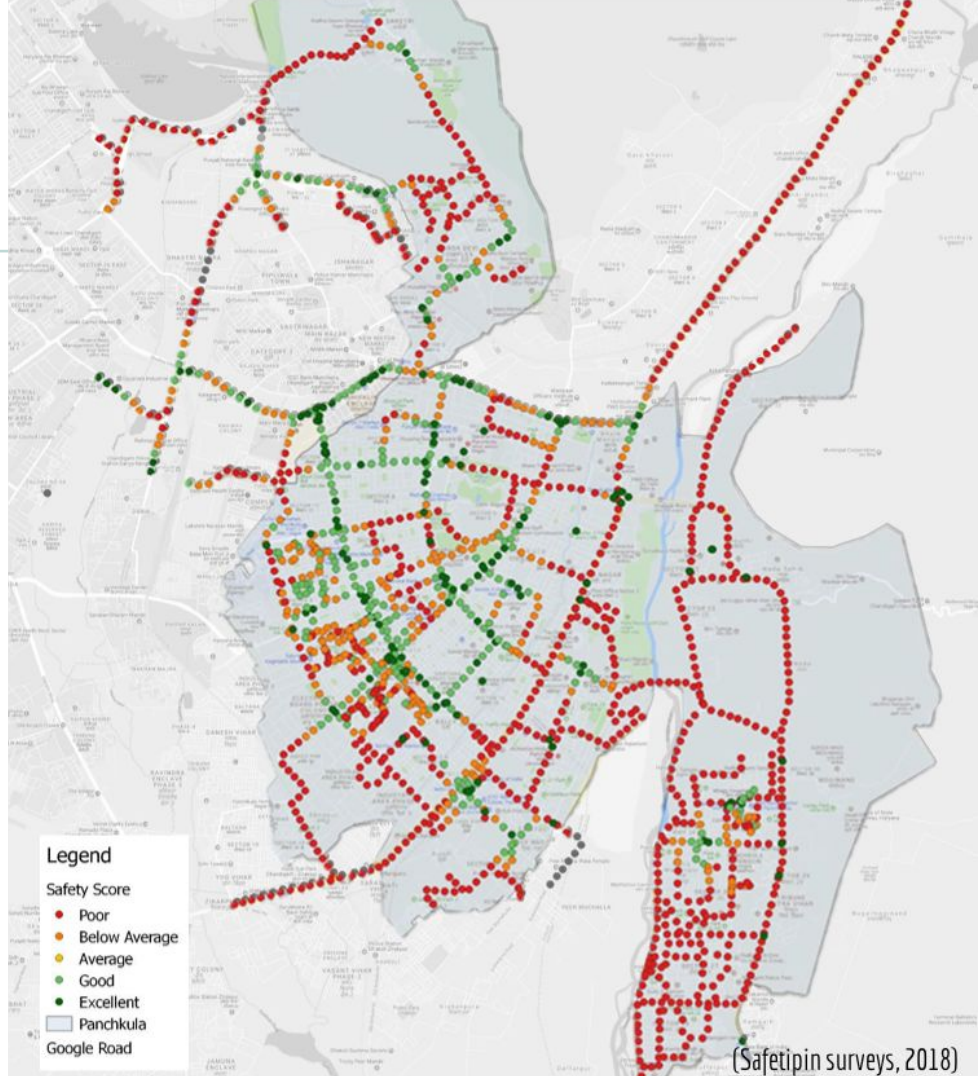
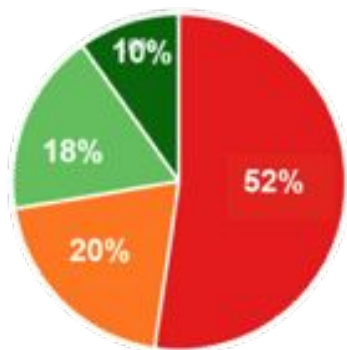
Part of a larger metropolitan region:

Chandigarh – Mohali – Panchkula



PUBLIC TRANSPORT AVAILABILITY in Panchkula

More than 52% of the city residents have
no access to any kind of PT mode
within 20 mins of walking distance
from their home at any time of the day



Walking to/from the Public
Transport stop

Waiting at the Public
Transport stop

Traveling onboard the Public
Transport vehicle



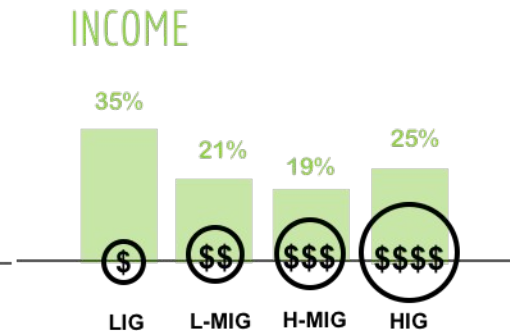
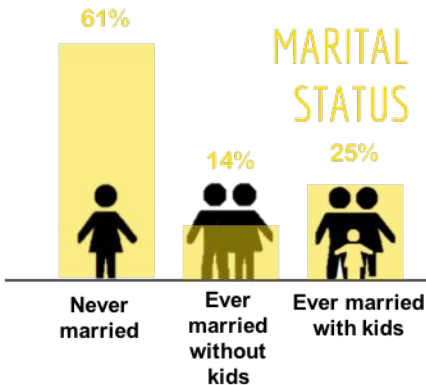
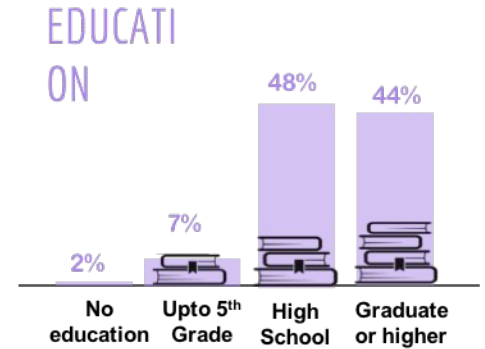
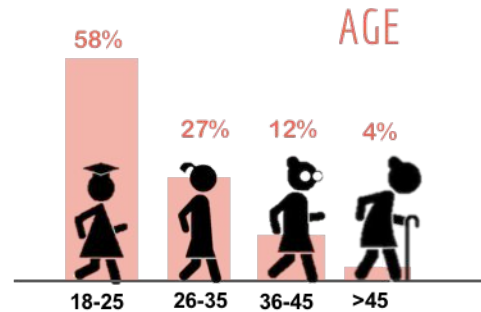
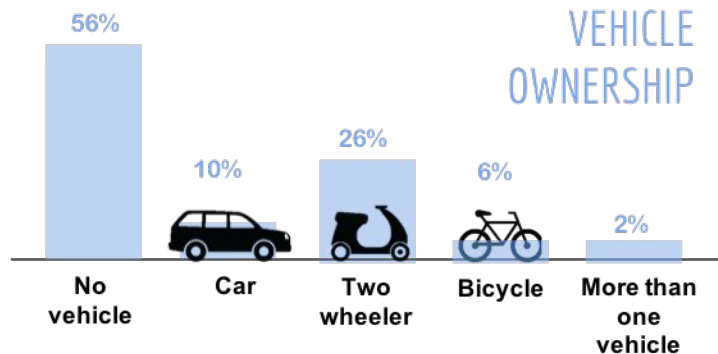
AVAILABLE
TRANSPORT
MODES



RESPONDENT PROFILE

Who is traveling by Public transport modes?

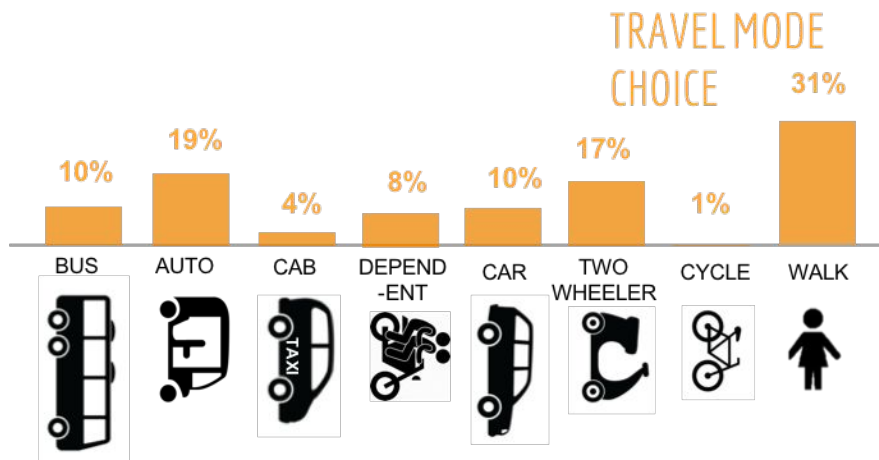
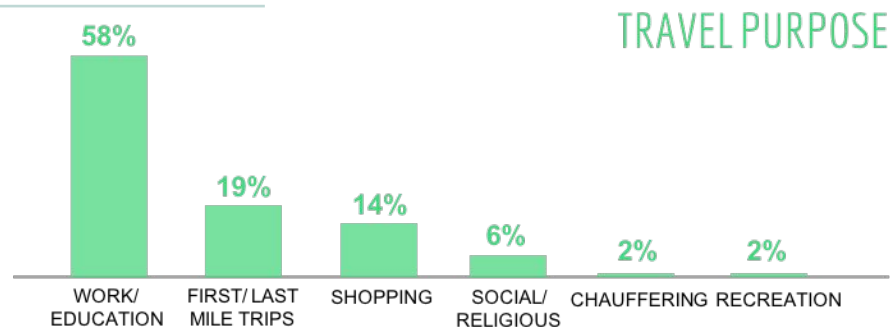
Surveys (115) and interviews (31) were conducted for **women public transport users**



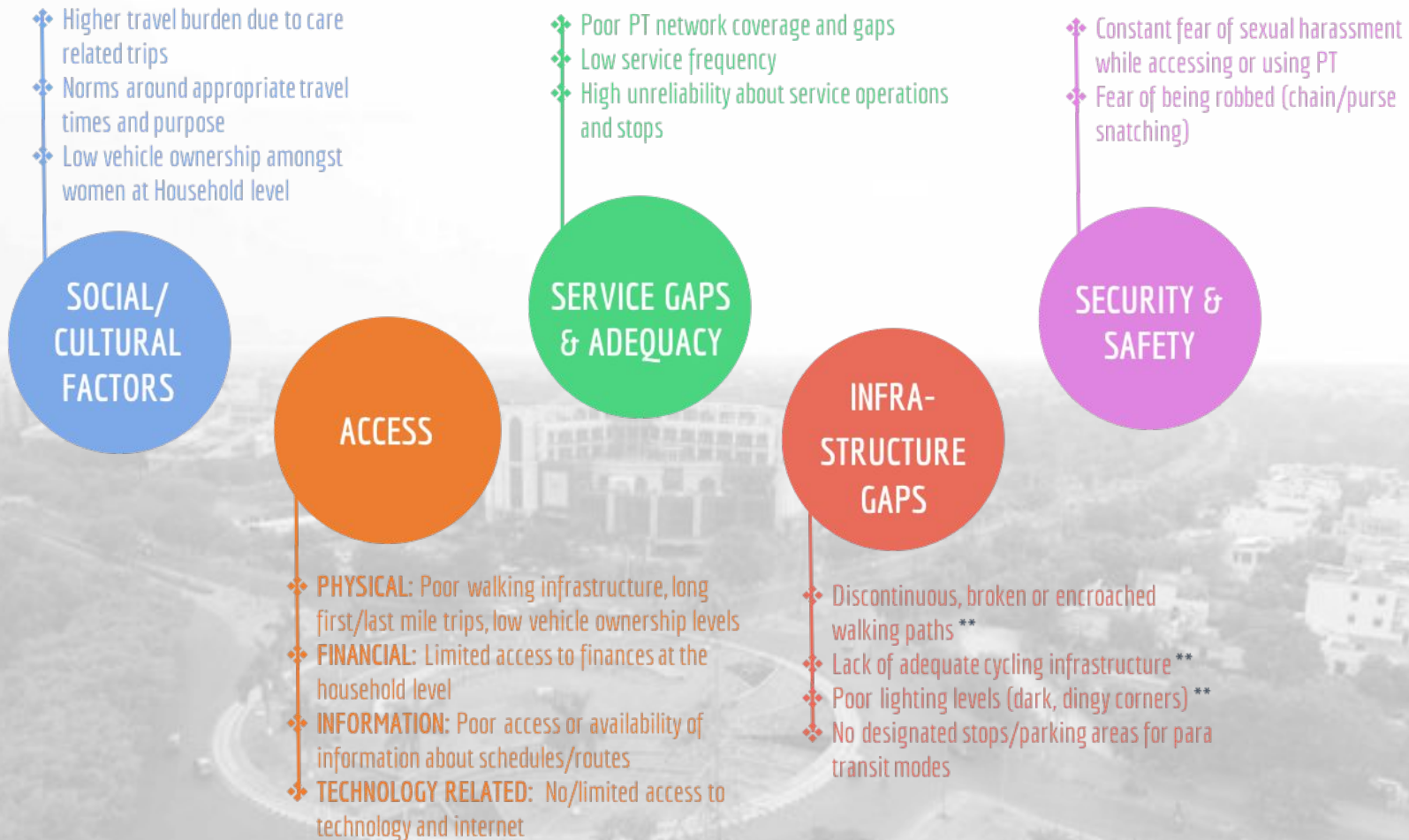
WOMEN'S KEY TRAVEL CHARACTERISTICS:

What for, and how are women traveling?

- ... **'no-choice'** users ...
- ...traveling for **'necessary or unavoidable'** trips:
work/education trips followed by shopping purposes;
...minimal travel for social or recreational purposes
- ...trip chaining and off-peak travel needs...
- ...para-transit modes and walking .. preferred over buses...
... increasing popularity of on-demand taxi services among women need attention
- ...dependency on people with personal modes of transport
- an important feature in women's mobility ...



BARRIERS



*** City is actively working to address these issues*

How does these barriers impact women's daily lives ?

Transport and time poverty

- No choice Public transport users
- Poor vehicle ownership and lack of access to technology
- Low mobility with long travel times

Inconvenient, unsafe and constrained mobility

- Long commutes with multiple modal interchanges and long first/last mile trips
- Often constrained to neighborhoods/certain areas
- Constant fear of victimization

Disadvantaged, vulnerable and a overall 'dependency' for travel

- Young, low income women and elderly – most constrained and vulnerable group
- Sense of 'dependability' on other members of household (particularly male) for travel needs

Transitioning to Gender-inclusive transport systems

Concluding thoughts

- **Augment and improve walking and public transport infrastructure**
(availability, universal accessibility, and security)
- **Acknowledge and improve informal modes of transport**
- **Relook at transport planning methodologies and models** to account for gender differences and account women specific mobility needs

The background is a blurred photograph of a city street. In the foreground, there are rows of yellow traffic bollards. In the background, there are cars, pedestrians, and buildings. A large white arrow with a blue outline points from the left towards the center of the image. Inside the arrow, the text "Thank you for your attention" is written in a blue, sans-serif font.

Thank you for your attention

Please contact us under:

Nikola Medimorec
nikola.medimorec@slocatpartnership.org