



19 May 2022

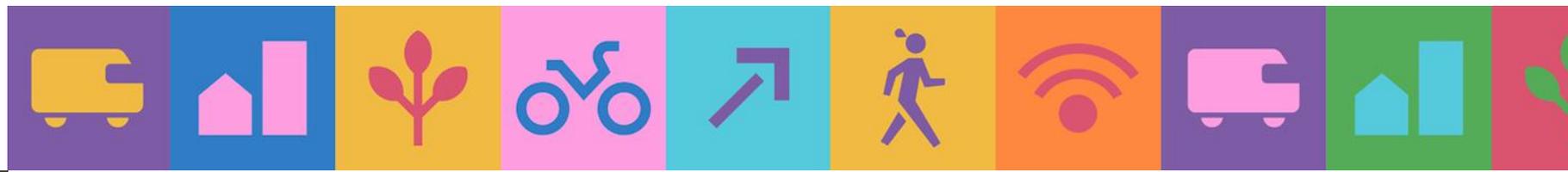


MOVIN

Paseo de la Reforma

Institutional Mobility Plan
Paseo de la Reforma

Behavioural change and travel demand management from the private sector



Content

1. Management of car use
2. Institutional Mobility Plans
3. Methodology
 - a. Diagnosis
 - b. Behavioural sciences
4. Mobility Plan: MOVIN Paseo de la Reforma

1. Management of car use

1. Management of car use

Car use management combines different policy instruments. From encouraging more sustainable travel choices to car and parking charges or restrictions.

Effectiveness			
1.	Congestion charges	7.	University mobility schemes
2.	Parking and traffic control	8.	Sustainable mobility services by universities
3.	Limited traffic areas	9.	Promotion of car sharing
4.	Free public transport passes for employed persons	10.	School Mobility Plans
5.	Workplace parking fees	11.	Mobility plans at city level
6.	Institutional mobility plans	12.	Gamification of sustainable mobility

Source: [What are the most effective ways to get cars out of cities?](#) (Nicholas K., Kuss P., 2022).

2. Institutional Mobility Plans

2. Institutional Mobility Plans



An **Institutional Mobility Plan** (IMP) is a sustainable mobility strategy that helps manage travel to and from work or study by promoting the use of alternative modes of transport to the individual car.

What is it for?

1. To know the mobility patterns of the people employed.
2. Quantify the impact they have within the institution and on society.
3. Identify and facilitate the implementation of mobility solutions that mitigate the negative impacts associated with such mobility patterns.

They can be developed for a single organisation or institution, as well as for a group of them located in the same area. Example: Employment cluster.

Potential strategies to implement

Individuales:

Caminar al trabajo: Identificar rutas y cruces seguros, mejorar la infraestructura, adecuar los accesos peatonales.

Pedalear al trabajo:

Biciestacionamientos, vestidores, escuelas de bici, entre otros.



Transporte público:

Mejorar la información sobre rutas, paradas y horarios, integrar otros servicios de primer o último tramo (bicicletas, transporte empresarial).



Transporte empresarial o vanpool:

Rutas inteligentes, planteadas de acuerdo con la residencia y horario de las personas que viajan a la institución, reserva por aplicación, pago electrónico.



Administrativas:

Horarios flexibles y escalonados, teletrabajo, oficinas remotas, semana comprimida, etc.

Auto compartido o carpool:

Plataforma que facilite la búsqueda, identificación y comunicación de personas interesadas en compartir el auto y estacionamientos exclusivos.



2. Institutional Mobility Plans Benefits



PERSONS EMPLOYED

- ✓ Improve quality of life and motivation.
- ✓ Generate physical and mental health benefits.
- ✓ Promote new mobility options.
- ✓ Reduce travel times.



SOCIETY AND ENVIRONMENT

- ✓ Reduce traffic congestion.
- ✓ To reduce the emission of polluting gases into the atmosphere.
- ✓ Reduce noise pollution.
- ✓ Reduce pollution-related diseases.



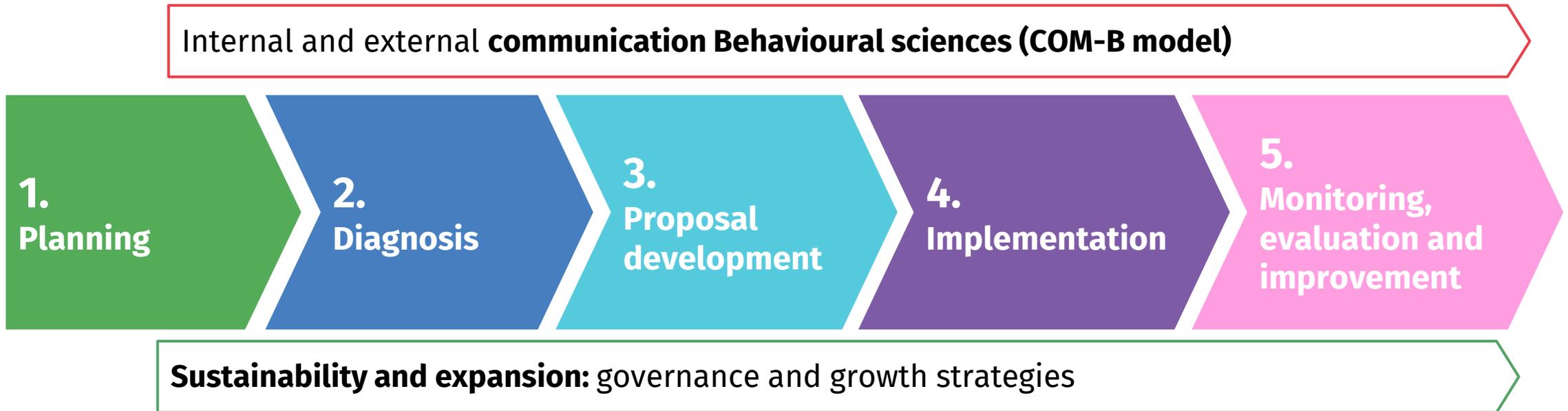
COMPANIES AND INSTITUTIONS

- ✓ Increasing productivity.
- ✓ Generate savings on parking costs and other externalities of motorisation.
- ✓ Increase talent retention and recruitment.
- ✓ Increase uptime and purchasing power.
- ✓ Improving the company's image (RSA)
- ✓ Before COVID-19, plan an orderly and safe return.

3. Methodology

3. Methodology

ITDP proposes a **5-step process** and **cross-cutting communication** strategies:



The elaboration of a Mobility Plan is a process that requires long-term management.

It usually takes **6 to 12 months** between the launch and the implementation of the first strategies, but much depends on the size of the company and its action plan.

Behavioural sciences

Understanding the factors that influence behaviour is essential to be able to modify it.

The **COM-B model** is a theoretical framework that proposes that for a person to behave in a certain way, the following is required (Michie et al, 2011):



Factors

1

Capacity: The physical and mental knowledge and skills necessary to perform a certain behaviour.

Opportunity: External factors that enable the behaviour to be performed. They include physical, social and environmental opportunity.

Motivation: Internal processes that influence people's decision-making and behaviour. They include reflective motivation (making plans) and automatic motivation (impulses, emotions and inhibition).

Barriers (example)



Not knowing how to ride a bicycle



Not owning a bicycle
Living too far away



Risk aversion

5 steps to understanding and facilitating change

1 Resistance to change is normal

Introducing a cultural change related to sustainable mobility will most likely provoke rejection from individuals and the organisation.

Knowing the reasons and barriers of people and organisations for not changing their mobility habits is very useful to develop the strategies and incentives of the Mobility Plan.

Listening to reasons (questionnaire and focus groups)

Formation of recognition groups

Much of human behaviour is defined by imitation of what "the majority" does. Belonging to a group and granting recognition, as a pattern of behaviour, is one of the keys to transforming habits.

People tend to unconsciously imitate the behaviour of those with recognition and status. For example, people in management positions in companies arrive at work on bicycles.

Detecting and positioning leaders of change

5 Setting an example

It is essential that decision-makers within organisations promote sustainable mobility and lead by example.

4. Mobility plan: MOVIN Paseo de la Reforma

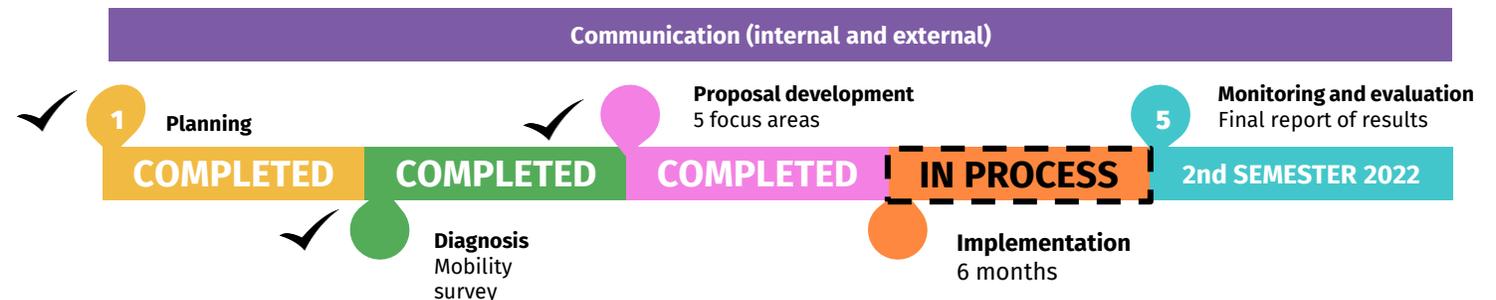
4. MOVIN Paseo de la Reforma



- **MOVIN Paseo de la Reforma** brings together 8 companies in a social and environmental commitment: to **promote sustainable mobility**.
- **Feature:** All companies are located within an employment cluster with multiple sustainable transport alternatives.
- We achieved a **62% response rate to diagnosis**, representing almost 7,000 people.



- The PMIs are part of SEMOVI's mobility strategies. They are included as one of the points of the **Mobility Sector Emission Reduction Plan 2019**.



4. MOVIN Paseo de la Reforma



Plan de Movilidad Interinstitucional Paseo de la Reforma

REPORTE DIAGNÓSTICO GLOBAL



Results of the global diagnosis

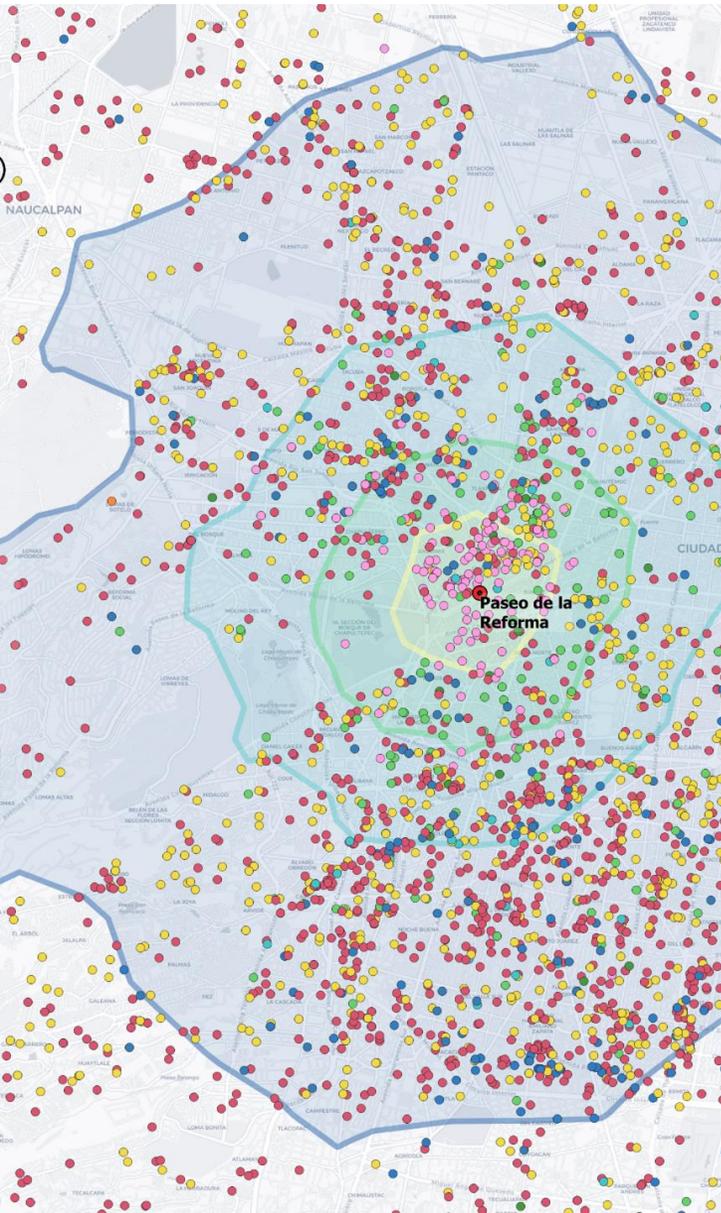
Profile of the people

- **52.8%** identify themselves as men 
 - **47.1%** as women 
- * A gender analysis was carried out

- Most people (**35.7%**) live within a radius of 10-20 km.
 - Only **8.7%** live within 3 km.

- **8.2** out of **10** people own a car 
- **4** out of **10** people own a bicycle 
- **12%** of staff are Ecobici users and 37.7% are women. 

4. MOVIN Paseo de la Reforma



Mobility patterns

-  Car, the most used mode. TP in second place.
 - The average occupancy rate per car was **1.4 persons**.

- **6.5** out of **10** people own and used a car.
- **1.5** out of **10** people own and used a bicycle.
 - The shorter the distance to the workplace, the greater the use of bicycles.

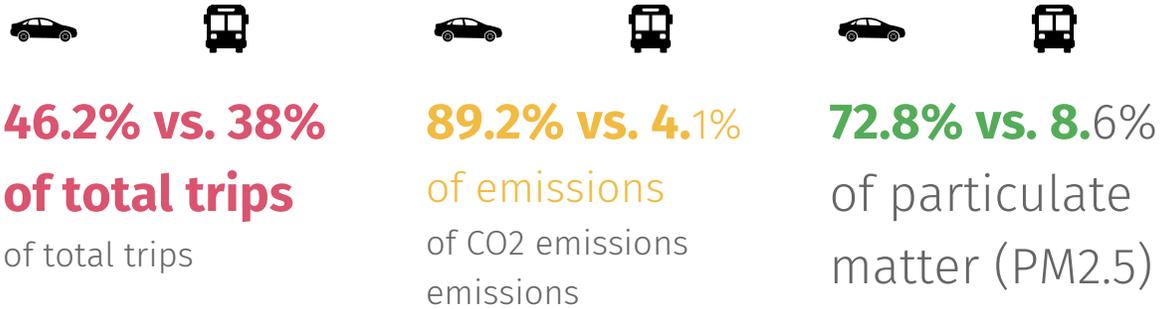
- **48.8%** travelled more than 15 km (one way).
- **53.2%** travelled more than 1 hour (one way) and **9% travelled** more than 2 hours.
 - Only **2.6%** 15 min. or less.



4. MOVIN Paseo de la Reforma

Mobility patterns

Car use and emissions vs. public transport



People's **labour displacements** generated:
8,560 Ton of CO2 and **647.4 Kg of PM2.5**
17,120 trees would need to be **planted** per year to offset commuting related emissions

Car and parking costs

 **\$5,001.66 MXN** per month

Going to the office in some kind of car is:

- +\$** • **1.4 times more expensive** than some types of taxis
- +\$+\$** • **10.3 times more expensive** than personnel transport
- +\$+\$+\$** • **27.8 times more expensive** than cycling

E • **85.7%** parked their **car at the company free of charge**. On average they spend **\$1,050.00 MXN per month** (30% of total car expenses)¹⁷

4. MOVIN Paseo de la Reforma

MOVIN objectives:



Car use
→ Shift 20% of modal share from car to sustainable modes.



Cycling
→ Double the main modal share of cycling (from 3% to 6%)



Pollutant emissions
→ Reduce pollutant emissions (CO2) by 30%.



Mobility subsidy
→ Shift 10% of current car subsidy to other sustainable modes

Vision: To improve the quality of life of employees, reduce congestion in the area and reduce polluting emissions by promoting more and better sustainable mobility options.





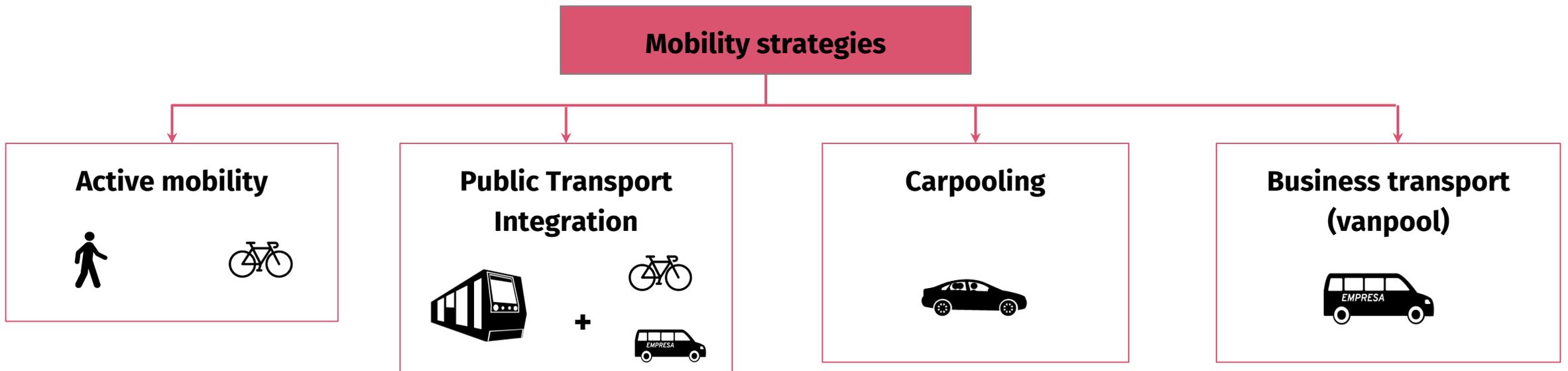
7. MOVIN Paseo de la Reforma Technical analysis

Strategy development process

Behavioural sciences (COM-B model)



A total of 23 strategies are presented, grouped as follows:





Example

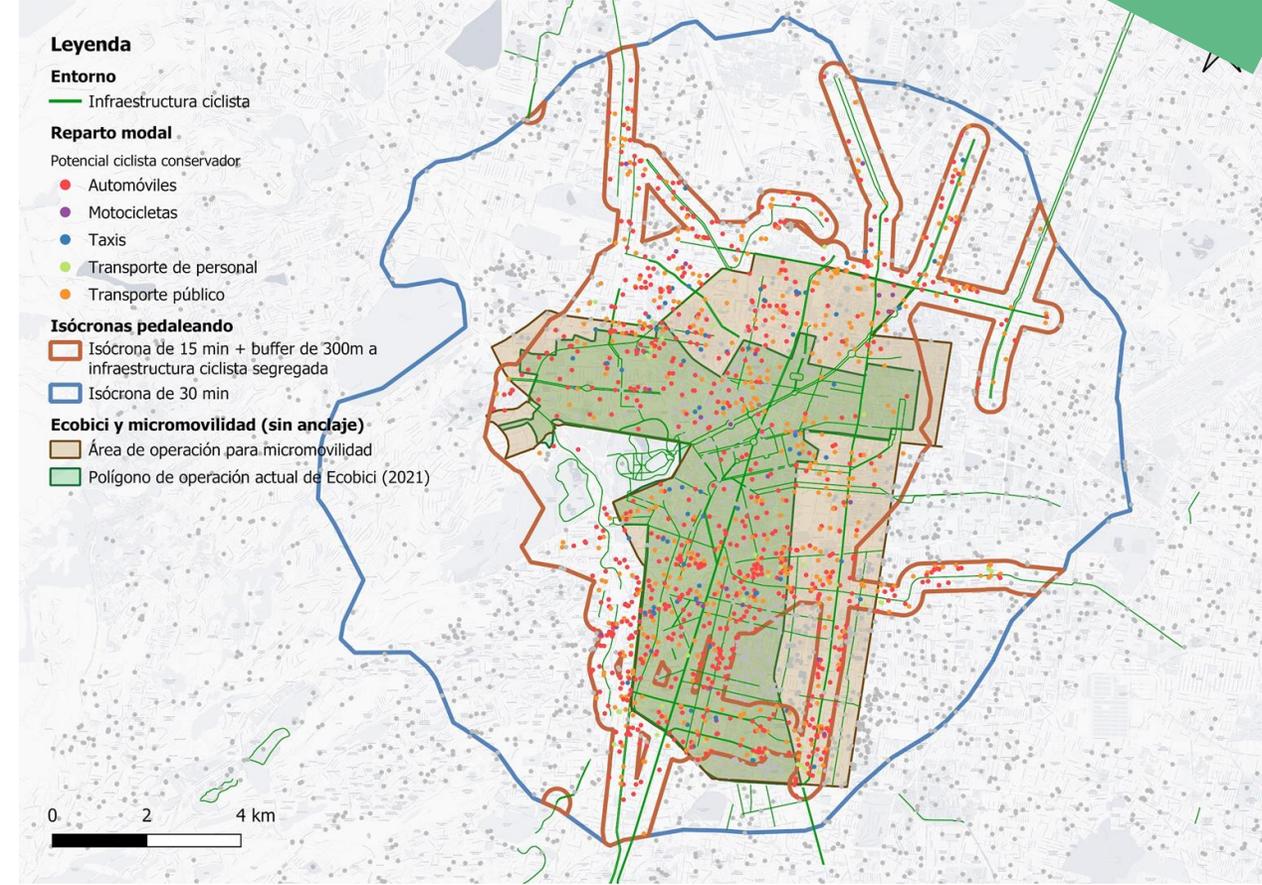
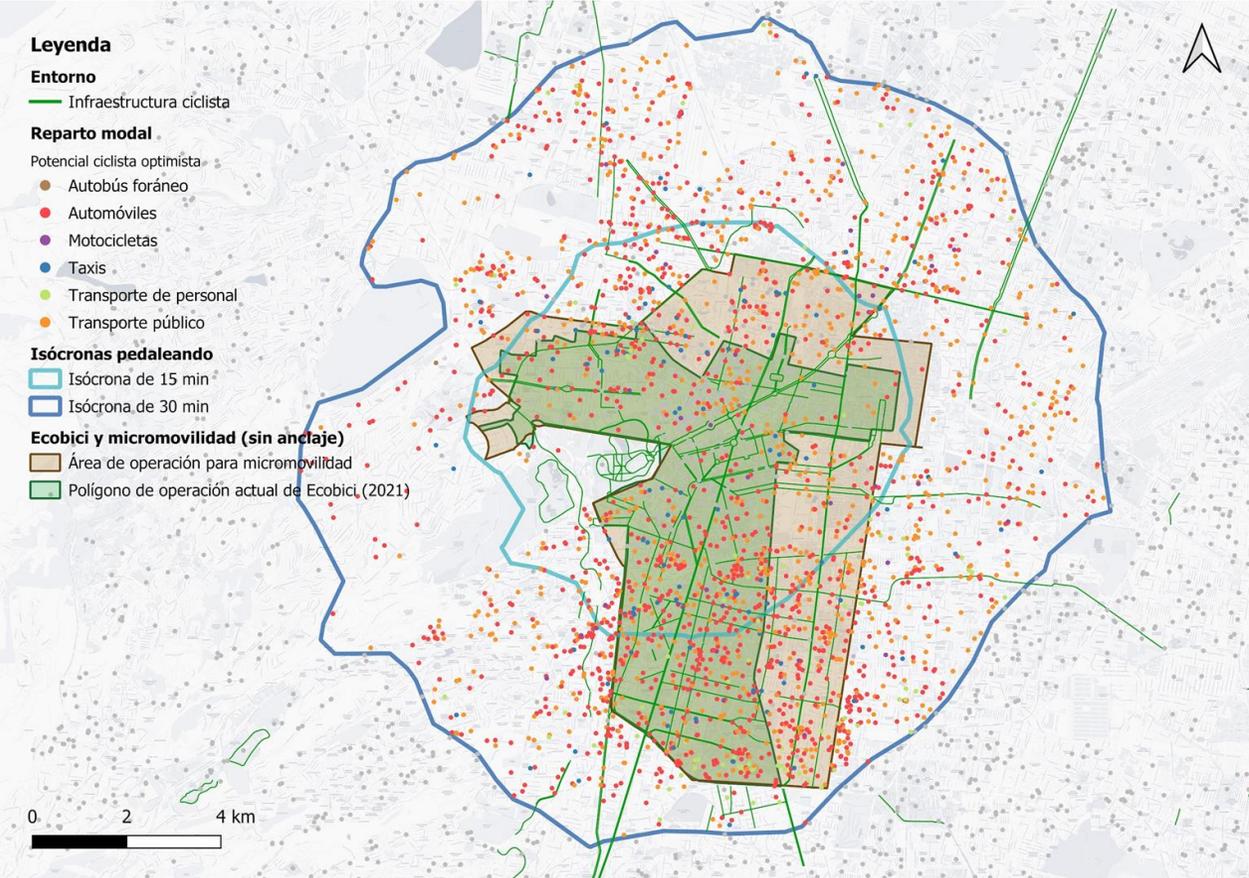
EO

Optimistic scenario



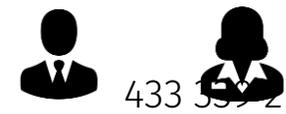
I prefer not to specify

Potential: 1,599 new people could cycle, representing **24.5%** of people (6,534). To meet the target of 3% additional modal share by bicycle, **208 of the 1,599 people** would be needed.



EC

Conservative scenario



I prefer not to specify

Potential: 774 new people could cycle, representing **11.8%** of people (6,534). To meet the 3% additional modal share target for cycling, **208 of the 774 people** would be needed.

7. MOVIN Paseo de la Reforma

What are the strategies we are going to promote?



Flexible entry and exit times
Providing facilities related to staff hygiene
Provide rain gear

Formation of running groups

Flexible entry and exit times
Providing facilities related to staff hygiene

Ecobici registration fee

Pay-as-you-go bicycle sharing systems

Provide rain gear.
Provide cycling safety equipment

Secure on-site bicycle parking

Organisation's fleet of mechanical or electric bicycles

Bicycle school and personalised cycling accompaniment

Development of cycle rides or work events around cycling



Digital platform for car sharing among collaborators

Flexible entry and exit times

Preferential parking for car sharing



Business transport route network



Information on public transport integration with:

- (i) Bicycle (Ecobici)
- (ii) Business transport

7. MOVIN Paseo de la Reforma

Can an institutional mobility plan contribute to the sustainability and quality of life of cities?

Can clustering of origins and destinations make collective transport solutions viable/profitable?

How can a PMI be sustained over time?

Should private sector mobility plans be promoted by authorities as part of urban sustainability solutions and how?

Thank you

::: mexico.itdp.org ::: ideamos.mx ::: @ITDPmx :::



UMEÅ

*One of the fastest growing
regions in Sweden*



Sustainable mobility

Central for achieving Umeå's overall goals

- Sustainable growth to 200,000 inhabitants by 2050
- Safe and secure
- Equal
- Climate neutral



The comprehensive plan integrates perspectives, the development strategies lay the foundation

Everyone shall take part



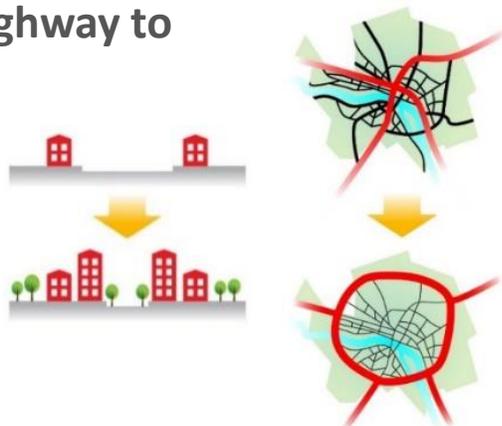
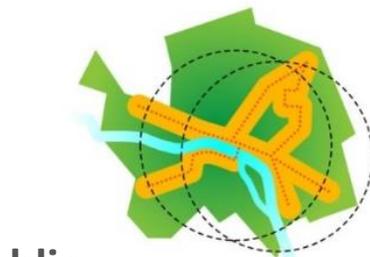
Create high density in new districts



Invest in public spaces and parks



Growth along public transport corridors and conversion of highway to city streets



Development strategies for urban growth
200 000 inhabitants by 2050

Five kilometer city - the dense city!



More city!
Complementing as revitalizing force



If men travelled like women,
the goal for the city
would be reached!

Goal for Umeå 2025; 65 percent of all travels in the city are sustainable

- Men: 40 percent
- Women: 56 percent

Travel habit survey 2015: Travel diary, inhabitants of Umeå (gender segregated statistics)





Car-free families – try out new habits

- Target those who are willing to live without a car
- Wide range of sustainable modes of travel, instead of focusing on a mode of travel
- Focus on change in lifestyle, instead of test-travelers for a short time or competitions
- 10 families, 3 months without a car

Conclusion

- Three months is enough time to give going car-free a real shot
- There is a great will to change, but you need support to overcome thresholds.
- Planning leads to less stress and reduced consumption, fewer impulse purchases.
- Electric bikes is the key to car-free life



Ta med tejp när ni ska handla otympliga saker



👍 😊 Du och 5 andra

Visat av 6

www.umea.se/bilfri



Innovative communication

16 %

16 % have tried
biking more often

We worked with Umeå-artist
Nathalie "Cleo" Missaoui



Umecom: citizen innovation and co-creation



REGIONAL HUB FÖR LOKAL + HÅLLBAR MAT

DETTA SKA VI GÖRA!
För att accelerera arbetet med lokal och hållbar mat i Västerbotten, stötta existerande och kommande aktörer inom området, förstå vilken en regional hub. Hubben ska vara en organisation och en fysisk plats som tillkännager framtid innovation inom sektorn lokal och hållbar mat. Hubben ska stå för kunskap inom området och leda till samarbeten mellan det offentliga, föreningar, och andra organisationer i landet.

KLIMAT- OCH MILJÖEFFEKTER
Bättre miljömedvetenhet, mindre utsläpp, ökad resursanvändning, ökad återvinning, ökad självförsörjning och ökad resursanvändning, ökad självförsörjning och ökad resursanvändning.

HUR GENOMFÖR VI FÖRSLAGET?
Det behövs flera aktörer för att genomföra projektet. Vi vill ha med oss aktörer som till exempel kommuner, företag, föreningar, utbildningsinstitutioner, forskningsinstitutioner, ideella organisationer samt företag och andra aktörer i den lokala marknaden. Vi vill också ha med oss aktörer som till exempel företag, föreningar, utbildningsinstitutioner, forskningsinstitutioner, ideella organisationer samt företag och andra aktörer i den lokala marknaden.

INCITAMENT FÖR CYKELVÄNLIGT BYGGANDE

DETTA SKA VI GÖRA!
Våra bostadsområdens utformningar är en stor faktor när det gäller att underlätta för Umeåbor att välja cykeln. En cyklande familj har ofta flera cyklar per person, men i dagens bostäder finns det inte förvaringsplats för allt detta, samtidigt som det tas för givet att alla ska få plats med en bil. Därför är vårt förslag att skapa incitament för att bygga bostadsområden där man kan parkera alla hushållens cyklar på ett stödt och vädersäkert sätt - oavsett vilken boendeform man har.

KLIMAT- OCH MILJÖEFFEKTER
Mindre utsläpp, ökad resursanvändning, ökad återvinning, ökad självförsörjning och ökad resursanvändning.

HUR GENOMFÖR VI FÖRSLAGET?
En idé är att göra det möjligt att söka medel från kommunen eller någon myndighet för att tes. en bostadsrättsförening eller andra aktörer ska kunna investera i cykelständer och annan infrastruktur som krävs, både vid ombyggnad och nybyggnation. I Malmö byggdes år 2017 det cykelvänliga bostadsområdet "Oh-boy" som ett pilotprojekt för minskad bilens i staden (<https://www.siegel.nu/homs/ohboy/>). Denna förslag kan användas som inspiration till utformning och som bevis för genomförbarheten.

ODLINGSKUNSKAP I SKOLAN

DETTA SKA VI GÖRA!
Vi behövs ett kunskapslyft inom odling och att ta tillvara på sin egen mat. Därför föreslår vi en satsning på odlingsskolor i skolan. Varje skola borde ha en odlingsskola och ett ämne - kanske elevens val, kanske inbyggd i en uppdaterad hemkunskap - som fokuserar på detta. Fokus ska ligga på permakultur, lokal självförsörjning och lokal kosttillsättning av Lax, Salm.

KLIMAT- OCH MILJÖEFFEKTER
Mindre utsläpp, ökad resursanvändning, ökad återvinning, ökad självförsörjning och ökad resursanvändning.

HUR GENOMFÖR VI FÖRSLAGET?
Upprätta kunskap och resurser från skolor och föreningar. Pensionärer i kommunen kan nyttjas som resurserpersoner.

Januari	-
Februari	23/2 Live Session
Mars	30/3 Live Session
April	27/4 Live Session
Maj	14/5 Umecom x Kamacon
Juni	-
Juli	Semester
Augusti	Festival, inget datum satt
September	28/9 Live Session
Oktober	26/10 Live Session
November	30/11 Live Session
December	14/12 Julavslutning på Revolt

UMECOM 2022



Challenging power, identity and norms is just as important as introducing new technology to reach climate neutrality



Thank you!

Philip Näslund

Strategic Development Officer, City of Umeå
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Comune di Parma



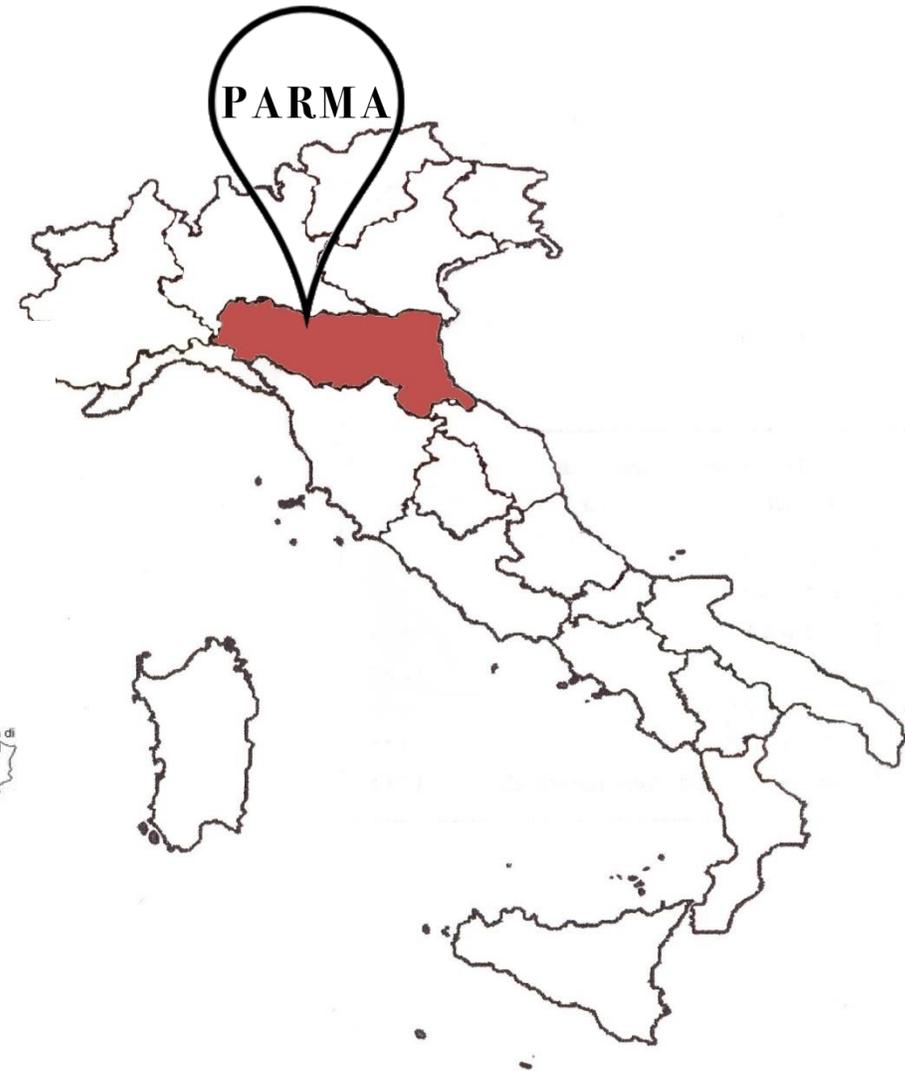
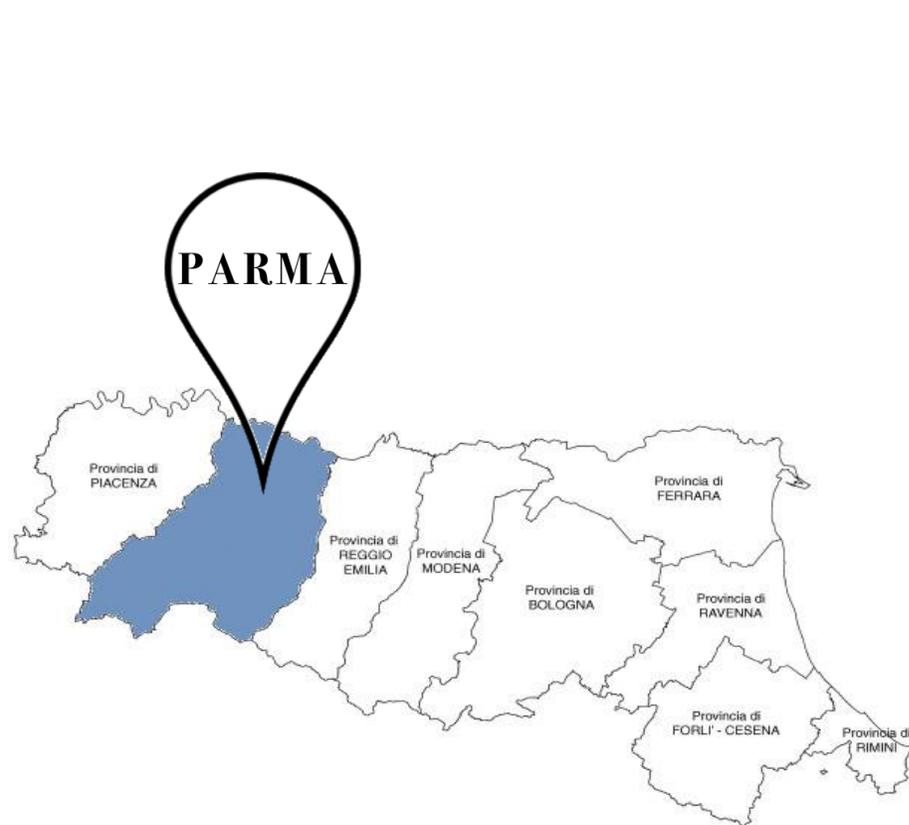
Mobility behaviour change: Promoting sustainable travel choices in cities

City of Parma

Patrizia Marani

19 May 2022

Parma



Inhabitants: 198 225

Inhabitants per km²: 735

Land Area: 260,8 km²

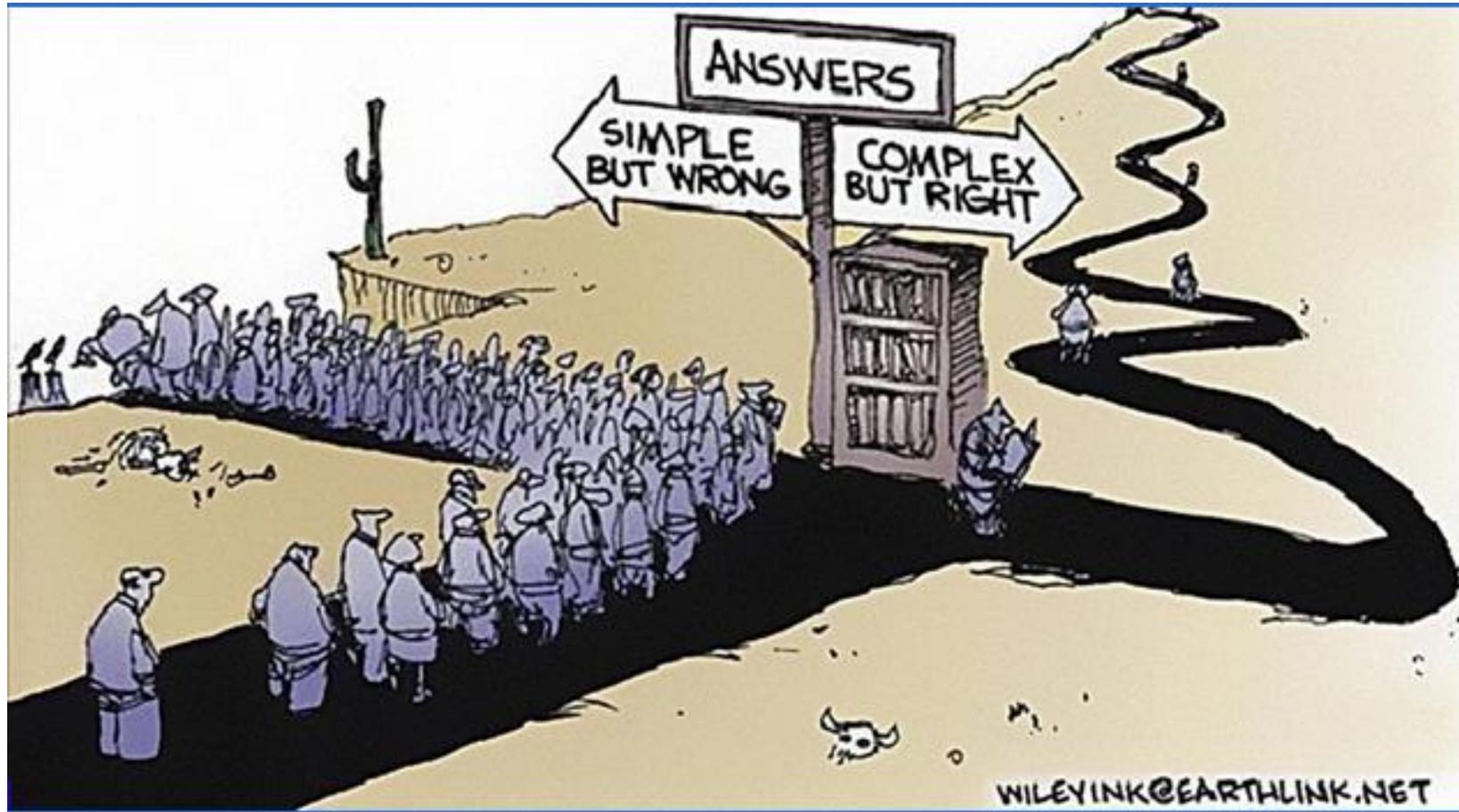
Parma: food valley



Parma: and air pollution in the Po region



Satellite image of northern Italy in the winter season (source: MODIS Radiometer, NASA)



Parma: integrated approach

Integration of national, regional, inter-regional and local policies and strategies



Integration of air quality, sustainable mobility, climate change



Parma: SUMP



- **Reduce private vehicles** traffic and move people in a more efficient, sustainable and safe way
- **Re-design the public transport network** in order to cope with user expectations for efficiency, quality and fast access to information
- Develop **intermodality** and interconnection with different urban transfer systems (bike & car sharing, electric mobility, car pooling)
- Improve **environmental** indicators by reducing noise and air pollution and improve public spaces
- **Reduce transport costs**, energy consumption and waste of resources with a view to sustainable mobility
- Improve the sustainability of **urban logistics**

Parma: integrated actions

Increase cycling infrastructure:

- Extend and improve bike ways
- Bike sharing (electric, non-electric, station-based, free-floating)
- Bike stations for intermodality

Car sharing (low emission, electric, station-based, free-floating)

Electric scooters, free-floating

Electric moped, free-floating

Extend 30mk/h zones

Public transport: more efficient, attractive and competitive; low emission busses, trolley busses, intermodality, system of incentives

Improve public spaces for a thriving city

Participation and communication

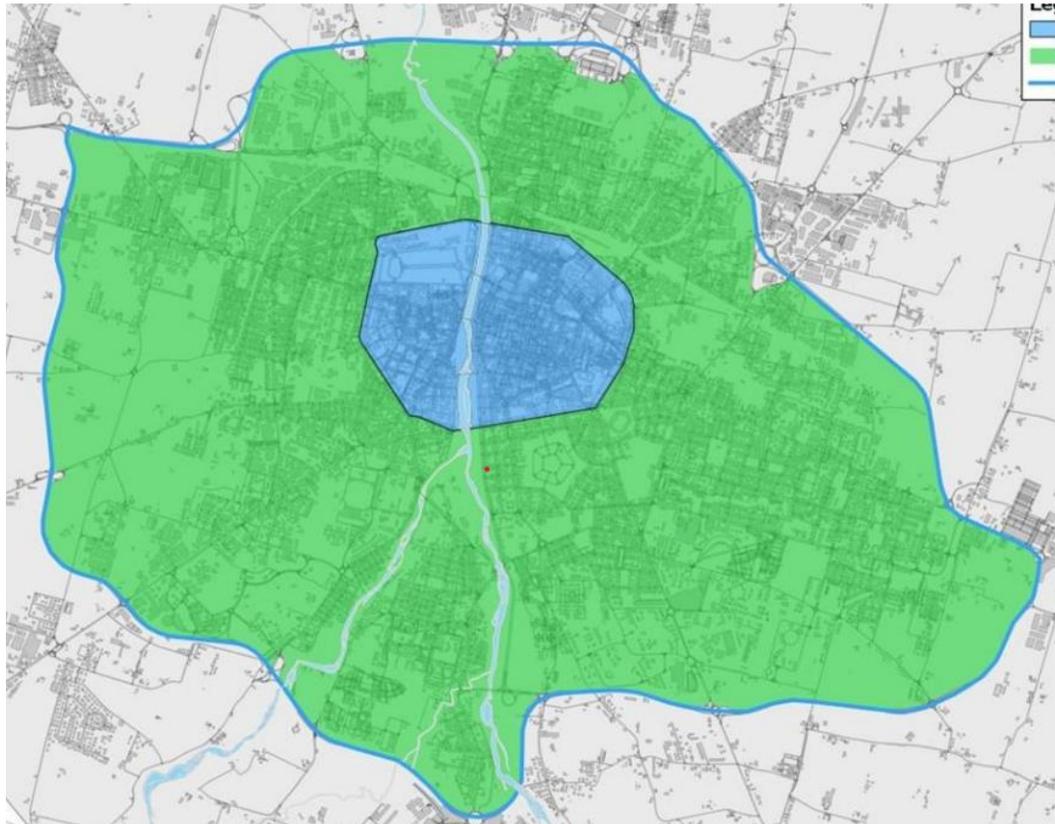
Education in schools and school mobility

Parking policy

Data monitoring

Parma: integrated actions

Blu and green areas



Gradually
implementing low
emission zone

Extending restricted
access regulation to
the whole urban area
within the ringroad

Parma: Network of Mobility Managers



AREA MOBILITY MANAGER

Coordinated by the City of Parma

Aim:

permanent and structural change in mobility behaviour home-to-work in urban and metropolitan areas

A network of 32 mobility managers of public and private organisations (at least 100 staff)

67.000 employees and students

Travel plans supervised by the City of Parma

Activities and benefits:

- . capacity building
- . common methodology and tools for the employees questionnaire and the preparation of the travel plans
- . incentives for the members
- . monitoring of data
- . coordination of urban strategies and initiatives

Parma: Network of Mobility Managers

What is a company mobility manager for?

- Fulfilling a legal obligation.
- Introducing greater efficiency in organisational processes related to mobility.
- Enhancing corporate welfare and reputation.
- Mitigating the negative externalities ..produced by the organisation.



Parma: Network of Mobility Managers

Mobility Management: a 'systemic' competence

Many functions and objectives:



- Initial assessment, data processing, plan definition, implementation, reporting, ongoing monitoring.
- Finding and managing funding lines internally or externally.
- Identification of digital media: apps, detection tools, monitoring tools.
- Communication and relations with internal and external stakeholders.

Parma: Network of Mobility Managers

Sustainable mobility measures in companies: a few examples

→ Encouraging public transport

- Requests for improvements to lines and timetables
- Incentives and contributions for tickets and subscriptions

→ Promoting sustainable mobility

- Promoting car pooling
- Incentives for the purchase of bicycles and accessories

Mileage incentives for cyclists

Dialogue with the local public transport company

Economic contribution

Communication, organisational support, economic contribution

Communication, economic contribution

Structure, communication



Parma: Network of Mobility Managers

Sustainable mobility measures in companies: a few examples

- Reducing the demand for mobility
 - Smart working
- Electrification of mobility:
 - Incentives for the purchase of E-Bikes
 - Installation of electric car charging stations
- Communication
 - Raising awareness and promoting good behaviour
 - Gamification and prizes

Organisational support,
financial contribution

Economic contribution

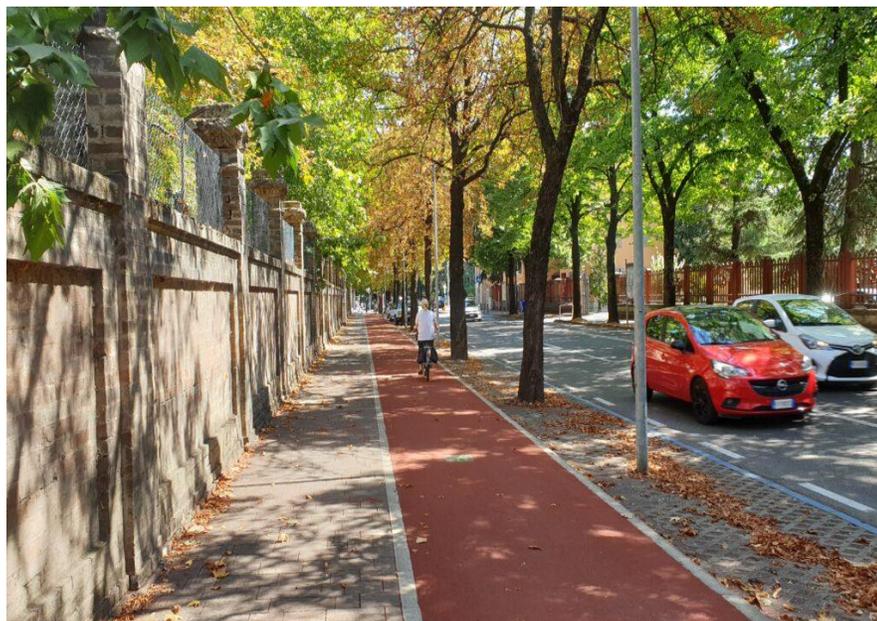
Structure

Communication

Communication, digital
support, incentives



Parma: Bike to work



Parma: Bike to work incentives

Encourage active travel between home and work and discourage the use of private cars

Started in 2020, three editions

Agreement between regional authority – local authority – enterprises – employees

A system of incentives to increase cycling to work:

- ⊙ 20 cents per km max. 50€/month
- ⊙ reduction of the price of the bike sharing (free monthly pass)
- ⊙ reduction (30%) of the price of the bike parkings

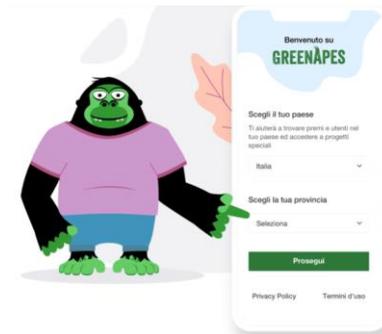
Parma: Bike to work incentives

Phase 1: the Municipality publishes an expression of interest for all interested public or private organisations

Phase 2: Signing of Mobility Management Agreements between the Municipality of Parma and organisations participating in the Bike to Work project

Phase 3: Employees can participate in the bike to work project

Phase 4: Monitoring of the bike to work with the App 'GreenApes'



Parma: Bike to work incentives

2020 October-December

2021 April-October

2022 running

Incentives: € 55.298,21

Km traveled: 267.703,85

Enterprises: 39

Parma: Bike to work incentives

Systemic action

Commitment of the municipality and the organisations to promote, communicate and disseminate the Bike to Work project

For temp and permanent employees

Any type of bikes

Only home-to-work

Parma: Bike to work incentives

**Se vai in bici
FAI UN BEL LAVORO**

III edizione Bike to work 2022/2023

E' salutare
Dà energia
Sei serena/o
Non inquina
Risparmi
E inoltre...

...puoi guadagnare in 3 modi:

- con gli incentivi per gli spostamenti casa-lavoro in bicicletta (max 20 centesimi al chilometro e max 50 euro al mese).
- con la riduzione del costo di utilizzo del bike sharing.
- con la riduzione del costo del deposito delle biciclette nelle velostazioni e nei depositi convenzionati con il Comune.

E' salutare
Rinforza il tuo sistema immunitario e fa bene alla linea

Dà energia
Ti aiuta ad aumentare la concentrazione e favorisce il benessere

Sei sereno
Se fai movimento aumenti il buon umore

Sei protetto
Favorisce le misure anti COVID di distanziamento fisico

Non inquina
Aiuta a migliorare la qualità dell'aria che respiriamo tutti

Risparmi
Non spendi in manutenzione auto, benzina e parcheggio

Da aprile a giugno partecipa al progetto Bike to Work

FIAB
Regione Emilia-Romagna
Comune di Parma
AICAR

<https://www.youtube.com/watch?v=fvJfaCMDrzY>

Thank you

Patrizia Marani

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