Policy Learning Platform Online Discussion
7 July 2020

Making Public Transport safe & acceptable in times of COVID-19

Katharina Krell & Simon Hunkin
Interreg Europe
Policy Learning Platform

Interreg Europe

European Union | European Regional Development Fund

Aim

- Present the challenges from COVID for public transport
- Understand the types of measures that can be implemented in response
- Investigate crowdsourced case studies and good practices
- Rate and assess practices based on impact and transferability

Agenda

- **Understanding the Challenge**
  - Ilaria Bonetti, Innovhub (SmartEdge)

- **Typology of policies**
  - Katharina Krell, Policy Learning Platform

- **Introduction Round**

- **Good practices for public transport**
  - IE Partners and PLP Experts

- **Discussion of favoured measures**

Low-carbon economy
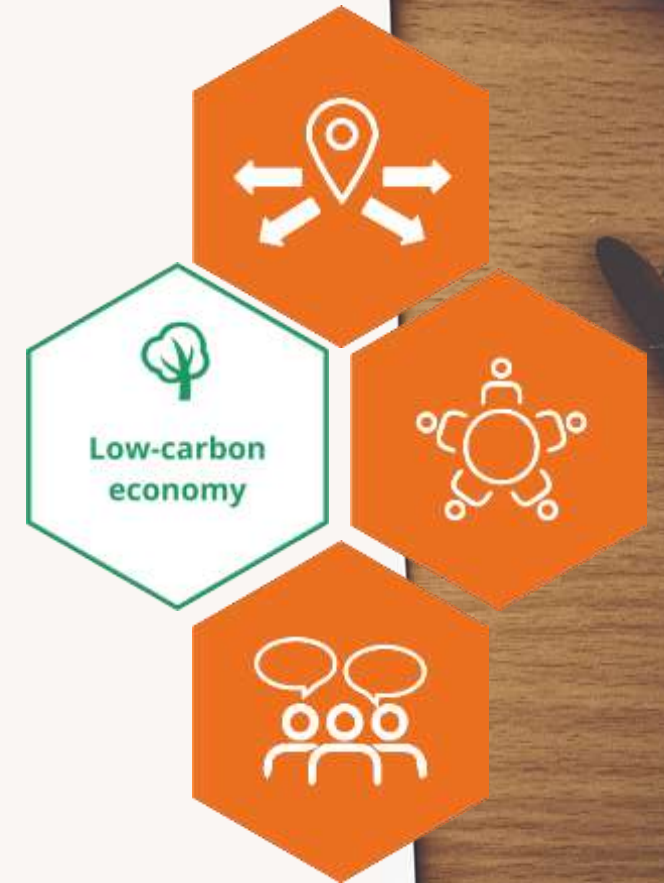
Housekeeping

- You can jump in at any time to ask questions or to comment
- Please keep your microphone muted, though, if you are not talking
- Cameras optional!
- Recording for internal purposes only

Public transport during lockdown – Lombardy

Ilaria Bonetti
Innovhub (SmartEdge)

European Union | European Regional Development Fund

During the epidemiologic emergency, many countries opted for lockdown measures to try and contain the positive cases and to protect ourselves.

This decision had impact on several aspects: social life, economic activities, air quality and pollution.

First and foremost, our digital tools made the home office the norm, as people were asked to work from home and (if possible) working in remote mode to reduce spreading of the virus.

Our daily routines and mobility patterns have changed drastically, and for a while immobility was the standard. Many of us has been isolated or encouraged to stay home and this had direct effects on many families.

The question now is: how will this situation influence the transition to a low carbon society? Will it put sustainable development back years, or is this an occasion to convert our knowledge into practice and contribute to the transition to a low carbon economy?

Some data...

MARZO-APRILE 2019 / MARZO-APRILE 2020

Paris -54% ± 15%
Milan -47% ±15%
Rome. -49% ± 15%
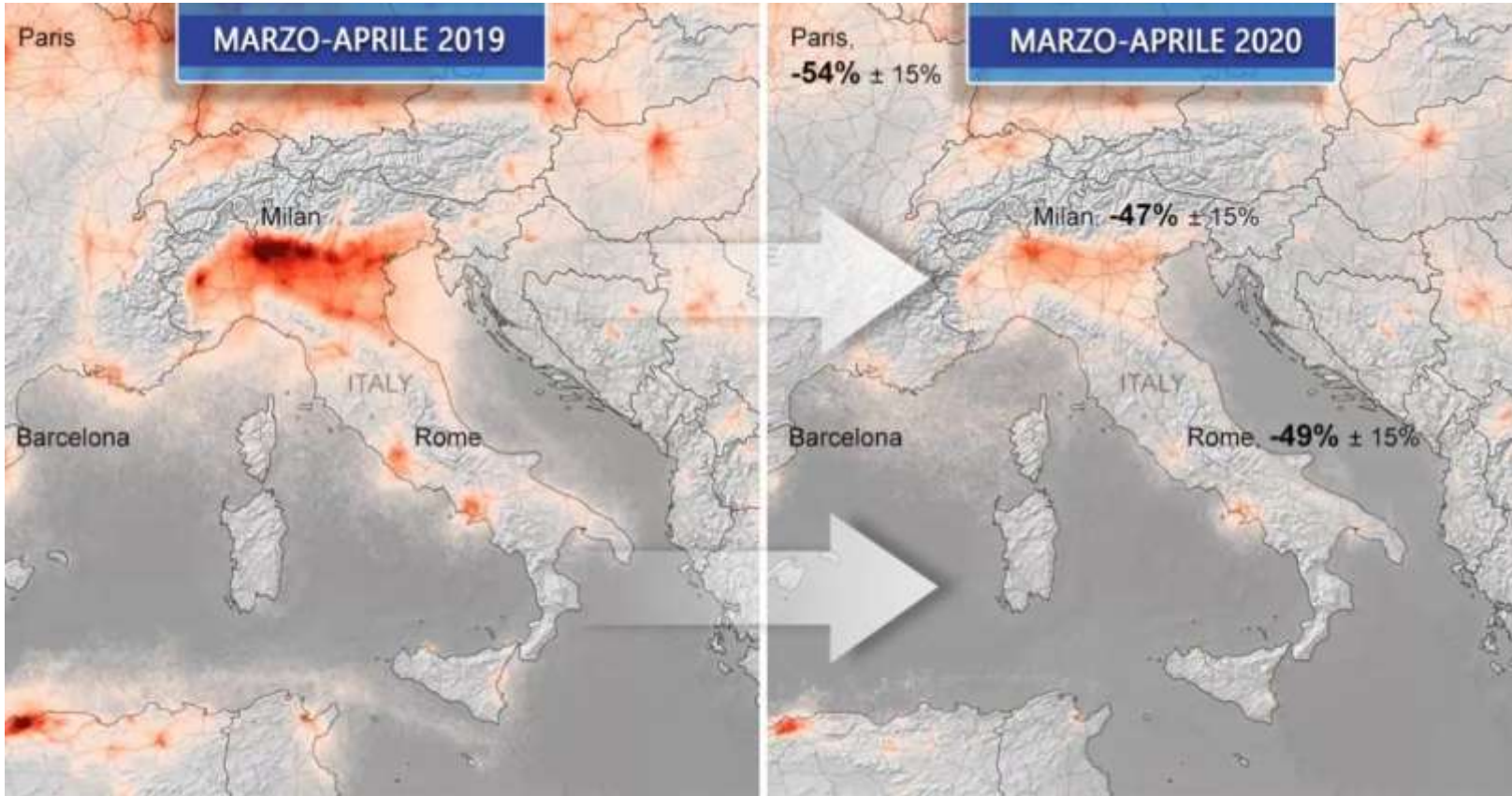
Many of Italy's towns and cities, particularly in the north, are heavily polluted - and one of the most noticeable side-effects of quarantine for many people around the country has been noticeably cleaner air.

One of Italy's biggest air pollution blackspots is Milan, that is also the area by far worst hit by Italy's coronavirus outbreak and was the first part of the country to introduce emergency quarantine measures.
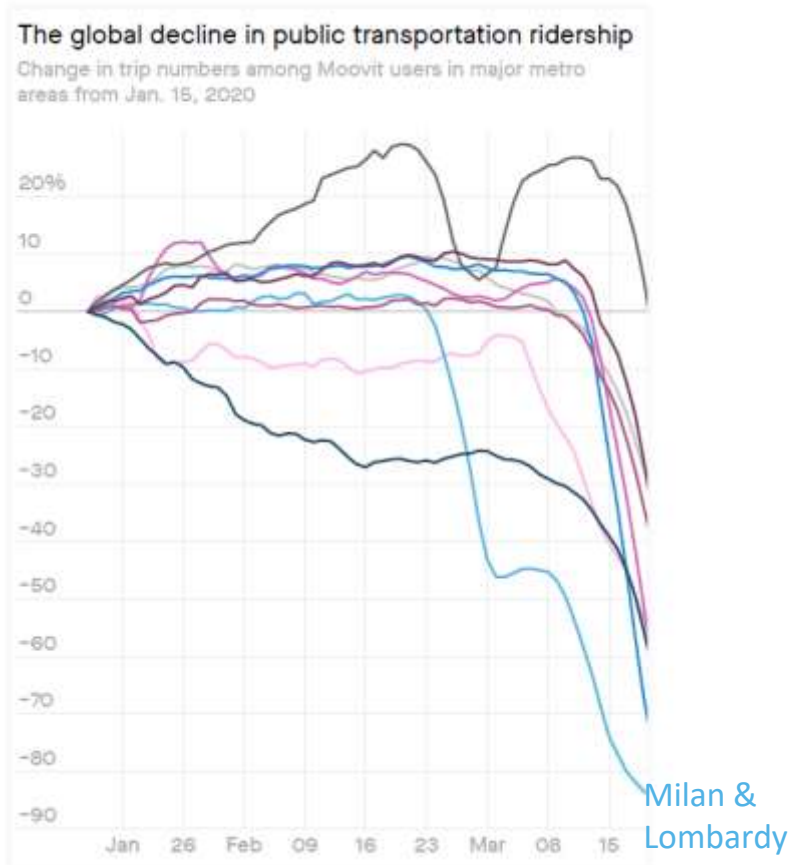
In Milan, the concentration of nitrogen dioxide (NO_2), a gas emitted mainly from vehicles and power stations has fallen by 24 percent in March, compared with the preceding four weeks.

This situation created the pre condition for the Region and Milan Metropolitan City to re think the transport issue in a more sustainable way.

Public/private transport

Due to Coronovirus lockdown, public trasportation has ground to a halt as people didn't want to use it because of risks connected with virus spread.

Journeys on transit modes — which include bus, train, subway, light rail, ride-hail, and shared mobility options like bikes and scooters — were down 86% in hard-hit Milan and Lombardy.

The global decline in public transportation ridership
Change in trip numbers among Moovit users in major metro areas from Jan. 15, 2020

Milan & Lombardy

	Average 2019	Beginning 2020	Lockdown (first 30 days)	Lockdown (whole period)	Variation to 2019
Not motorised mobility	25,1	33,4	38	34,9	+ 9,8
Private mobility	62,6	56,5	57	61	- 1,6
Public mobility	12,2	10,1	5	4,1	- 8,1
Total	100	100	100	100	

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City plans for Phase 2 mobility

- The «social distance» in **Public Transport** reduces the offer, so the aim is to re organise services, innovations, and dedicated solutions to increase the capacity;
- **Cars' use** has been chosen by citizens as the best option to move around the city; this implies the risk of congestion which needs to be managed;
- Citizens opted also for **bicycles use** and this requires new cycles paths;
- There is need for **public spaces** to organise common activities and this implies doubling the sidewalks;
- An acceleration for **bikesharing, micro mobility and electric vehicles** is requested;
- **Smart working and proximity services** are promoted to reduce transfers;
- There is a need for a **city timetable plan** to use services' capacity as best as possible;
- An improvement in the **Mobility Manager** and **school mobility** is needed.

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City plans for Phase 2 mobility

Obstacles and difficulties

- Milan Metropolitan City and other Lombardy cities suspended **ZTL, no pollution charges and parking payments**. Now it's difficult to re start these measures again;
- The **financial resources** needed to implement the measures are scarce and the budgets of cities and private/public companies are critical;
- Those that have a **good planning and middle term strategies**, can push positively for the implementation;
- It is important to **monitor and check** constantly mobility and transfers;
- It is fundamental to **monitor the transition phase** and check what is concretely implementing

DL Rilancio for urban mobility

- **Art. 44 Improvement of Fund for the purchase of vehicles** with low CO2 emissions g/km (100 Millions in 2020 and 200 Millions in 2021)
- **Art. 200 TPL Measures,** with companies' financial support of 500 Millions budget. It deletes the obligation to use alternative fuels vehicles (electric, methane and hydrogen) until June 30th , 2021.
- **Art. 229 Measures to promote sustainable mobility.** It foresees a mobility voucher up to 500 Euros (maximum) and a limit of 60% of the whole purchase, to buy bicycles and push scooters, to buy bike sharing and scooter sharing services (not car sharing).For this purpose, 120 millions Euros have been allocated (70 Millions had been already planned)
- **Modification to Road Code,** to promote bicycles and micro mobility circulation;
- **Promotion of Mobility Manager:** obligatory for companies with more than 100 employees.

Mobility: don't go back to normality

A silent pandemic is happening: air pollution, climate alert, public space that is not used ad common good.

European Green Deal and European Fund for re starting
Public resources to support and relaunch
Accellerate choices toward the right transition, low carbon, sustainable mobility, cities' rigeneration

Thank you for your attention!

Ilaria Bonetti
Innovhub – Stazioni Sperimentali per l'Industria

www.innovhub-ssi.it

https://www.interregeurope.eu/smartedge/

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Good Practice Typology

Katharina Krell & Simon Hunkin
Interreg Europe
Policy Learning Platform

Interreg Europe

European Union | European Regional Development Fund

Social distancing as safety principle
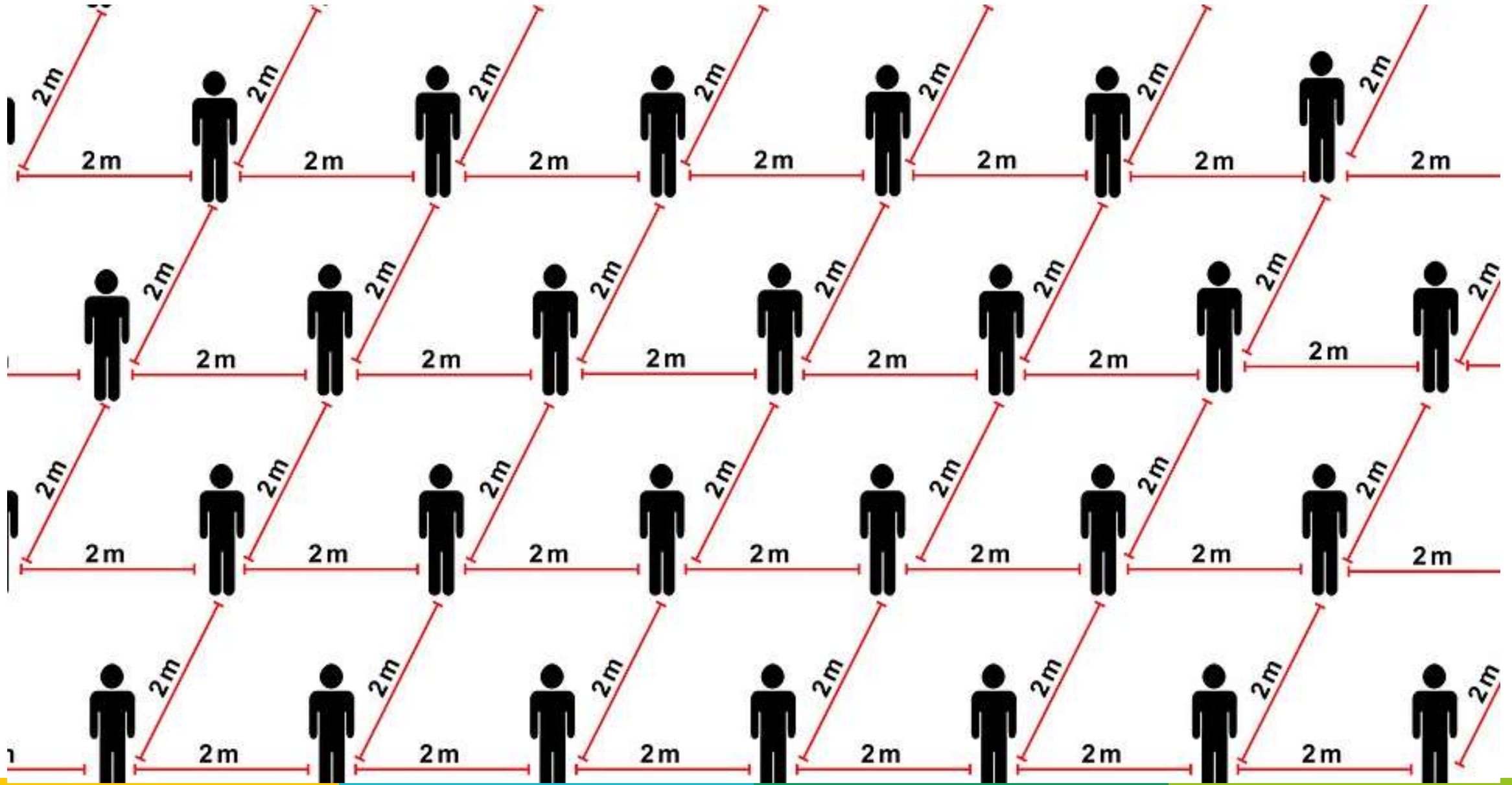
The problem:
Safe distancing reduces the capacity of PT

How can people cross town using public transit while keeping a safe distance?

- They can only do so in much smaller numbers than before.

- Maintaining physical distancing will reduce the capacity of public-transport to between 15 and 35 percent of pre-pandemic levels.

Metro systems and commuter suburban rail links, built for high passenger density, may see the steepest reductions.

- Transport for London estimates that with 2m physical distancing, the London Underground will be able to carry 13-15% of normal passengers.

- McKinsey analysis of regional rail lines in the Netherlands suggests that the capacity of those lines falls to 20-25% with physical-distancing of 1.5 m.

5 types of good practices to address this challenge

1. Increase transport capacity   INCREASE

2. Limit ridership to enable physical distancing   PROHIBIT

3. Shift travel demand away from peak hours   SHIFT

4. Help riders make choices that alleviate crowding   NUDGE

5. Enact safety measures for PT users   GENERAL SAFETY

PLUS:

Restore confidence through communication and   (RE-)BUILD TRUST
public relations measures

1. **Increase** transport capacity

- Getting more buses onto the road
  - May require purchase of new vehicles
  - An opportunity to upgrade bus fleet
- Longer trains/more carriages
  - If feasible – depends on rail infrastructure/platforms
- More frequent journeys
  - With existing fleet; have fewer in depot, higher circulation

2. **Limit ridership** to enable physical distancing

Office workers, students, and riders making recreational trips account for most of the passenger kilometers traveled on one European country's public-transit system.

Share of passenger kilometers traveled during lockdown, by passenger type, %[1]

Office jobs	Hospitality		Other jobs		Visiting		Other
21	7	5	5	11	20	17	11	4
	Retail	Healthcare			Education		Recreational

———— 100% ————
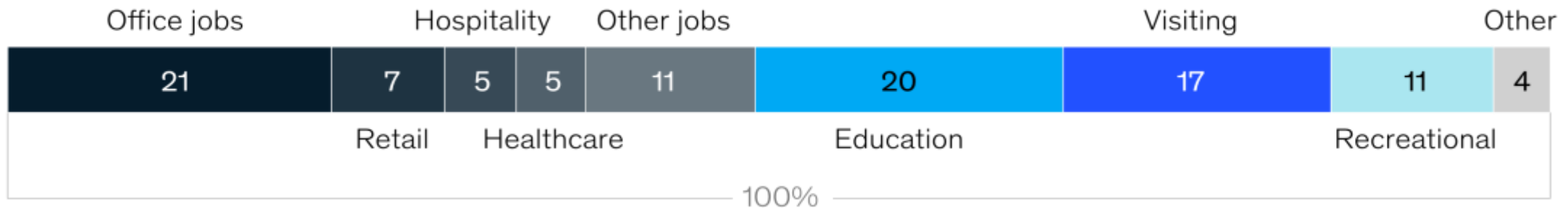
Discourage non-essential trips to allow those most dependent on PT to travel safely
- who hold jobs where they must be on site
- who have a housing situation that is not conducive to working from home
- who cannot afford more expensive transportation alternatives

https://www.mckinsey.com/industries/travel-logistics-and-transport-infrastructure/our-insights/restoring-public-transit-amid-covid-19-what-european-cities-can-learn-from-one-another#

3. **Shift travel demand** away from peak hours

- Many people traveling in a short period to time create demand peaks resulting in crowded wagons.

- "Peak shaving" can shift demand away from peak hours and to less busy periods.

- Peaks are created by uniform business hours.

➢ Stagger start times for schools, public services, and offices

Public-transit occupancy during peak travel periods can far exceed the level that permits safe physical distancing.

Occupancy of public transport, %

McKinsey & Company

21
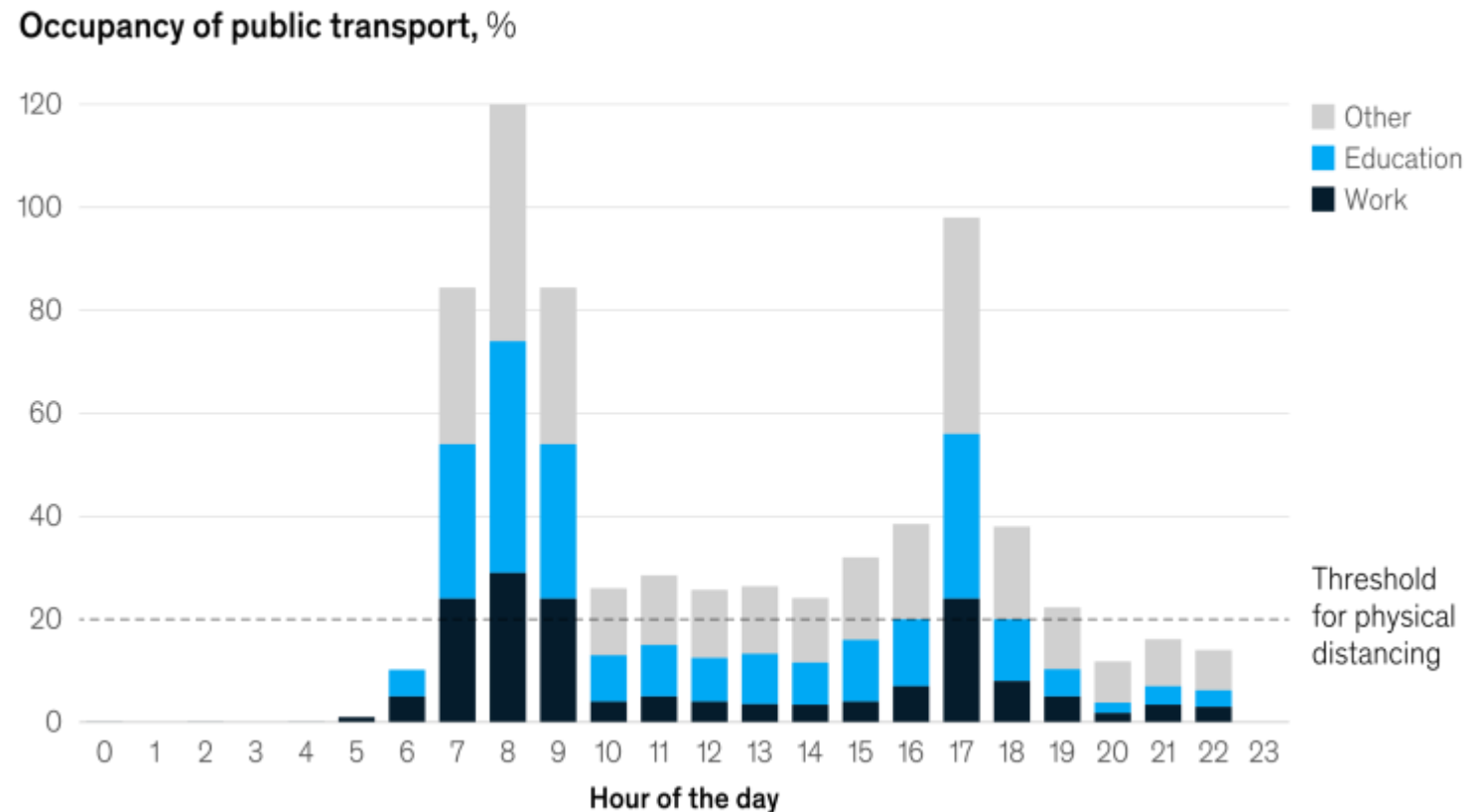
4. **Help riders make choices** that alleviate crowding

Stricter reservations policy

- Make Reservations obligatory

- Add advance-booking capabilities

- Add reservations on suburban trains

Real-time crowding information

- Introduce apps showing which services and carriages have the most space for physical distance.

- Introduce real-time crowding info in mobile app.
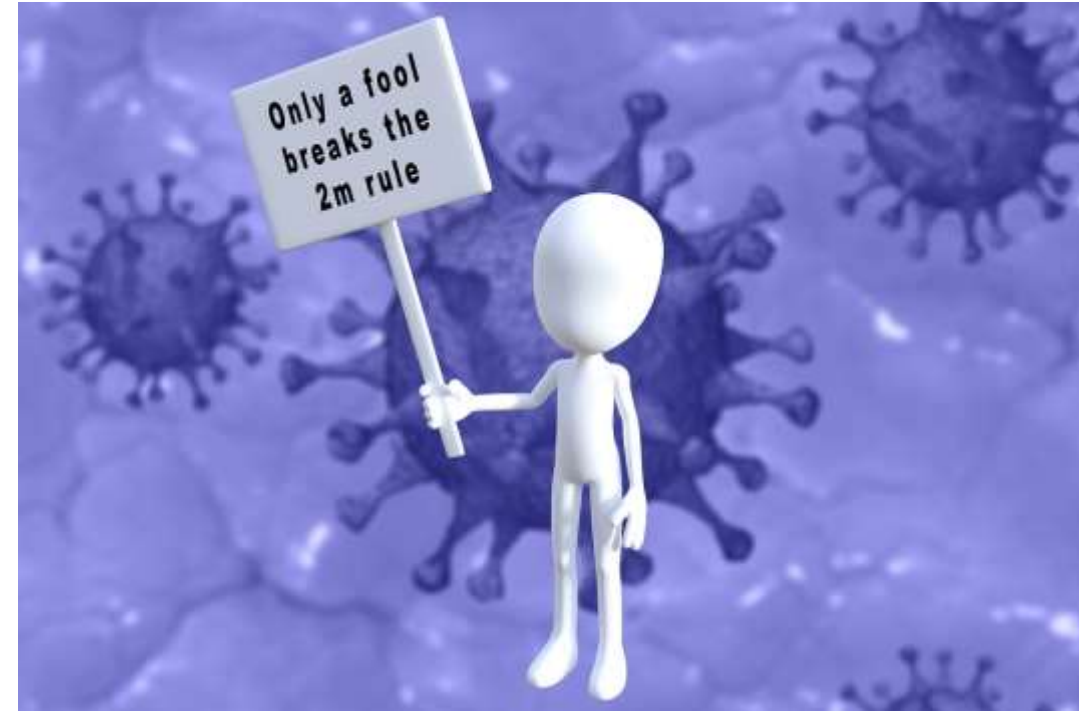
5. **Enact safety measures** for PT users

Physical distancing will cut transit capacity to 15 to 25 percent of normal levels, but use of personal protective equipment could increase capacity to 40 percent.

Available capacity of transportation modes, illustrative data for the Netherlands, %
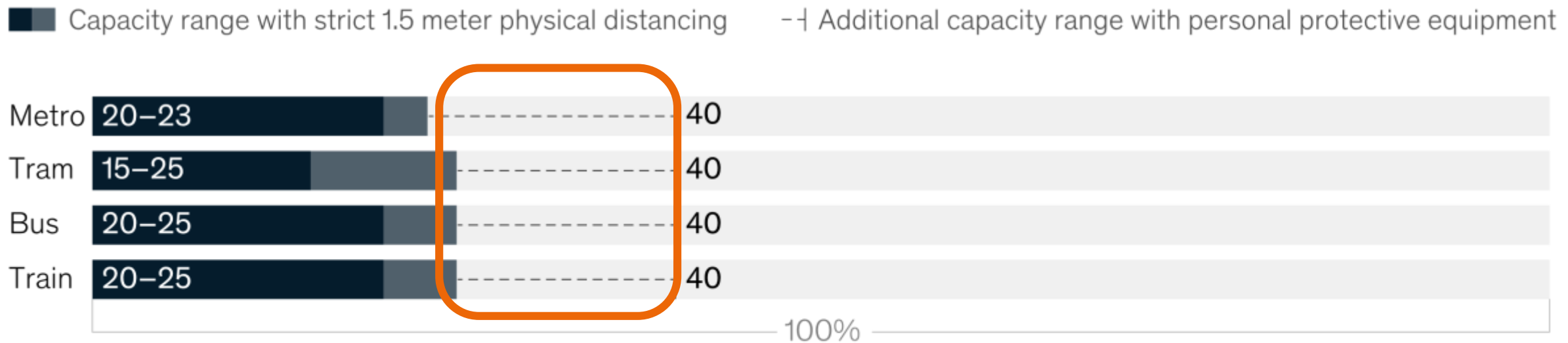
▬ Capacity range with strict 1.5 meter physical distancing   ⊣ Additional capacity range with personal protective equipment

Metro	20–23	40
Tram	15–25	40
Bus	20–25	40
Train	20–25	40

100%

Introductory round

- Name
- Organisation
- Region
- Interreg projects

Interreg Europe

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Identified good practices

Madrid increases PT capacity to allow distancing

INCREASE

"An additional 45km of bus lanes will be rolled out across the city.

The increase in bus lanes is intended to facilitate the circulation of buses, improving the speed of operations and, therefore, the supply of seats provided by EMT (the operator).

This measure will increase the number of places available by 32,000, enabling greater social distancing."

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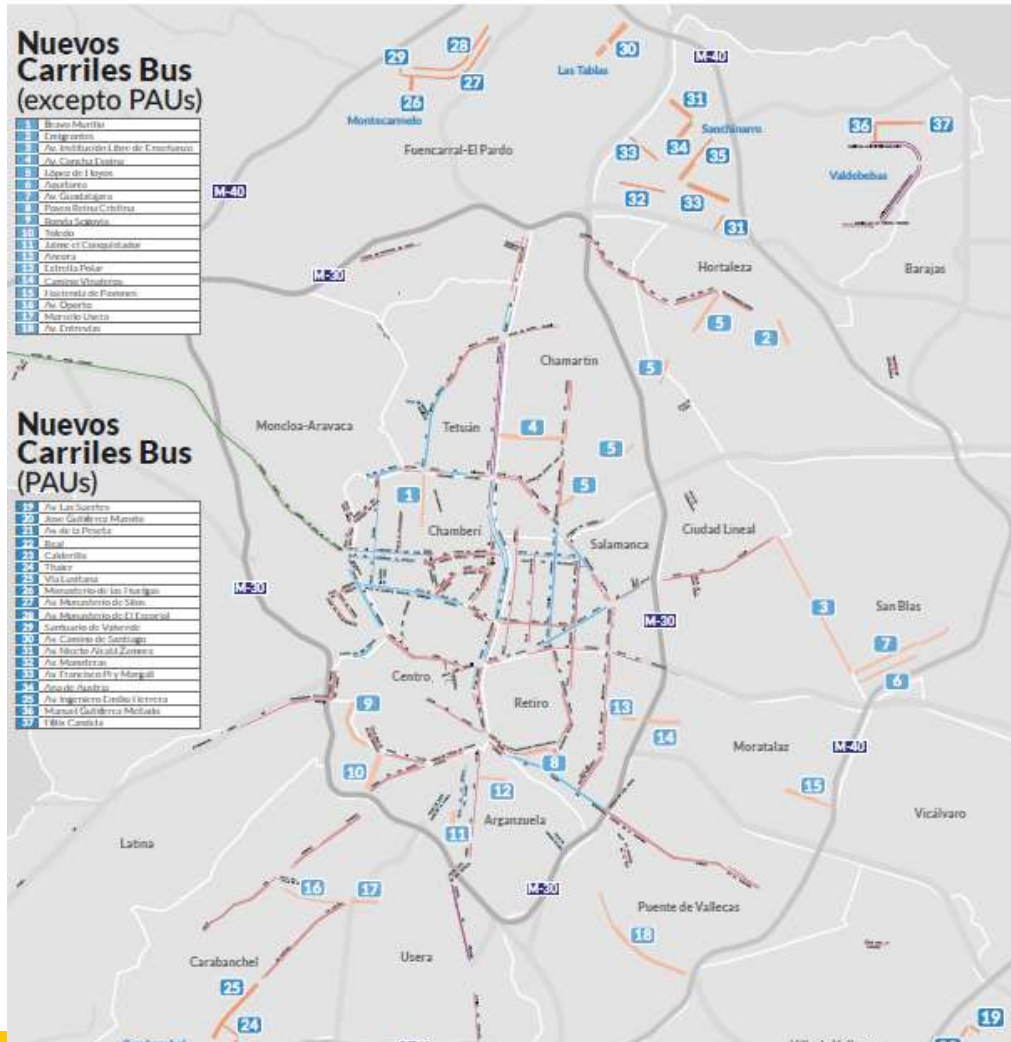
IASI CITY – ROMANIA

- dedicated bus for medical staff

- dedicated bus/trams for vulnerable people between specific hours morning/evening

- bus/trams disinfection each 90' (at the end of the line general disinfection during night

- limited no of passengers on labeled places

- Specific spots marked on tram/bus stations

-access in PT only with masks and temperature control; hand disinfectants provided inside PT

-Smart apps with reali-time infos about PT and COVID-10 measures

- E-ticketing inside PT (QR, apps, sms, contactless payments)

-awareness campaigns on social media, web, large panels in the city

✓**Elena FARCA- Iasi Municipality**

InnovaSUMP
Interreg Europe

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Limit ridership & guide people via apps (New Zealand)

- Limitation of travel to essential travel on one hand…
= prohibit

- Information on real-time crowding in the mobile app on the other hand…
= nudge

Essential travel only.

2 metres
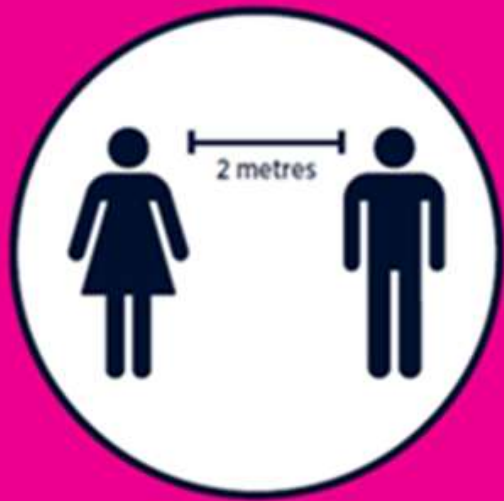
Reduced travel frequency now in place.

For more information, please use the
AT Mobile app or visit **AT.govt.nz**

Unite against COVID-19

AT Mobile app now showing real-time bus capacity

Published: 27 March 2020

Share
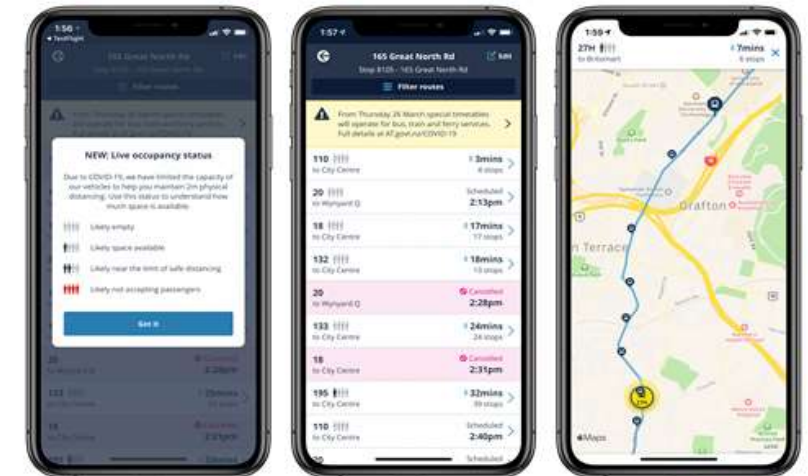
Under the Government's Alert Level 4 restrictions, public transport can now only be used by those working in essential services, for medical reasons, to access essential services, including getting to the supermarket, and to move essential goods.

To help those people, Auckland Transport has introduced a major upgrade to its app, AT Mobile. The new feature shows how many people are on a bus at any given time.

This allows people to see if the recommended physical distancing between other passengers of two metres will be achievable before they get on board.

UK Guidelines for Public Transport

For users:

- Facemask recommended
- Travel at off-peak times
- Use quieter stations and stops
- Keep changes to a minimum and walk as much as possible

For operators:

- Limit ticket inspection – high risk
- One way access (Entrance through front door, exit through rear)
- Screens for drivers
- Frequent disinfectant

How can MaaS systems help to minimize the impacts of the COVID-19 pandemic?

NUDGE

Webinar - MaaS in the post-pandemic era
Organised by PriMaaS Project
JUN 29-30 2020
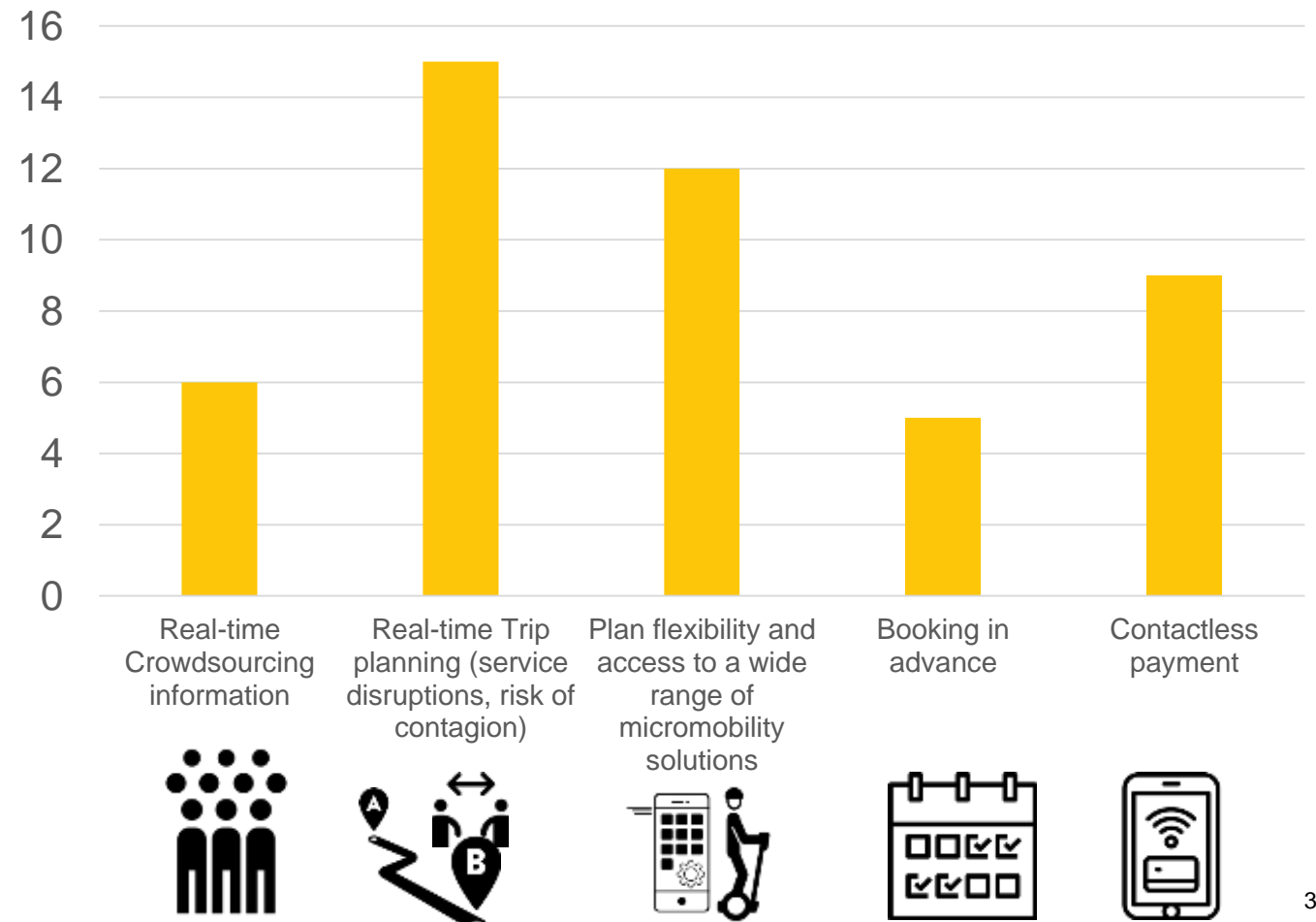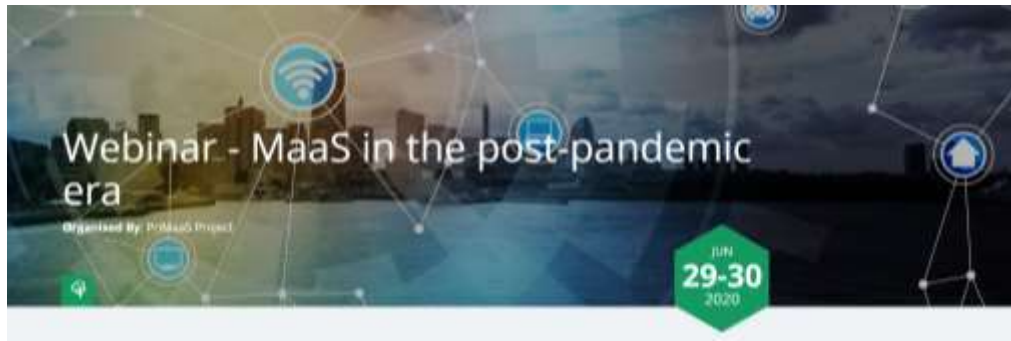
With the participation of:

MaaS ALLIANCE   UbiGo   moovit   SEI Stockholm Environment Institute

mobilità ROMA   TRAFIKLAB   OPEN MOVE

Real-time Crowdsourcing information	Real-time Trip planning (service disruptions, risk of contagion)	Plan flexibility and access to a wide range of micromobility solutions	Booking in advance	Contactless payment
6	15	12	5	9

UbiGo

Hello :)
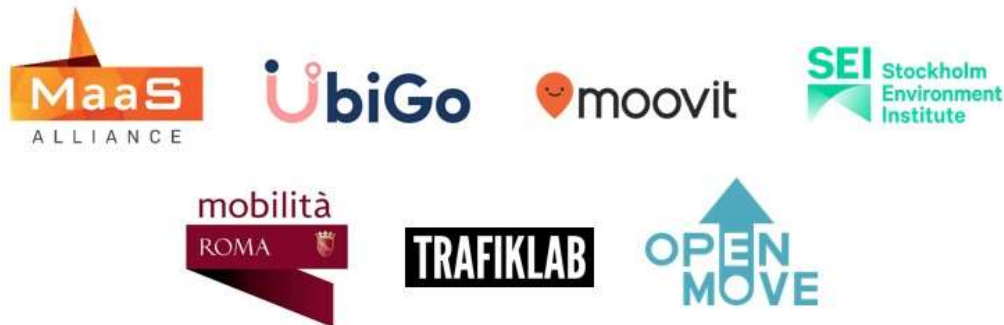
Select what to do!

New service:
Monthly bike rental

Rental car	+100-200%
Car sharing	+50-100%
Taxi	-50-90%
Public transport	-70-80%

Make UbiGo better, give feedback

Planning Tools

- Urban Mobility Analytics
  - Origin destination matrix - with mode split
  - Line analysis
- On-Demand simulations

**moovit**

On-Demand Services

- Adapt regular services to be 'smarter'
  - Provide convenience and flexibility to riders
  - Keeps riders and employees safe according to regulations
- Optimize services with automated dispatching, routing, and scheduling

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Real-Time Communication with Riders

- Rich user segmentation enables **targeted messaging**
- Messages are **delivered to Moovit users via push or in-app popup** - keeping them away from crowded station notification boards (social distancing)
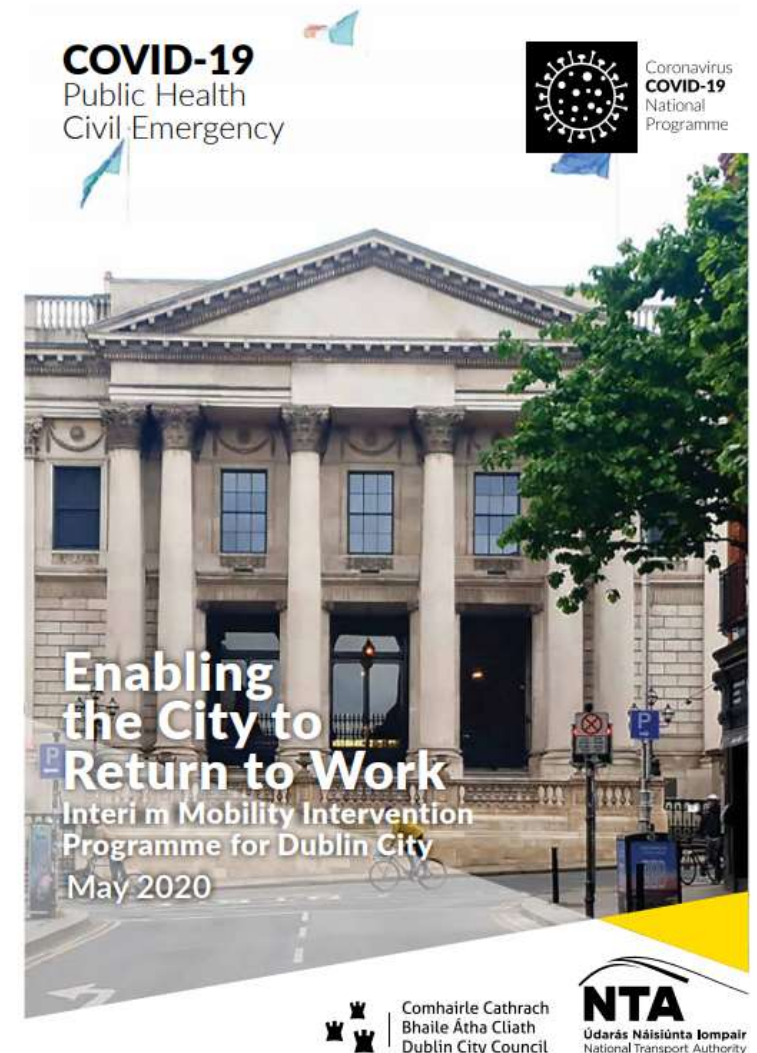- Push/popup messages are linked to detailed information pages

NYC-NJ: COVID-19 Updates
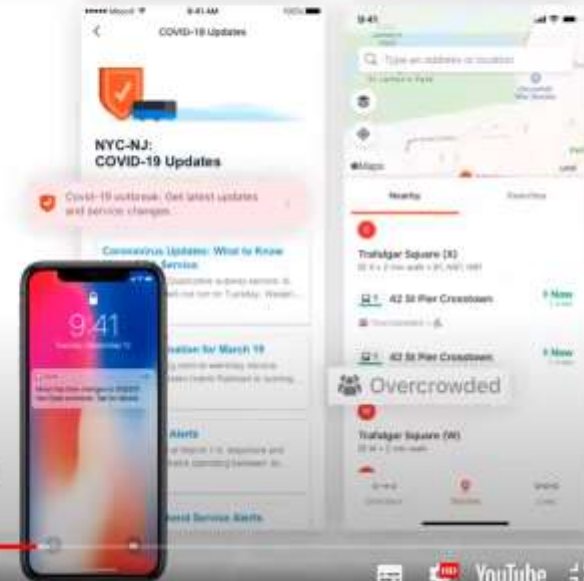
Dublin mobility recovery plan

- Additional space at bus stops for social distancing when waiting; bus stops suspended if social distancing not possible

- Maintaining usual number of buses on routes, despite fall in use (spacing)

- Amended routes to spread the traffic load and link with cycling and pedestrian facilities

- Bus priority: Route extension and new priorities (early start at traffic lights; new bus lanes to allow overtaking of stopped buses)

- Bus route changes to facilitate new cycle lanes

COVID-19 Public Health Civil Emergency

Coronavirus **COVID-19** National Programme

Enabling the City to Return to Work
Interim Mobility Intervention Programme for Dublin City
May 2020

Comhairle Cathrach Bhaile Átha Cliath Dublin City Council

NTA Údarás Náisiúnta Iompair National Transport Authority

NL: Shift peak demand by staggered opening hours

Schools / universities in the Netherlands spread start times over the day

- *"Start and end times will be staggered so that students can travel to and from the institution at different times of the hour, day and week. Educational institutions will inform students of the modified schedules and the regional or institution-wide rules for staggering student presence on campus. Some teaching activities will still take place online." https://www.government.nl/topics/coronavirus-covid-19/*

- Staggering is a principle already widely used to alleviate the road network during holiday periods.
    - In the Netherlands, the country is divided into three parts, which have staggered periods for summer holidays
    - In Germany, the federal states have a staggered summer holiday schedule

Shift peak in Paris / Ile-de-France through a collaborative approach including residents, employers and public bodies

"Smoothing out rush hours aims to improve the quality of life, relieve the strain on our transport and roads and thus improve the attractiveness of our territories and productivity.

In addition, faced with the major health challenge of physical distance measures in public transport, the Ile-de-France Region offers a collaborative service to residents, businesses and territories to manage business travel in the best possible way."

- An initiative first introduced in 2018 (pre-crisis! = peak shaving is good for PT at all times!)
- Major employers having their HQ in the region are collaborating in this initiative since inception.

  - https://smartwork.smartidf.services/fr/lissageheurepointe (fr)
  - https://www.polisnetwork.eu/article/ile-de-france-launches-collaborative-service-to-smooth-demand-at-peak-hours/?id=122791 (en)

Catalonia Bus Occupancy App

- Aurocurb App will inform of bus occupancy as bus approaches

- Supports social distancing – encourages people to wait for less busy buses

- Uses GPS systems of buses as well and ticketing system to work out occupancy

London Transport Social Distancing App

- Similar app coming up in London – social distancing & contact tracing app

- Integrates historical data to predict vehicle discharge as well

- Funded by InnovateUK, developed by UrbanThings

- Capture vehicle occupancy level from smart card tap-in data

'Deutsche Bahn' German train crowding info

- Help passengers book trains that are not crowded
- Inclusion in booking app

Die Auslastung ist in 3 verschiedene Stufen eingeteilt, die Sie an d

	Geringe bis mittlere Auslastung erwartet
	Besetzung von mehr als der Hälfte der Sitzplätze erwartet
	Außergewöhnlich hohe Auslastung erwartet

https://www.bahn.de/p/view/service/buchung/auslastungsinformation.shtml

NS Social Distancing Trials

- NS (Nederlandse Spoorwegen) trialled seat spacing, significantly reducing capacity
- Aimed to test if public respected the rules
- One-way carriages (entrance and exit at different ends)

Madrid e-bikes

- 5,000 new electric bikes for the city BiciMAD hire scheme

- Located at stations and transport hubs, in particular

- Avoid waiting around for connections

The new mobility in Zaragoza

Good practice certification

Safe public transport

- good cleaning practices
- washing of clothes
- correct use of chemicals
- transport of employees
- good personal hygiene practices
- use of personal protective equipment
- training and information for workers

Enact safety measures – free mask supply, Madrid

- Key workers in Spain who depend on public transport received <u>millions of face masks</u> to stop the spread of COVID-19.

- The measure from the Spanish Government had 10 million face masks distributed to key workers (e.g. health workers) to protect citizens who are still dependent on the use of public transport for getting to work.

Show:

Little video:
https://twitter.com/i/status/1254475581044871168

MOTIVATE app; a crowdsourcing and interactive learning environment

e-smartec
Interreg Europe

Developed by CERTH/HIT in the framework of MOTIVATE MED 2014-2020 project

- ✓ Co-planning 'facilitator'
- ✓ Tool for online consultation / engagement 'enabler'
- ✓ Awareness raising channel (gamification approach)
- ✓ 'Quick' and 'direct' feedback for planners, local authorities and stakeholders

Crowd-listening and learning opportunities

MOTIVATE

A crowd sourcing approach to mobility data and assessments collection   **&**   An awareness raising game for shifting to sustainable modes

MOTIVATE app; COVID tag & exploitation for PuT promotion

Limiting face to face interaction in COVID situation
While
Acting as a constant tool for later on (previous normality)

- ✓ **It is an online tool that (given proper promotion) can complement / replace (in the desired degree) physical consultation processes and focused meetings**
  - ✓ It can also act as a constant communication channel with the travellers - updates and push up notifications (rewarding link can enhance participation)
- ✓ **Trip diaries collection, a basic input for the analysis of the AS IS situation (SUMP cycle phase 1) can be collected via the app** (complementing at a first step traditional home-based surveys while at a later stage acting in principal)

- ✓ **MOTIVATE awareness raising game promotes PuT VS private cars showing direct input to happiness and health**
  - ✓ Push notifications and personalized messages can be also added in its architecture
- ✓ **'Evaluation of PuT interventions' functionality can be used also for sensibilization** (triggering users' interest on getting involved in decision making / ownership feeling and giving users the floor to co-create PuT services)

Public Transport Safety Posters Ireland

In Ireland we are providing information to passengers that Public Transport is safe and how they can stay safe while using Public Transport as a means of increasing confidence in the Public Transport Network

TFWM Survey

Coventry City Council

Top Tasks & Services by A-Z

Home > Latest news > Parking, travel and streets > Public transport > Transport for West Midlands need your views

Transport for West Midlands need your views

Published Thursday, 18 June 2020

Transport for West Midlands(TfWM) want your views on how to support regional planning as the lockdown is lifted and to ensure that the transport network and other services meet the needs of residents.

They have put together **this survey**, which asks residents for their views on some proposed changes to the network post lockdown.

In order to make sure that as many different types of people as possible are surveyed, the survey also asks some questions about you, your travel patterns and lifestyle.

The survey takes around 10-15 minutes to complete.

News links

» News archive

» Coventry City Council news RSS feed

Feeds from the Web

» Council meeting webcasts

Attracting individuals back to trains

- Each resident to receive 10 free train journeys
- Can take bikes on train for free
- Encouraged to travel off-peak, compulsory mask wearing

- Encouraging and easing people back into public transport
- Boosting the domestic economy by encouraging 'staycations'

- Some resistance from SNCB – more frequent cleaning

WORLD ECONOMIC FORUM   Agenda   Platforms   Reports   Events   About   English ∨   TopLink   🔍

Regional Agenda   Belgium   Aviation, Travel and Tourism   COVID-19

Belgium eases lockdown with free train tickets for every citizen

The Belgium government has offered every citizens 10 free train tickets to encourage domestic tourism   Image: REUTERS/Yves Herman
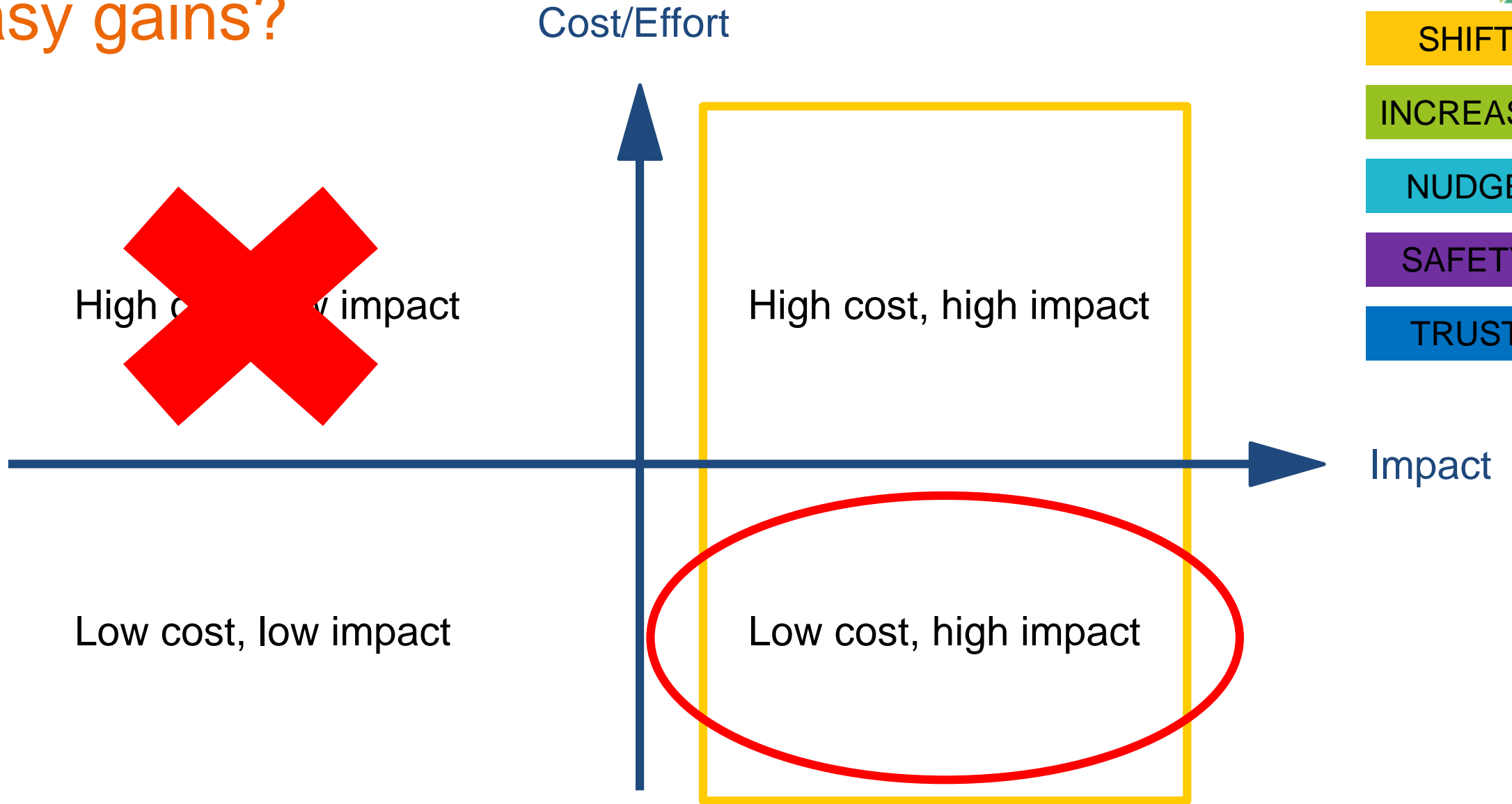
46

Discussion

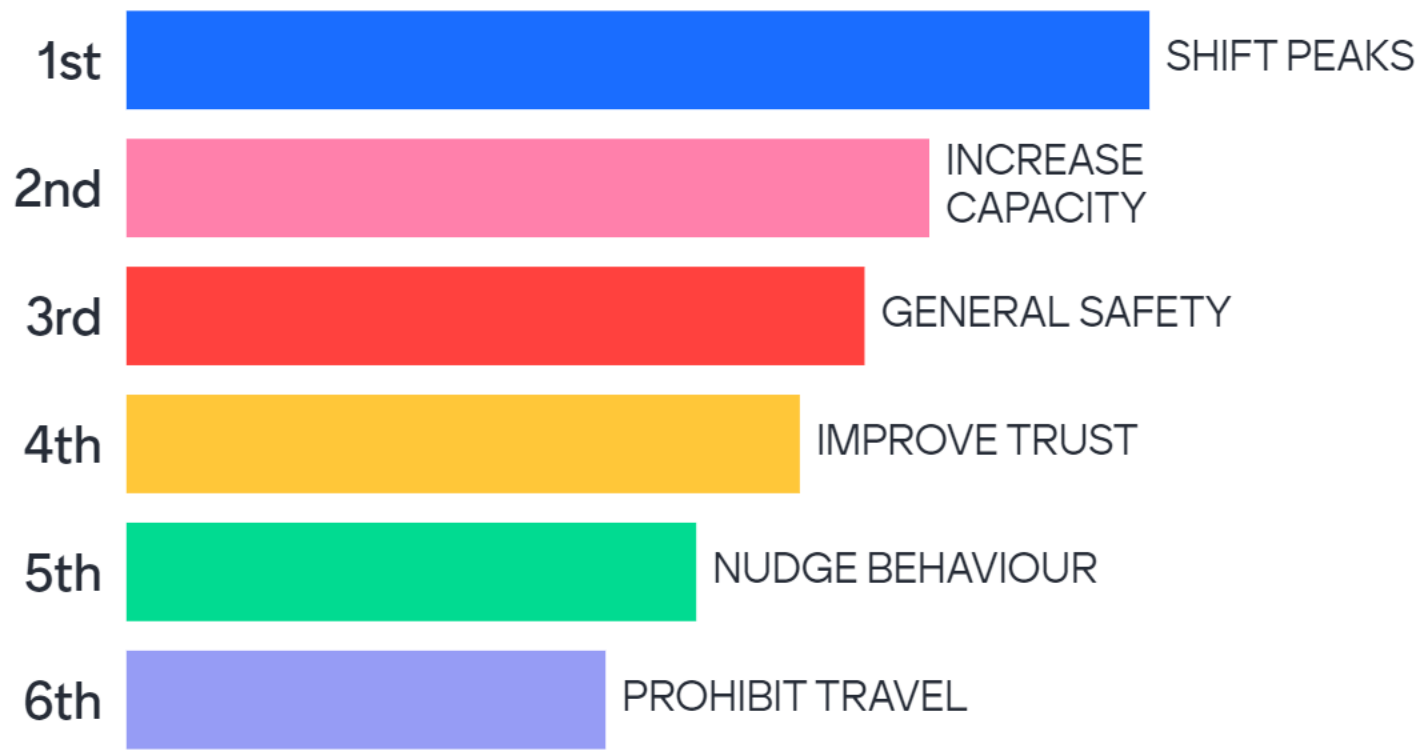European Union | European Regional Development Fund

Easy gains?

Cost/Effort

High cost, low impact

High cost, high impact

Impact

Low cost, low impact

Low cost, high impact

PROHIBIT
SHIFT
INCREASE
NUDGE
SAFETY
TRUST

Type with greatest potential impact?

Easy gains?

Cost/Effort

High(er) cost, low(er) impact

TRUST

High(er) cost, high(er) impact

INCREASE

SHIFT

SAFETY

Impact

PROHIBIT

Low(er) cost, low(er) impact

NUDGE

Low(er) cost, high(er) impact
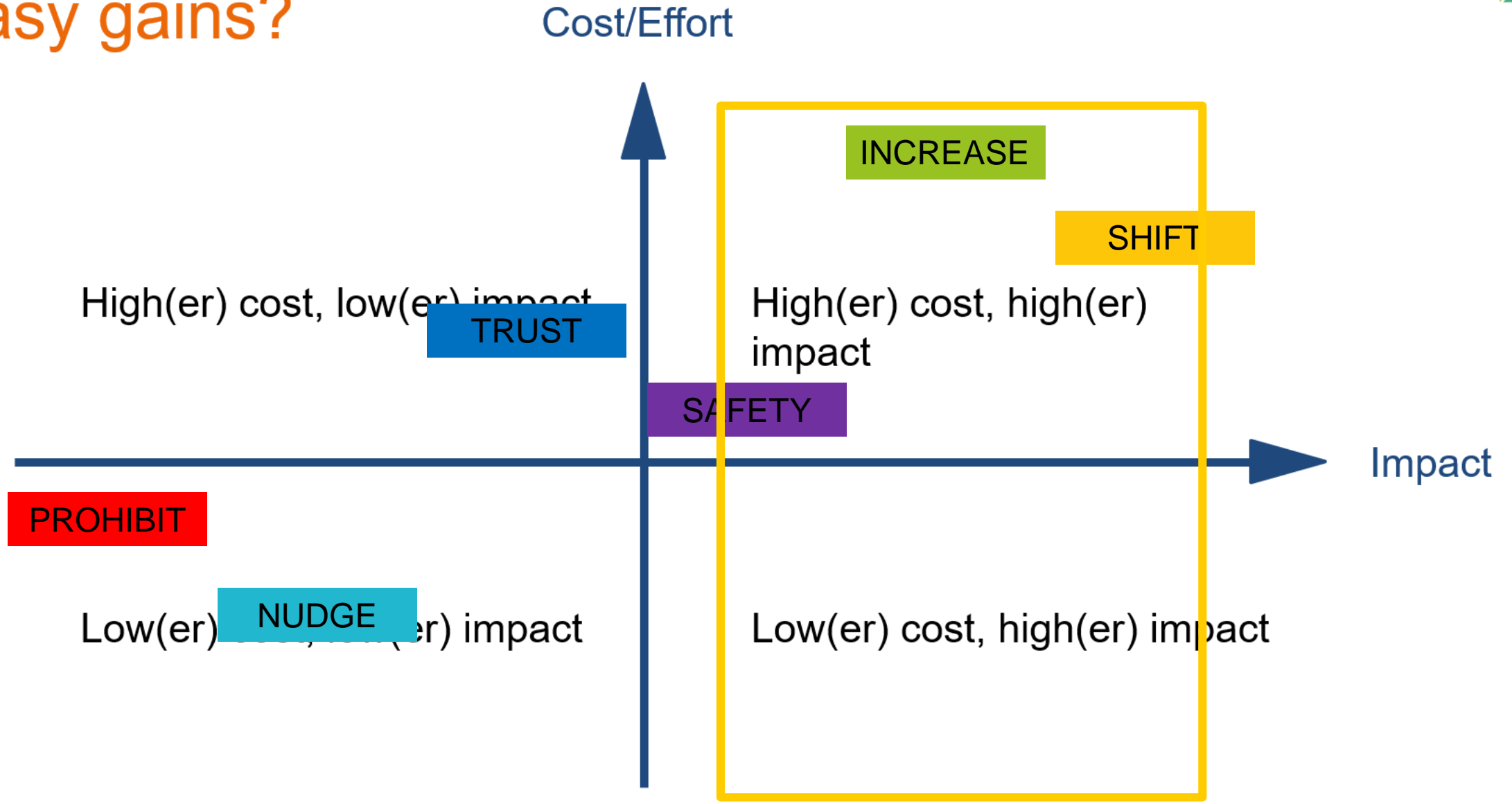
Discussion Qs

- What practice under each 'high impact' type is most promising?

- What's missing in your region? What would you like to see implemented?

- Most measures are urban focused – what can we transfer to:
  - Long-distance travel
  - Rural public transport

- What is still worrying you? What has been missed out?

Thanks for your attention!

Katharina Krell & Simon Hunkin
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