International Transport Forum

Global dialogue for better transport

Decarbonising Transport Initiative

Deep emission reduction for transportation sector

ALPS International Symposium, Tokyo 19. Feb

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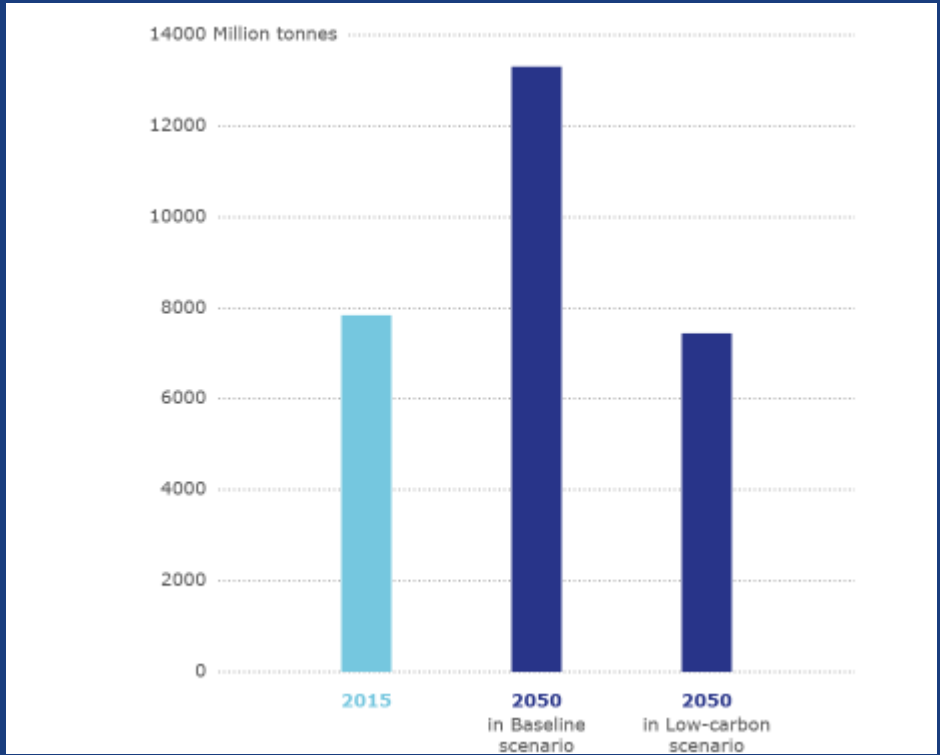
OECD

ITF Transport Outlook

CO_2 from transport



Currently foreseeable policies to mitigate transport CO_2 are not sufficient to achieve climate ambitions

Transport will emit c. 7.5 giga-tonnes of CO_2 in 2050, roughly the same as in 2015 – even if all known tools are applied

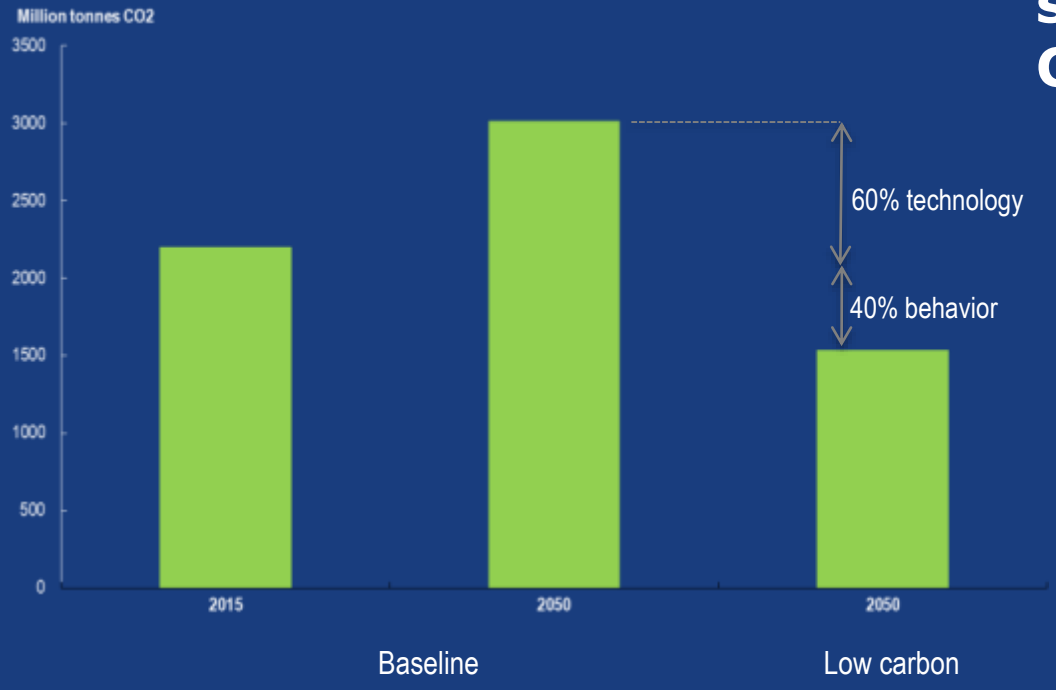
Transport in (I)NDCs

Out of the 194 parties which have submitted either INDCs or NDCs

- 86% provide an economy-wide, quantified CO_2 reduction target
- **81% mention the transport sector**
- **60% provide transport mitigation "measures"**
- **10% provide a quantified CO_2 reduction target *for transport***

ITF Transport Outlook

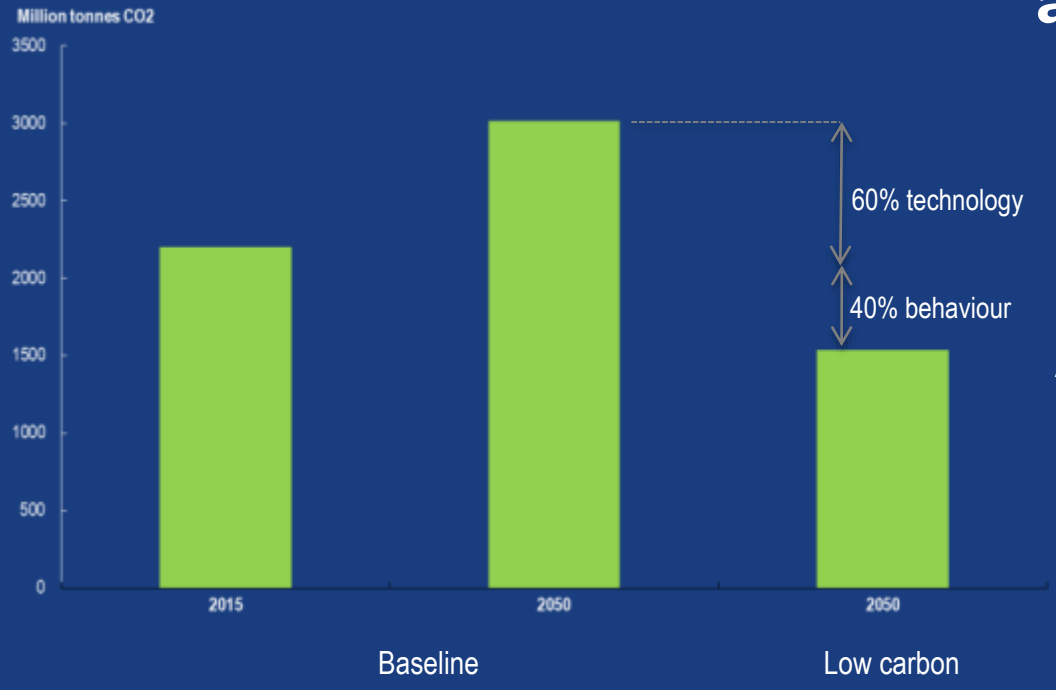
CO_2 from urban passenger transport



The right policies can significantly cut transport CO_2 emissions in cities

ITF Transport Outlook

CO_2 from urban passenger transport



But are not sufficient to achieve climate ambitions

Accelerated innovation and radical policy choices – such as shared mobility are required

disruption

data


CAR2GO
autolib'
チョイモビ
Korttelіauto
www.citizenn.com
A vantagem de andar à hora.
Cité lib
autopartage pour tous
DriveNow
Premium Car Sharing by BMW i and MINI
CITYCARCLUB
commute
greensharecar
when you need to drive
Hertz
On Demand
UBER
CITY CAR SHARE.org
FORD
CARSHARING
stadtmobil
carsharing
Flinkster
Mein Carsharing
AutoShare
bluely
Hertz
delebilen
city car club
Ha:mo
TOYOTA
GO CAR.ie
Community CarShare
bcs.
Bundesverband CarSharing
GREEN WHEELS
liftshare.com
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CITROËN
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Borrow Your Neighbor's Ride
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enterprise
CarShare
lyft
ORIX
CarShare
ZEN CAR
Times Car PLUS
goget
Mu by PEUGEOT
Quicar
Share a Volkswagen
Respiro Car Sharing
ozocar

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City of Stockholm

10% of 18 years old

have a driver's licence

Aretun & Nordbakke, 2014

OECD

24hrs.

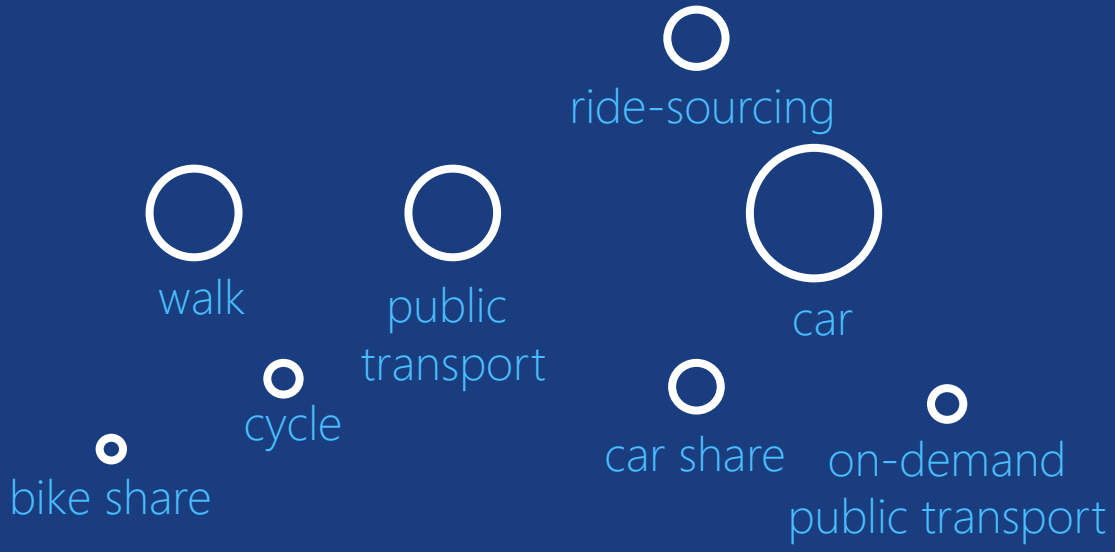

JAGUAR
RENAULT
GM
TOYOTA
NISSAN
VOLVO
Mercedes-Benz
Google
TESLA
Ford
BMW
Audi

Future obsolescence of the drivers license

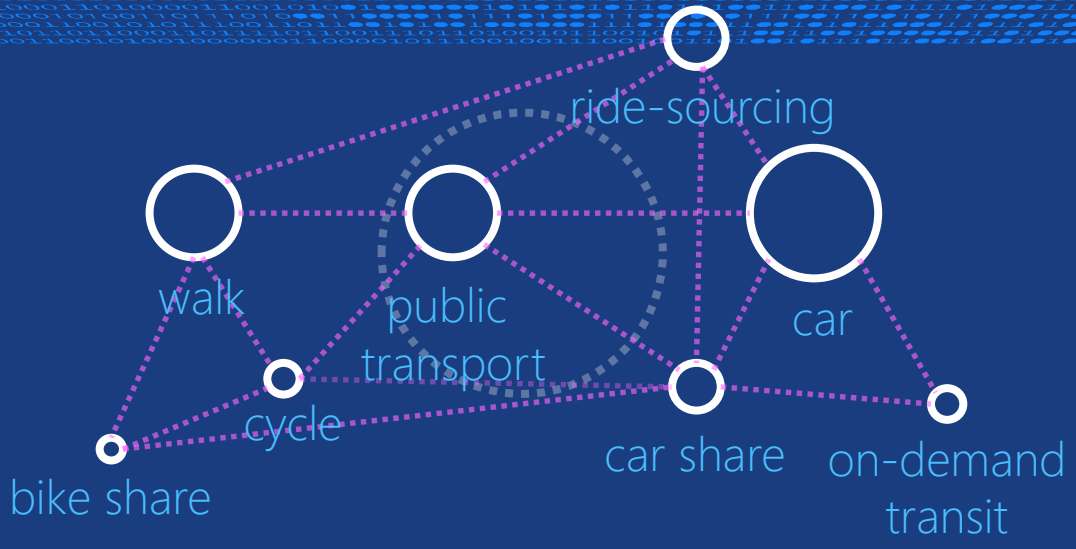
...

2017 **2035** **2052**

mobility in the city



mobility in the city



Mobility as a Service


STOCKMANN

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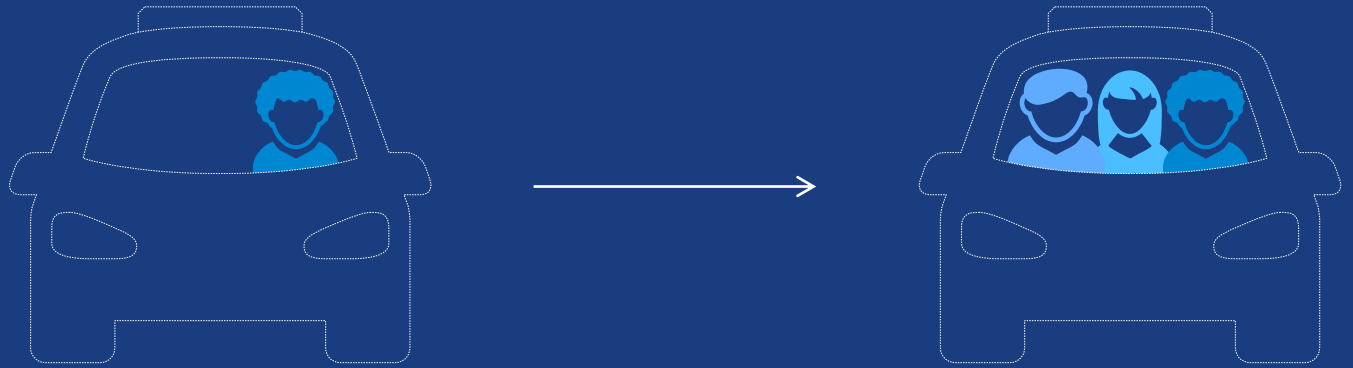
what if?




real city


real* trips


real routes


same quality

Shared “taxis”

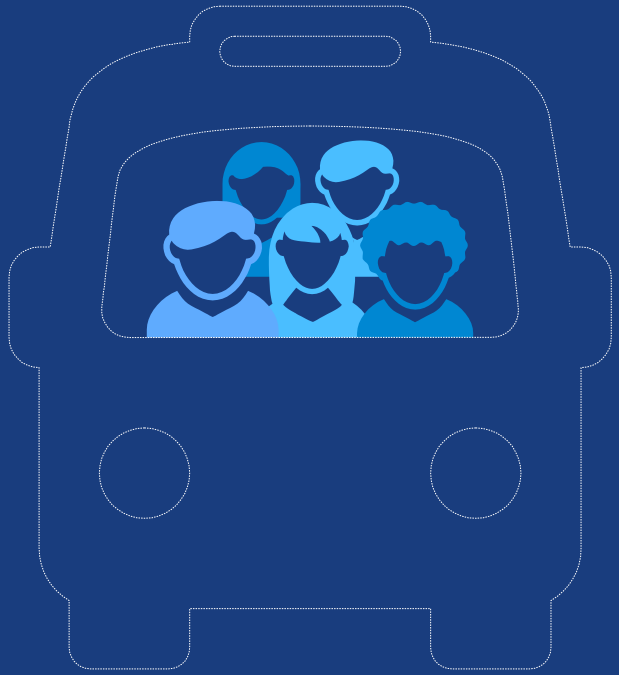
simultaneous ride-sharing

Door-to-Door Service

8 seat Minivan reconfigured for 6 pax, easy and quick entry and exit

Max waiting time variable with distance : 5 min (<=3 km) to 10 min (>= 12 km)

Max total lost time (wait+detour) variable with distance : 7 min (<=3 km) to 15 min (>=12 km)



TaxiBus

optimised on-demand bus

Street-corner to street-corner service.

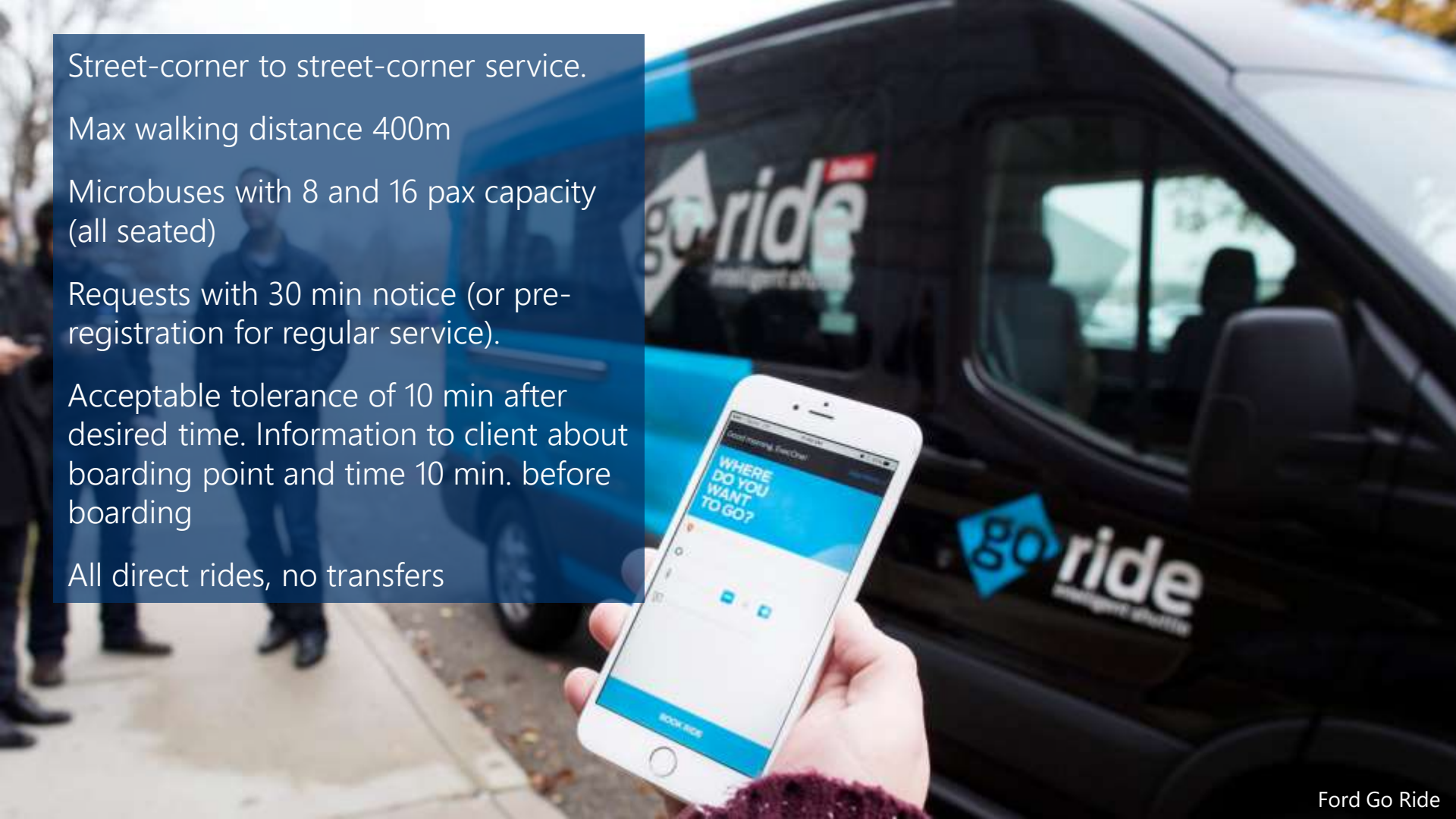
Max walking distance 400m

Microbuses with 8 and 16 pax capacity (all seated)

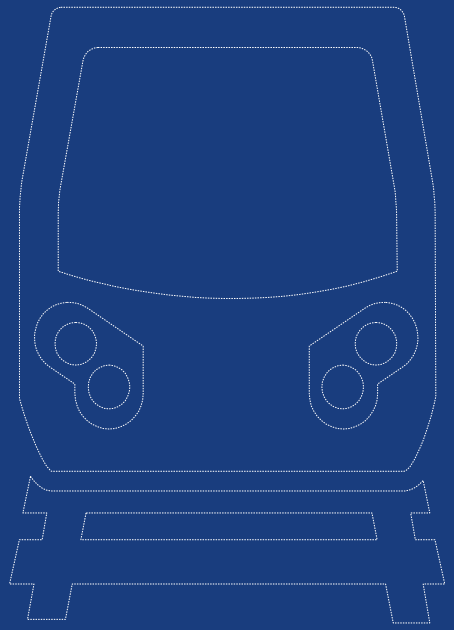
Requests with 30 min notice (or pre-registration for regular service).

Acceptable tolerance of 10 min after desired time. Information to client about boarding point and time 10 min. before boarding

All direct rides, no transfers

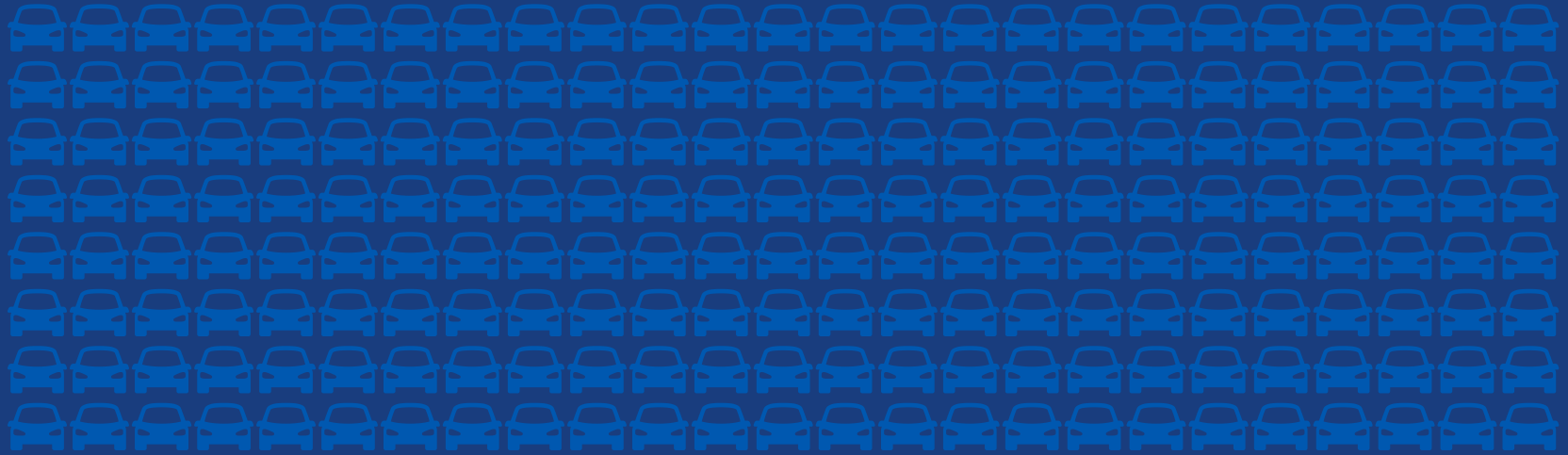


Ford Go Ride



high-capacity
public transport

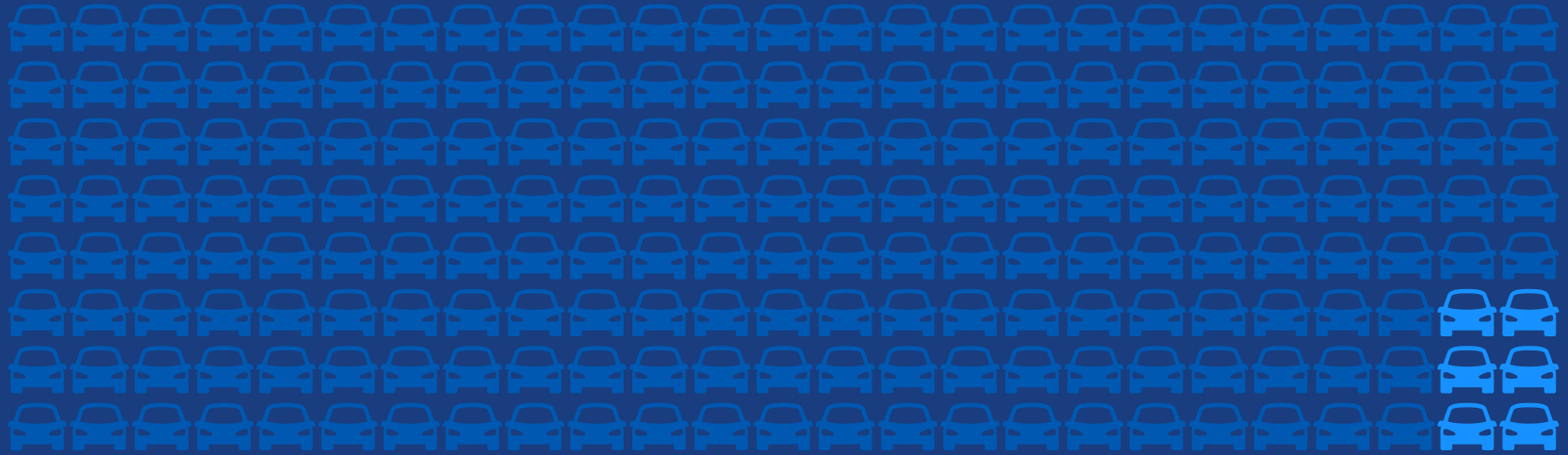
Lisbon



Scenario: 24 hours

number of cars
required to provide the
same trips as before:

Lisbon



Scenario: 24 hours

number of cars
required to provide the
same trips as before:

3%

car fleet

-97%

-93%

-97%

-96%

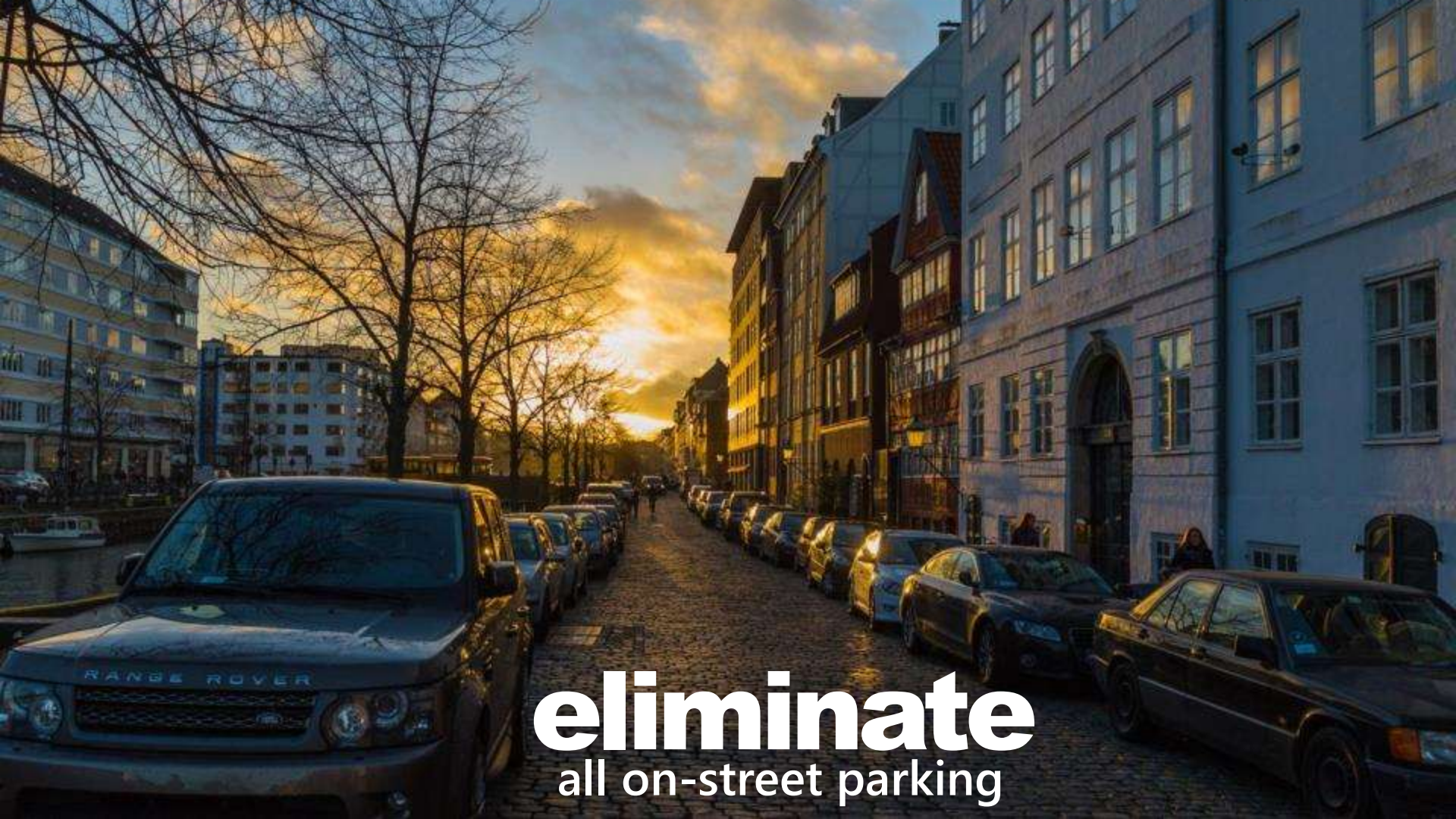
CO_2 emissions

-31% -54% -62% -34%

EV recharging/range constraints =
2% more cars.

public transport

+54% +681% +47% +30%



eliminate

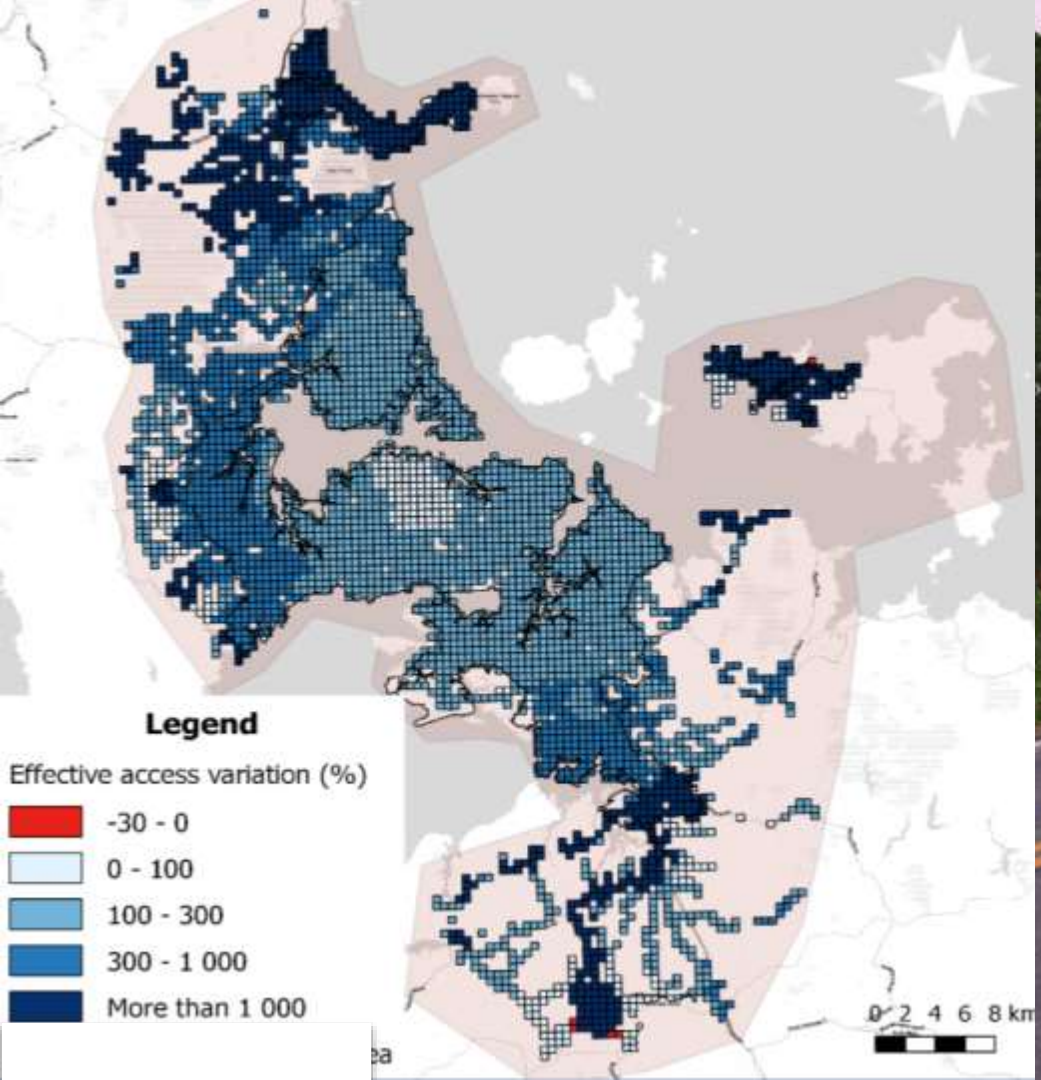
all on-street parking


RANGE ROVER
+20%
kerb-to-kerb street space


PARKING


PARKING


PUBLIC
PARKLET
A space for the community to enjoy
PLACITA para todos


Legend
Effective access variation (%)
-30 - 0
0 - 100
100 - 300
300 - 1 000
More than 1 000
0 2 4 6 8 km

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Understanding user preferences

Focus group for each city

Stated preference survey

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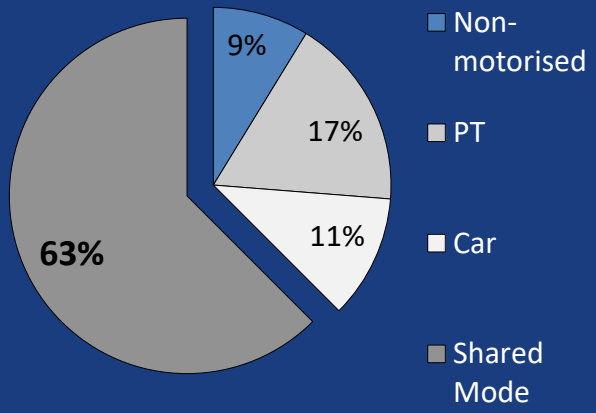
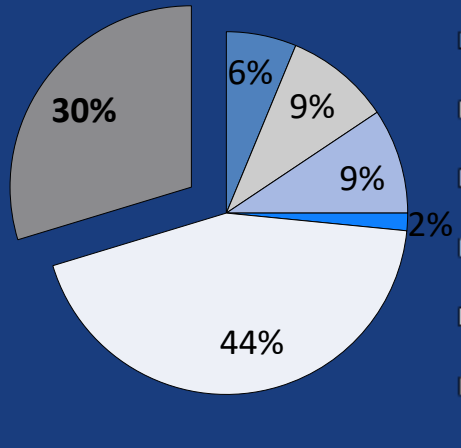
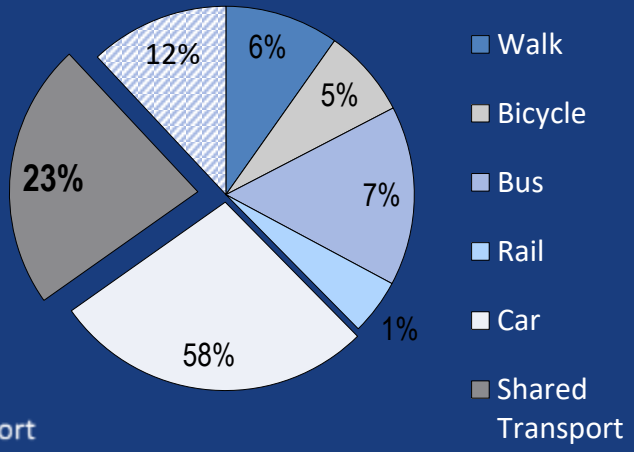
Shared mode in stated preference survey



Helsinki



Auckland



Dublin

CO_2 emissions (20%)

-22% -15% -19% -4%

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Recommendations

Consider integrating shared mobility into transport offer

Use shared services as feeder to increase use of public transport

Ensure sufficient scale for services

Target potential early adopters (car users)

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Transition

Integrate land use and transport policies

Part of other policy instruments

Policies to manage changes to parking space

Legal and regulatory framework

Business models

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Thank you!

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