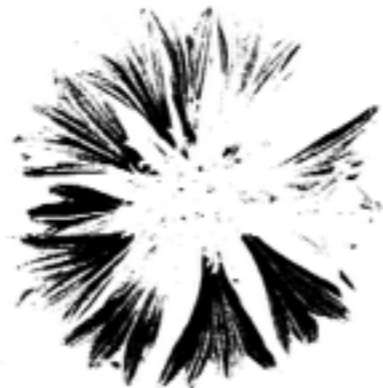


Innsbruck, June 26th, 2015



'SPONTANEOUS' RIDESHARING - A NEW PUBLIC TRANSPORT SYSTEM?!

PROJECT 'TREMSE'



*Hermann Spiess
Agronomist, ETH Zürich*

Innsbruck, June 26th, 2015



'SPONTANEOUS' RIDESHARING = TRAVELING ON EMPTY SEATS



*Hermann Spiess
Agronomist, ETH Zürich*

TREMSE = Cornflower (Centaurea cyanus)

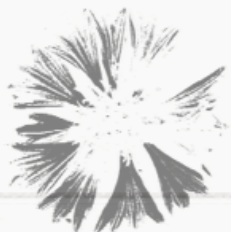
THE VISION



'Big changes are not to be expected in transports but in mobility...

The distinction between public- and individual transportation is becoming more and more difficult until finally they both become one.'

Karin Frick, Gottlieb Duttweiler Institute (2014)



Ridesharing = Carpooling

(taking a ride in a car that drives ANYWAY)

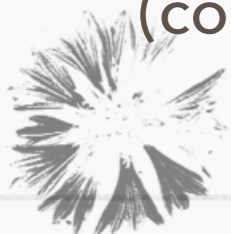
WHAT IS 'SPONTANEOUS' RIDESHARING?

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shaping comobility

- 2007 outlined by Nokia engineers, this system differs significantly from former ridesharing systems (it is also called 'dynamic', 'ad-hoc' or 'instant' ridesharing).

Modern smartphone- and GPS- technology allows passengers to check for rides with cars that are already on the road.

- Planning ahead becomes obsolete and
does **NOT** restrict car driver's freedom anymore.
- It can be used **SAFELY** by **ALL** car drivers
(commuters, shoppers, professionals) and by any possible passenger by App.



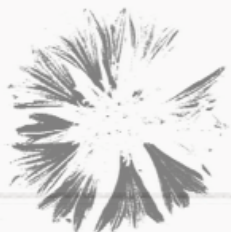
WHAT IS '*SPONTANEOUS*' RIDESHARING?

Car drivers do not need to plan ahead,
don't make phone calls and detours neither.

A SR-service never creates additional traffic
(as a taxi service does).

If car drivers are using it, traffic will be reduced.

Destination information can be used to forecast and
influence traffic upcome.



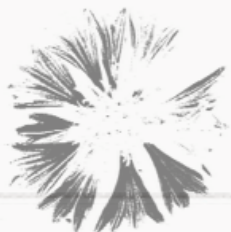
WHAT IS '**SPONTANEOUS**' RIDESHARING?

By entering the drive's destination in an App at departure, the car driver makes **EMPTY SEATS** accessible for passengers.

This takes a few seconds only.

The system then attributes a **TIMETABLE** and an **ITINERARY** to the car, and looks for possible passengers on the route.

The driver's **FREEDOM** and **INDEPENDENCE** before departure are not infringed.



WHAT IS '*SPONTANEOUS*' RIDESHARING?

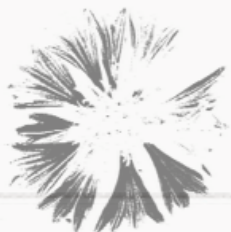
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It is simple, economic and ecologic

A few seconds only

- the seat is already paid for

- and no additional fuel is used.



OUR TRANSPORTATION MEANS:

*What do we associate with
Public Transport?*

Timetable

Itinerary

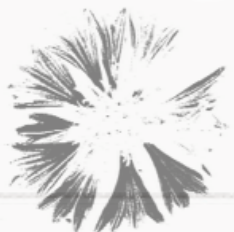
Bus

Train

Tram

Airplane

Boat



Individual Traffic

shaping comobility

Freedom

Independence

Car

Bike

Truck

Ship, Vessel



OUR TRANSPORTATION MEANS:

Public Transport

Timetable

Itinerary



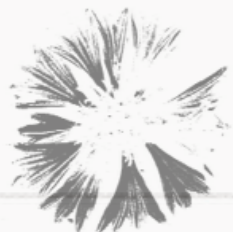
Individual Traffic

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Freedom

Independence

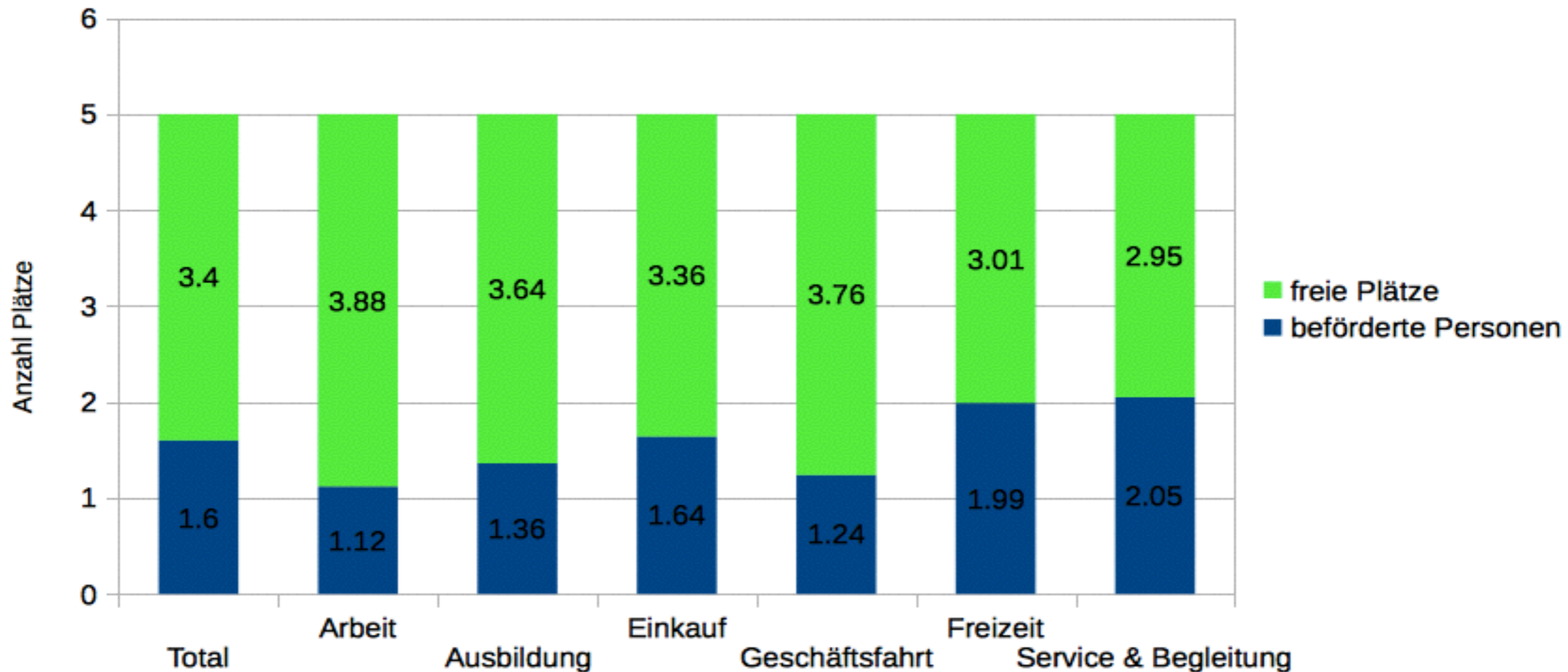
***is striving
for more
empty SEATS***



EMPTY SEATS IN SWITZERLAND

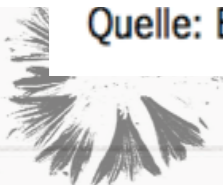
Besetzungsgrad von Personenwagen 2010

nach Verkehrszweck



Quelle: BFS, ARE – Mikrozensus Mobilität und Verkehr (MZMV)

© BFS 2014

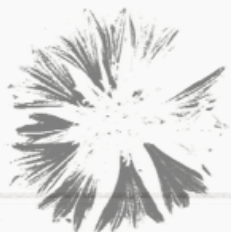


ANYWHERE IN THE WORLD...

1 Fahrzeug = ca. 1.2 - 1.8 Personen?!

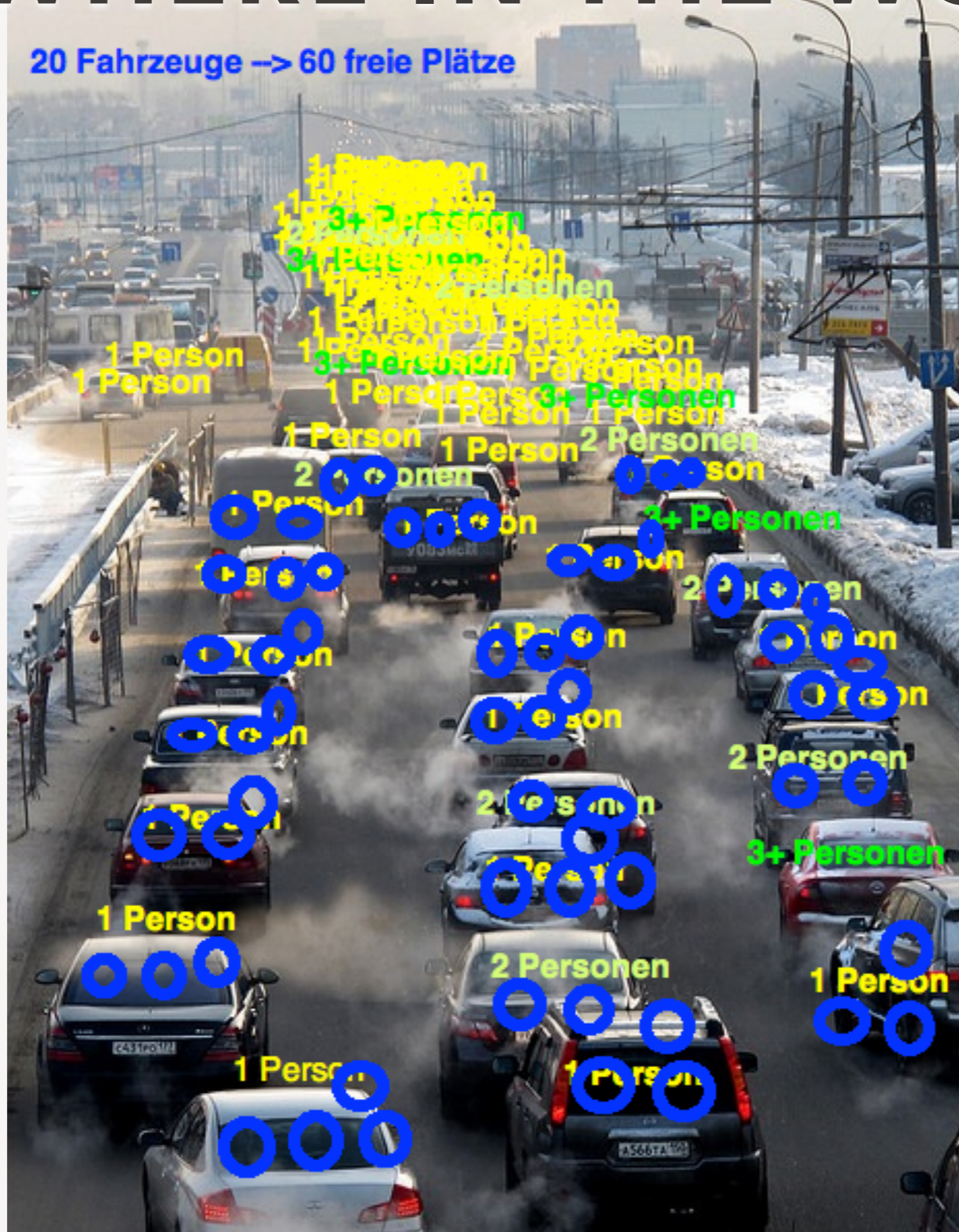


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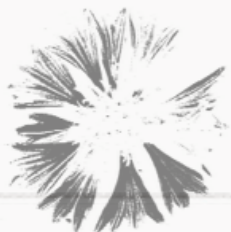


ANYWHERE IN THE WORLD...

20 Fahrzeuge → 60 freie Plätze



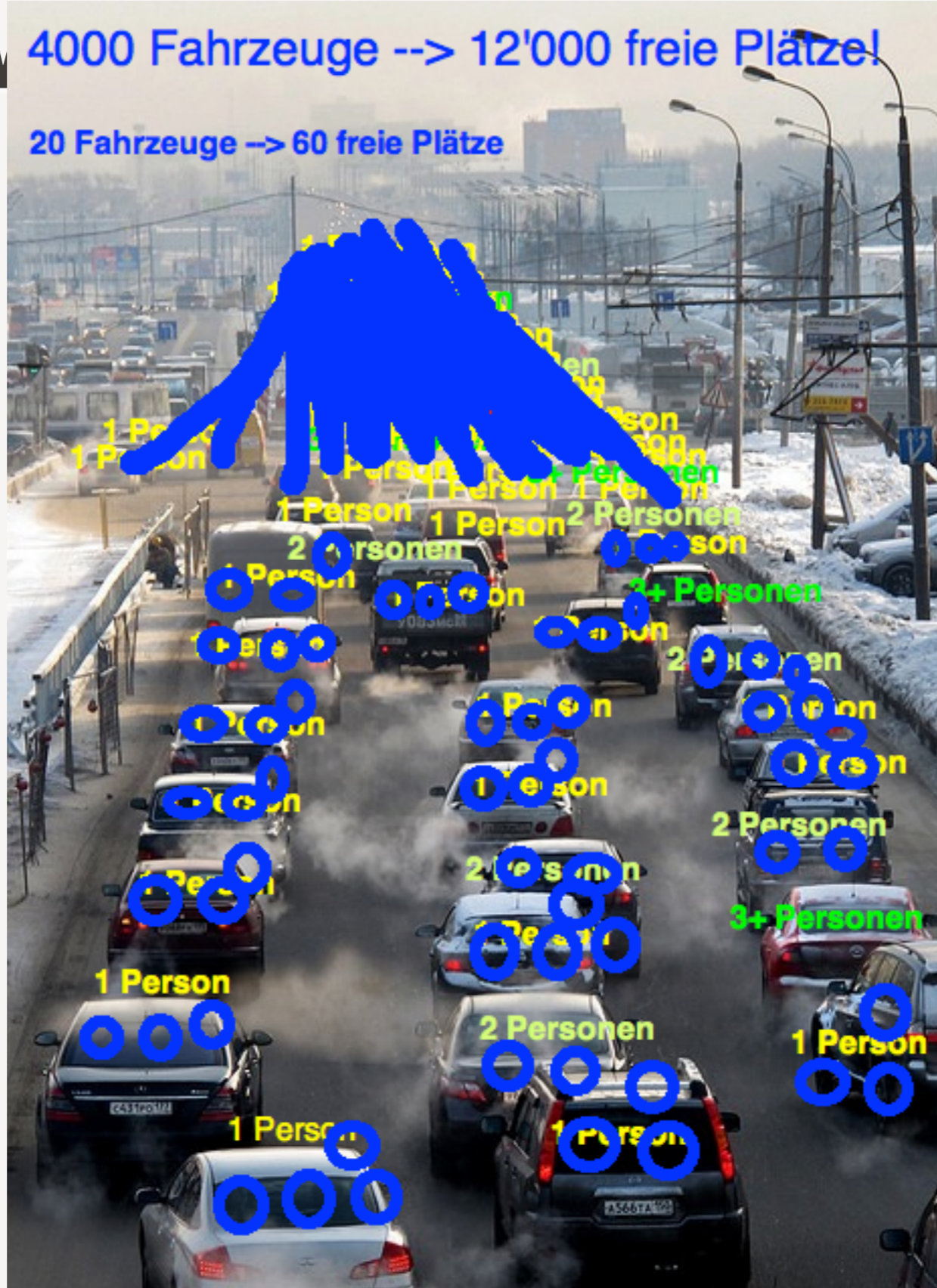
comoco
shaping comobility



ANYV

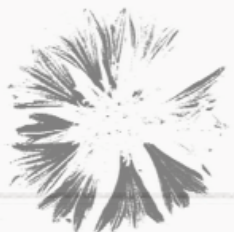
4000 Fahrzeuge --> 12'000 freie Plätze!

20 Fahrzeuge --> 60 freie Plätze



ORLD...

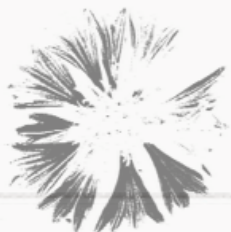
comoco
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PROJECT 'TREMSE' - A FIRST STEP INTO THE FUTURE

With project ,TREMSE' I want to show in practice:

- *Car drivers can - with little effort - transport passengers. Safely.*
- *Many different people will use and quickly appreciate the new transportation options.*
- *Public transport officials and politicians will value a new approach for future transportation challenges.*



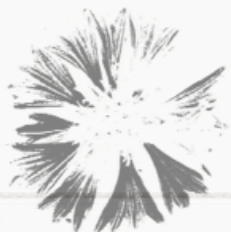
PROJECT 'TREMSE' - A FIRST STEP INTO THE FUTURE

How will this work?

- 1. Marketing and information campaign about the project.*
- 2. During a few weeks, public transit passengers and citizen test the transportation service provided by car drivers.*
- 3. Scientific and economic analysis of the trial.*

A partner and leader in public transport is essential.

*The **UBB** is a leader in public transport and obviously is interested in innovative solutions for transportation challenges.*



wocomoco
shaping comobility

Innsbruck, June 26th, 2015



ÖBB COULD INITIATE THE SHAPING OF THE
NEW PUBLIC TRANSPORT SYSTEM OF THIS
CENTURY!



*Hermann Spiess
Agronomist, ETH Zürich*

Innsbruck, June 26th, 2015



THANK YOU FOR YOUR ATTENTION

QUESTIONS?



PROJECT 'TREMSE'

*Hermann Spiess
Agronomist, ETH Zürich*

THRILLING SCIENTIFIC LITERATURE ON 11 PAGES:

NOKIA

Research Center

NRC-TR-2007-003

Link: <http://research.nokia.com/sites/default/files/tr/NRC-TR-2007-003.pdf>

Empty Seats Traveling

Next-generation ridesharing and its potential to mitigate traffic- and emission problems in the 21st century

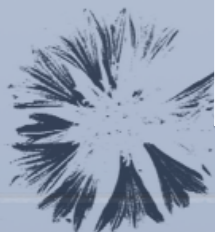
Stephan Hartwig, Nokia TP (stephan.hartwig@nokia.com)

Michael Buchmann, NRC

Nokia Research Center Bochum

<http://research.nokia.com>

February 14th 2007



'SPONTAN SAMKJØRING' (BERGEN, NORWAY)

The private car is the main reason for today's traffic congestions



... but it may also be part of the solution

DYNAMIC RIDESHARING IN BERGEN, NORWAY
www.seat4me.net

SEAT  ME
Connecting ridesharers



Hermann Spiess

'SPONTAN SAMKJØRING' (BERGEN, NORWAY)

Benefits for the public sector

Less need for traffic investments

More efficient use of public transport

Reduced emissions

health benefits

Less pressure on infrastructure

Improved traffic flow

DYNAMIC RIDESHARING IN BERGEN, NORWAY
www.seat4me.net

SEAT  ME
Connecting ridesharers

