

Mistra SAMS

Sustainable Accessibility and
Mobility Services

Mistra SAMS Annual conference

7 maj 2020

Zoom meeting



Agenda

- 13.00-13.45 **News, research results and upcoming activities in Mistra SAMS**
Short presentations and discussion
- 13.45-14.00 **Fika break**
- 14.00-14.45 **Stakeholders for sustainability transformation**
Research impact on policy through different stakeholders, by Eva Krutmeijer
Break-out session on stakeholder roles in transforming urban transport
- 14.45-15.00 **Fika break**
- 15.00-15.45 **Covid-19 and sustainable accessibility and mobility**
The pandemic's effects on travel and work patterns in five Swedish public agencies by Peter Arnfalk
Break-out session about how the current situation might affect some of the issues studied by Mistra SAMS.
We aim to keep this last discussion a bit informal and we encourage everyone to bring something to drink and a snack!

Agenda Part 1

News, results and upcoming activities

- Milestones, outreach and impact – Anna
- Results from
 - WP4: "Users' perspectives and institutional conditions" – Janne, Malin and Karolina
 - WP5 Living Lab 2 in Tullinge – Anna, Bhavana, Martin, Tina and Peter
 - WP6 Exploring impacts on city, regional and national levels – Jonas, Daniel
- Menti question

Milestones 201901-202005

Launch of Living Lab 2 January 31st



Yearly meeting with ISAP
September 2019



Mistra SAMS part of IVA list of 100 most innovative research projects

Our research is included in IVA's 100 List 2020, a list of research projects focusing on sustainability with significant potential to benefit areas such as business and method development or to have a positive impact on society.



Yearly panel discussion with politicians
Järvaveckan June 2019



Writing workshop in Linköping
April 26th



Kitchen talks seminars
10+ informal seminars and presentations
in the kitchen/open seminar room at SEED

- Revision of programme plan and budget Nov 2019
- Phase 1 report delivered March 15th
- Proposal for phase 2 submitted March 31st

Outreach and impact 2019

Communication Goal:

Integrate results from Mistra SAMS in real life activities in planning and policy making, as well as among user groups.

Seminar with European Commission:
"A Clean Planet for all"



Visit by minister Per Bolund



Transportforum



ITS4Climate –in Bordeaux
MaaS and AaaS for Climate



Seminar and roundtable in the
Swedish Parliament:
"Tax policy for increased mobility and
decreased private car use"



Workshop with the
Swedish Transport Administration:
"Setting targets for sustainable accessibility"

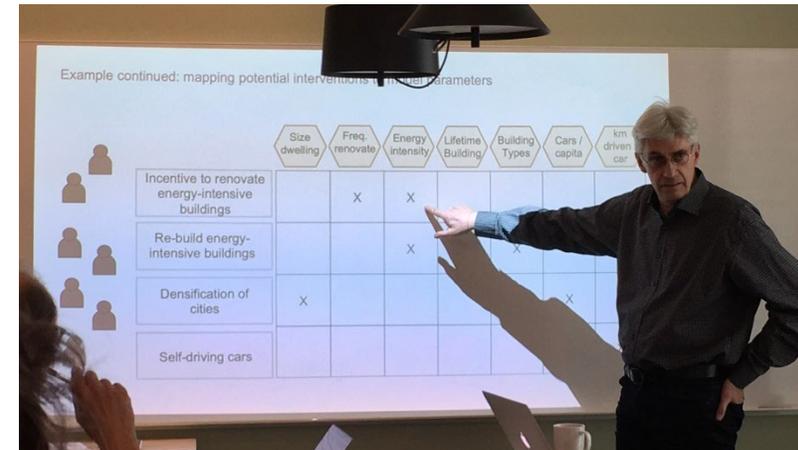


Exponential Climate Action Roadmap
– scaling solutions to halve emissions by 2030



Visiting Speakers

- May 24 2019,
Professor Lorenz Hilty, University of Zürich
"Simulating the post-fossil Swiss city in a game"
- October 10, 2018
Professor Iain Docherty, University of Stirling
"Future of connected and autonomous vehicles and potential threats to public transport systems"
- January 8 2019
Professor Glenn Lyons, University of West England
"Handling Uncertainty in transport planning and decision making"
Writing workshops with PhDs and senior researchers from different work packages.



Young International Researchers exchange

Visiting us:

Ioanna Moscholidou, University of Leeds. August 2019

Fabio Hirschhorn, TU Delft, August 2019

Jan Bieser, University of Zurich, August – November 2019

Johanna Pohl, Technical University of Berlin, August- November 2019

Mohammad Jama Mohammad, Edinburgh Napier University,
September 2018



Visiting other Universities

Fredrik Johansson visited Autonomous University of Barcelona Feb-Mar 2020

Liridona Sopjani visited University of Southern California June 2019

Tina Ringenson visited Earth Institute at Columbia University, New York, 2018

Upcoming

- **Mistra SAMS resultconference 2020 12/11**
- Almedalen is cancelled 2020
- Digital Conferences and webinars with Mistra SAMS researchers:
ICT4S conference June 21-27, virtual meeting, Euroconstruct webinar June 13th +
other digital reserach conferences - see our calender
- **Next step of our proposal for phase 2**, comment from Linda Bell, Mistra

WP4 – Users' perspectives and institutional conditions

The Aimo and Botkyrka case

- Aimo intervention:
Free-floating electric car sharing service
- Botkyrka intervention:
Reduced (free) cost for PT card for employees



- Methodological approach
- Mostly by developed psychological scales – instruments
 - Attitudes, accessibility, satisfaction, willingness to change etc

A GPS based app in participants phones

- Actual travelling behaviour – not self reported

Before and After method (transfer is important)

- Instruments and GPS recording

Conclusions - preliminary

1. Reduced PT card intervention had little effect on changes in modal choice.
2. The electric free-floating car sharing service had little effect on changes in modal choice.
3. Next step is to analyze and compare individuals that **have changed** their modal choice with the individuals that **have not**, irrespectively of an intervention. Have their decision-making processes been affected or not?

Bike Sharing System (BSS) – a user perspective

Malin Henriksson, Jonas Ihlström & Anna Wallsten, VTI

- Street interviews with 25 users (4 women, 21 men, 6 bike couriers)
- Almost all users had own bikes but found the BSS to be convenient, cheap, fast and comfortable and used BSS for everyday commuting.
- What adjustments to the service would be needed to meet sustainability goals?



TInnGO
Transport
Innovation
Gender
Observatory

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The role of municipalities in steering towards smart and sustainable mobility

Interview study with local officials carried out under 2019, under review for publication

Results:

- Local officials see a potential in some, but not all, concepts for “smart mobility” as a means to support sustainable mobility.
- Current governance strategies leave a large room for commercial companies to set the agenda
- Institutional and political challenges to overcome if public authorities shall be able to take a more leading role
- A need for a thorough political discussion on “smart mobility” and how to align it with long term sustainable development goals



Results from Living Lab 2 in Tullinge

WP5- team:

Anna, Bhavana, Martin, Tina, Peter,

Teo and Mia +

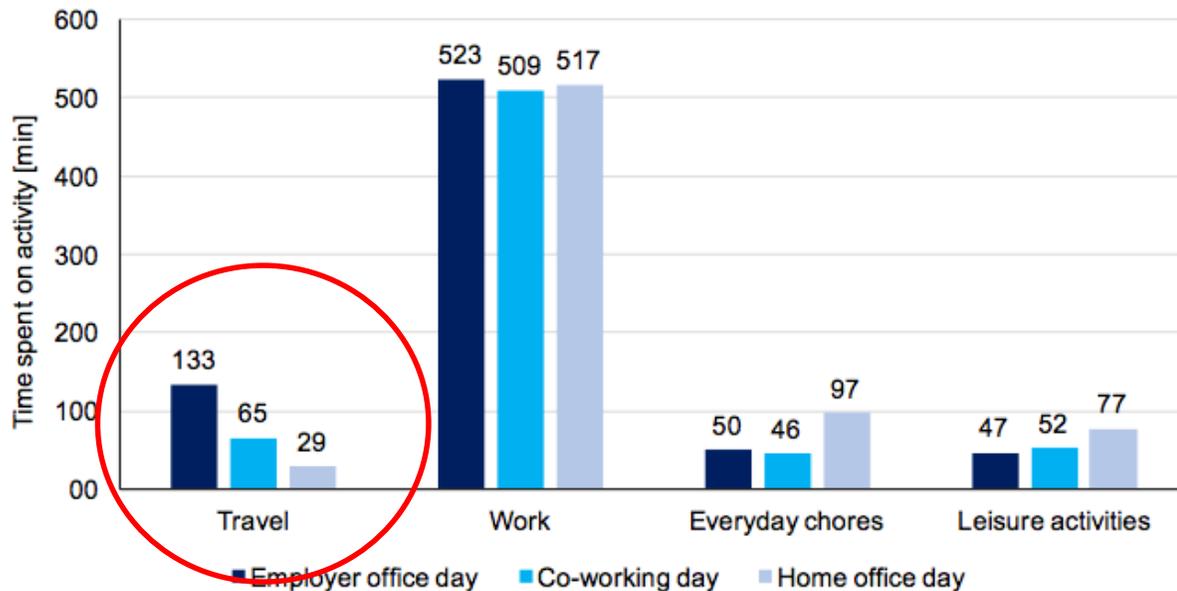
IYR : Johanna and Jan



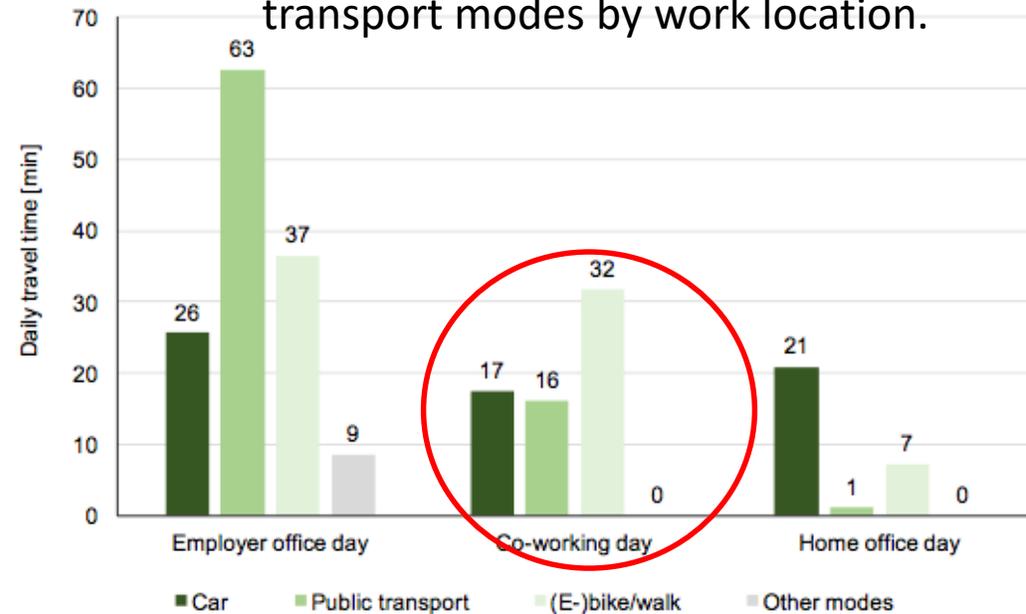
Time use and daily travel time

by 20 diarists in the Tullinge co-working hub

Daily time spent on activities by work location



Daily travel time per workday across transport modes by work location.

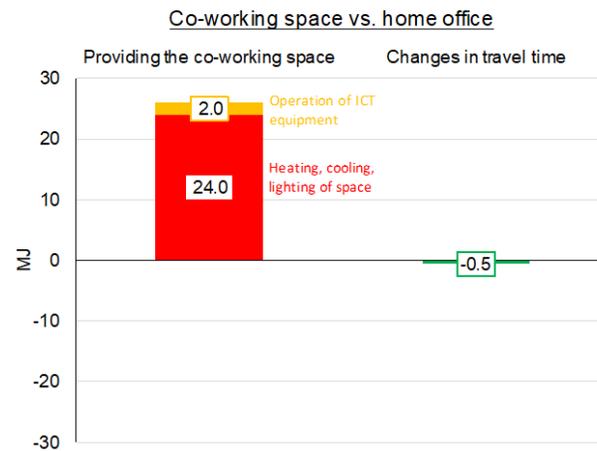
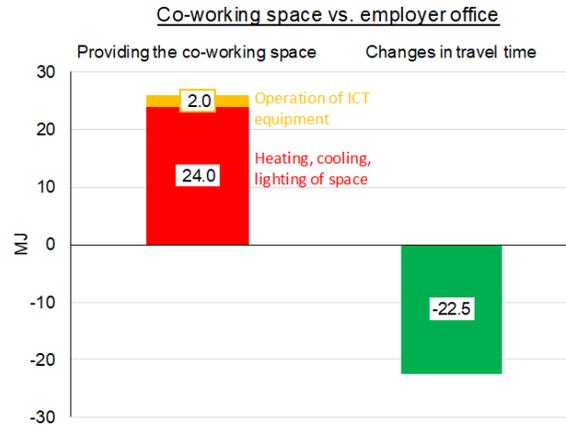


Manuscript: Co-working in Stockholm: A case study of time-use, travel and energy impacts of telecommuting

Jan C. T. Bieser^{a,*}, Bhavana Vaddadi^c, Anna Kramers^b, Mattias Höjer^b, Lorenz M. Hilty^{a,d}

Environmental impacts of co-working

	Decrease of resource use	Increase of resource use	
Technology: Co-working infrastructure	n/a by definition	Infrastructure use - Space - Furniture - ICT end-user devices - ICT infrastructure	1: Direct effect
Application: Working at the co-working space	Substitution effect		2: Indirect effect
	Space		
	<ul style="list-style-type: none"> - Reduction of office space at employer - Reduction of office space at home 	<ul style="list-style-type: none"> - Additional meeting space at employer - Additional office space at home 	
	Transport		
<ul style="list-style-type: none"> - Reduction of commute time/distance - Reduction of private travel time/distance - Switch to more sustainable transport modes 	<ul style="list-style-type: none"> - Increase of commute time/distance - Increase of private travel time/distance - Switch to less sustainable transport modes 		
Equipment			
<ul style="list-style-type: none"> - Reduction of ICT use at employer/home - Reduction of furniture at employer/home 	<ul style="list-style-type: none"> - Increase of ICT use at employer/home - Increase of furniture at employer/home 		
Induction effect			
Transport			
<ul style="list-style-type: none"> - Reduction of travel of other household members/work colleagues - Switch to more sustainable transport modes by other household members/work colleagues 	<ul style="list-style-type: none"> - Increase of travel of other household members/work colleagues - Switch to less sustainable transport modes by other household members/work colleagues 		
Rebound effect			
<ul style="list-style-type: none"> - Income rebound effect - Time rebound effect 			
Structural change: Large-scale co-working adoption	System transformation and structural change		3: Systemic effect
	Economy		
	<ul style="list-style-type: none"> - Decoupling of economic output and resource use 	<ul style="list-style-type: none"> - Increase of productivity, economic output and resource use 	
Lifestyle			
<ul style="list-style-type: none"> - Creation of local communities/more locally-oriented lifestyles - More sustainable patterns of production/consumption 			



“Co-working accompanied by additional energy savings measures could reap maximum benefits”

- To get the best out of the Co-working hub in terms of energy savings:
- **Reduction** of total travel time and distances (e.g. by choosing co-working spaces close to home)
 - **Use** of sustainable transport modes
 - Net **reduction** of (heated) floor space at the CW space, at the employer's office and the co-workers home
 - A **high number** of CW or home office days (increasing the number of avoided commutes to employer offices)

Preliminary findings from the Tullinge work hub

- Current workplace policy and norms strongly inhibit more frequent hub use
 - This may be changing now, and hubs could take a part
- Need to understand usage patterns and actively manage user activity to optimize hub utilization.
- Conditions for work hubs are site-specific.
- Largest value may be employee well-being/health.
 - Secondary environmental effects from development of "local lifestyles"?

"There will be huge changes after Corona... it was just this threshold we needed to pass."

"I have many colleagues that live in tiny apartments. They feel caged now"

"You get that feeling of 'going to work', focussing, not blurring the lines"

"I found that I liked local life, and started looking for jobs within biking distance"

Telework and Policy

- National policies & guidelines regulating Telework are dated (e.g. Distansarbete SOU 1998: 115)
- Telework policies in organisations are often dated, restrictive and not communicated
- Up to the middle management/closest manager to allow telework for individuals
- Telework policies poorly aligned with activity-based offices (e.g. Trafikverket, Försäkringskassan)
- Covid19 triggers a discussion and potentially reviews of policies and guidelines

Governance of MaaS for ASI

ASI - Avoid-Shift-Improve

Systematic literature review

Living lab-interviews with public participants + SKR rep

- Research on MaaS governance does not consider non-travel accessibility as part of the MaaS package – *Avoid* is absent
- Research points to a need for active role for public actors – some think they should support MaaS, other ensure the livelihood of traditional public transport or societal values
- Difficult to intergrate AaaS with MaaS, but maybe we should still push for it
- Uncertainty about who should be responsible for AaaS and MaaS
- Opening for municipalities to use traditional means to support sustainability

WP6 Exploring impacts on city, regional and national levels

Three main parts:

- **Backcasting, with Images** for the Swedish transport system reaching climate targets 2030/2035
- **Passenger car fleet analysis** regarding GHG and battery utilization
- **Activity based modelling** of traffic in Stockholm considering shared vehicles and e-commuting (e.g. work hubs)



WP6 Exploring impacts on city, regional and national levels

Task 6.2 Paper 1, Backcasting (Jonas, Mattias, Hampus,)

- Three main ways of reducing GHG emissions by new services
 - Reduction of direct emissions from e.g. car travel
 - Reduction of in-direct emissions associated with vehicles and infrastructure
 - Increased acceptance for pricing measures
- Car travel need to be reduced by some 15-20% until 2030/2035.
- Analysis of Swedish register of types of professions:
Up to 30% of all work days could be carried out by telecommuting →
8% reduction of total car travel
- Significant reductions of indirect emissions seems to be possible by new accessibility and mobility services in combination with pricing measures ~ 1 million tons of CO2



WP6 Exploring impacts on city, regional and national levels

Task 6.2: Paper 2, Sharing and electrification of the car fleet (*Hampus, Jonas, Mattias*)

- We explore the role electrification and sharing of cars could have regarding:
 - Reduction of GHG emissions until 2030
 - Efficient utilization of electric car battery metals (non-Tesla way)
- Scenarios are developed with different levels of sharing (related to household types) and electrification as well as different battery sizes
- Preliminary findings:
 - Sharing has a substantial potential to save battery metals (and GHG)
 - Premature scrapping of cars may be required if the -70% target should be met.



Rebound effects of new services need to be considered

Rebound effects:

- Economic
- Time-use
- Psychological

Initiatives:

- Submitted paper “Time-use rebound effects of telecommuting” (Bieser, Kramers, Höjer, Hilty)
- Paper in progress: Modelling of activity changes when work hubs become an alternative (WP6)
- Sister project (lead by IVL) on “Rebound effects in transport”, where Mistra SAMS is represented.
 - Focus on policies that may counteract rebound effects



WP6 Exploring impacts on city, regional and national levels

Task 6.1: Activity based modelling including new services (Daniel and Oskar)

Scaper is an activity (agent) based travel demand model developed at KTH.

Advantages: The persons (synthetic population) activities are followed during a day (or week) with a time-geographical perspective.

Own vehicle vs Shared vehicle

Aim of this task: To include some of the new accessibility/mobility services in the model and test a couple of policies



WP6 Exploring impacts on city, regional and national levels

Task 6.1: Activity based modelling including new services – Paper 1

- Objective: To analyse the potential for, e.g. shared mobility services in the form of taxis, bike-sharing, and e-scooters in Stockholm.
- Results as market shares and traffic flows
- But also an analysis of some selected neighbourhoods and individual agents



WP6 Exploring impacts on city, regional and national levels

Task 6.1: Agent based modelling including new services – Paper 2

- In the model day-to-day and within-day planning of activities are analysed in a joint framework
- The persons in the model are given the option to work from home once per week.
- They may also choose to perform more free-time activities when they are working from home



Questions from the chat?

Fika-question

**Most interesting development for accessibility and mobility
-last year?**

Go to www.menti.com

Code: 65 63 47

Agenda Part 2

Stakeholders/Polymakers for sustainability transformation

- Introduction to Work package 7
- "Bridging research and policy" *Eva Krutmeijer* (Mistra Geopolitics)
- Group discussions on stakeholder/policymaker roles in transforming urban transport

WP7 - Planning paradigm and policy recommendations

Aim of WP7:

“The overarching aim of this work package is to analyse how to turn the development of the accessibility and mobility system into a sustainable direction, by means of planning and policy measures.”

WP7 Tasks

1. **Synthesis policy and planning**
2. Strategies/roles for public actors with regard to accessibility and mobility services
3. What factors have determined infrastructure planning in Sweden
4. Development of improved decision support for e.g. infrastructure investment (CBA/ Backcasting)
5. Scenarios and robust strategies for planning of parking in urban areas

Mistra SAMS Annual conference 7 May 2020

Bridging research and policy

Eva Krutmeijer

Eva Krutmeijer

- Physical chemistry, Uppsala University
- Textbook editor, Natur & Kultur Publishing Company
- Head of Information, Royal Swedish Academy of Sciences
- Project manager, Swedish Research Council
- Science communications strategist (EKKO)
 - Moderator and project manager
 - Communications lead Mistra Geopolitics
 - Science twists

This talk:

- Bridging research and policy – why?
- Some important challenges to be aware of
- The researcher as sender
- Examples
- Who are your stake-holders?

The first question: WHY?

- Bridging research and policy – why?
- Look at your research program plan with eyes of a person with power to change something.
- What is it that needs to change?
- How does your research come into the picture?
- Why does this not happen anyway?
- Why is your research needed?
- Why is this important?

The second question: WHO?

- Where are the decisions made?
- Who are the policymakers that you want to communicate with?
- What are they worried about?
- One step further: Who are the true benefitters of your research?
Who cares?

HOW can your
research contribute?



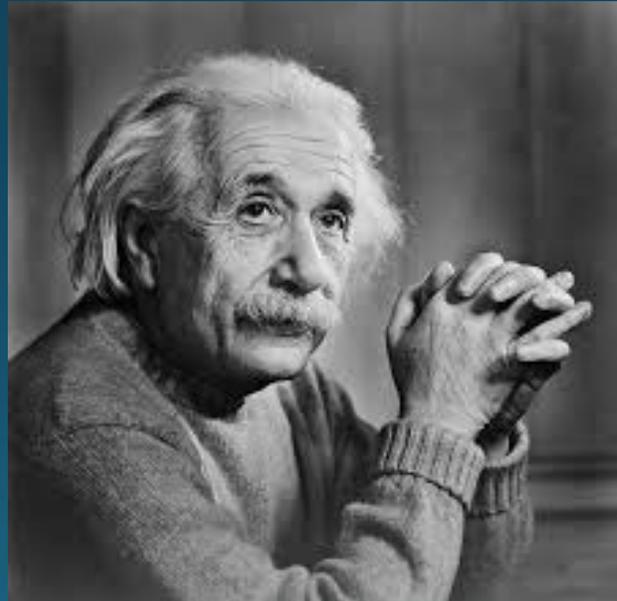
The third question: HOW?

- Identify your stake-holders
- Help the stake-holders understand and analyze risks concerned with your topic
- Communicate overviews and consequences
- Provide them with long-term arguments
- Be honest and clear – you do not need to have all answers
- Listen carefully when they express hesitation

Challenges

- Policy-makers are value driven and researchers are curiosity driven
- There is no linear way from facts to decisions
- Researchers might be 'used' by policymakers
- Researchers are often very specific in their knowledge whereas policymakers are broad and general
- Policymakers are worried about risks – Change is risky business!
- Who are the winners?
- What happens with the losers?
- How can your research contribute and how can you communicate around that?

“ If you can't explain it simply, you don't understand it well enough”.





The
problem is:

It is FAR
more
complicated
than that!

Research vs Policy

Complicated language

Precise

Keep to data

Models

Narrow

Successive knowledge

Uncertain

Critical thinking

Articles and publications

Easy to understand

General picture

Consequences and stories

Reality

Wide, understandable

'Truth', facts

Positive, clear

Easy answers to complex matters

One-liners, tweets

Examples: Stakeholder involvement

How can your research contribute to their challenges?

How do you make them understand what needs to be done – often conflicts between short-term/long-term or conflicts of interest.

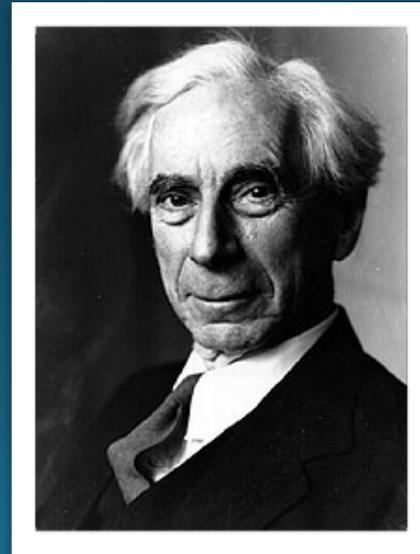
Examples: Mad cow (UK), Technology assessments (Denmark), workshops Mistra Geopolitics

Stakeholder involvement

Stakeholder = they will be affected from your research

- Step 1. Make a 'wishlist' of organisations and individuals
- Step 2. Increase your understanding of their problems and risks as well as motivators
- Step 3: Contact them, give examples of your findings and involve them (i.e. Participate in seminar, comment a study or report, invite to be part of panel, involve in advisory committee etc)
- Step 4. Cherish your relations.

“The trouble with the world is that the stupid are cocksure and the intelligent are full of doubt.”



Bertrand Russell

Thank you for having me!

- Eva Krutmeijer, eva@krutmeijer.se, www.ekkommunikation.se

Group discussions on stakeholder/policymakers roles in transforming urban transport

Change needed: A reduction of car travel per capita by around 20% until 2030 seems necessary to achieve climate targets (WP6)

This can be achieved (in part) by a combination of new accessibility- and mobility services (supported by digital platforms) and economic policy instruments.

Group discussion - Questions

Point of departure: A reduction of car travel with 20% until 2030 by a combination of e.g. new accessibility- and mobility services (supported by digital platforms) and economic policy instruments

Who are the key stakeholders/policymakers to address in order to achieve this change? And why these?

Keep in mind:

Who is a winner, what happens to the losers?

Who needs be active in the process?

Who needs to give passive support?

Examples of stakeholders/policymakers

- EU policy makers
- National policy makers
- Local politicians
- Vehicle manufacturers
- NGOs
- ICT businesses
- Office space providers
- Public transport operators
- Etc etc

Recap from group discussion

Which are the key stakeholders - and why?

Go to www.menti.com

Code: 65 63 47

Group photo!

Agenda Part 3

Covid-19 and sustainable accessibility and mobility

1. The pandemic's effects on travel and work patterns in five Swedish public agencies by Peter Arnfalk
2. Break-out session about how the current situation might affect some of the issues studied by Mistra SAMS.
3. Gathering and Closing of the meeting

Questions for break out session Part 3

- How will research in Mistra SAMS phase 1 be affected and related work in partners organizations
(i.e.: Living Lab, Interviews, work policies, articles etc...)
- Short timeframe – How will urban accessibility and mobility be affected by Covid-19 2021?
- Long timeframe - How will urban accessibility and mobility be affected by Covid-19 2031?

We aim to keep this last discussion a bit informal and we encourage everyone to bring something to drink and a snack!

Taxiföretagen nere för räkning

Taxiföretagen hör till de värst drabbade av den pågående coronakrisen.

– Just nu ser vi 60–70 procents inkomstbortfall. I slutet av månaden är det nog inte många bolag som finns kvar, säger Claudio Skubla, förbundsdirektör på Svenska Taxiförbundet.

Coronaviruset inverkan på ekonomin
Uber skär ned

Fanny Hällegårdh / TT 2020-03-21



Scania permitterar nästan samtliga 19 000 anställda

Explosionsartad ökning för videokonferenser

Antalet digitala möten har ökat kraftigt i coronakrisen. Som ett exempel har Googles företagslösning Meet trettiofaldigat antalet användare sedan januari. Ursprunget till produkten finns i Stockholm.

Anja Haglund / TT
Publicerad 2020-04-29



Kontor

Analytiker: Coworking vinnare i coronatider

Publicerad: 19 Mars 2020, 15:15

Just nu utmanas coworking-branschen på djupet, men runt hörnet väntar en belöning. "Min analys är att bolagen bör gynnas av detta osäkra läge. Inte på kort sikt, men garanterat på lång sikt", säger Charlotte Norell, analyschef på Croisette.

Res bara om du måste (lättläst)

Information om corona-viruset och kollektivtrafiken på lättläst svenska.

Just nu sprider sig corona-viruset bland oss som bor i Stockholm.

Alla måste hjälpas åt för att minska risken att många blir sjuka.

Det här kan du göra:

- Det är viktigt att du bara reser med SL om du är **helt frisk** och inte är snuvig eller hostig.
- Res bara med bussar och tåg **om du måste**. **Stanna hemma**. Hälsa inte på vänner. Åk inte på utflykter.
- Måste du resa till jobbet eller skolan försök att **åka före eller efter alla andra**. Tidigt på morgonen, mitt på dagen eller efter klockan 7 på kvällen är det ofta mer plats på tåg och bussar.

SAS varslar 40 procent av personalen

2020-04-28 09:32 Av: TT

2 kommentarer



Fastighetsnytt

Finally!

Don't forget the result conference

November 12th

and

Invite a friend!

Thank you!

Mistra SAMS: www.sams.kth.se

Twitter: @MistraSAMS