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Policy challenges of
urban mobility



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Plenary session “Mobility and the
city: policies for sustainability”

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policies for sustainability”

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Source: picture by Alessio Bragadini from Flickr



Sustainable mobility, in particular in *urban areas*, is written in bold in the agenda of decision makers (and of researchers...)

My contribution will try to recall and briefly discuss five (among many) issues which may deserve attention because less consolidated in literature and practice.

- Sustainability means also “economic sustainability”
- (Too) great expectations from sharing mobility?
- Mobility and land use: everyone speaks about, but few make it
- Prohibitions, pricing and *nudging*
- A new era of perfect information: big data and travel platforms

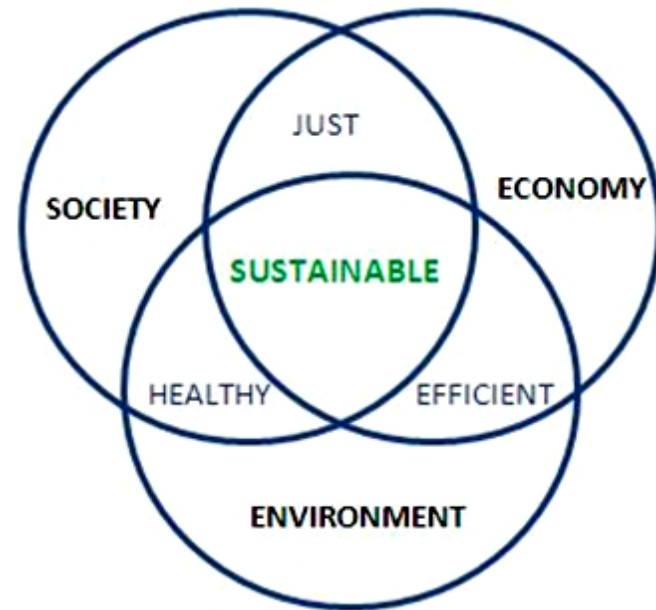


Do not forget *economic* sustainability

The dimensions of sustainability

Sustainability does not mean only
“*environmental sustainability*”!

The focus on the **economic** dimension
(and on the **efficiency** of the public
expenditure) is there since the
beginning!





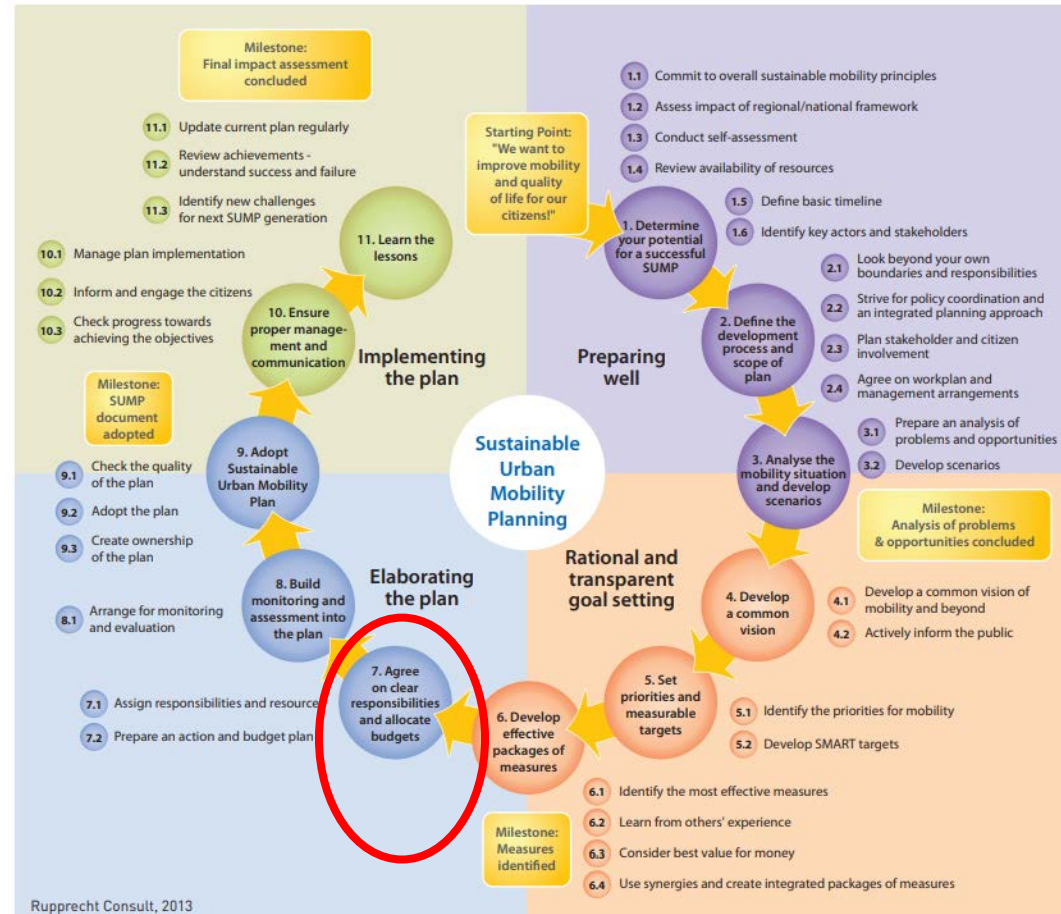
Do not forget *economic* sustainability

Plans must be financially viable

What does it mean? At least 2 things:

1. Plans must be *financially viable*, i.e. the cost of actions must be known and allocated since the beginning.

Otherwise, our plans are just *whish lists*, useless and doomed to failure



Source: ELTIS SUMP's guidelines



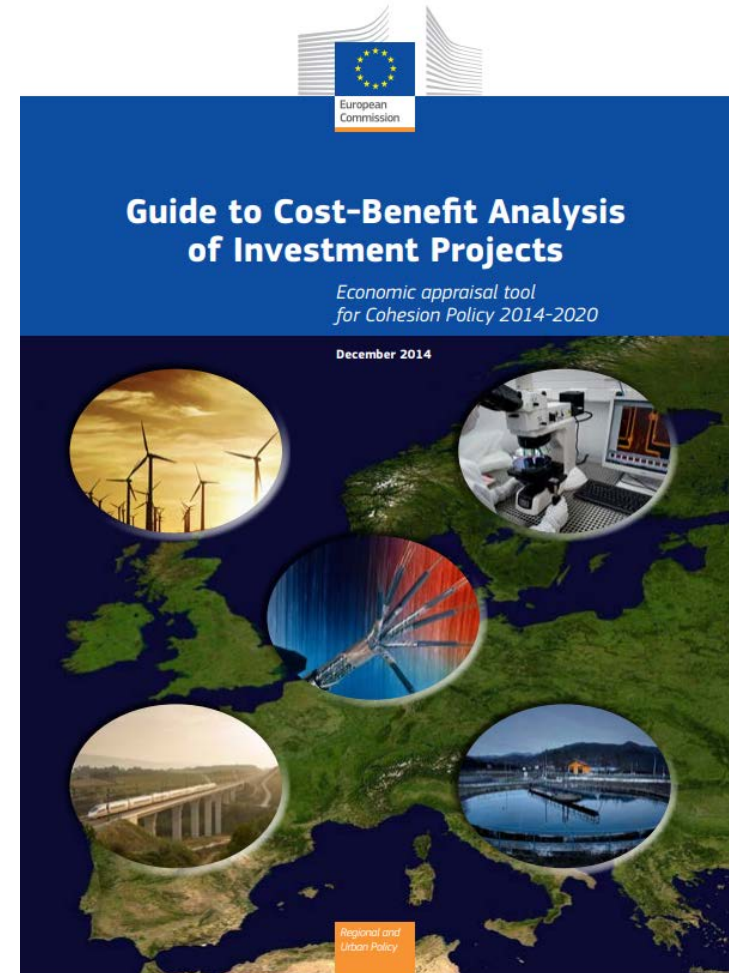
Do not forget *economic* sustainability

Plans must be efficient

What does it mean? At least 2 things:

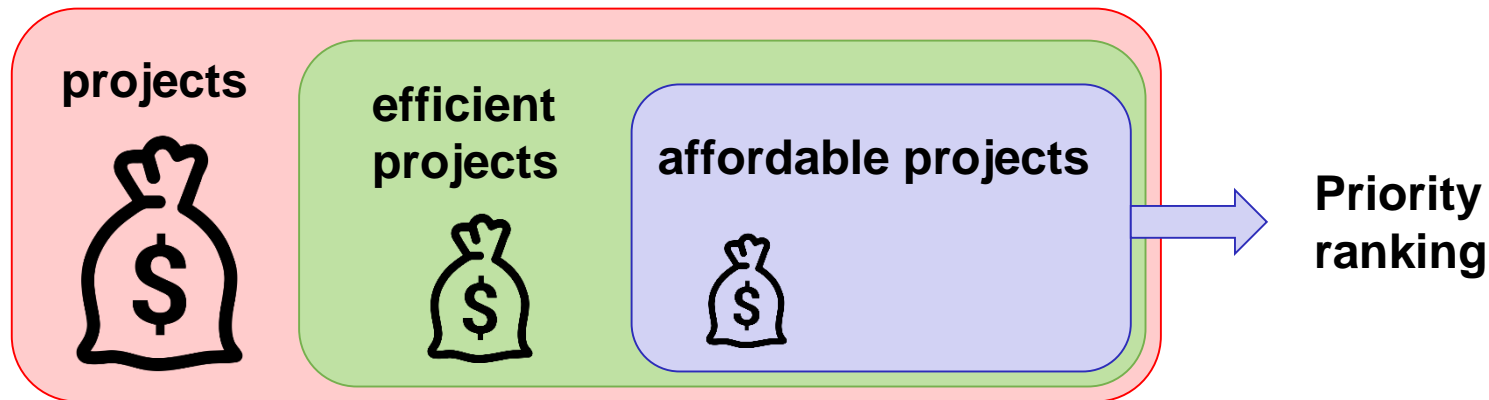
2. Actions and plans must be **efficient**, i.e. they must produce more outputs than inputs.

Otherwise, we **waste private and public money**, obtaining results which value less than the effort spent





The logical consequence of keeping economics in planning choices is that decision-makers **must rank** decisions.



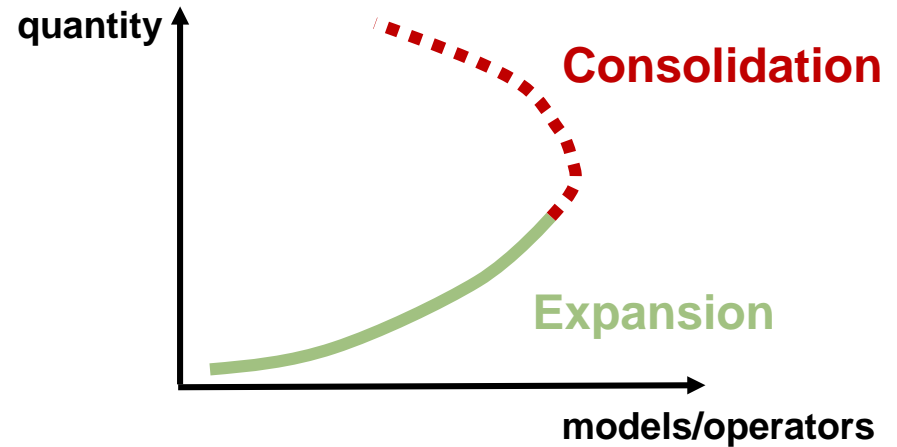
A perverse incentive against ranking is called “derived finance”: when **who spends and who pays are different subjects**, the one that spends enjoy a *free riding* situation and will irresponsibly maximise requests.

→ Need to **responsibilise the local decision-maker** and ask him to **contribute to costs** (e.g. municipalities must finance 30% of infrastructure they request for to central state budget)



Sharing mobility are clearly growing:

- ✓ Car sharing
- ✓ Bike/scooter sharing
- ✓ Ride sharing
- ✓ Carpooling
- ✓ ...



This **growth** is both **quantitative** and in terms of **variety of services and models**. It is likely that in the future the quantity will further grow, but the variety will consolidate around **fewer groups and models**.



Great expectations from sharing mobility

But, how much sharing mobility counts now?

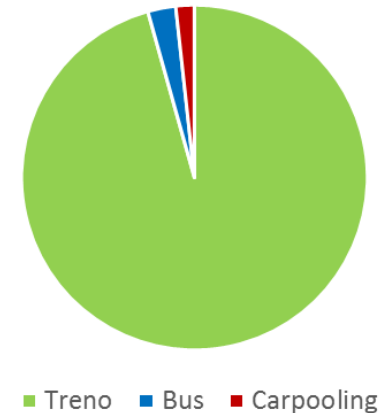
Not so much. Some examples:

Carpooling Milan-Genova (one of the larger routes, 2016)

TRAIN: 22 rides/day x ~500 seats = ~ 11.000 seats/day

BUS: 6 rides/day x ~50 seats = ~ 300 seats/day

CARPOOLING: 53 lifts/day (friday) = ~ 200 seats/day



Carsharing rides in Milan (2017)

CARSHARING: 15.000 rents/day

→ 0,47% of total trips within Milan...

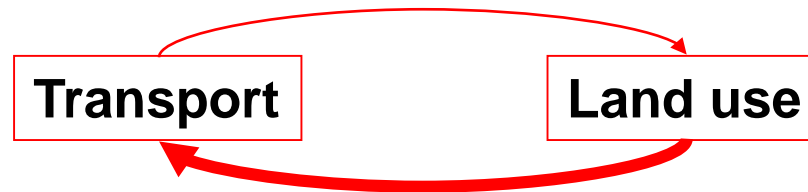
→ (but 640.000 subscriptions to 6 operators in a 1.3 M inhabitants city!)

The real impact of sharing mobility lays in the long-term changes in mobility practices and vehicle ownership



Everyone knows that mobility and land-use are strictly interrelated.

Most likely, **transport system limitedly influences overall land use, but land use largely influence mobility.**



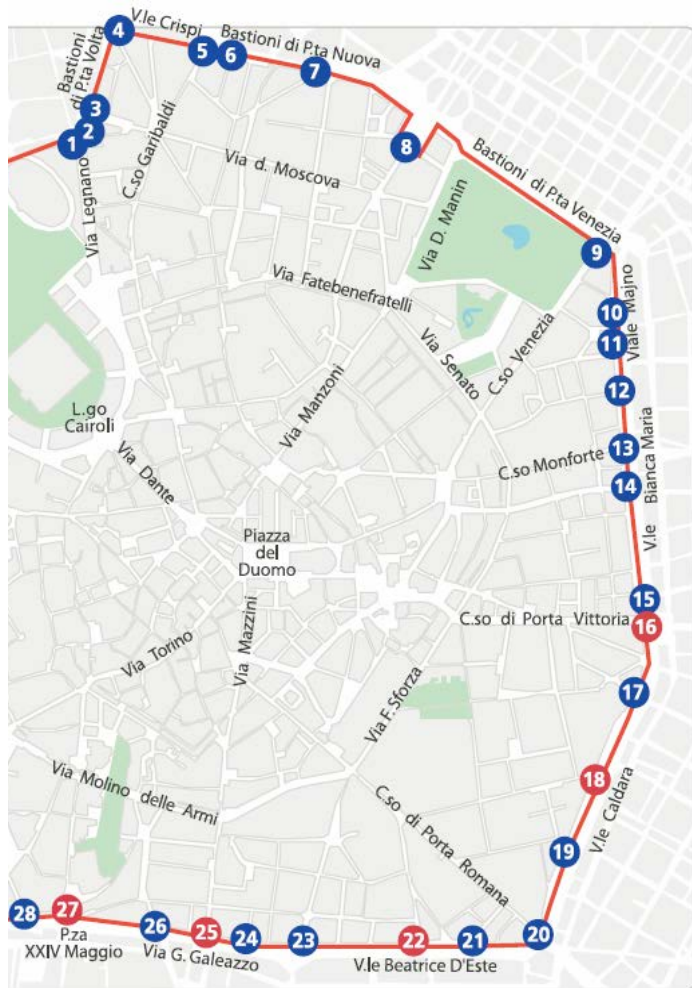
Planning should (could) drive the system towards a more efficient equilibrium.

But, the impression is that planners tend to plan transport systems to favour (big) real estate redevelopments, which is **good but expensive**, and often forget that is **land-use planning that should be “influenced” by existing transport supply availability**, sometimes also limiting it.



From prohibitions to nudging

Old school economics



The first forms of regulatory policies for private mobility are represented by **constraints, limitations and prohibitions:**

- Number plate limitations
 - Car free areas
 - ...
- *Effective but inefficient and politically difficult*

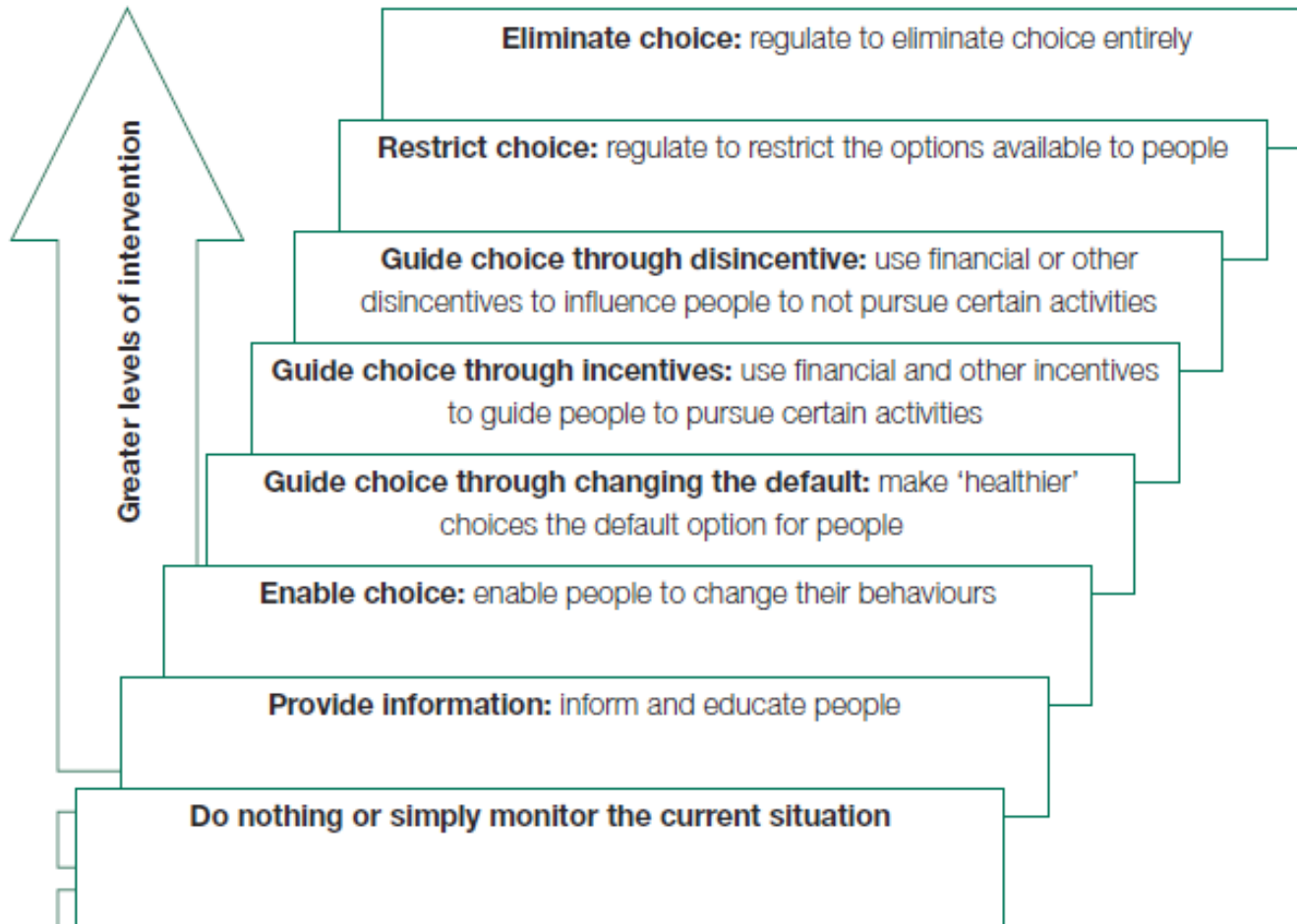
Pricing is used, but not so pervasively, because politically costly:

- Road pricing
 - Park pricing
 - ~~Mobility credits~~
 - ~~Pay-per-drive fuel duties~~
- *Effective and efficient but politically difficult*



From prohibitions to nudging

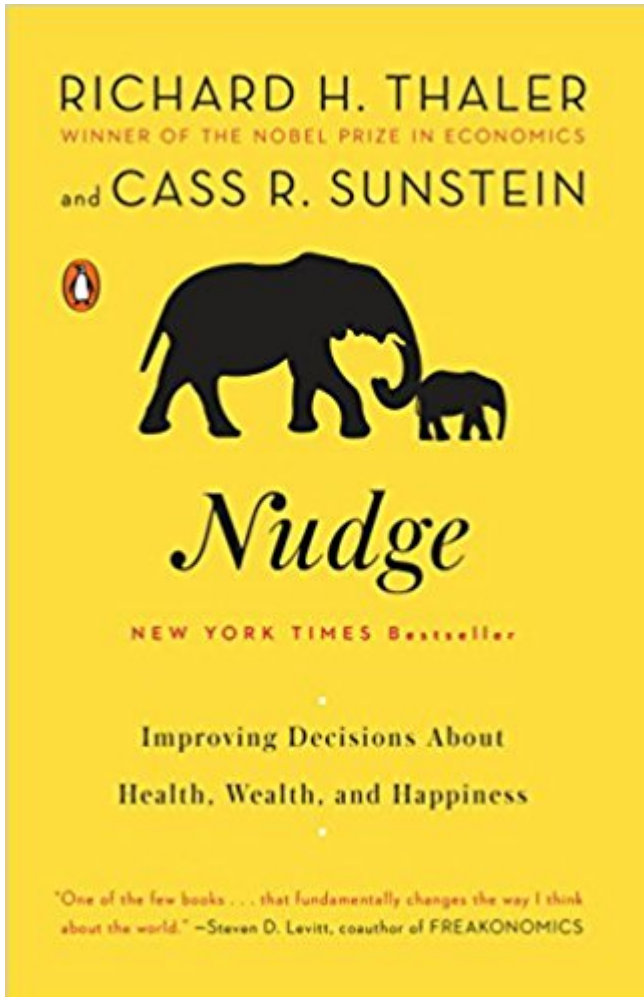
The idea of nudging





From prohibitions to nudging

The idea of nudging



The frontier is “**nudging**”. It is sexy, cheap, politically easy... and sometimes even working!

The principle is that behaviours can be “gently changed” in a likely direction without impositions or prohibitions.

It is used in safety and in pedestrian flows regulation. However, also **economic behaviours** (such as mobility choices) could be treated under these principles.

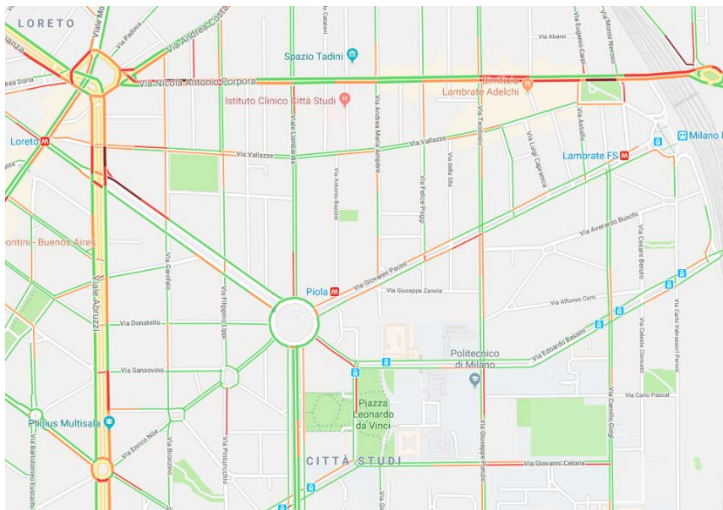


A new era of perfect information? Big data for users

Finally, great attention is now given to big data and real-time travel platforms.

Their potentiality in shaping future mobility (and present, too) is huge, at least in two ways:

1. Big data and real-time software **extend the information for the user**: we now know the status of the road congestion, all prices for all competing services, delays, etc. Choices can be taken with **much more awareness**.



Treni	€ 80		03:35 h
Voli	€ 76		01:10 h
Bus	€ 40		08:20 h

Consigliati Prezzo Durata **Partenza** Arrivo

Modalità principale

Da € 79,90

05:00 → 08:35 Diretto 03:35 h

Milano Centrale → Roma Termini

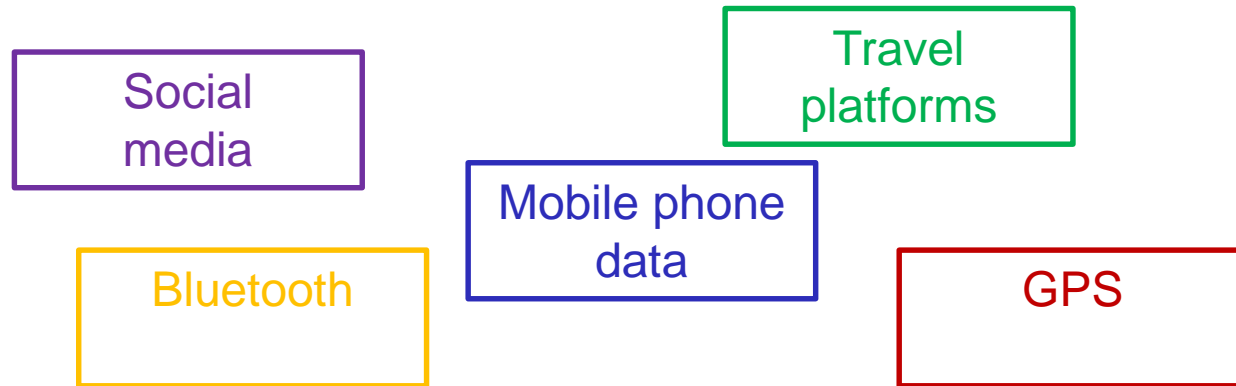
Seleziona



Finally, great attention is now given to big data and real-time travel platforms.

Their potentiality in shaping future mobility (and present, too) is huge, at least in two ways:

2. A unimaginable amount of data is **potentially available** (traffic counts, OD matrices, durations, travel choices, pricing, etc.) to planners.
However, despite the interest from data-owners to commercialise them, still many **barriers** exist: privacy, initial costs, mismatch between demand and supply, excessive detail for practical use,... Much work is still needed





Thank you for your attention!!!

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Please quote as follows / Per favore, citare come segue:

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