



Planning processes and decision support systems

Giacomo Lozzi, POLIS

Workshop “Walking and Tracking data for planning and policy” – Brussels – 20-22 January 2016



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 635266.

Aim of the literature review



Investigation of **current needs and practices on planning and policy making** regarding walking and cycling

It provides a broad in-depth knowledge of past and current practices in three scopes:

- **Applicability of Planning Support Systems (PSS):** the study of the practical application of Planning Support Systems in local urban/mobility planning (TIS)
- **Planning and policy processes** and elements of process data collection and analysis (POLIS)
- **Ideal planning practices and use of information:** scientific review of research databases (FTTE)

Objectives:

- *to foster the development* of Tracking for planning tools
- to assess their *potential* and the *ways* they are currently being *applied*
- to find out about their specific characteristics *in different contexts*
- *to figure out challenges* when it comes to tools' technical implementation



Applicability of Planning Support Systems (PSS)



From technical analysis to policy making

Scope: the study of the practical application of PSS in local urban/mobility planning

PSS's integration in planning and policy: through the use of information and analysis tools providing support by identifying problems and testing solutions

PSS definition: “an information framework that integrates the full range of current (and future) information technologies useful for planning” (Klosterman, 1997)



Applicability of Planning Support Systems (PSS)



From technical analysis to policy making

Main concerns to consider for a successful application of these tools by planners and decision makers:

- Decision makers and planners should be **involved in the development process** from an early stage (to understand needs)
- **Similar projects and tools considered**, to learn from success or failure
- Collected data stored in a **format easily accessible, exchangeable and process able**
- Tool layout: **pleasant and intuitive, clear and transparent**
- A **divuligation campaign** should accompany the tool development
- **Support (not steer) the planning process**, also because information provided is only partial



Planning and policy processes and elements of process data collection and analysis



The literature review focuses on **current practices for cycling and walking planning and policy**.

This part of the research identifies:

- EU projects related to **(walking and cycling) tracking** activities
- EU projects related to **planning processes** and elements of process **data collection and analysis**

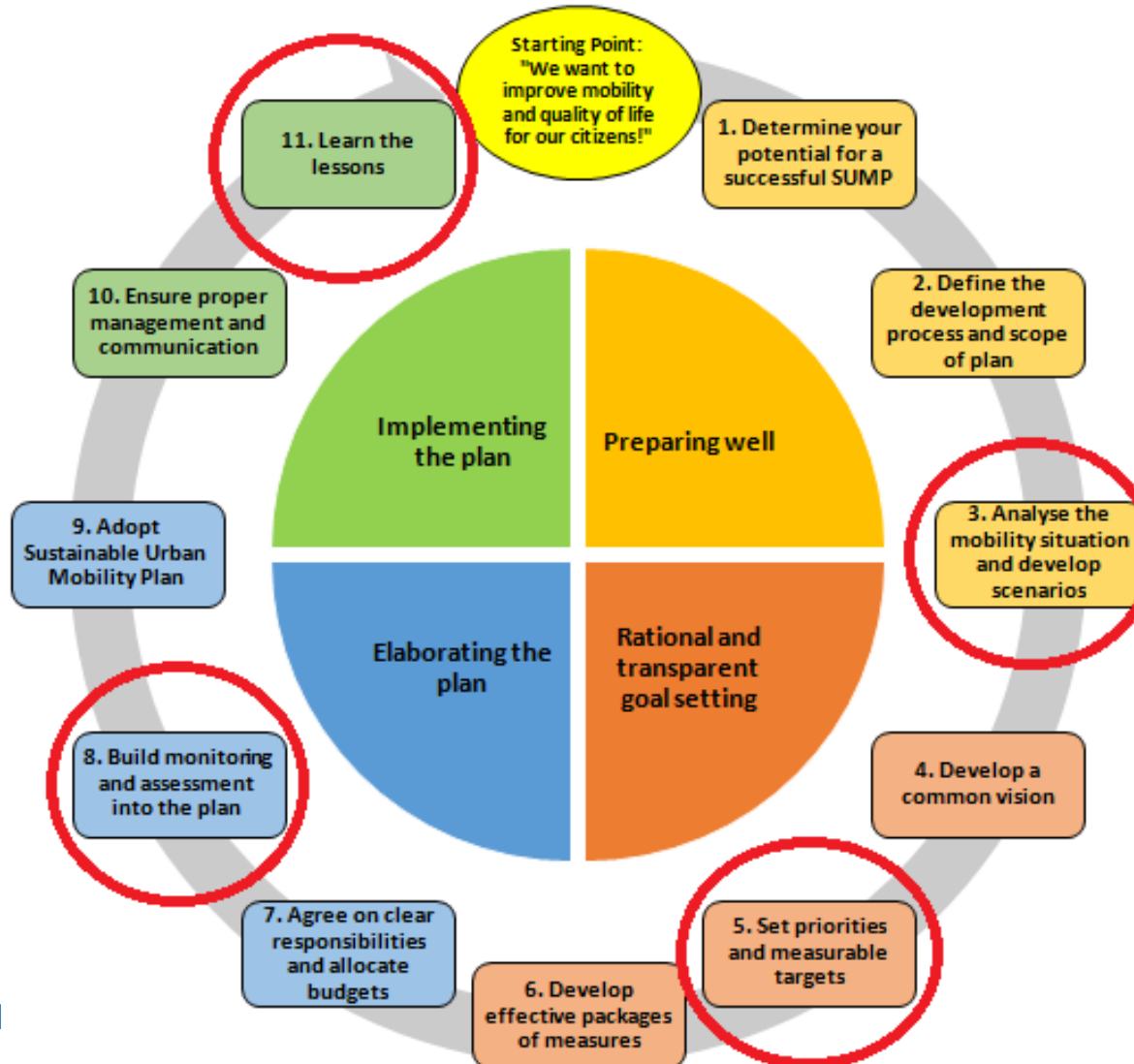
Selection of guidelines and projects focusing on these aspects, with special attention on provisions and indications on **data collection**.



Planning and policy processes and elements of process data collection and analysis



SUMP



Planning and policy processes and elements of process data collection and analysis



SUMP: data use

Data plays an important role during all the planning phases of a SUMP:

1. **the preparation of measures:** data used to analyse the current mobility situation and develop alternative scenarios that might result from different policies and measures
2. **the setting of the objectives :** level of accuracy of the previously collected data should be assessed, in order to develop SMART (measurable and quantifiable) targets
3. **the elaboration of the plan:** monitoring and evaluation process should be defined, and the impact of a particular measure will be assessed on the basis of the type of data selected and its *ex-ante/ex-post* quantification.
4. **the monitoring processes** which, again, leads to new action: more general impact assessment will be implemented in order to understand success and failure: this process will consider the actual achievement of the target previously identified.



Planning and policy processes and elements of process data collection and analysis



PRESTO project

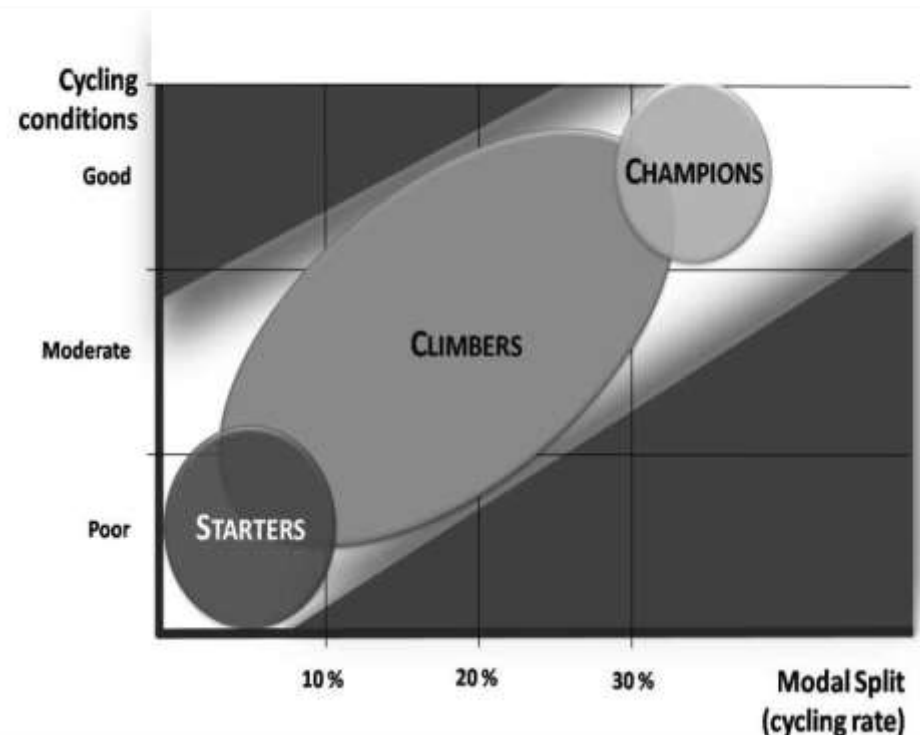
No one-size-fits-all model for making cities cycle-friendly:

1st step → define city typology:

- *Starting* Cycling Cities
- *Climber* Cycling Cities
- *Champion* Cycling Cities

The level of cycling development of a given city depends on two indicators:

- *cycling rate*
- *cycling conditions*



Planning and policy processes and elements of process data collection and analysis



BYPAD project and platform

Level 1: *Ad hoc oriented* approach

Level 2: *Isolated* approach

Level 3: *System orientated* approach

Level 4: *Integrated* approach

Tailored cycling policies for different city typologies

Starting Cycling Cities

Climber Cycling Cities

Champion Cycling Cities



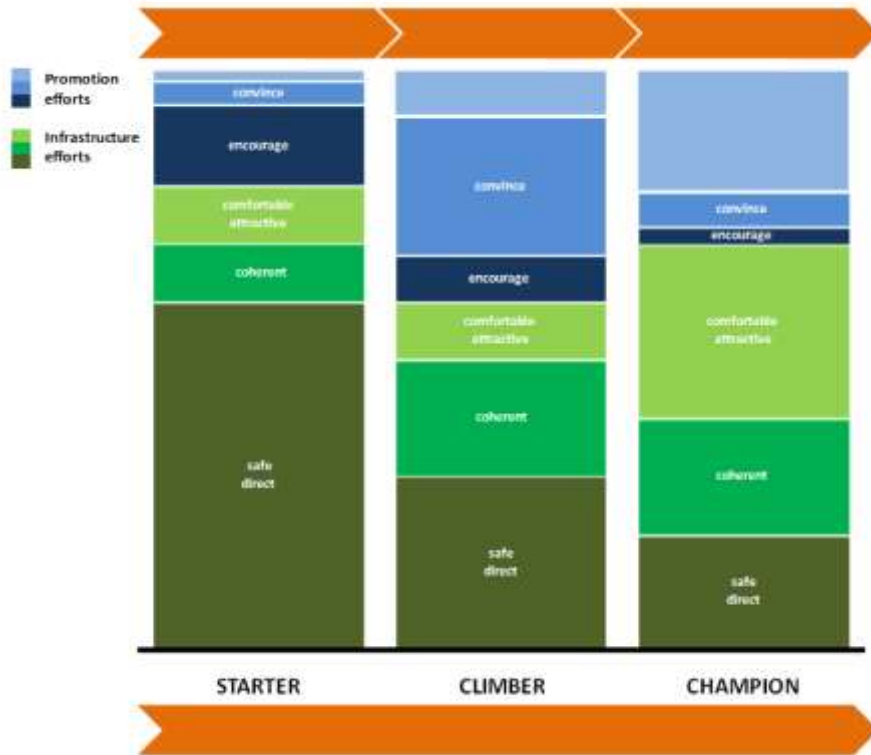
Planning and policy processes and elements of process data collection and analysis



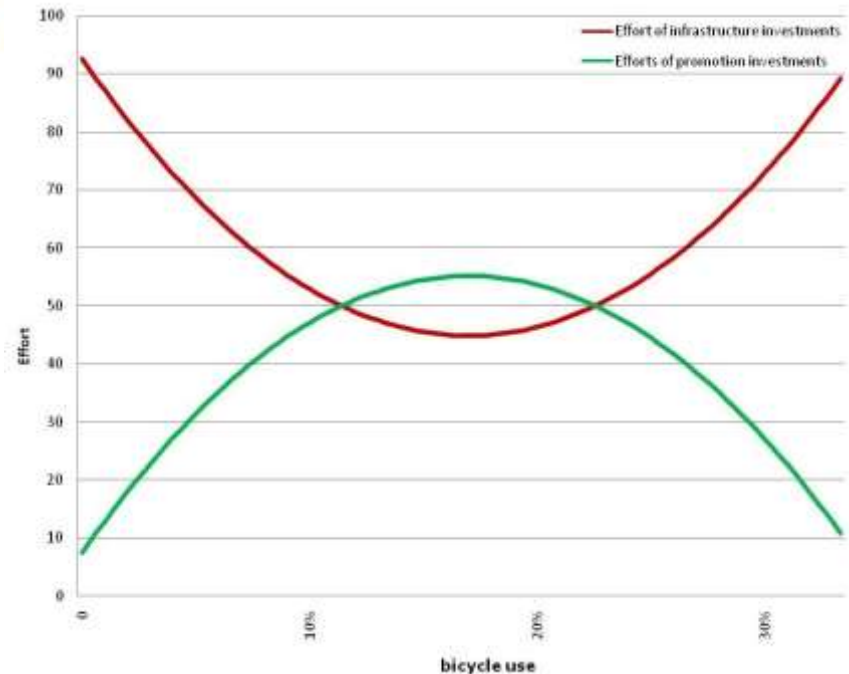
PRESTO and BYPAD project: same approach

Promotion or Infrastructure effort? Depends on the city typology!

PRESTO



BYPAD



Planning and policy processes and elements of process data collection and analysis



PRESTO project: data use

Different data use according to the city typology

- **Starter** cities should use data to map the current situation, e.g. measure the cycling rate
- **Climber** and **Champion** cities should use it to constantly monitor the cycling conditions in order to improve them /maintain high number of cyclists.

Like in SUMP, **data gathering** and **evaluation** are intended as a dynamic and cyclical process which never comes to an end



Open questions



1. Findings about successful PSS application: are the mentioned key elements actually needed to realise helpful tools for decision makers in order to set a local cycling and walking policy?
2. Supportive role of data for decision making process: how data (and specifically tracking) should be collected and used to effectively support the planning (cycle) process?
3. Relevance of the contexts in terms of local needs (City typology): how the local situations really affects and changes the planning approach?



Contact Information



Giacomo Lozzi

glozzi@polisnetwork.eu

Phone: +32 2 5005686

Daniela Stoycheva

dstoycheva@polisnetwork.eu

Phone: +32 2 5005679



THANK YOU!



For further information contact the project coordinator at INESC ID:
Paulo Ferreira, Phone: **+351 21 3100230**, Email: **paulo.ferreira@inesc-id.pt**