

**2nd CONDUITS Technical and City Pool Workshop
Paris 23-24th March 2011**

SUNSET Overview

**Dr Susan Grant-Muller, Institute for Transport Studies, University of Leeds
s.m.grant-muller@its.leeds.ac.uk**

SUNSET Overview



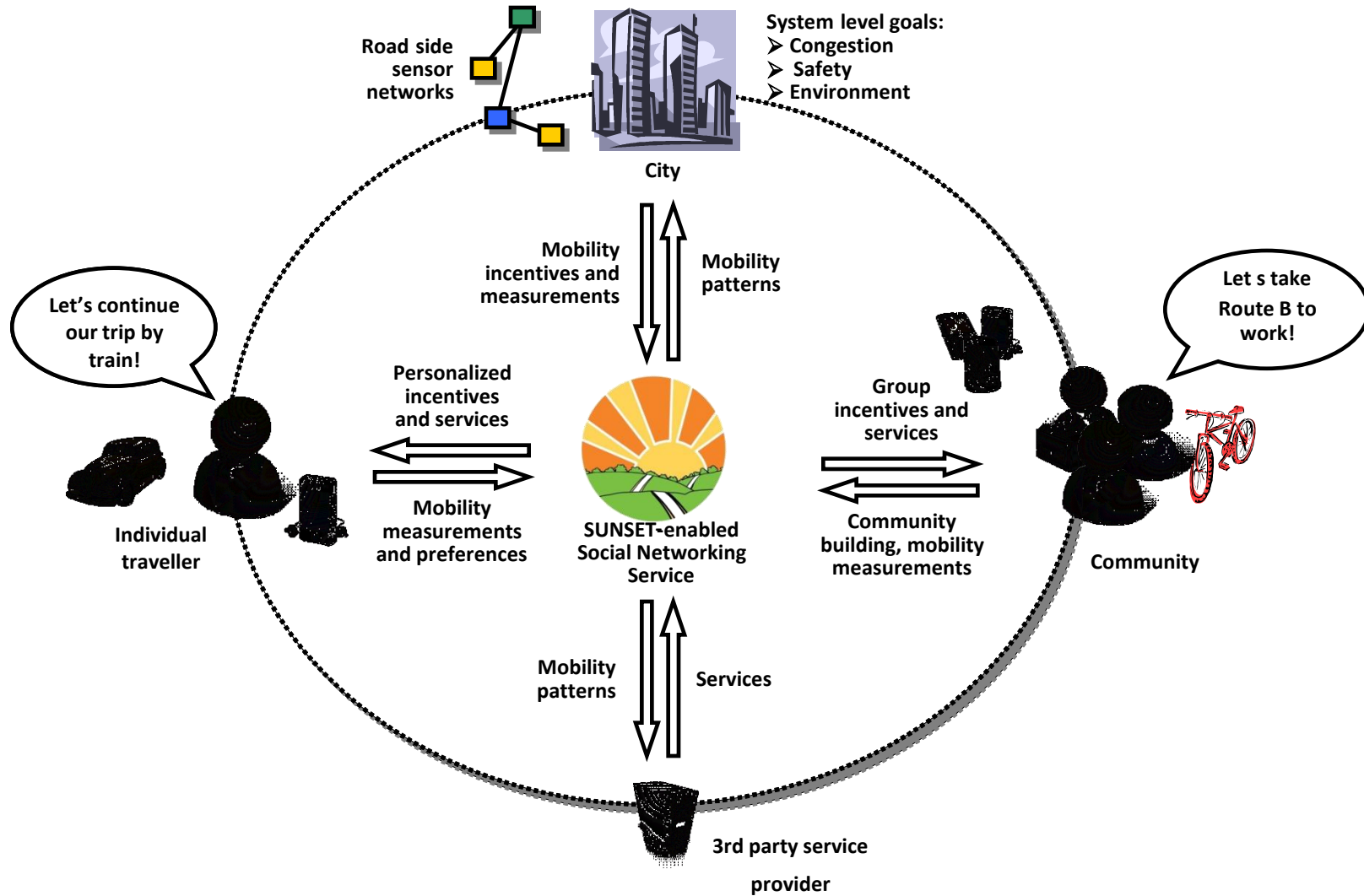
SUNSET
Sustainable Social Network Services
for Transport



© 2011-2014 SUNSET Consortium

The research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 270228. The project's website is at www.sunset-project.eu.

SUNSET intelligent eco-system





WP1: Scenarios and Requirements
Leader: **Stefan** Poslad (QMUL)



WP2: Personal Monitoring Infrastructure
Leader: **Johan** Koolwaaij (NOVAY)



WP3: Incentive Services and Goal Management
Leader: **Eric** van Berkum (UTWENTE)



WP4: SUNSET Mobile Application
Leader: **Marko** Luther (DOCOMO)



WP5: Smart Urban Mobility Services
Leader: **Arjan** Peddemors (NOVAY)



WP6: Evaluation Methodology
Leader: **Susan** Grant-Muller (UNIVLEEDS)



WP7: Living Lab Operation and Experimental Evaluation
Leader: **Vera** Dethmers (ENSCHEDÉ)



WP8: Dissemination, Exploitation, and Standardization
Leader: **Cristian** Hesselman (NOVAY)

European Commission
Officer: **Mr. Stefanos Gouvas**

Information Society and
Media DG

Behavioural change and incentives



- Allows cities to manage city-wide sustainability goals (“system goals”) by influencing the travel behaviour of their citizens at the personal level, creating a **balance between system-level and personal mobility goals**.
- **Incentives to be explored**: ‘personal performance indicator’ through to ‘reward points’ through to ‘travel related monetary incentives’
- Personalised: SUNSET aim to coach travellers - **rewards and incentives** for sustainable travel behaviour rather than restrictions and penalties for non-sustainable behaviour.

Business model



Alternative business model to current infrastructure schemes (largely based on Cities, govt, some PPP to provide funding for transport improvements)

- Provision of information (sensors, databases) – Cities, highways authorities, third parties
- Provision of transport related incentives – Cities, transport operators, employers
- Provision of 'rewards' – third parties, local business, employers



Individuals finance their own 'infrastructure element', but system relies on opting-in

Development of business case dependent on evaluation of scheme costs and benefits....

Risks and uncertainties in Evaluating ITS systems



- Some **indicators** difficult to define or translate into measurable characteristics
- System may be defined without **access to key data** or proxies/surrogates
- Difficulties in establishing the '**do nothing**' case for the indicators
- Establishing ideal **evaluation period** – short run vs long run
- Defining **geographic scope** over which benefits/performance can be measured
- Understanding the nature of **secondary impacts** (eg pollution exposure and health impacts), unintended consequences (eg personal security risks rather than benefits) and feedback loops (eg rebound)
- Assessing the full set of **system costs** alongside the benefits
- Appropriate level of data to build the **business case**

Project-level Innovations



- Social services (applications) that motivate people to travel more sustainably in urban areas
- Intelligent distribution of incentives (rewards) to balance system and personal goals
- Algorithms for calculating personal mobility patterns using info from mobile and infrastructure sensors
- Evaluation methodologies and impact analysis based on living lab evaluations

Will you participate in SUNSET understanding of external perceptions?

- Potential to achieve transport objectives
- Potential to achieve wider societal objectives (inc liveable cities, accessibility, others)
- Practically (operationally) feasible
- Financially feasibility

To connect the handset:

Press 'ON button' (flashing arrows)

Type in channel number (21) (green tick, disappears)

Potential to achieve transport objectives

1=very low

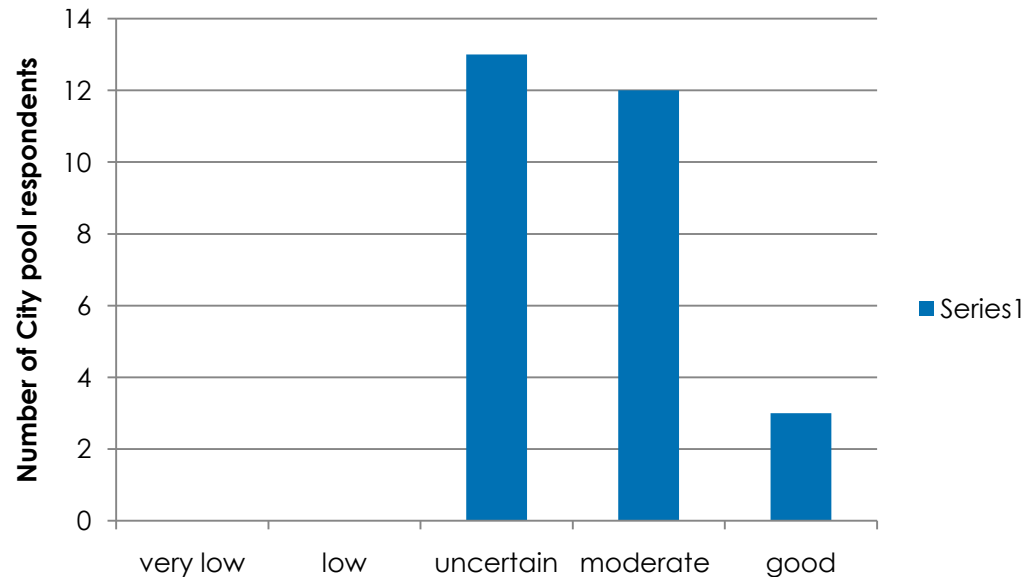
2=low

3=uncertain

4= moderate

5= good

SUNSET Potential to achieve transport objectives



Potential to achieve wider societal objectives (inc liveable cities, accessibility, others)

1=very low

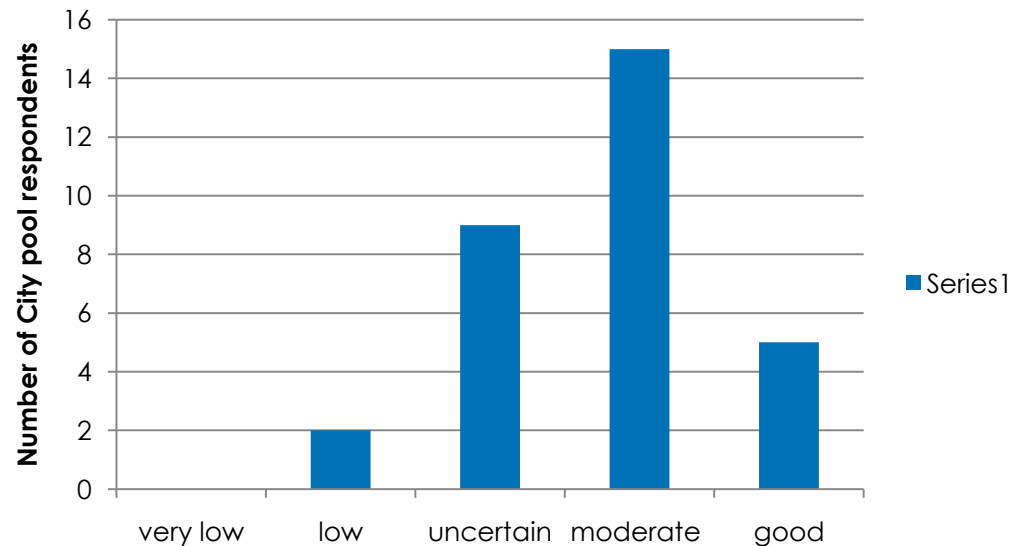
2=low

3=uncertain

4= moderate

5= good

SUNSET potential to achieve wider societal objectives



Perceptions



Practical/operational feasibility

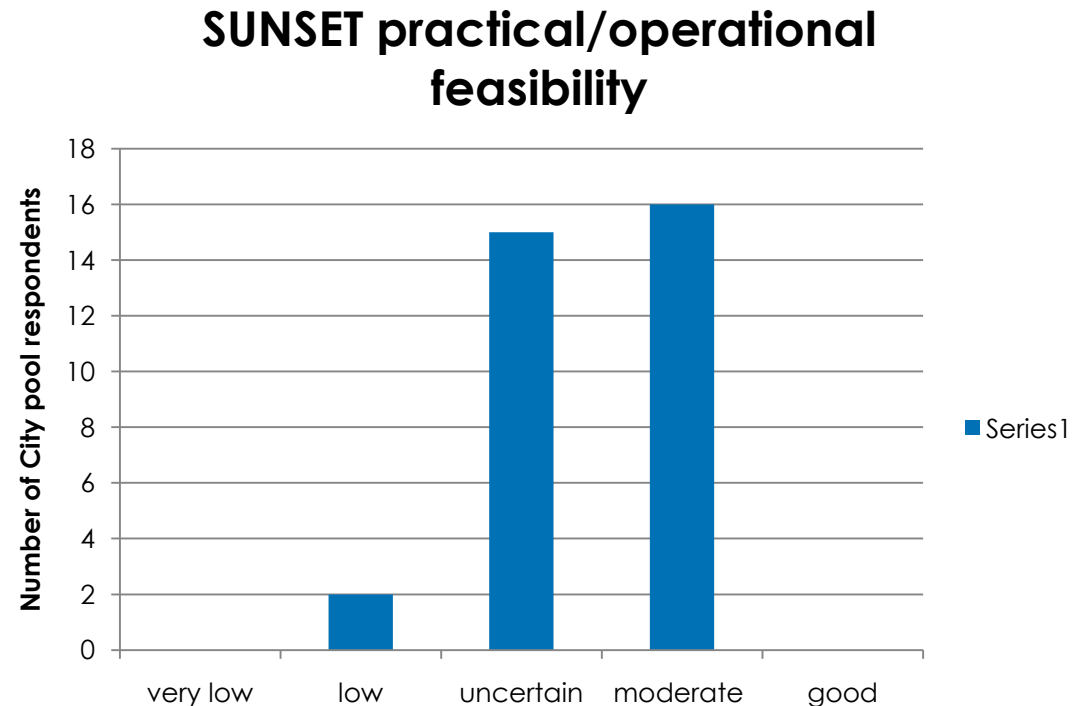
1=very low

2=low

3=uncertain

4= moderate

5= good



Potentially financial feasibility

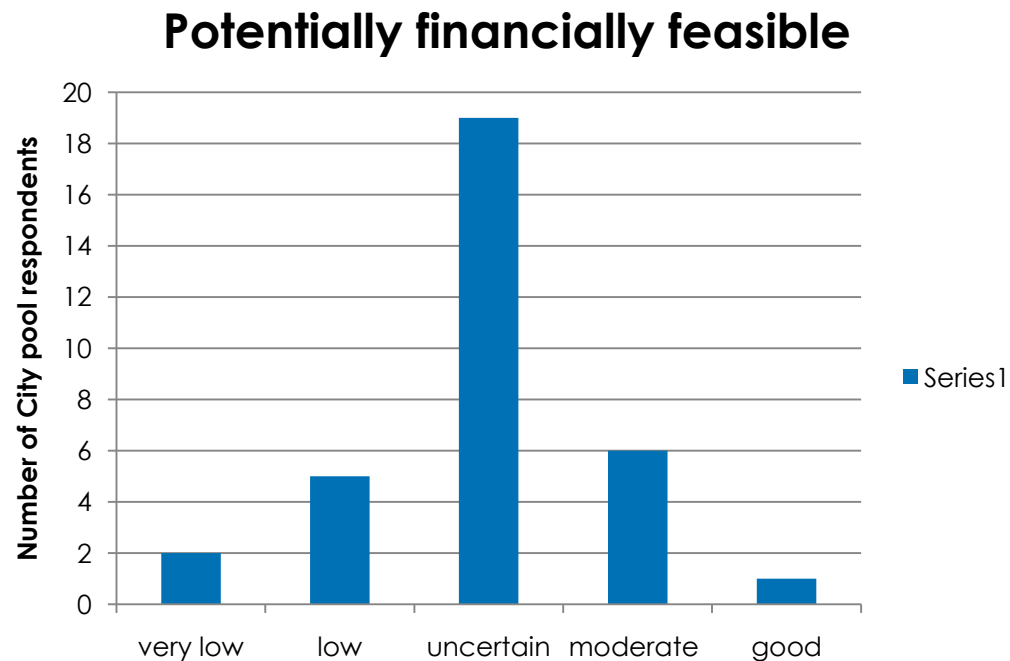
1=very low

2=low

3=uncertain

4= moderate

5= good



Perceptions



Thank you!!

s.m.grant-muller@its.leeds.ac.uk

