



Physical Activity through Sustainable Transport Approaches (PASTA)

An interdisciplinary attempt to comprehensively understand active travel and physical activity

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On behalf of the PASTA consortium



PHYSICAL ACTIVITY THROUGH
SUSTAINABLE TRANSPORT APPROACHES

Outline

- The PASTA project: overview
- Conceptual framework for Active Travel (AT) and Physical Activity (PA)
- Survey design and content
- Survey performance, first results
- Lessons learnt so far, next steps





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The PASTA Project: Background and Motivation

Policy challenge:

- Levels of physical activity should be increased
- Active travel promising approach for increasing routine physical activity
- Improved evidence on effects of AT measures
- Better collaboration public health and transport planning, exploitation of synergies in policy making

Research challenge:

- Relationship AT – PA, determinants AT
- Empirical basis Health Impact Models (HIM): crash risks, air pollution
- Advancement HIM





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The PASTA Project: Goals

Enhance knowledge on

- Relationship AT – PA
- Determinants AT
- Effects of AT (crash risks, air pollution)
- Effectiveness of AT measures

Advance Health Impact Assessment Models

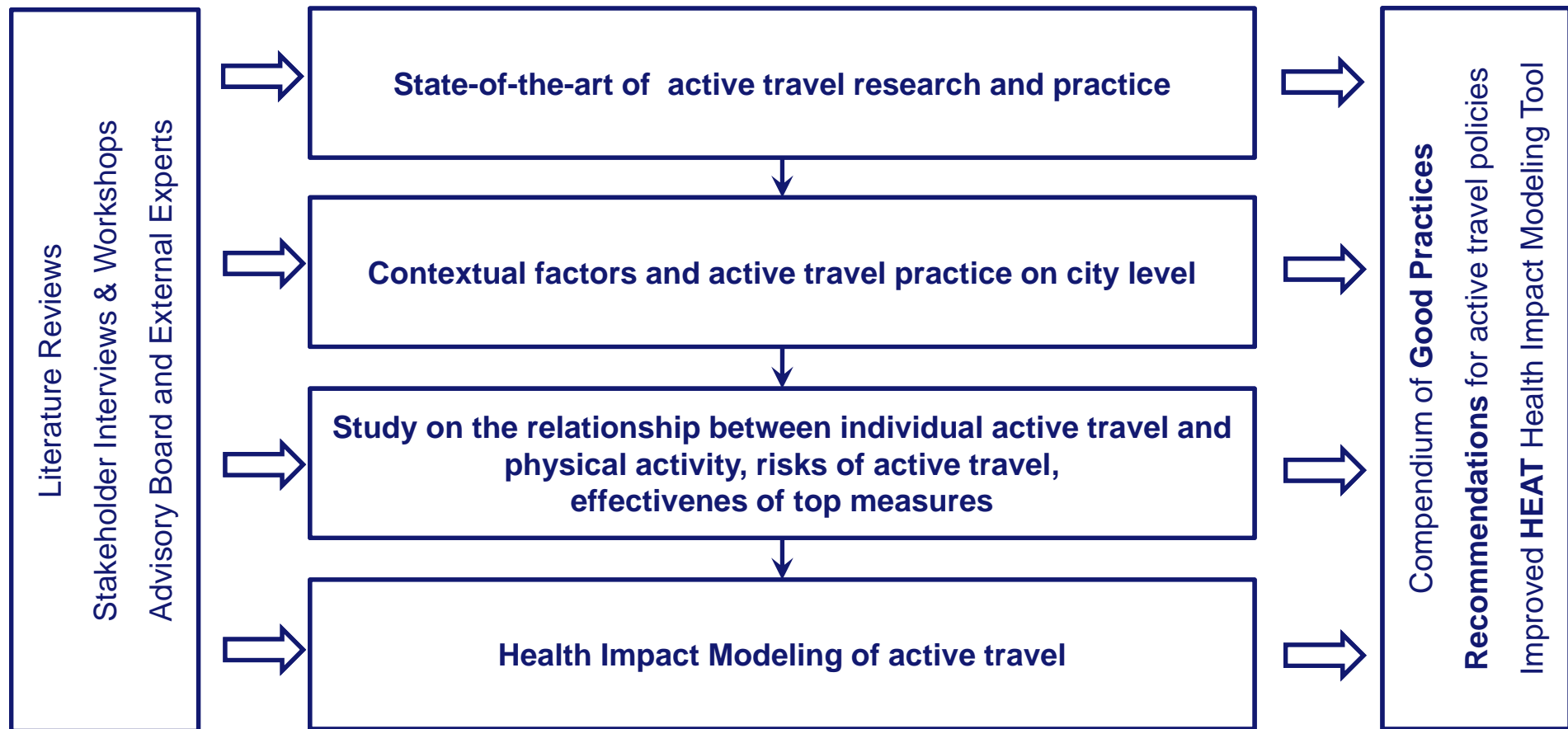
Foster the exchange between

- the disciplines of public health and transport planning
- research and practice

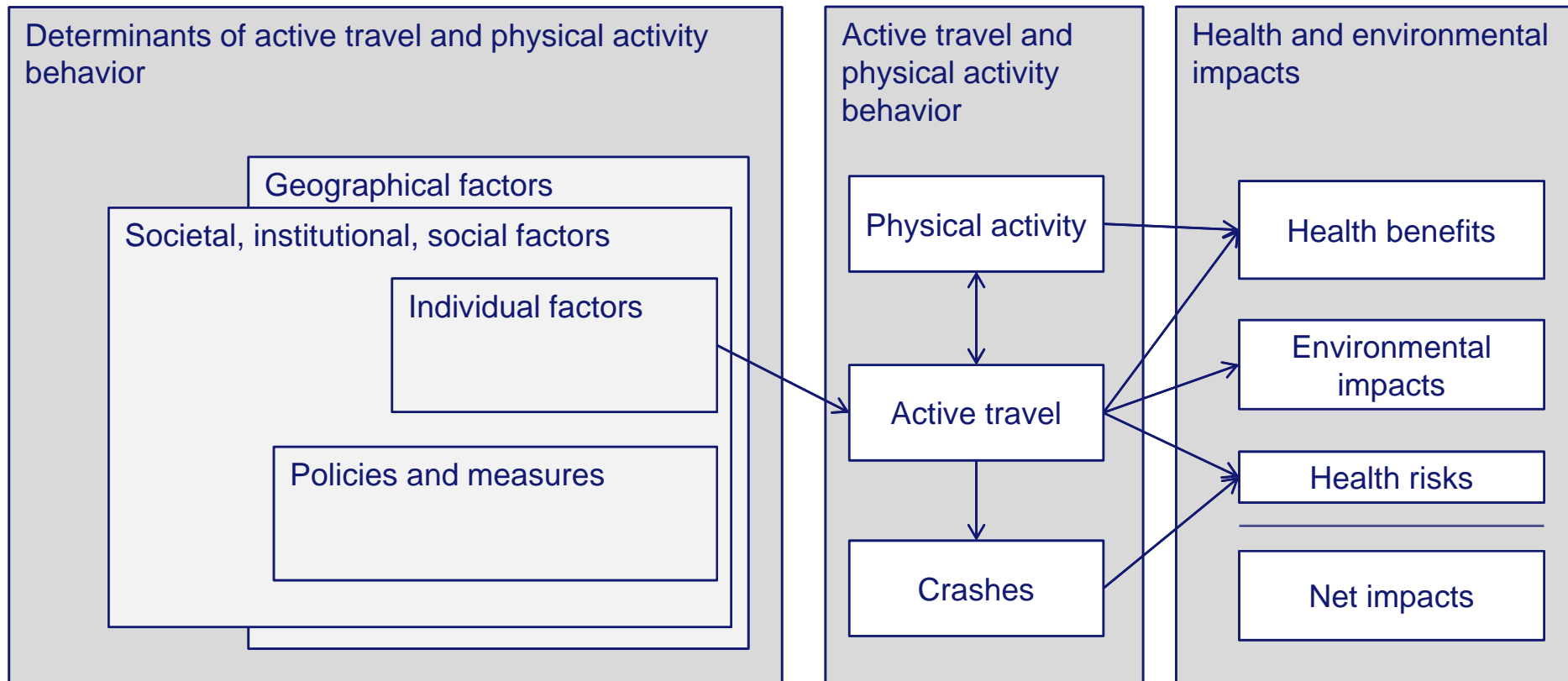




The PASTA Approach



Conceptual Framework Active Travel - Physical Activity

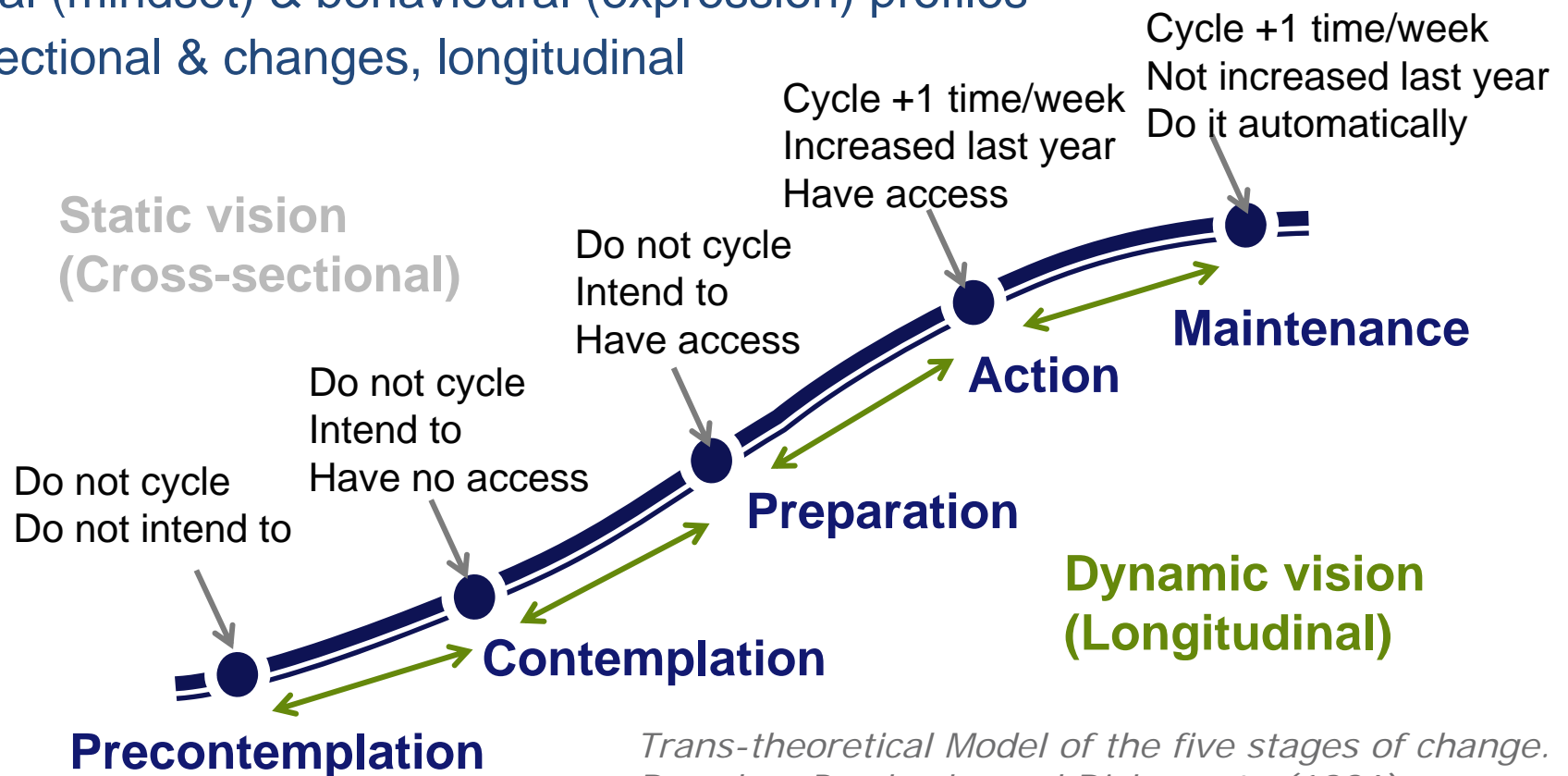




Conceptual Framework Evaluation Measures: Stages of Change

Survey content:

- Attitudinal (mindset) & behavioural (expression) profiles
- Cross-sectional & changes, longitudinal



*Trans-theoretical Model of the five stages of change.
Based on Prochaska and Diclemente (1986)*



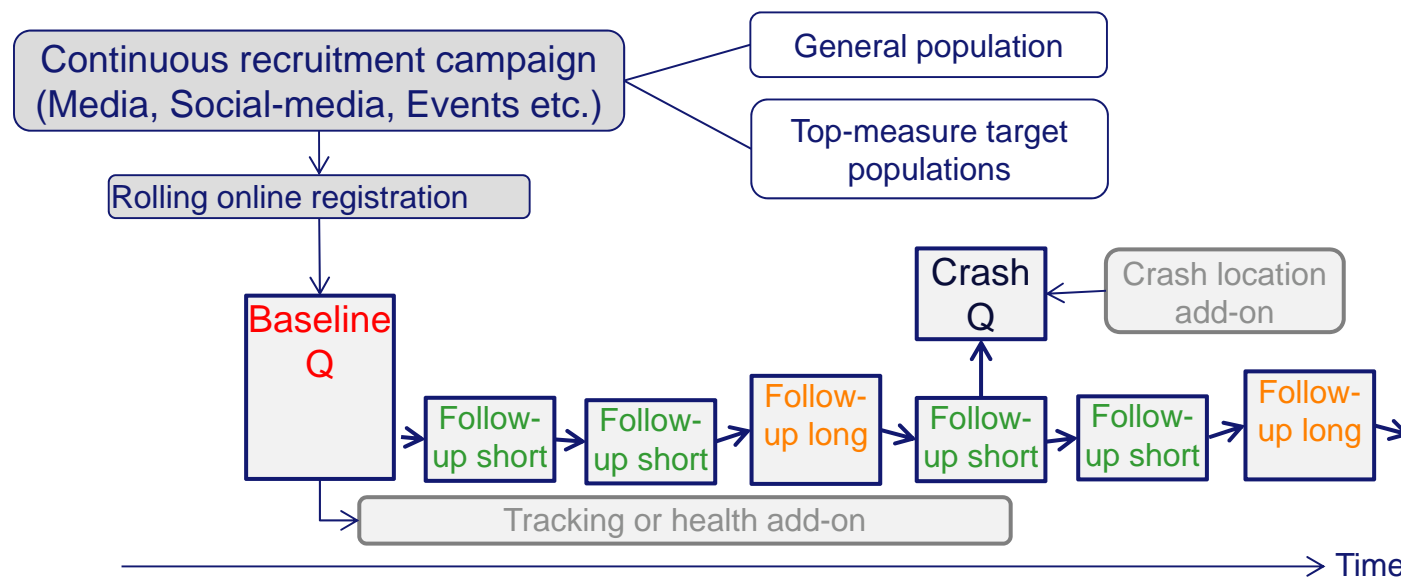
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The seven case-study cities

1. Vienna
2. Zurich
3. Antwerp
4. Barcelona
5. Örebro
6. Rome
7. London Borough of Newham



Survey Design and Contents





Baseline Questionnaire

Page 1 to 12	Registration: Age, gender, city General travel, availability mobility tools, habit, attitudes, intention AT
Page 13	Single item physical activity
Page 14, 15	Location home, work/school, employment status
Page 16, 17	Travel diary
Page 18 to 22	Modified GPAQ physical activity: At work, travel to and from places, recreational activities, sedentary behaviour
Page 23 to 26	Health: Height, weight; health, smoke, alcohol, suffer from health issues
Page 27 to 33	Attitudes, norms, barriers, intention
Page 34 to 37	Household size, nationality, education, income
Page 38	City-specific questions
Page 39	End; invitation for add-ons





Evaluation Design for the interventions

Questionnaire:

- Before
- After: awareness and use of intervention

Measurements:

- Before & after: available cyclist counts, bikeability evaluation, internal evaluation (air pollution concentration, time gain, traffic safety...)

Qualitative complement (a sub-sample of in-depth interviews):

- Detection of possible confounders: other interventions (constant review and mapping), other life events, ?
- In-depth exploration of change/non-change attitudes





Study Design

Impact:

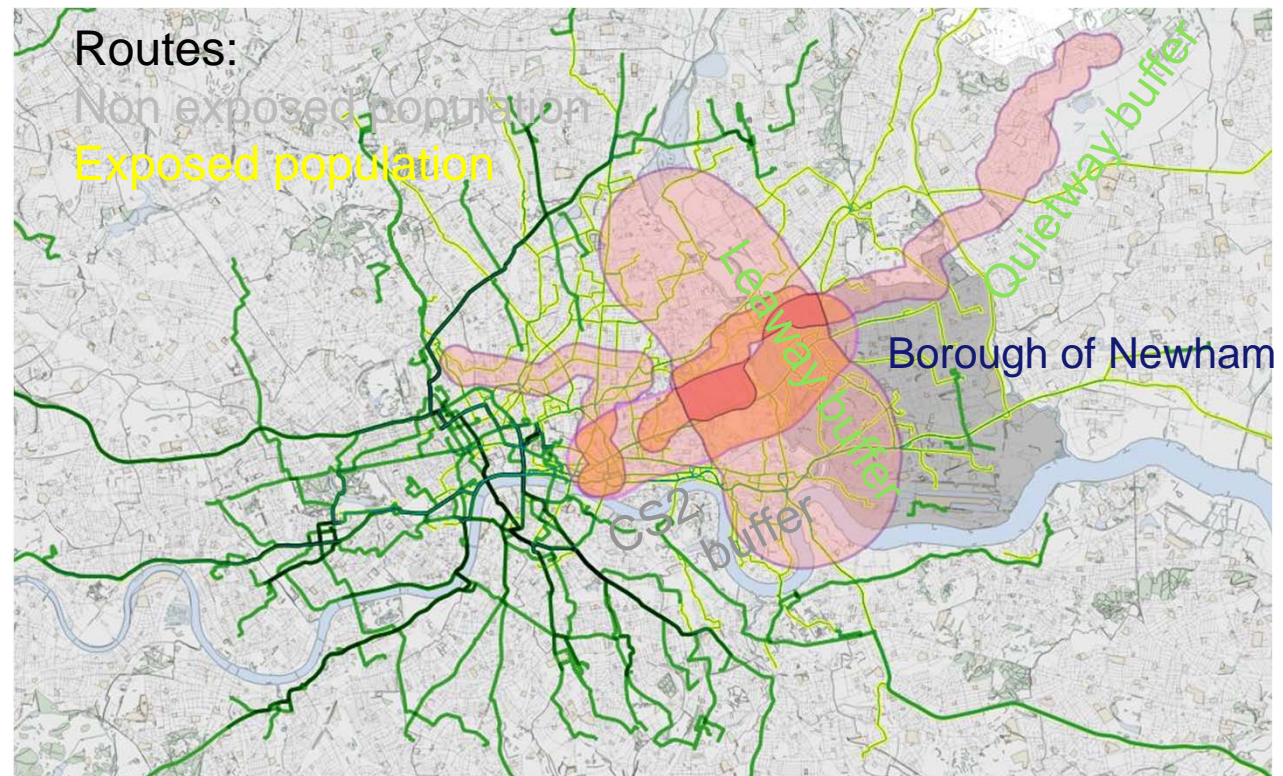
- Impact interventions in attitudes and behaviour of the population towards AT

Exposure:

- Proximity buffers to route

Dose-response:

- Impact assessment framework of policy measures depending on the levels of exposure of the population to these interventions



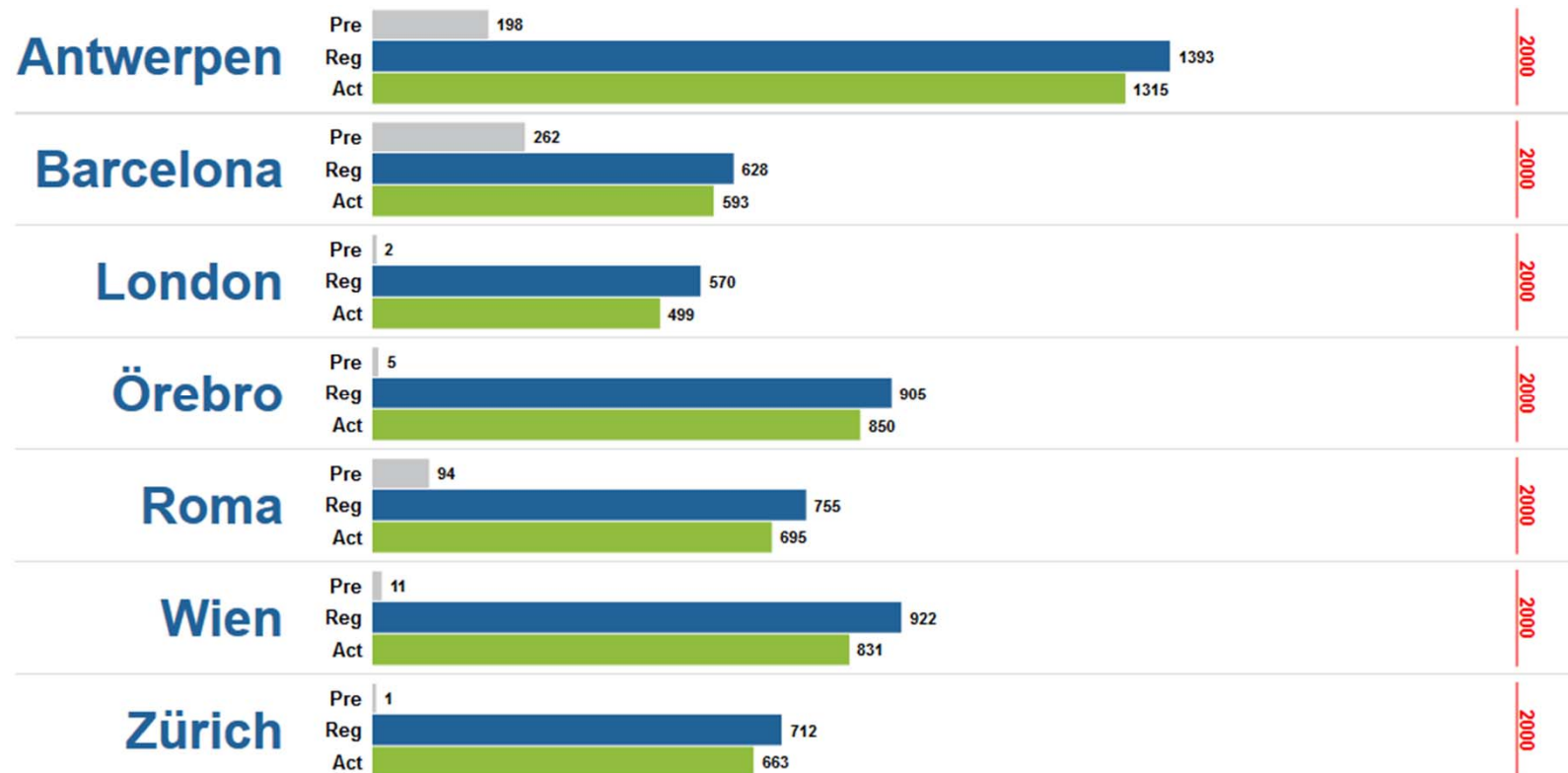


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Recruitment so far (6months of 2 years in total)

-6 months in (total of 24)

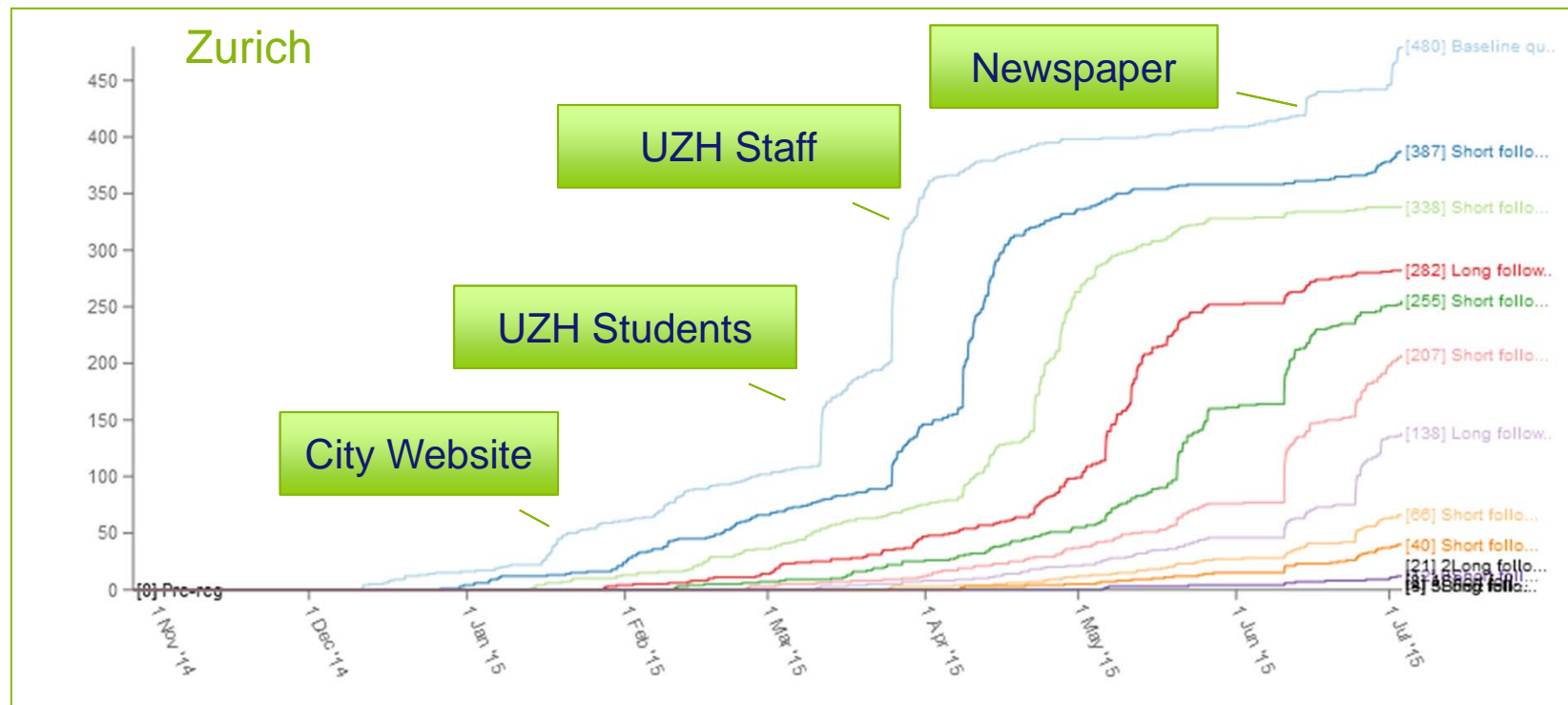
-5000+ participants (Goal 14'000)





Managing, tracking rolling, opportunistic recruitment

Dashboard showing recruitment progress in each city

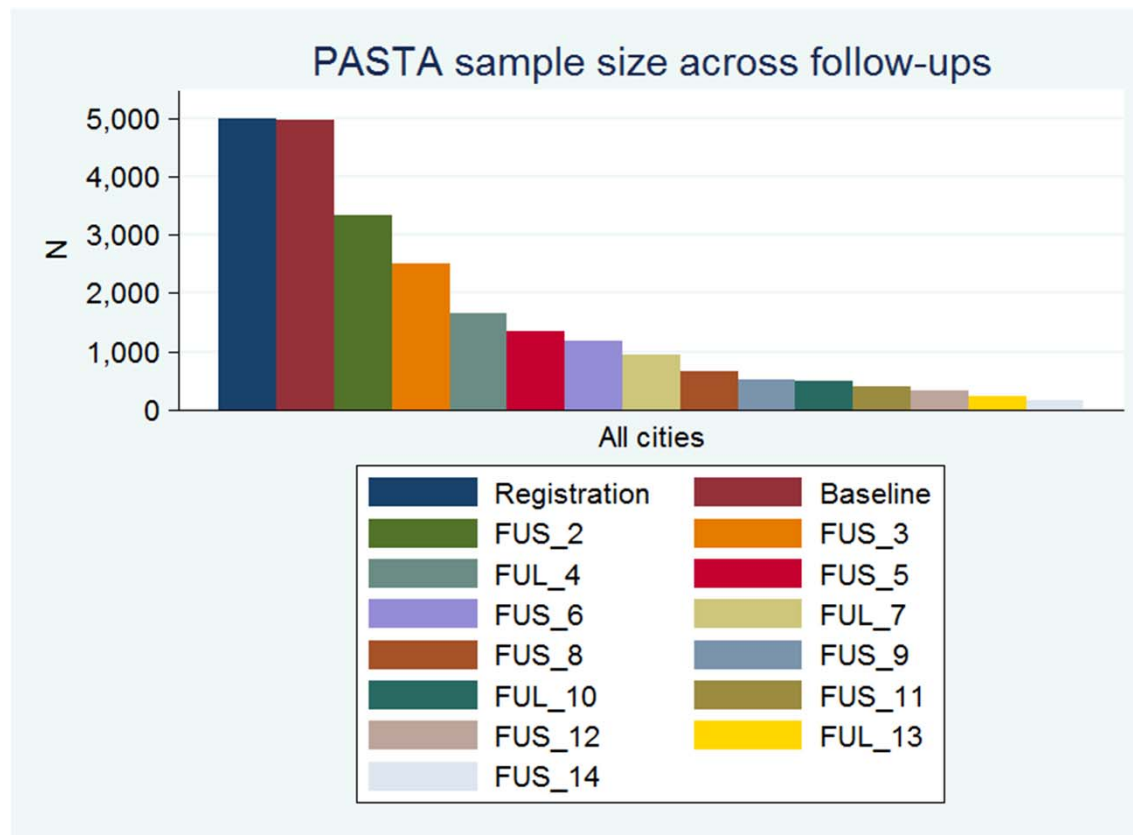


BLQ
FU1
FU2
FU3
Etc.





Loss in participants from questionnaire to questionnaire





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Lessons learnt so far: survey design

Challenges in merging empirical traditions public health & transport research:

Public health:

- Interested in duration, minimum of 10 minutes duration, compatibility of survey instruments with existing instruments required, less interest in data on motorized modes

Transport research:

- Interested in duration, number of trips, distance, more trust in diaries than in questions about the frequency of activities/trips, less interest in PA

Consensus:

- Location and contextual factors important, necessity for interdisciplinary conceptual framework

Consequence:

- Long questionnaire, some redundancy



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Lessons learnt so far: Achievements

Successful transdisciplinary approach:

- High interest of local stakeholder from public health and transport planning in collaborating but institutional structures not supportive

Successfully addressing research needs:

- Longitudinal analysis
- Comparable methods in different cities and cultural contexts
- Innovative online-survey design, including validation (tracking) and add-ons (air pollution, crashes)
- Information collected about AT and PA
- Successful recruitment and promising participation rates



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This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 602824-2

