

# POLIS

CITIES AND REGIONS FOR TRANSPORT INNOVATION

ANNUAL  
CONFERENCE  
**2024**

27-28 NOVEMBER 2024

KARLSRUHE (DE)



Baden-Württemberg  
Ministry of Transport



Karlsruhe





# health cities

**89%** of health occurs **outside of the clinical space** through our genetics, behaviour, environment and social circumstances.

Having **access to a green space** within 500m, **triples physical activity** levels, reduces **depression** by 25% and **asthma** by up to 30%.





We understand  
urban planning  health  
as two closely related concepts

Health as a  
planning tool



Cities as a tool for  
health

# About us

We aim to unlock the full potential of the relationship between health and cities.



lab

Research and capacity-building for healthy urban planning

Research, innovation  
Methodologies  
Guidelines  
Training  
Awareness raising  
Capacity building



action

Implementing knowledge through action

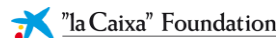
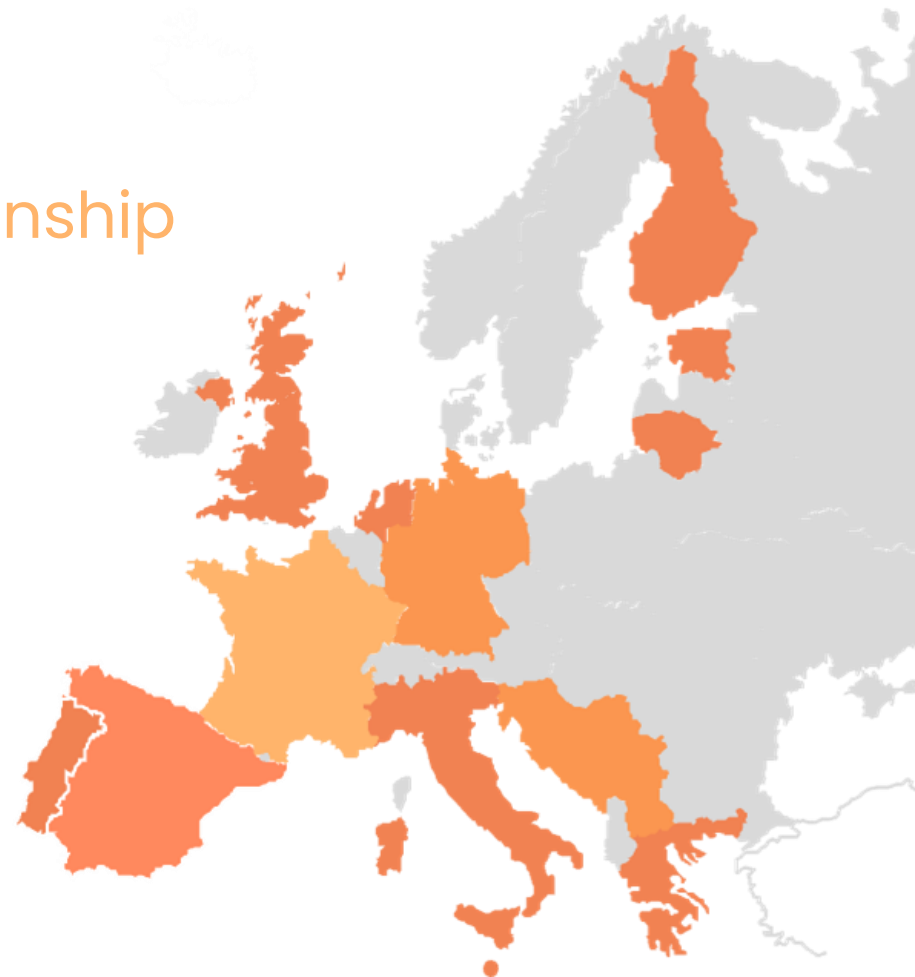
Knowledge to action  
Strategic planning and assessments  
Urban projects  
Urban health strategies  
Active prescribing



tool

Supporting practitioners and decision-makers

Develop, maintain, update the Healthy Cities tool  
Topic-specific modules  
Synergies with other tools







# Healthy Cities lab

Advancing research and  
capacity-building for  
healthy urban planning.

# HORUS: Urban Health

## Tackling NCD risk behaviours in urban areas with vulnerable populations

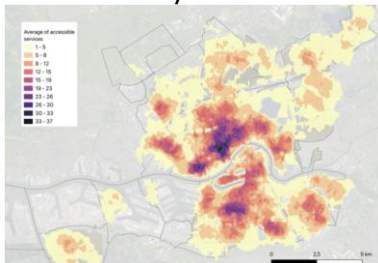
Identifying and measuring the association between urban environment features and NCDs in Rotterdam, Rijeka and Valencia

In-depth stakeholder engagement to explore the causal behavioural links between urban environments and vulnerable populations lifestyle

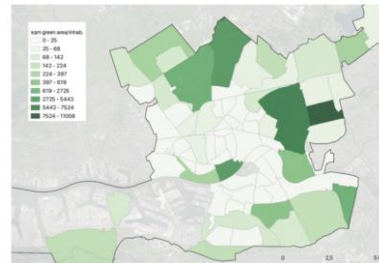
Population density



Connectivity



Green area/inhabitant



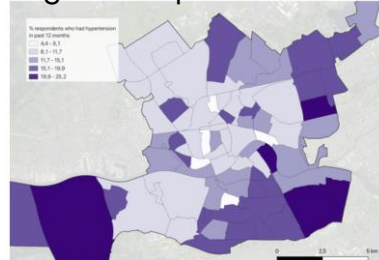
Overweight



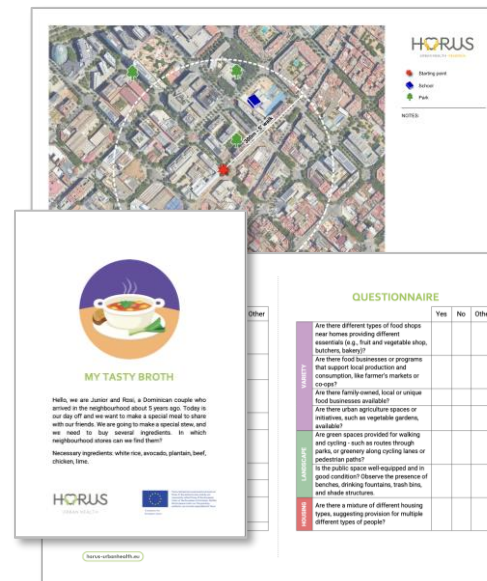
Diabetes



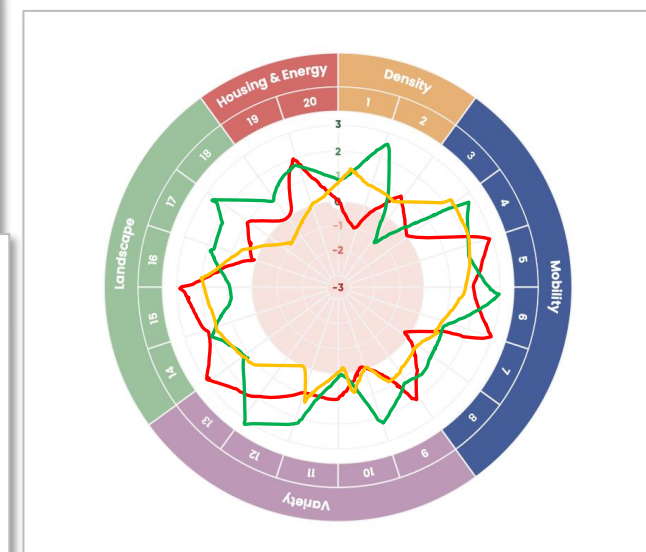
High blood pressure



19 urban context variables > 15 risk factors + health outcomes



6 Focus Groups + 30 interviews per city



# Integrating health into mobility planning

## A practical guide for integrating health considerations into SUMP



### **Based on scientific evidence**

Expanding on existing HCG methodology and research, to focus on mobility + stakeholder consultation



26 Urban Mobility  
Determinants of Health linked to  
22 health outcomes



### **Systematic approach to integrating health in SUMP**

In all stages of planning: diagnosis, proposal & monitoring



Tools and examples to  
support practitioners & decision-  
makers



### **Catalogue of actions to boost health**

In 5 key areas: walkability, cyclability, public transport, traffic and urban environment



Link to health  
Checklist & infographic



# Integrating health into mobility planning



## Guia pràctica de m

Estratègies per incorporar la perse  
Plans de Mobilitat Urbana Sostenible

Gener 2024



### Ca.8 Promoció i creació de rutes segures que connectin punts estratègics (equipaments, centralitats) i assegurin la connectivitat capil·lar (amb diferents barris)

- Ca.8.1. Promoure i senyalitzar de rutes segures per caminar a les escoles
- Ca.8.2. Promoure i senyalitzar rutes saludables en relació amb els espais oberts i parcs de l'entorn

#### Impacte en salut

Estils de vida: Activitat física

Física: Sobrepès, Obesitat

Bienestar: Felicitat

#### Ex. 4: Metrominut

El metrominut és un plànol centrat en la mobilitat a peu. Amb una representació simple, similar als plànols de transport públic, assenyalen els recorreguts principals, les distàncies i el temps aproximat de desplaçament. Normalment, destaca fites importants de l'entorn com llocs d'interès, equipaments, nodes de transport públic, parcs, etc. És una bona manera de fomentar els desplaçaments a peu.

#### UTRECHT Walking Time

Meters & minutes to your destination

WHO Healthy Cities Congress edition



Font: Utrecht Walking time - City Deal Space for Walking, City of Utrecht, 2023

Hi ha molts exemples de ciutats que han desenvolupat mapes d'aquest tipus (Pontevedra, Àguilas, Cádiz, Vitoria i Gasteiz, Sant Quirze del Vallès, Mòdena, Poznan, Toulouse...). Aquí es mostra un exemple de la ciutat holandesa Utrecht, on es categoritzen les rutes segons el tipus: històric, natura, aigua, comercial o neutral.

### Objectiu 2: Promoure la mobilitat en bicicleta

#### Ci.1 Proporcio i longitud de carrils bici segregats (presència de carrils bici en el 50% o més de la xarxa de carreteres)

- Ci.1.1. Assegurar la presència de carrils bici en el 50% o més de la xarxa de carrers

#### Impacte en salut

Estils de vida: Activitat física, Sedentarisme

Física: Sobrepès, Obesitat, Mortalitat prematura, Salut en néixer, Malalties cardiovasculars

Mental: Salut mental general

#### Ci.2 Qualitat i manteniment dels carrils bici

- Ci.2.1. Garantir la qualitat i el bon manteniment dels carrils bici

Assegurar un bon manteniment per garantir condicions adequades de seguretat.

#### Impacte en salut

Estils de vida: Activitat física

#### Ci.3 Seguretat dels carrils bici

- Ci.3.1. Dimensionar la xarxa de carrils bici segons les necessitats dels diferents tipus d'ús

Adequar les dimensions i pendent, etc.) a la diversitat de recorregut escolar, circulatori, etc.

#### Impacte en salut

Estils de vida: Activitat física

Física: Sobrepès, Accidents

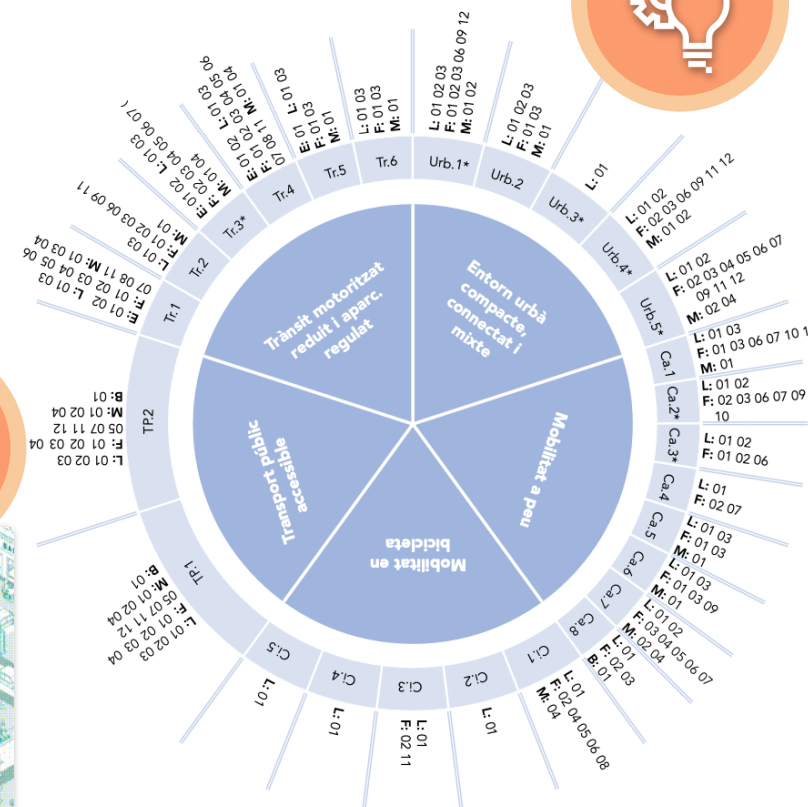
#### Ci.4 Promoció i creació de rutes segures que connectin punts estratègics (equipaments, centralitats) i assegurin la connectivitat capil·lar (amb diferents barris)

- Ci.4.1. Promoure i senyalitzar de rutes segures per caminar a les escoles

- Ci.4.2. Promoure i senyalitzar rutes saludables en relació amb els espais oberts i parcs de l'entorn

Assegurar la connexió amb zones industrials, etc. Assegurar la

La mobilitat és clau per la Salut





# Integrating health into mobility planning

## Public transport plays a critical role in healthier mobility:

- Widespread impact on physical and mental health
- Accessibility and availability of public transport for various social groups
- Walking is a significant part of public transport journeys.

Check-list per incorporar la salut en els PMUS (I)

Determinants de la Salut relacionats amb el model de mobilitat			Criteris a complir			Estratègies			Tipus d'actuació			Indicadors clau			Comentaris
			Complet	En curs	No aplic	Canvi de paradigma	Regulació	Acció directa	Regulació	Acció directa	Regulació	Canvi de paradigma	Regulació	Acció directa	
Salut pública	Q1.1	Presència i densitat de parades de viants	Q1.1.1	Augmentar la quantitat de parades de viants											
			Q1.1.2	Protegir els viants en els espais públics											
			Q1.1.3	Evitar els passos en la intersecció dels viants amb els vehicles											
Seguretat	Q2.1	Presència d'espais adequats per a viants	Q2.1.1	Assegurar una fluïdesa adequada dels viants i les zones de viants, especialment de nit											
			Q2.1.2	Per caminants per millorar la seguretat dels viants											
			Q2.1.3	Assegurar l'accessibilitat universal de les zones de viants											
			Q2.1.4	Assegurar la neteja i manteniment dels carrers i zones de viants											
			Q2.1.5	Assegurar la neteja i manteniment dels carrers i zones de viants											
			Q2.1.6	Assegurar la neteja i manteniment dels carrers i zones de viants											
			Q2.1.7	Assegurar la neteja i manteniment dels carrers i zones de viants											
			Q2.1.8	Assegurar la neteja i manteniment dels carrers i zones de viants											
			Q2.1.9	Assegurar la neteja i manteniment dels carrers i zones de viants											
			Q2.1.10	Assegurar la neteja i manteniment dels carrers i zones de viants											
Seguretat	Q3.1	Presència de carrers i zones de viants	Q3.1.1	Assegurar la presència de carrers i zones de viants											
			Q3.1.2	Assegurar la presència de carrers i zones de viants											
			Q3.1.3	Assegurar la presència de carrers i zones de viants											
			Q3.1.4	Assegurar la presència de carrers i zones de viants											
			Q3.1.5	Assegurar la presència de carrers i zones de viants											
			Q3.1.6	Assegurar la presència de carrers i zones de viants											
			Q3.1.7	Assegurar la presència de carrers i zones de viants											
			Q3.1.8	Assegurar la presència de carrers i zones de viants											
			Q3.1.9	Assegurar la presència de carrers i zones de viants											
			Q3.1.10	Assegurar la presència de carrers i zones de viants											



# Healthy Cities action

Turning knowledge into action, bringing practitioners and decision-makers together to unlock the full potential of urban planning and health.



# Urban health strategy for Subirats

## Health analysis

## + Urban analysis: technical data & citizen consultation

Select the health indicators on which you want to have an impact

Select all Clear all Save changes

**Environmental**

**Lifestyle**

Physical activity ☒

Sedentary behavior ☐

Social interaction ☐

Food habits ☐

**Physical**

General physical health ☐

BMI ☐

Obesity ☒

Premature mortality ☐

Birth outcomes ☐

Type 2 diabetes ☒

Cardiovascular diseases ☒

Asthma and respiratory diseases ☐

Functional capacity ☐

Accidents and falls ☐

Injuries ☒

Pain ☐

Heat stress ☐

**Mental**

Stress ☐

Anxiety ☒

Depression ☒

Cognitive function ☐

Emotional Wellbeing ☐

Attention deficit ☐

General mental health ☒

**Wellbeing**

Linked Urban Determinants of Health

☒ View percentages %

**Density**

Population density 78%

Business density 87.5%

**Connectivity**

Street connectivity 50%

Location connectivity 62.5%

Cyclability 37.5%

Walkability 50%

Public transport 50%

Traffic 62.5%

**Mobility and transport**

Social services 78%

Sport infrastructure 62.5%

Recreational & commercial amenities 78%

Public spaces 78%

Food environment 62.5%

**Mixed use and proximity**

Greening 78%

Blue spaces 50%

Green space diversity 62.5%

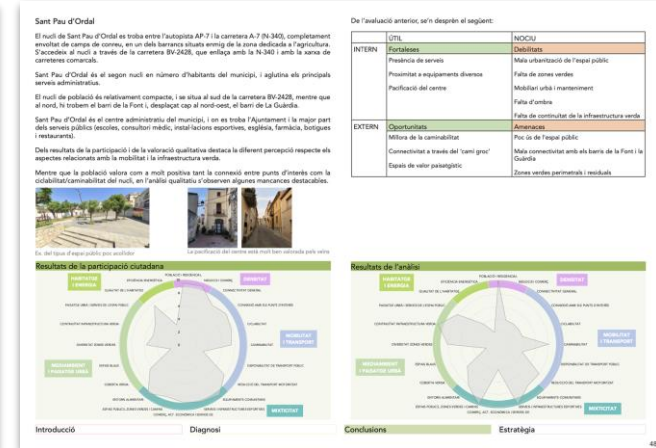
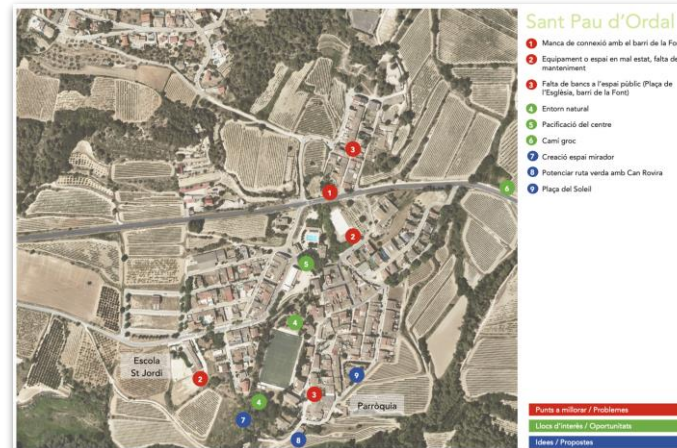
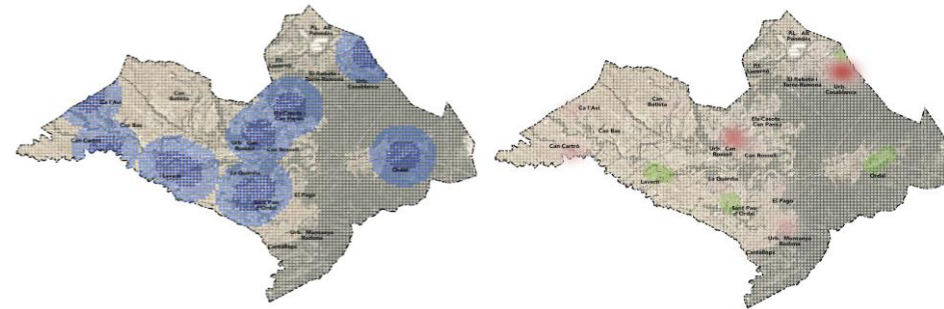
Green space continuity 50%

Urban landscape 37.5%

**Environment and urban landscape**

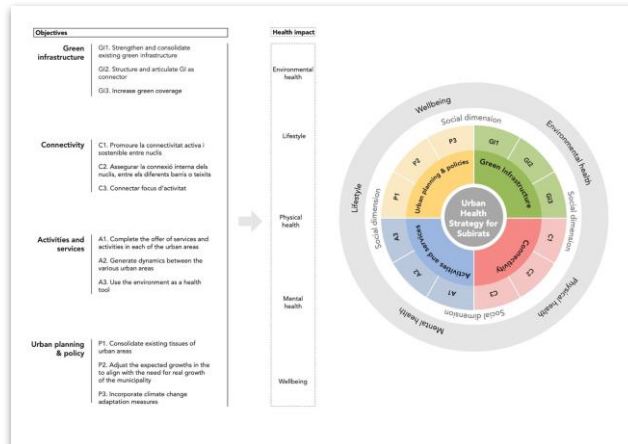
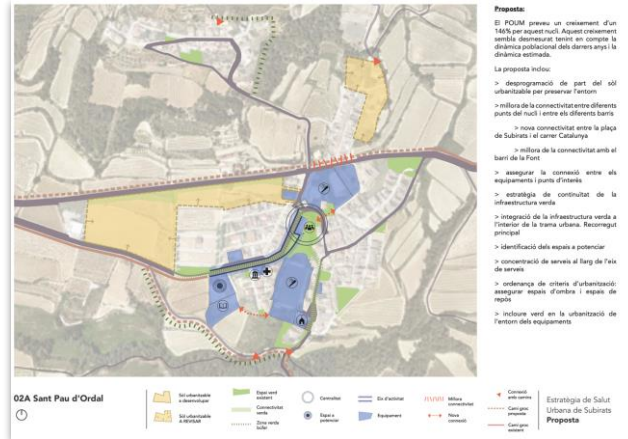
Housing quality 25%

Energy efficiency 12.5%

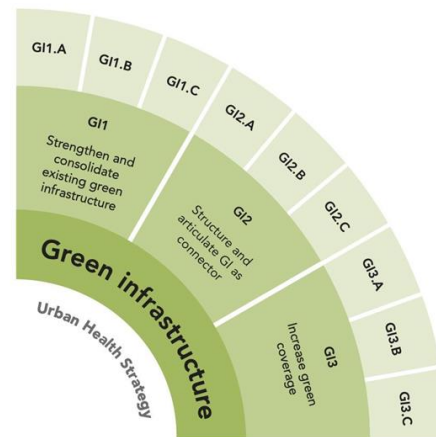


# Urban health strategy for Subirats

## Urban health strategy



## Green infrastructure



## Key

Area	Lead (Ag.)	Timeline (Term)	Instrument (Instr.)
NG: Main towns (Sant Pau, Ordal, Lavern)	LA: Local Authority	Short: 2024 - 2027	Ord: Municipal ordinance for urbanization conditions in public spaces and green areas, and identified green corridors
NP: Small towns	CT: community	Mid: 2027 - 2030	
MU: Municipality	ST: health professionals	Long: beyond 2030	
TN: All towns			PD: Strategic Plan (public space, urban green)
URB: Suburban areas			

Introduction      Diagnosis      Conclusions      Strategy

## GI1 Strengthen and consolidate the existing green infrastructure

### Description

Proximity and access to green areas have a major impact on physical and mental health. It can triple physical activity and even reduce the risk of depression, diabetes and asthma by 30%. Diversity in the typology of green spaces improves the environmental conditions of the environment in terms of biodiversity. In all towns, existing green spaces must be strengthened, in order to ensure the presence and diversity of green elements (trees, bushes, etc.). To consolidate these spaces as nodes of activity and promote their use by the neighbors, they must be equipped with the necessary furniture and ensure good maintenance.

### Actions

	Instr.	Area	Ag.	Term
<b>GI1.A</b> Ensure the presence of green in all areas currently qualified as a 'green spaces'.	Ord	TN	LA	Short
<b>GI1.B</b> Guarantee the typological diversity of green spaces, with vegetation of varying size, structure and location, as well as providing spaces for diversity of uses (children's games, sports practice, meeting place or rest...).	PD espai públic	TN	LA	Short
<b>GI1.C</b> Adapt the furniture and infrastructure of public spaces to ensure optimal accessibility and usability conditions for all groups.	Ord	TN	LA, CT	Mid

### Health impact

Environmental	Lifestyle	Physical health	Mental	Wellbeing
Air quality	Physical activity	General physical health	Stress	Perception of safety
Noise pollution	Sedentary beh.	Asthma and respiratory diseases	Anxiety	Quality of life
Biodiversity	Social interaction	BMI	Depression	Happiness
Heat stress	Food habits	Obesity	Cogn. function	
		Premature mortality	Emotional wellbeing	
		Birth outcomes	Attention deficit	
		Type 2 diabetes	General mental health	
		Cardiovascular diseases		
		Accidents and falls		
		Injuries		
		Pain		



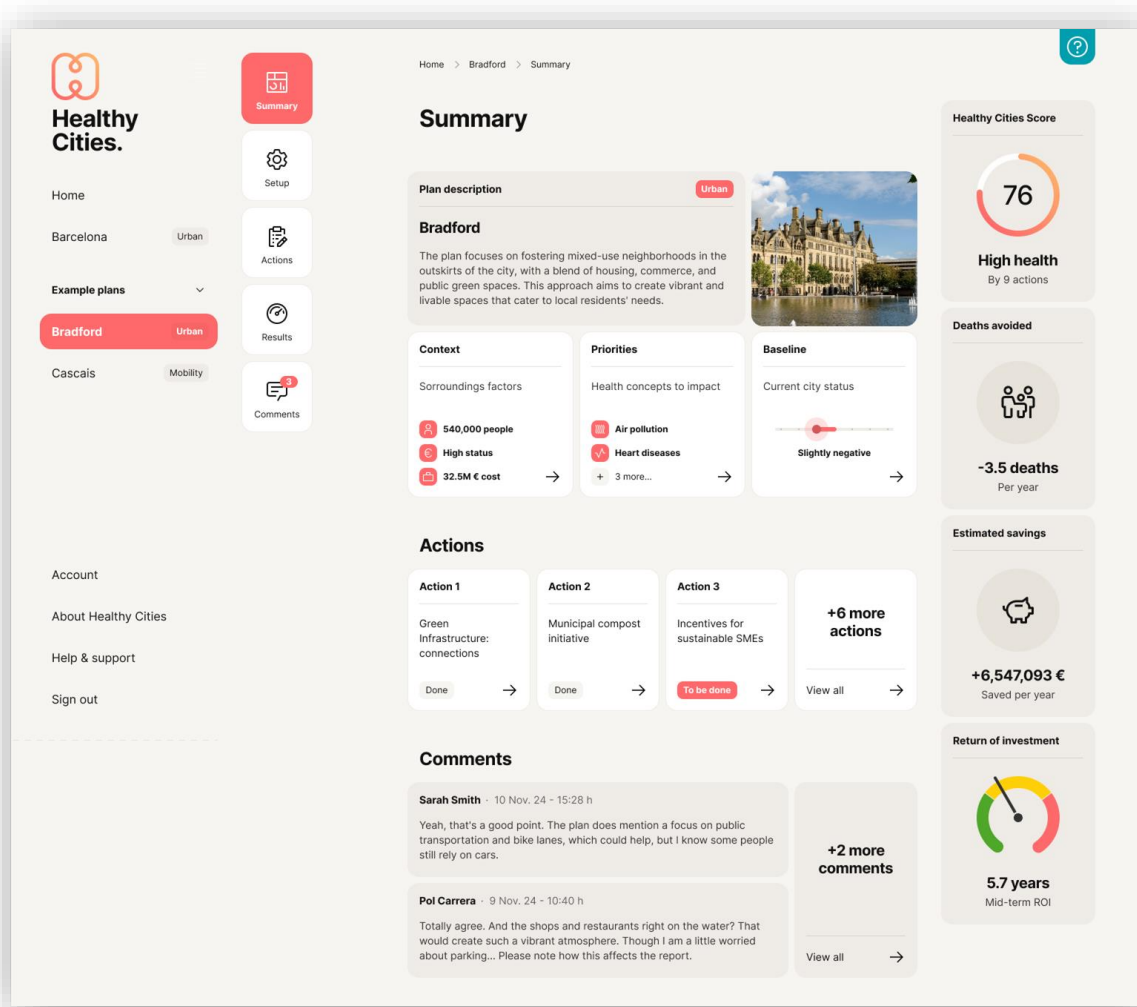


# Healthy Cities tool

A digital tool to show the  
relationship between  
urban development  
&  
health

**Used by 20+ cities boosting  
urban health and wellbeing  
across Europe**

# Healthy Cities tool



- Easy to use
- No complex data required
- Flexible and adaptable to different contexts
- Tailor-made for practitioners and decision-makers to support health-driven urban interventions.



Urban planners



Health professionals



Decision makers



Citizens



Governments




Innovation



# Healthy Cities tool

1

Assess your baseline and identify urban priorities to meet your health goals

**Healthy Cities.**

Home

Cascais Municip... Urban

Santo António Va... Urban

**Bradford** Urban

Example plans

Green heart urban

Account

About Healthy Cities

Summary

Setup

Context

**Priorities**

Baseline

Actions

Results

Comments

Home > Bradford > Setup > Priorities

## Priorities

Which health indicators do you want to address?

See more about health indicators ⓘ

**Environment**

☒ Air pollution

☐ Noise pollution

☒ Biodiversity

**Lifestyle**

☒ Physical activity

☒ Sedentary habits

☒ Social interaction

☒ Food habits

**Physical health**

☒ Perceived health

☐ Body mass index

☒ Obesity

☐ Premature mortality

☒ Birth outcomes

☐ Type2diabetes

☒ Cardiovascular dise...

☒ Respiratory disease

☐ Functional capacity

☐ Accidents and falls

☐ Traffic injuries

☐ Pain

☐ Heat stress

**Mental health**

**What are health indicators?**

Health indicators encompass concepts that include direct outcomes in mental and physical health, as well as environmental and lifestyle factors strongly linked to health.

**Goals**

Urban determinants	Impact on priorities
<b>Density</b>	
Population density	45 %
Business density	55 %
<b>Mobility</b>	
Street connectivity	45 %
Location connectivity	45 %
Cyclability	64 %
Walkability	73 %
Public transport	64 %
Traffic	73 %
<b>Variety</b>	
Public services	55 %
Sports facilities	36 %
Amenities	55 %
Public spaces	64 %
Food environment	45 %
<b>Landscape</b>	
Green coverage	91 %
Blue spaces	18 %
Green diversity	73 %
Green continuity	36 %
Urban landscape	45 %
<b>Housing and energy</b>	
Housing quality	18 %
Energy efficiency	18 %

**What are your plan goals?**

The urban determinants you should focus on to improve your

# Healthy Cities tool

2

Review the impact of your plan or current environment on health

The screenshot displays the 'Healthy Cities' tool interface. On the left is a sidebar with the logo and navigation links: Home, Ruth's plan (selected), Amber's plan, Celia's plan, Example plans, Green heart, Account, and About Healthy Cities. Below these are icons for Summary, Setup, Actions, Results, and Comments. The main area is titled 'Action number 3' with the instruction 'Evaluate the impact your action will have.' It contains a form for 'Action name' (with a placeholder and a note to 'Choose a short name to identify your action'), a 'Description' field (with a note to 'Briefly describe your action'), and 'Density' sliders for 'Population density' and 'Business density'. On the right, two summary cards show 'Healthy Cities Score' (41, Medium score, 3 actions) and 'Estimated savings' (+9,504,602 € Saved per year). Below these is a 'Health outcomes' table.

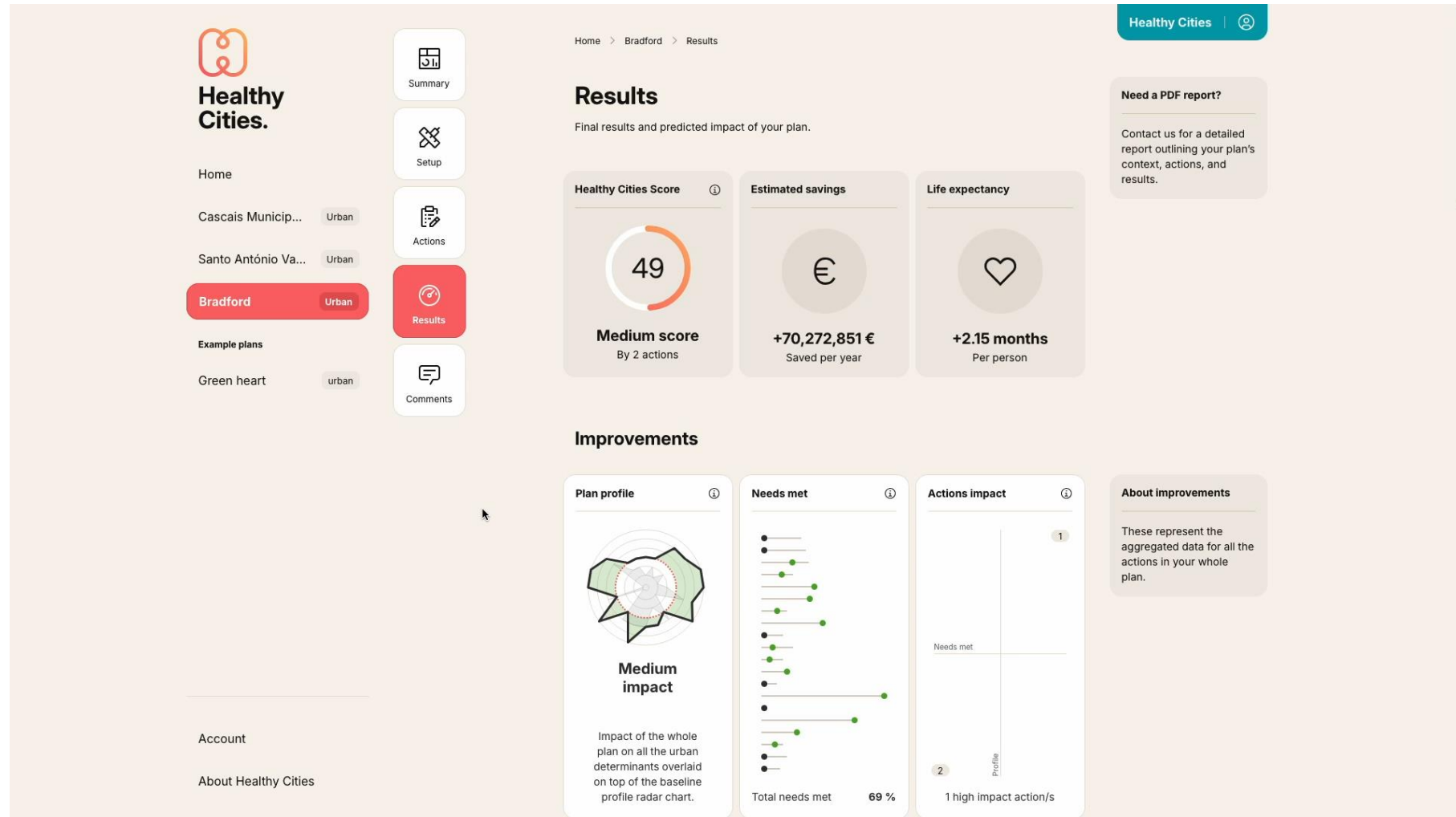
Health indicator	Action performance
<strong>Environment</strong>	
Air pollution	0 %
Noise pollution	0 %
Biodiversity	0 %
<strong>Lifestyle</strong>	
Physical activity	0 %
Sedentary habits	0 %



# Healthy Cities tool

3

See how much your urban plan could save on health each year



# Our tool-related services

- Support and training in the use of the tool.
- Support in interpreting the results following the application of the tool.
- Expand the research, tailoring the tool to specific needs.
- Adaptation to specific contexts, languages.
- Customisation to add more functionalities and use-cases:

mobility



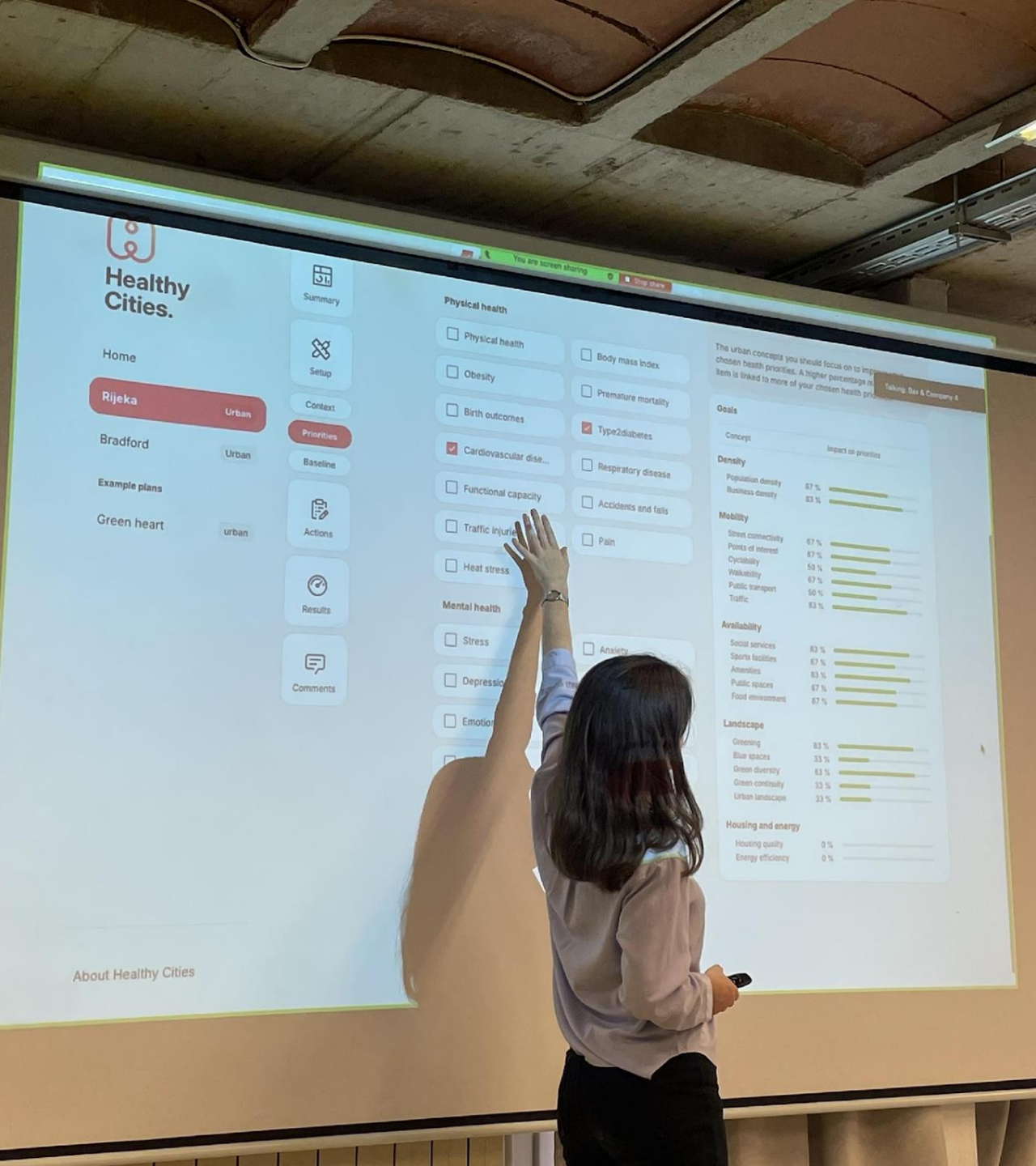
citizens



housing



greening





Thank you!



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