



Reality



...alternate reality



1



Estimating cost of poor
quality urban environment

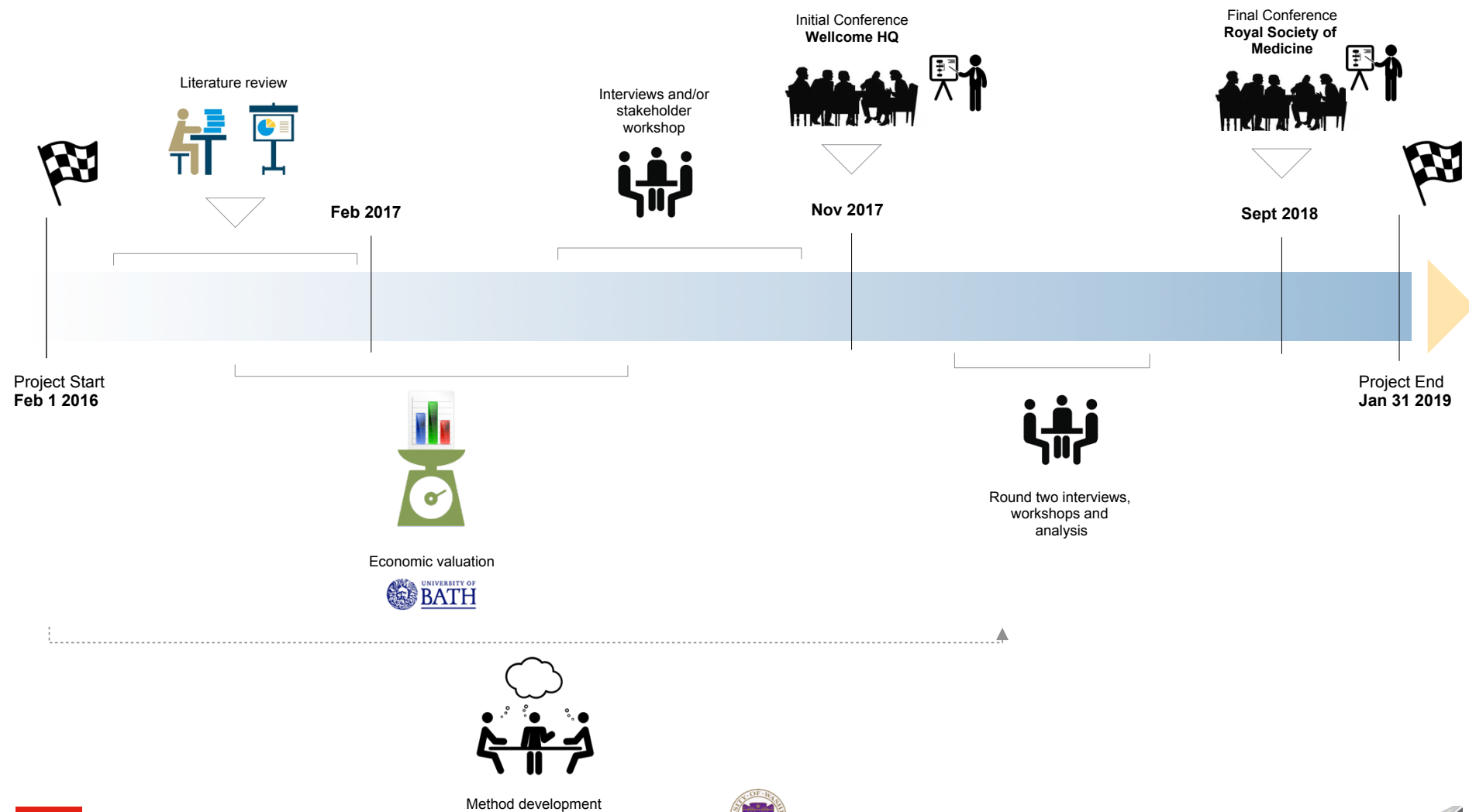
2



Exploring barriers and opportunities for
creating healthy urban environments



PROJECT ACTIVITY TIMELINE



Findings: systematic review on the impacts of the built environment on health

Categories	Key themes	Outcomes	
Neighbourhood Design	Increase neighbourhood walkability	Reduced risk of hypertension (S)	
		Reduced risk of diabetes and prediabetes (M)	
		Improved mental health (M*)	
	Increase access to facilities and amenities	Increased physical activity levels (M),	
		Improved mental health (S)	
	Enhance neighbourhood connectivity	Reduced limitations in performing instrumental activities of daily living among men (M)	
		Reduced risk of obesity among women (W)	
	Improve access to open green space	Improved mental health (S)	
		Reduced risk of non- accidental mortality (S)	
		Increased physical activity levels (S*)	
		Reduced cardiovascular risk factors (S)	
		Reduced risk of asthma (M*),	
		Reduced risk of diabetes and prediabetes (M)	
Buildings	Improve thermal quality and ventilation	Improved general health and respiratory outcomes (S*)	
		Reduced blood pressure (S*)	
		Reduced cost associated with heating(S)	
		Reduced level of NO2 in the living room (M)	
		Reduced mould contamination (M)	
		Improved school attendance among children (M)	
	Improve quality of housing (health and safety)	Reduced falls and fall related injuries among older adults (S)	
		Improved mental health (M)	
	Inadequate quality of housing	Increased mortality from coronary heart diseases (M)	
	Increase access/ relocation to affordable homes or social housing	Improved general health among previously homeless people (M)	
		Improved mental health among adults and children (M)	
		Improved educational achievement among young boys (M)	

* Refers to best available evidence and it applies when more than one study was identified as part of the review that reported the same 'outcome'. In such instances the study deemed to be of the best quality is presented



Strong



Moderate



Weak

Categories	Key themes	Outcomes	
Natural environment	Exposure to environmental hazards (air pollutants)	Increased risk of cervical cancer (S*)	
		Increased risk of brain cancer (S)	
		Increased risk of non-accidental mortality (S*)	
		Increased risk of lung cancer (S)	
		Increased blood pressure (M*)	
		Increased risk of dementia and Alzheimer’s disease (M*)	
		Increased risk of type II diabetes (M)	
	Reduce exposure traffic noise	Increased average life expectancy (M)	
		Economic savings of 9.3 billion EUR/year (M)	
	Improve access to green space	Improved respiratory outcomes (S*)	
		Increased physical activity level (W)	
		Improved mental health (W)	
	Exposure to traffic noise	Increased risk of myocardial infarction among males (S)	
		Poor academic performance among children (S)	
		Reduced quality of life among women (S)	
		Increased blood pressure (S)	
		Worsened mental health (M)	
		Increased risk of Type II diabetes (S)	
Transport	Improve infrastructure for walking and cycling	Increased physical activity levels (S*)	
		Reduced risk of pedestrian motor vehicle collision (S*)	
	Improve road safety	Reduced risk of pedestrian injury (S*)	
		Reduced risk of road traffic collision (S*)	
	Improve public transport Infrastructure	Increased active transport (M)	
		Reduced exposure to road traffic collision (M)	
	Exposure to traffic related environmental hazards	Increased risk of pre/post menopausal breast cancer (S)	
Food	Increase access to healthy food environment	Reduced odds of obesity (M*)	
	Density and proximity of fast-food outlets	Increased risk of diabetes (S*)	
		increased risk of obesity (M*)	
	Exposure to unhealthy food outlets near school environment	Increased risk of obesity (W)	



Strong



Moderate



Weak

MAIN TOPIC AREAS

(linking urban form to health)



**LITERATURE
REVIEW**

**NEIGHBOURHOOD
DESIGN**

**NATURAL
ENVIRONMENT**

TRANSPORT

BUILDINGS

FOOD

INDICATORS

e.g. Road, public transport, walking, cycling

**HEALTH
OUTCOMES**

e.g. Obesity, diabetes, injury



**ECONOMIC
VALUATION I**

(of health outcomes relating to range of generic typologies)



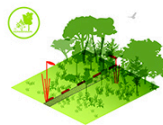
Check with case study partners



**COMMUNITY
OPEN SPACES**

LANDSCAPES FOR RECREATION, SOCIAL LIFE, AND SMALL-SCALE FOOD CULTIVATION

PLAYGROUNDS
NEIGHBORHOOD PARKS
SPORTS FIELDS
REGIONAL PARKS
PLAZAS
RECREATION CENTERS
TRAILS / GREENWAYS
URBAN GARDENS
FARMERS MARKETS
CEMETERIES (EXISTING)



**ECOLOGICAL
LANDSCAPES**

MEADOWS AND FORESTS THAT PROVIDE HABITAT AND OTHER ENVIRONMENTAL BENEFITS

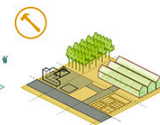
NATURE PARKS
INDUSTRIAL NATURE PARKS
RAPID REFORESTATION
SUCCESSIONAL ROAD ROADS TO RIVERS



**BLUE+GREEN
INFRASTRUCTURES**

LANDSCAPES THAT CAPTURE STORMWATER AND CLEAN AIR

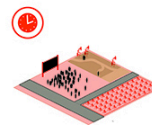
LARGE LAKE
SMALLER RETENTION POND
INFILTRATION PARK
SWALES + INFILTRATION MEDIAN
ROAD-SIDE POND (ALONG WIDE ROADS)
GREEN INDUSTRY BUFFER
CARBON FOREST



**WORKING+
PRODUCTIVE
LANDSCAPES**

LANDSCAPES THAT GENERATE NEW KNOWLEDGE, GROW ENERGY AND FOOD, AND CREATE NEW URBAN EXPERIENCES

RESEARCH LANDSCAPE
URBAN FARM
AGRICULTURE AND HYDROPONICS
ALGAE-CULTURE
ENERGY FIELD OR FOREST
HOMESTEADS
CAMPGROUNDS



**TRANSITIONAL
LANDSCAPES**

TEMPORARY LANDSCAPES THAT CLEAN SOIL AND ENABLE NEW FORMS OF SOCIAL LIFE AND CREATIVE DISPLAYS

EVENT LANDSCAPES
REMEDIATION FIELDS OR FORESTS
ART-SCAPES
URBAN MEADOWS