

Creating Healthy Cities: the role of transport

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Belfast Healthy Cities



Belfast Healthy Cities

Partnership  **Belfast Health and Social Care Trust**



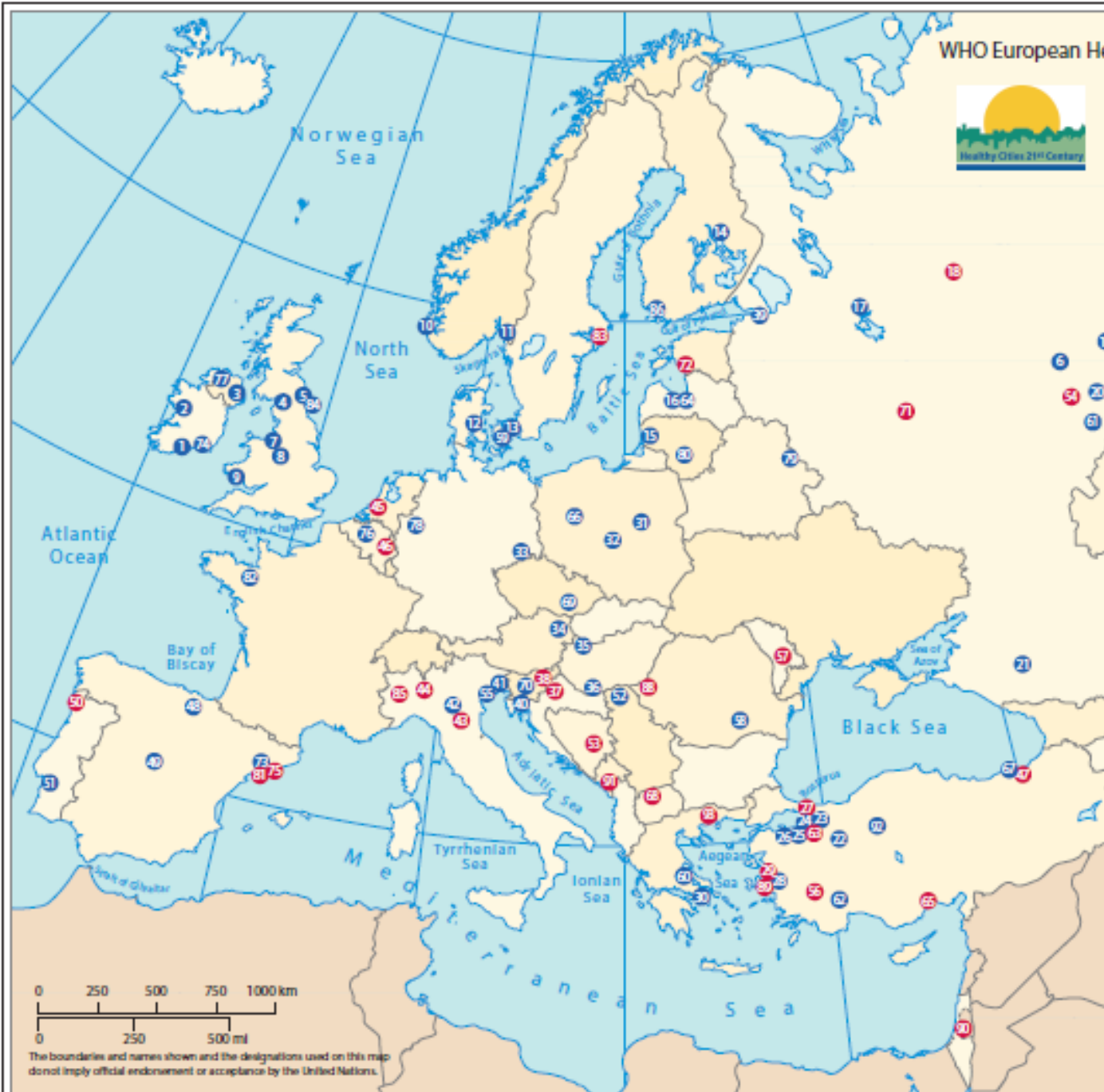
HousingExecutive

Public Health
Agency

Our Vision is to be a leader in creating a healthy and equitable city



WHO European Healthy Cities Network – Phase VI (2014–2018)



1	Cork	IRE	50	Viana do Castelo	POR
2	Galway	IRE	51	Seoul	POR
3	Belfast	UNK	52	Novi Sad	SRB
4	Cardiff	UNK	53	Sarajevo	BH
5	Newcastle	UNK	54	Ulyanovsk	RUS
6	Chelmsbury	RUS	55	Venice	ITA
7	Liverpool	UNK	56	Denizi	TUR
8	Stoke-on-Trent	UNK	57	Chinaitu	MDA
9	Swansea	UNK	58	Bucharest	ROM
10	Sandnes	NOR	59	Frederiksborg	DEN
11	Bedford County	NOR	60	Floedvi-Psychiko	GRE
12	Horsens	DEN	61	Chapayevsk	RUS
13	Copenhagen	DEN	62	Bardar City	TUR
14	Kuuspi	FIN	63	Omurgazi	TUR
15	Klaipeda	LTH	64	Riga	LVA
16	Jurmala	LVA	65	Muzik Municipality	TUR
17	Cherapovets	RUS	66	Poznan	POL
18	Vilny Ustyug	RUS	67	Trabzon Metropolitan	TUR
19	Izhensk	RUS	68	Skopje	MKD
20	Dmitrovo	RUS	69	Bimo	CZE
21	Starogol City	RUS	70	Ljubljana	SVN
22	Eskisehir	TUR	71	Seapino	RUS
23	Goltsik	TUR	72	Pleus	EST
24	Yalova	TUR	73	Sant Andreu de la Barca	SPA
25	Bursa	TUR	74	Waterford	IRE
26	Nikici	TUR	75	Barcelona	SPA
27	Kadikoy	TUR	76	Brussels	BEL
28	Izmir	TUR	77	Derry City and Strabane	UNK
29	Karpykala/Amir	TUR	78	Düsseldorf	DEU
30	Amanassion	GRI	79	Gorki	BLR
31	Warsaw	POL	80	Kaunas	LTH
32	Lodz	POL	81	L'Hospitalet de Llobregat	SPA
33	Dresden	DEU	82	Rennes	FRA
34	Vienna	AUS	83	Stockholm	SWE
35	Győr	HUN	84	Sunderland	UNK
36	Pecs	HUN	85	Turin	ITA
37	Zagreb	CRO	86	Turku	FIN
38	Celje	SVN	87	Novosibirsk	RUS
39	St Petersburg	RUS	88	Municipality of Arod	ROM
40	Rijeka	CRO	89	Belgova/Amir	TUR
41	Udine	ITA	90	Jerusalem	ISR
42	Modena	ITA	91	Podgorica	MCD
43	Bologna	ITA	92	Çankaya	TUR
44	Milan	ITA	93	Dnava	GRI
45	Rotterdam	NET			
46	Liège	BEL			
47	Ortishur (Trabzon)	TUR			
48	Vitoria-Gasteiz	SPA			
49	Villanueva de la				
50	Cañada	SPA			

64 Designated cities

29 Applicant cities



World Health Organization

REGIONAL OFFICE FOR Europe

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

“Traffic will be to 21st century public health what sewage was to 19th century public health”

Scrofula
Cholera

Diphtheria

Typhoid

Dysentery

1858

Stress & mental
health

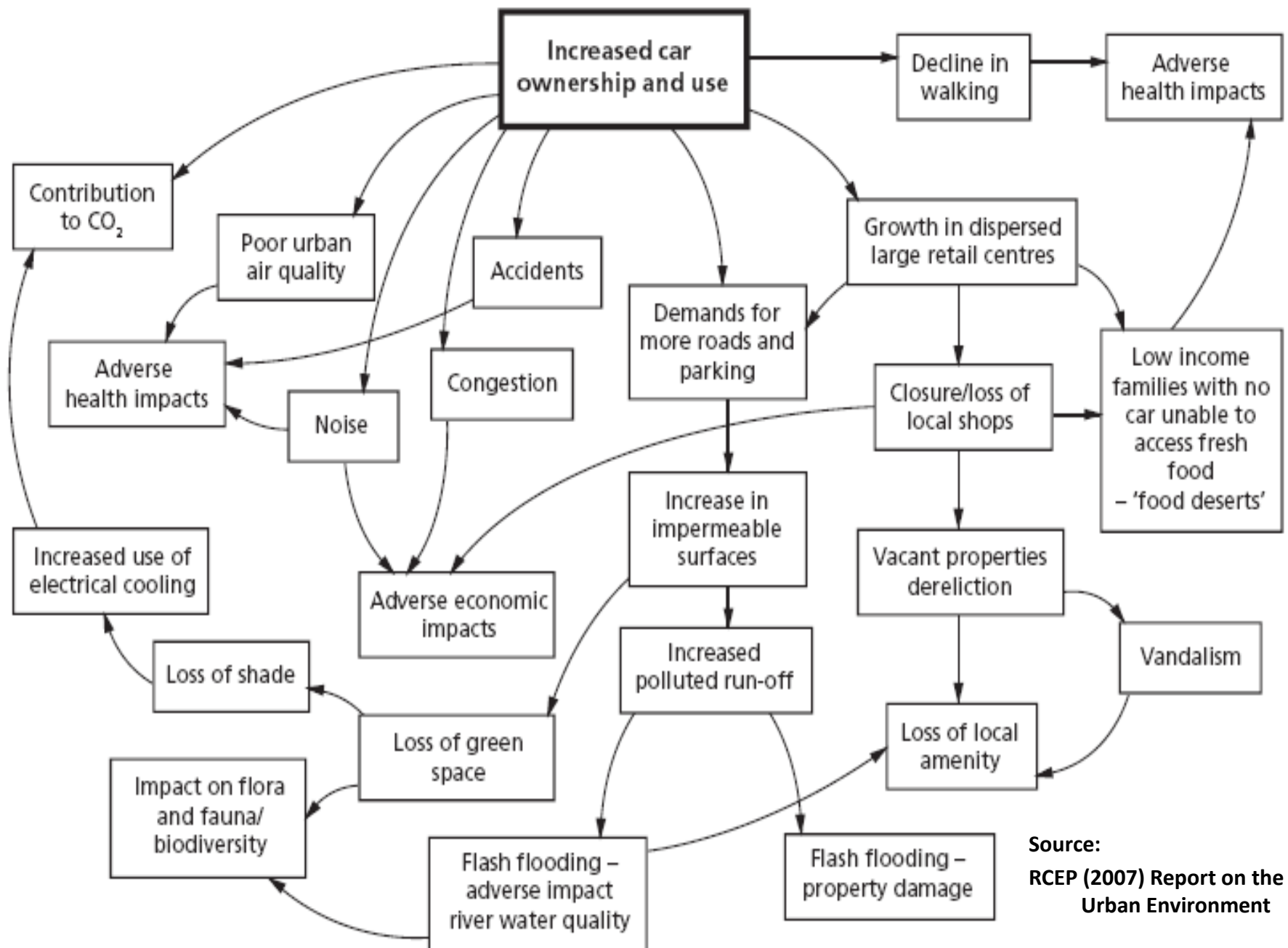
Asthma

Obesity

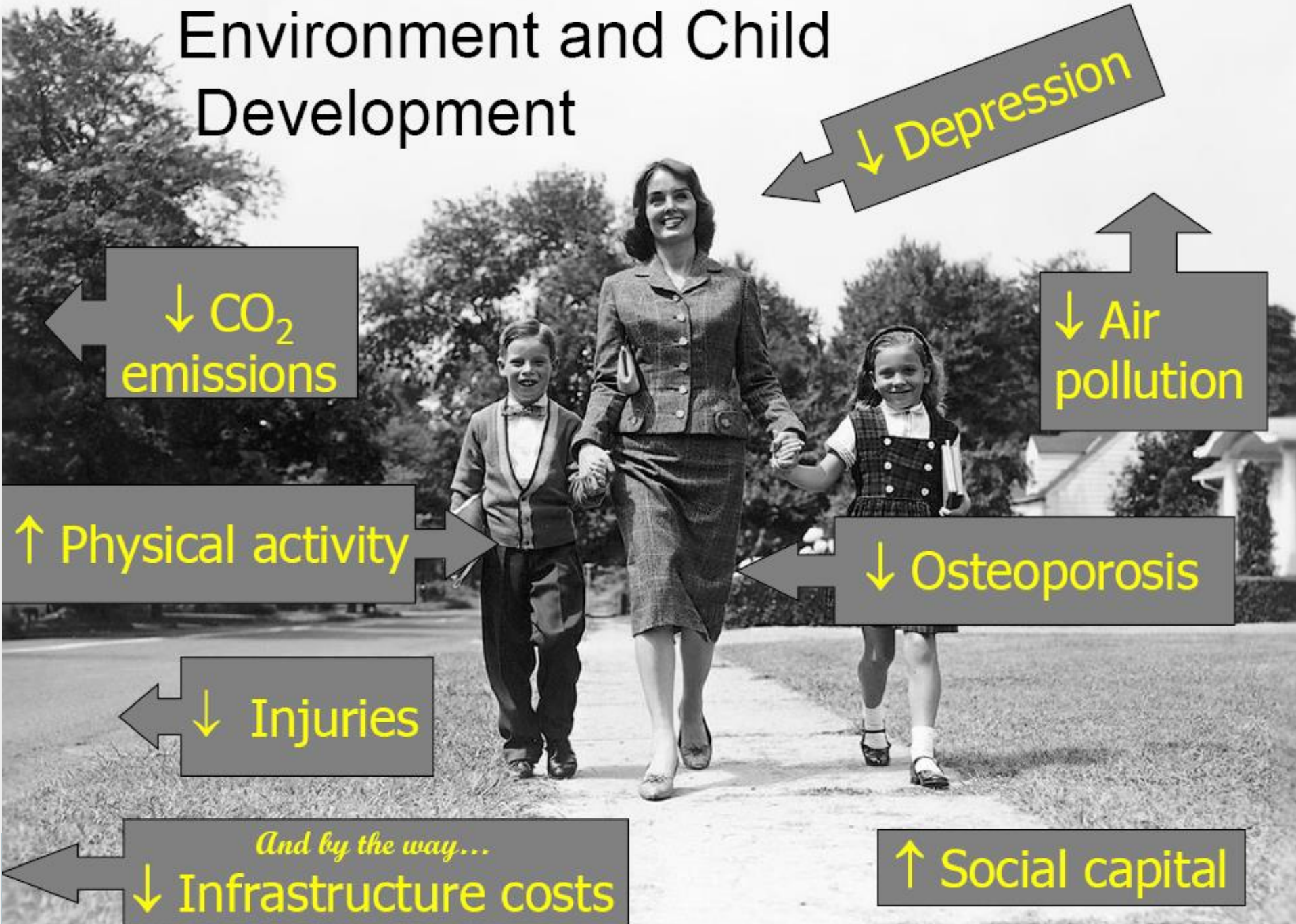
Heart disease

2016





Environment and Child Development





Legend

Annual mean ambient $PM_{2.5}$ ($\mu\text{g}/\text{m}^3$)

Circles: monitoring station / background: modeled estimates

< 10

11 - 15

16 - 25

26 - 35

36 - 69

70 or more

Population

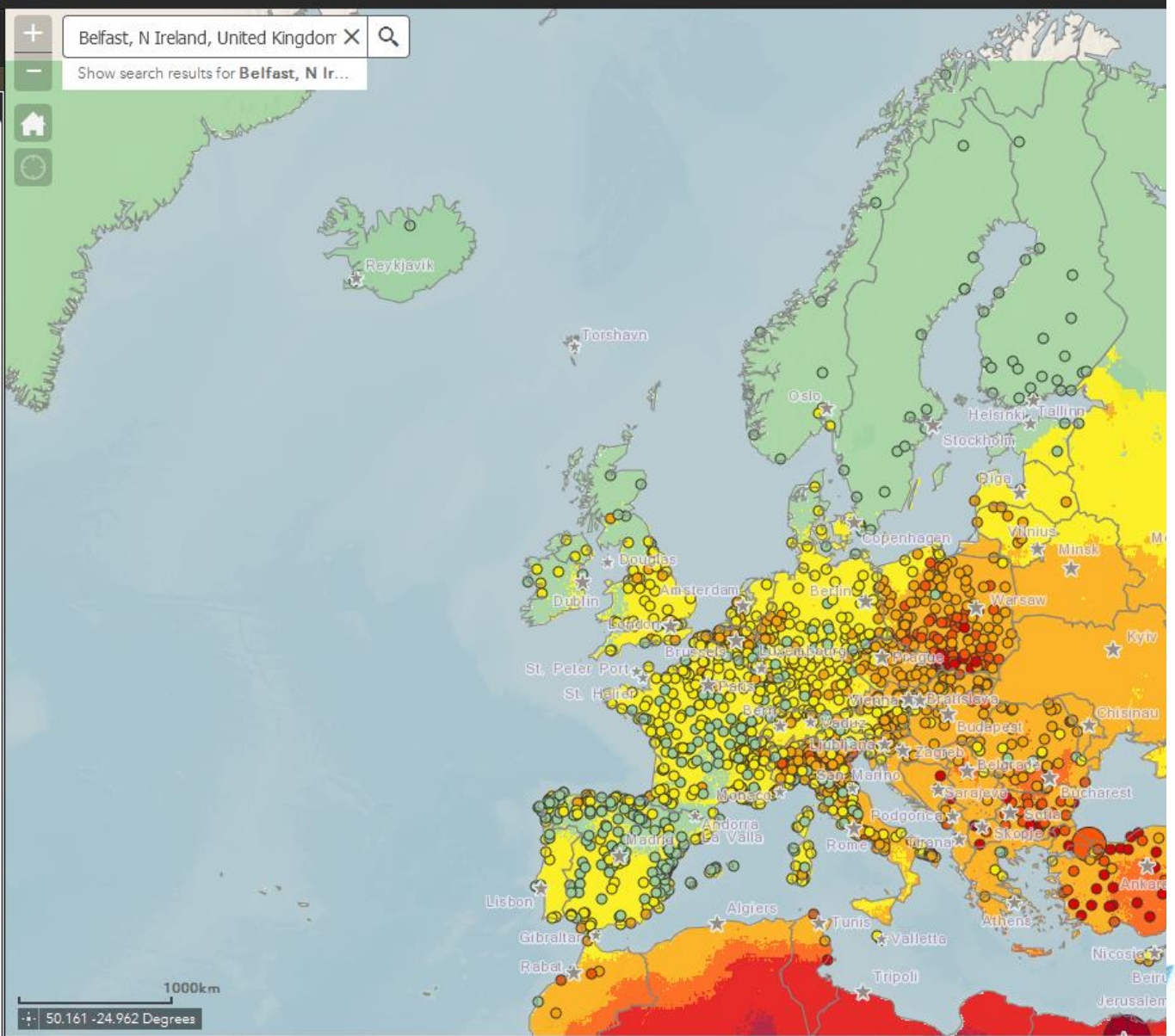
> 25,000,000

20,000,000

15,000,000

10,000,000

< 5,000,000



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Health impact of air pollution

Table 2. GBD results for outdoor air pollution for the UK¹³

	DALYs	Deaths	%
Ambient PM pollution			
Cerebrovascular disease	73,061	5,448	20 %
COPD	27,558	1,681	8 %
Ischaemic heart disease	220,643	13,907	61 %
Lower respiratory infections	815	9	0 %
Trachea, bronchus and lung cancers	38,623	2,328	11 %
Total (all causes)	360,700	23,373	100 %
Ozone			
Total (all COPD)	8,865	772	100 %

Benefits of transport

Walkable neighbourhoods encourage social interaction and can contribute to **community cohesion** and even safety

Free play and mobility in safe spaces supports **children's physical, mental and social development**

Active travel is an effective way to **tackle obesity**

Good public transport and active travel infrastructure improves **access to jobs and services**, especially for low income groups



Walkability Assessment for Healthy Ageing





versatile city

centre and center ring road

attractive, dynamic and healthy centre

neighbourhoods and radial roads

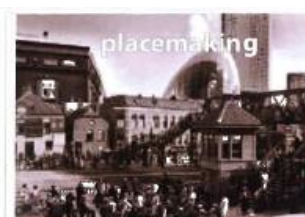
relieving old radial roads, intensifying use of modern radials

neighbourhoods and inner ring road

ring road as recognizable central distributor road in car accessibility of the city

region and outer ring road

links the city to national and international networks



placemaking

pedestrian

pedestrian on site most important

fine-grained network of streets and pavements, combined with variously arranged squares

pedestrian on site most important, development of new routes in favour of new dynamics

limit barrier effect inner ring road, particularly on old radial roads

campuses are the new villages
link pedestrian network to recreational routes



cyclist

most important traffic participant in linking places

centre ring road most important connecting cycle route in city centre

sufficient cycle parking, well integrated in public space

fast cycling routes by means of historic radial roads as contribution to neighbourhood lifeline

fast radial cycling routes as contribution to city life

maintain and improve cycle crossing of the inner ring road

fast cycling route Brainport Avenue

fast cycling routes to surrounding municipalities



public transport user

fast, high-frequency, comfortable and reliable travel on longer distances for larger passenger flows

BRT two-directional along centre ring road

central bus station
Neckerspoel/railway station as transport hub and entry to city

BRT corridors as carrier for urban development

customised public transport for target groups and areas

BRT corridors connect 'places to be'

if possible BRT grade-separated crossing with inner ring road

sustainable landside access to Eindhoven Airport

adjusted public transport networks with seamless transfers

direct connection to (inter)national network of high speed trains



motorist

raised-awareness users: less often, cleaner, main roads, parking at remote distance/incentive parking

centre ring road no longer a continuous circular vehicle route

no expansion visitor parking in city centre

within the inner ring road 30 km/h and cyclist priority on roads with the exception of modern and new radial roads

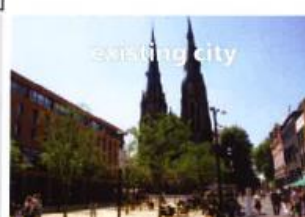
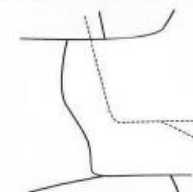
less and/or easier junctions with inner ring road

fourth category in road's classification: neighbourhood access roads

optimise national and international road network, taking city accessibility into consideration

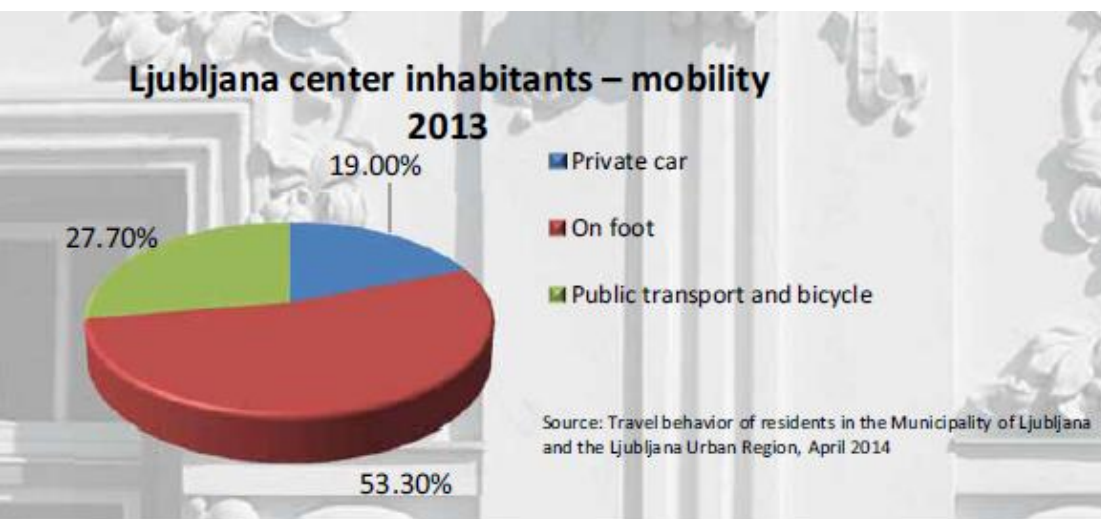
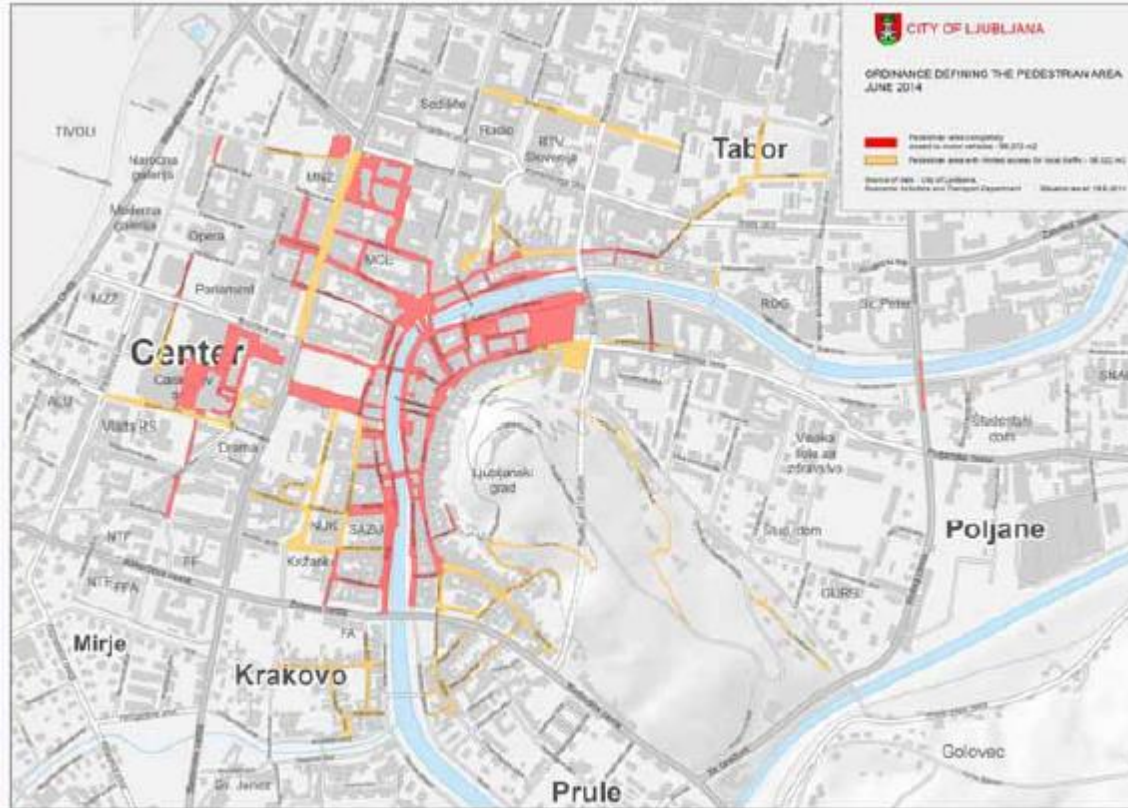


own motion fast forward



existing city

healthy city





”Copenhagenization”

”Copenhagen lane”

**Traffic calming
experiment
at the high street
Nørrebrogade in
Copenhagen inspired
NY to traffic calm
Broadway at Times
Square**



Slide courtesy of Copenhagen City Council

Thank you

Further information

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