

NEW URBAN MODELS FOR HEALTH

Mark J Nieuwenhuijsen

ISGlobal Barcelona
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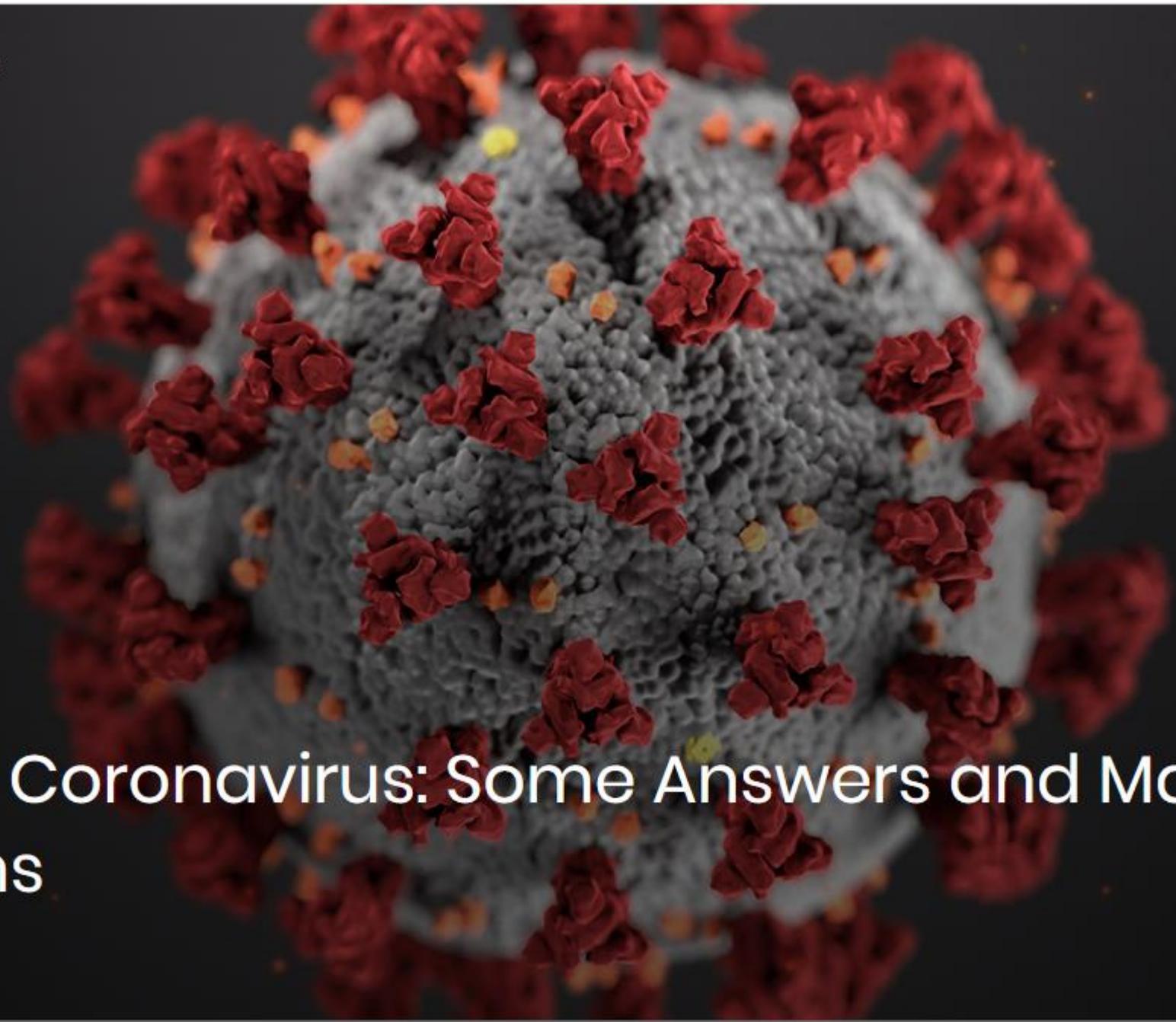
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**2904 premature deaths (20%) annually in
Barcelona due to suboptimal urban and transport planning**

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Mueller et al EHP 2017; 125: 89-96



The New Coronavirus: Some Answers and Many Questions



The Rue de Rivoli, a central route in Paris, will be devoted mostly to bike and pedestrian traffic after lockdown is lifted. // Cyril Marcihacy/Bloomberg

Paris Has a Plan to Keep Cars Out After Lockdown

FEARGUS O'SULLIVAN APRIL 29, 2020

London / Large areas of city to be made car-free as lockdown eased



Live
UK coronavirus: Welsh schools will not open until September; 'stay home' advice remains

London
TfL faces £3bn funding gap despite £1.6bn bailout

Education
Prolonged school closures risk damaging children's education, No 10 warns

Milan announces ambitious scheme to reduce car use after lockdown



Coronavirus: How pandemic sparked European cycling revolution

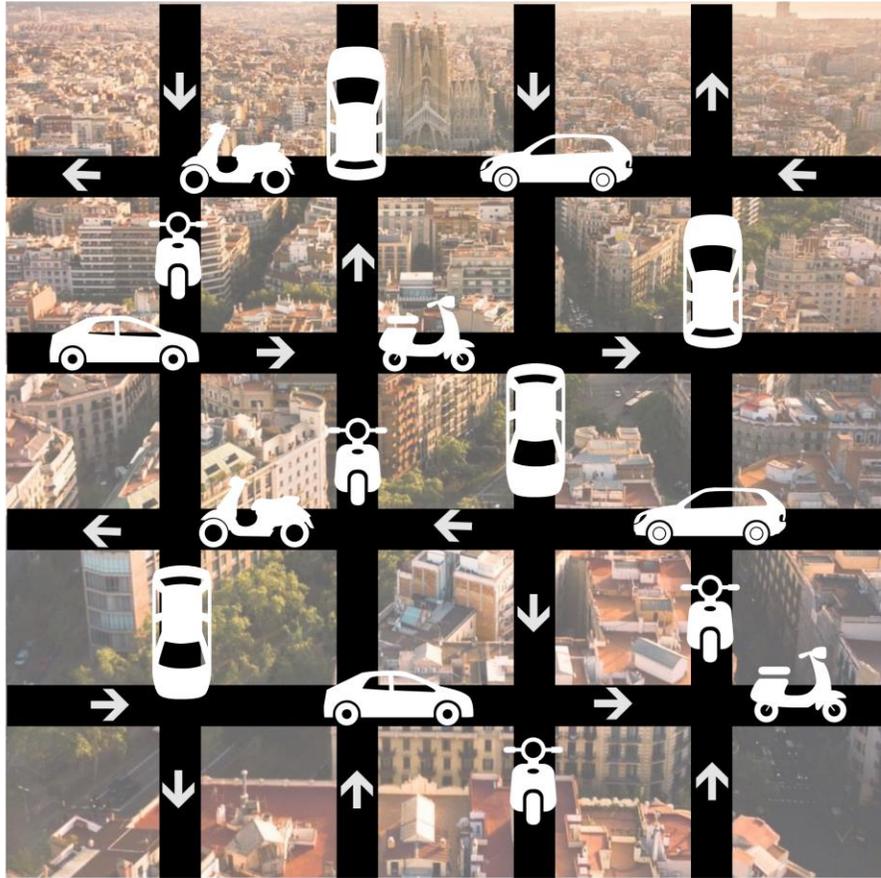
By [Kate Vandy](#)
BBC News, Brussels

🕒 5 days ago

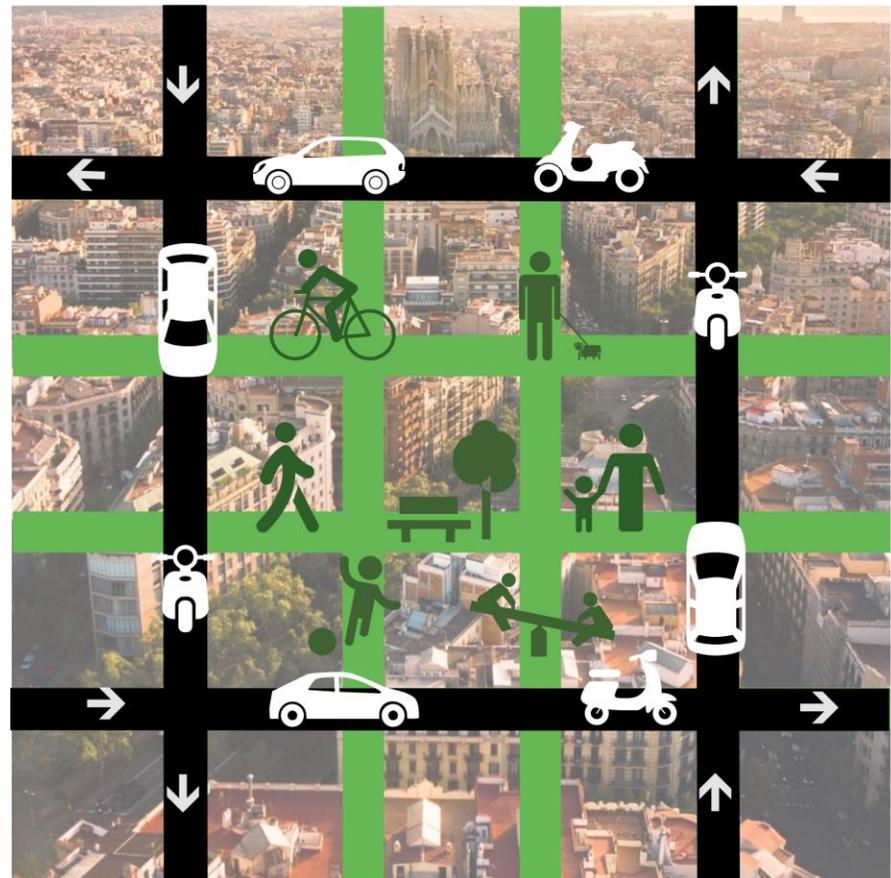
Coronavirus pandemic



The French government has invested millions of euros in cycling since the start of the pandemic



Baseline situation



Superblocks model



Barcelona Superblock San Antoni

Before

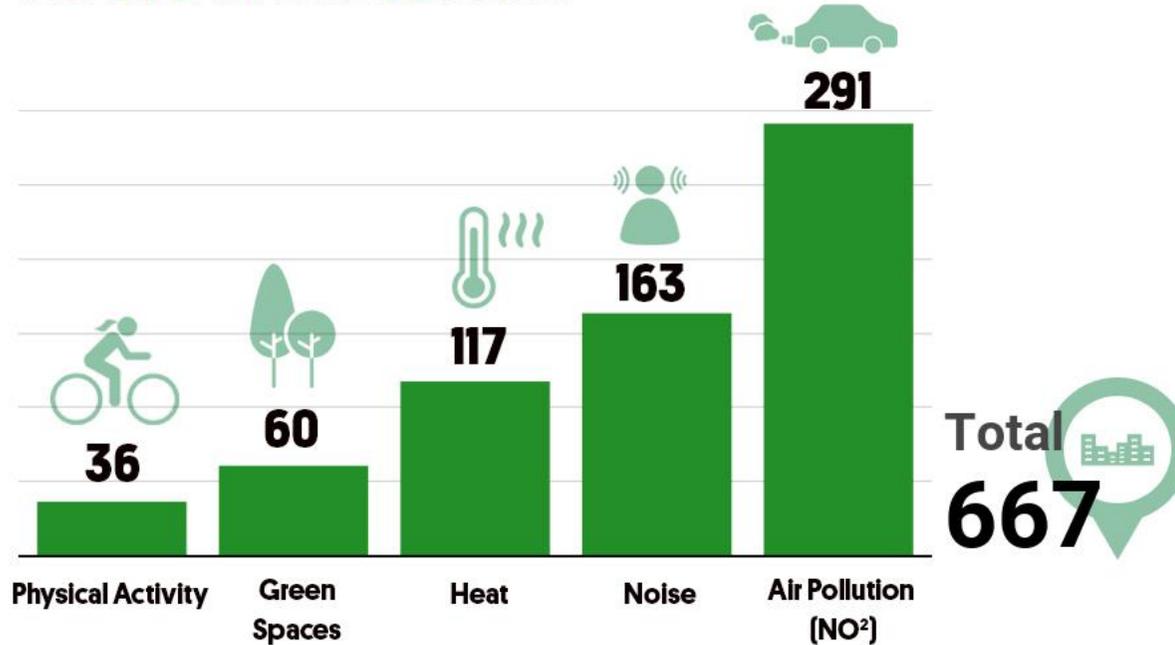


After

BARCELONA SUPER BLOCKS

- **19.2% car reduction**
- **11.5 ug/m³ (24.3%) NO₂ reduction**
- **2.9 dB noise reduction**
- **3 fold increase green space (6.5% to 19.6%)**
- **20% Surface temperature reduction**

Annual Premature Deaths that the "Superblocks" Model Could Avoid in Barcelona



Source: Mueller et al. Changing the urban design of cities for health: the Superblock model. *Environment International*. 2019

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Mueller et al 2019, Env Int

CITYLAB

Paris Mayor: It's Time for a '15-Minute City'

In her re-election campaign, Mayor Anne Hidalgo says that every Paris resident should be able to meet their essential needs within a short walk or bike ride.

By [Feargus O'Sullivan](#)

18 de febrero de 2020 14:40 CET



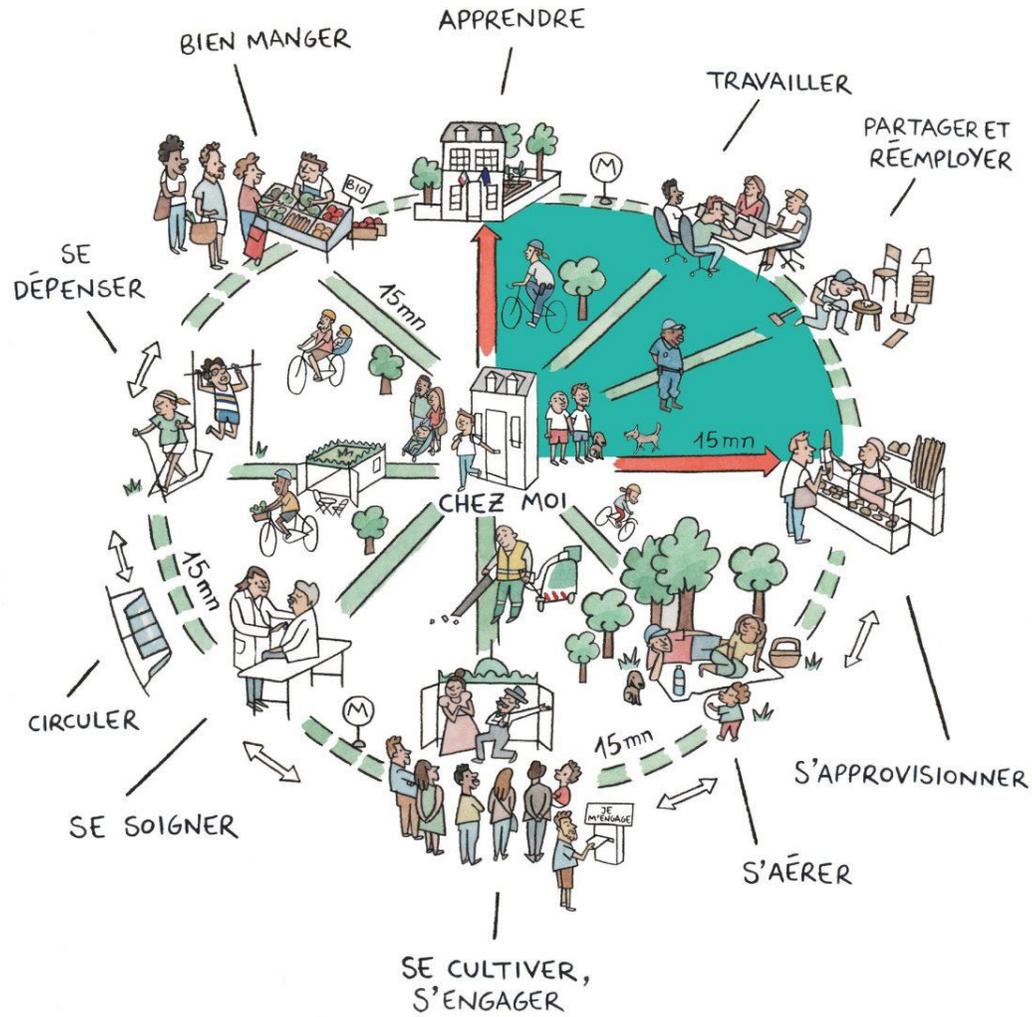
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LE PARIS DU 1/4 HEURE



15 minute City Paris



MICHAËL



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Review article

Car free cities: Pathway to healthy urban living

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ARTICLE INFO

Article history:

Received 21 March 2016

Received in revised form 25 May 2016

Accepted 30 May 2016

Available online xxx

ABSTRACT

Background: Many cities across the world are beginning to shift their mobility solution away from the private cars and towards more environmentally friendly and citizen-focused means. Hamburg, Oslo, Helsinki, and Madrid have recently announced their plans to become (partly) private car free cities. Other cities like Paris, Milan, Chengdu, Masdar, Dublin, Brussels, Copenhagen, Bogota, and Hyderabad have measures that aim at reducing mo-



(Photo: Marcia Taylor)

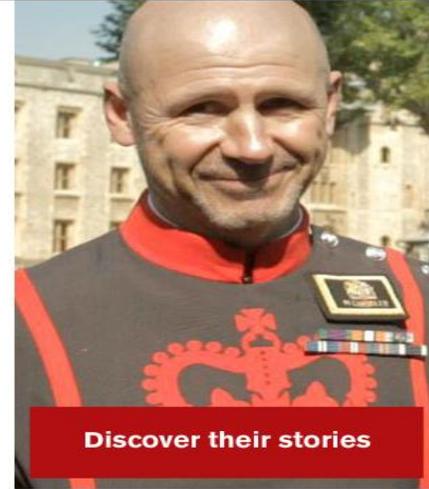
Hamburg Plans to Become Car-Free By 2034

But should there really be zero cars?

By **Rachel Nuwer**
SMITHSONIANMAG.COM
FEBRUARY 17, 2014



Hamburg, Germany, recently announced plans to convert 40 percent of the city into car-free pedestrian zones within the next two decades. [According to Inhabitat](#), existing green spaces



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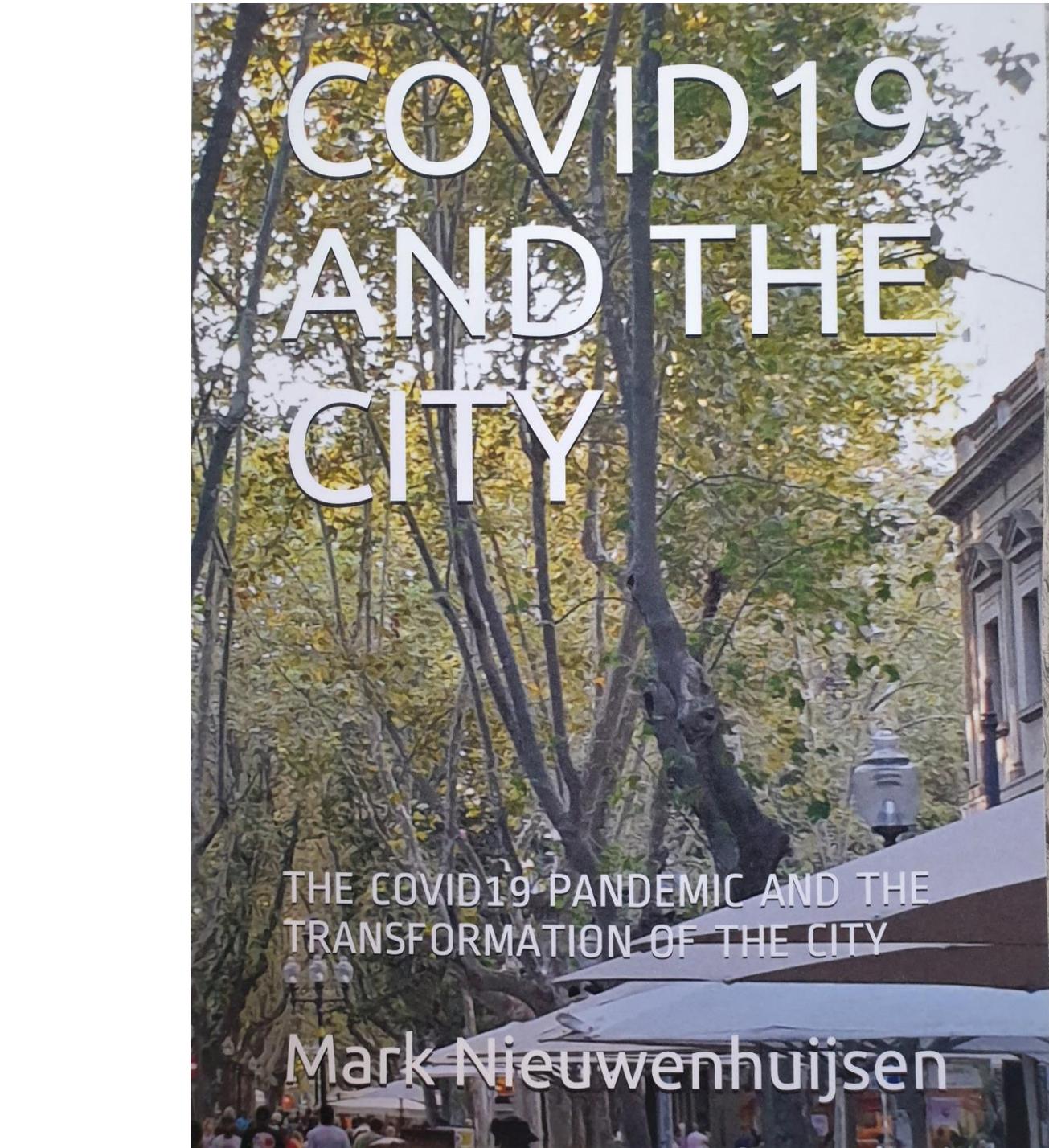


Vauban, Freiburg

Multisectoral approach

Multi sectorial and systemic approaches are needed to address current problems and find solutions





COVID19 AND THE CITY

THE COVID19 PANDEMIC AND THE
TRANSFORMATION OF THE CITY

Mark Nieuwenhuijsen

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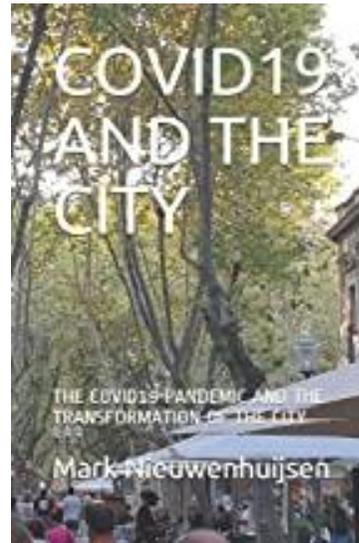
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Integrating Human Health into Urban and Transport Planning

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THIS ONE
RUNS ON MONEY
AND MAKES
YOU FAT

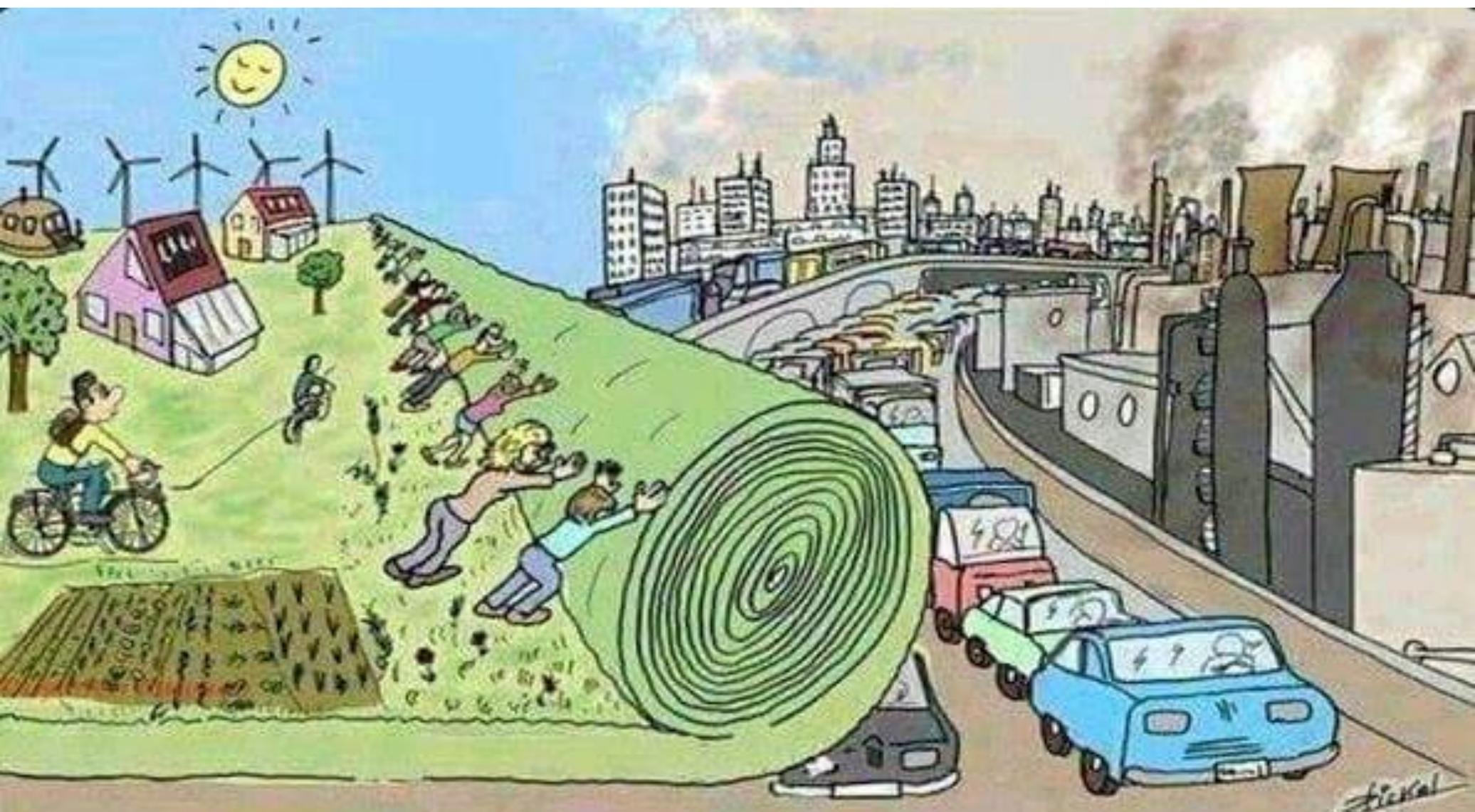


THIS ONE
RUNS ON FAT
AND SAVES
YOU MONEY

50% of car trips < 5 km



Utrecht, NL







Seoul

ALDERHEY HOSPITAL LIVERPOOL BEFORE AND AFTER

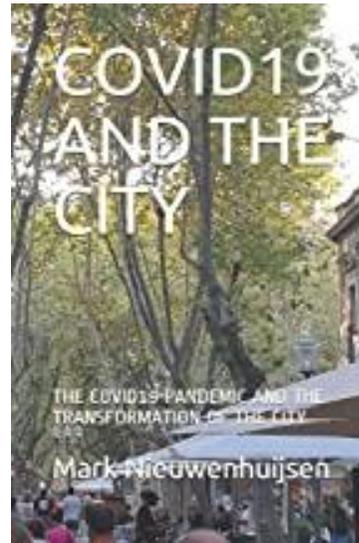


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Environment International xxx (xxxx) xxxx



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Environment International

journal homepage: www.elsevier.com/locate/envint



Urban and transport planning pathways to carbon neutral, liveable and healthy cities; A review of the current evidence

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Green cities, healthy people

Active cities, healthy people,

Clean cities, healthy people

Social cities, healthy people

CONTEXT

Each year world wide there are:

- **4.2 million deaths due to ambient air pollution**
- **3.2 million deaths due to lack of physical activity**
- **1.2 million deaths due to traffic fatalities**

WHO, GBD

- **Climate crisis**
- **Population growth and ageing**
- **Urbanization (70% live in cities soon)**

