

**SESSION n°6: URBAN PUBLIC HEALTH**

**Design  
& Health**  
International Academy for Design and Health

Milano, Italy 11-14 April 2024

**Design & Health**

13TH WORLD CONGRESS & EXHIBITION

REVITALIZING HEALTH BY SALUTOGENIC DESIGN

Healthy environment | Healthy people

# Community Wellbeing Framework

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**POLITECNICO  
MILANO 1863**

DIPARTIMENTO DI ARCHITETTURA,  
INGEGNERIA DELLE COSTRUZIONI  
E AMBIENTE COSTRUITO

MEDIA PARTNER

**Progettare  
per la Sanità**  
Organizzazione, tecnologia, architettura

**edra** | SANITÀ 33

SPONSORS

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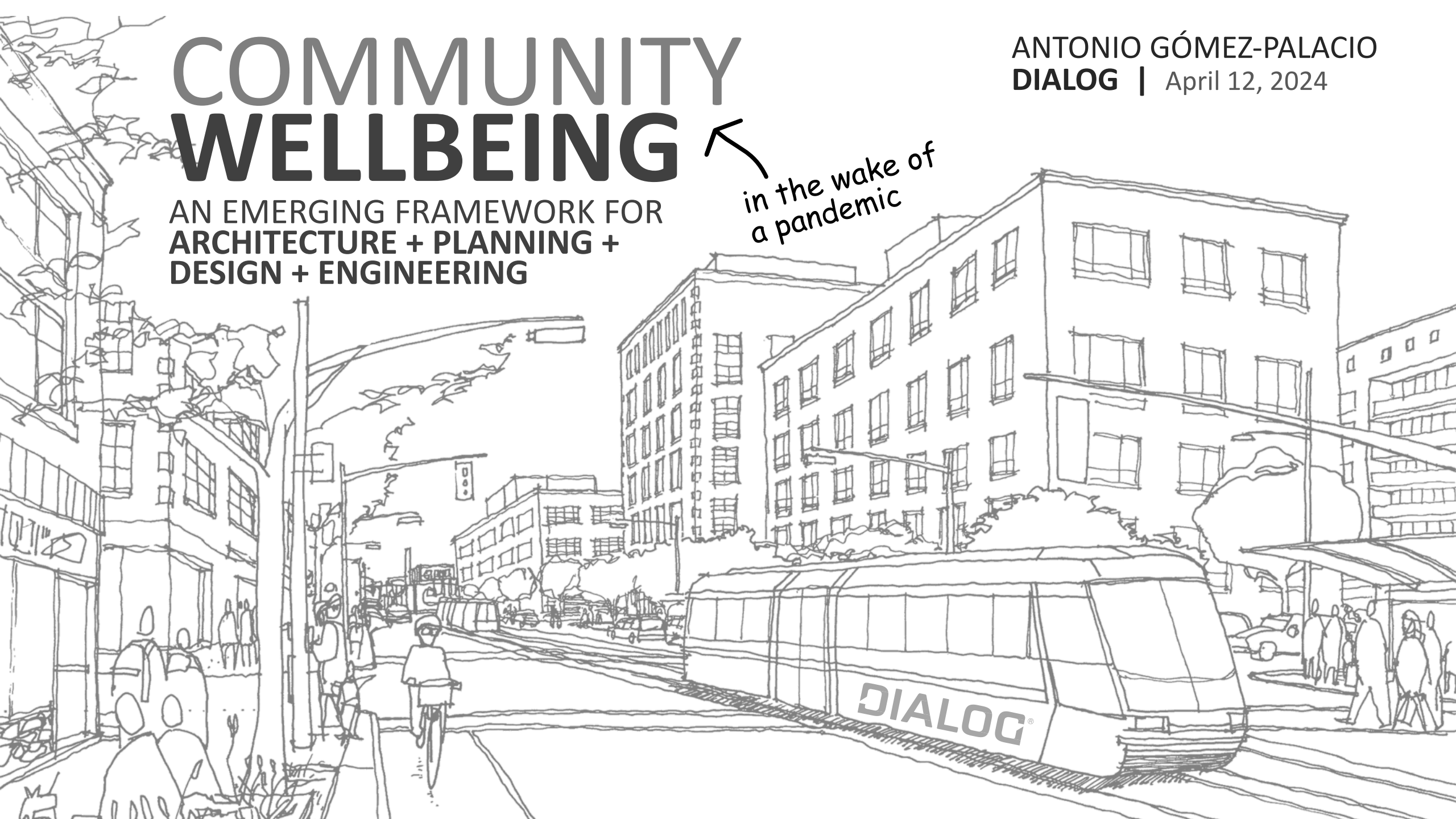
**cneto**  
CENTRO NAZIONALE  
TECNICO E  
OPERATIVO

# COMMUNITY WELLBEING

AN EMERGING FRAMEWORK FOR  
ARCHITECTURE + PLANNING +  
DESIGN + ENGINEERING

in the wake of  
a pandemic

ANTONIO GÓMEZ-PALACIO  
DIALOG | April 12, 2024

















Mexico City,  
1919

source: <http://www.tramz.com/mx/mc/mc50.html>





Toronto  
181 Baldwin,  
October 7, 1919

*R. 934. Oct. 7-1919 - 181 BALDWIN ST*

source: urbanToronto.ca



**1900**

**2010**

**INFECTIOUS DISEASES**  
decreasing and  
replaced by  
**LIFESTYLE DISEASES**



in CANADA:



**59,034**

DEATHS FROM  
**CORONAVIRUS**  
(CANADA, April 10, 2024)

**55,000**

DEATHS FROM  
**1918-1920**  
**PANDEMIC**

source: Parks Canada

**276,689**

DEATHS (2017)

**48%** FROM

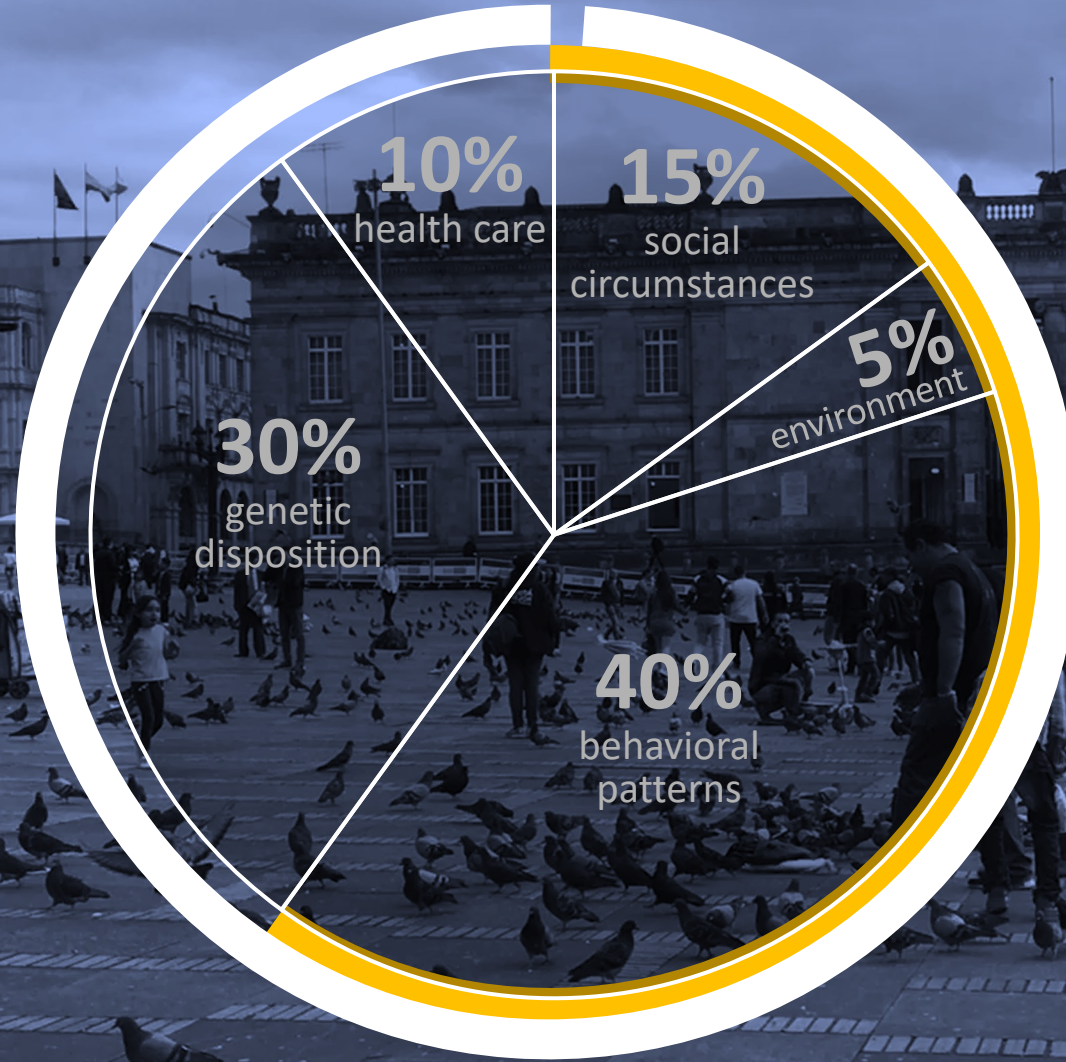
**CANCER** or  
**HEART DISEASE**

source: Stats Canada

Source: Steven A. Schroeder, M.D., We Can Do Better — Improving the Health of the American People, <http://www.nejm.org/doi/full/10.1056/NEJMs073350#t=article>

Source: Steve Shortell, What's the biggest driver of health care costs? Our personal behaviors. <http://blogs.berkeley.edu/2010/10/27/whats-the-biggest-driver-of-health-care-costs-our-personal-behaviors/>

# CONTRIBUTION TO PREMATURE DEATH



**60%** SOCIAL ENVIRONMENT BEHAVIOR

**96%** percent of health expenditures on medical services. 4% on preventing disease and promoting health









You are here



# GLOBAL DEMAND vs SUPPLY

by # of Earths



we use 1.5 planets  
to support our  
activities

source: WWF Global ([www.panda.org](http://www.panda.org))



BILLION 10

# WORLD POPULATION GROWTH

8

6

3

2

0

1750

1800

1850

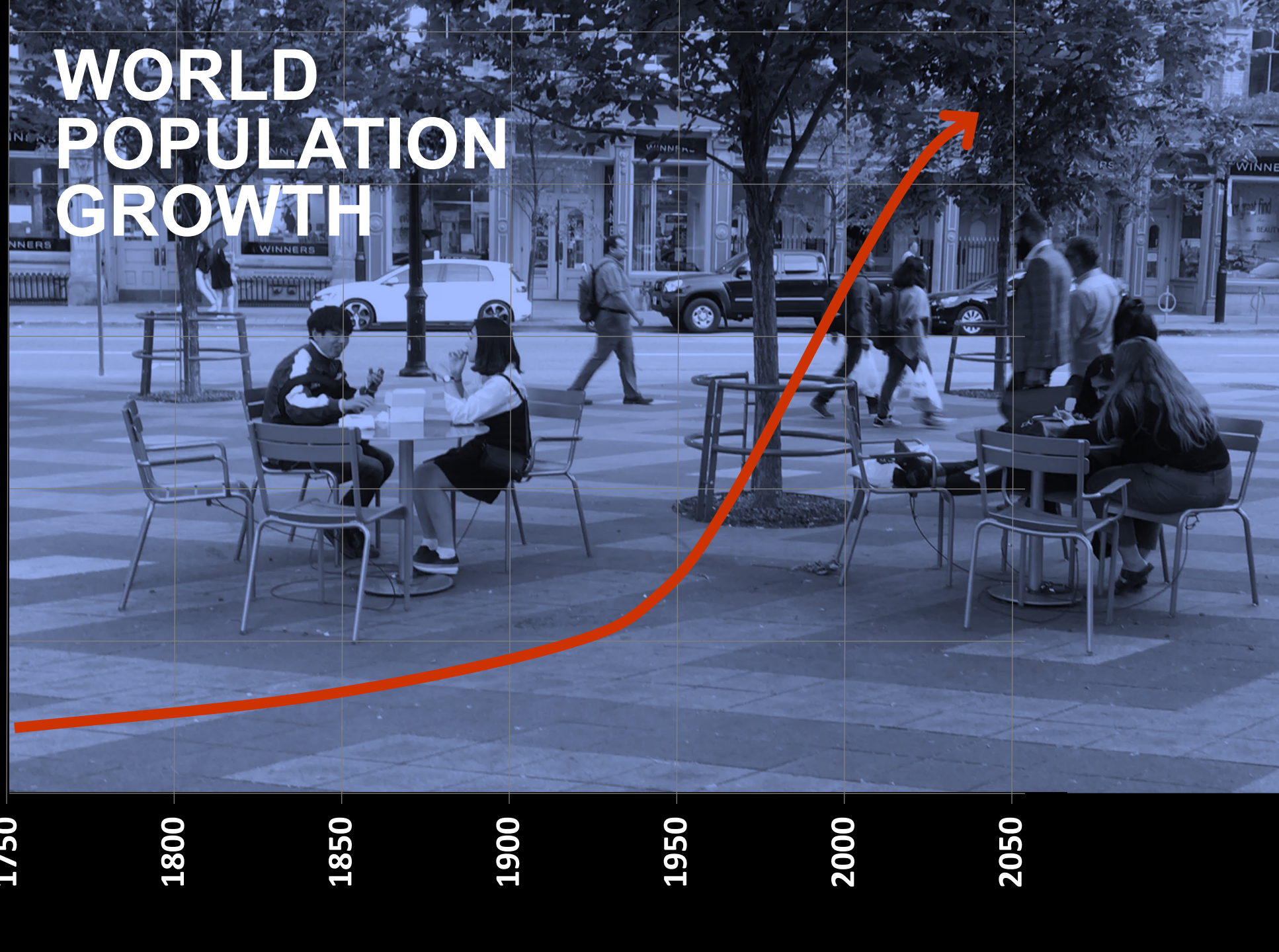
1900

1950

2000

2050

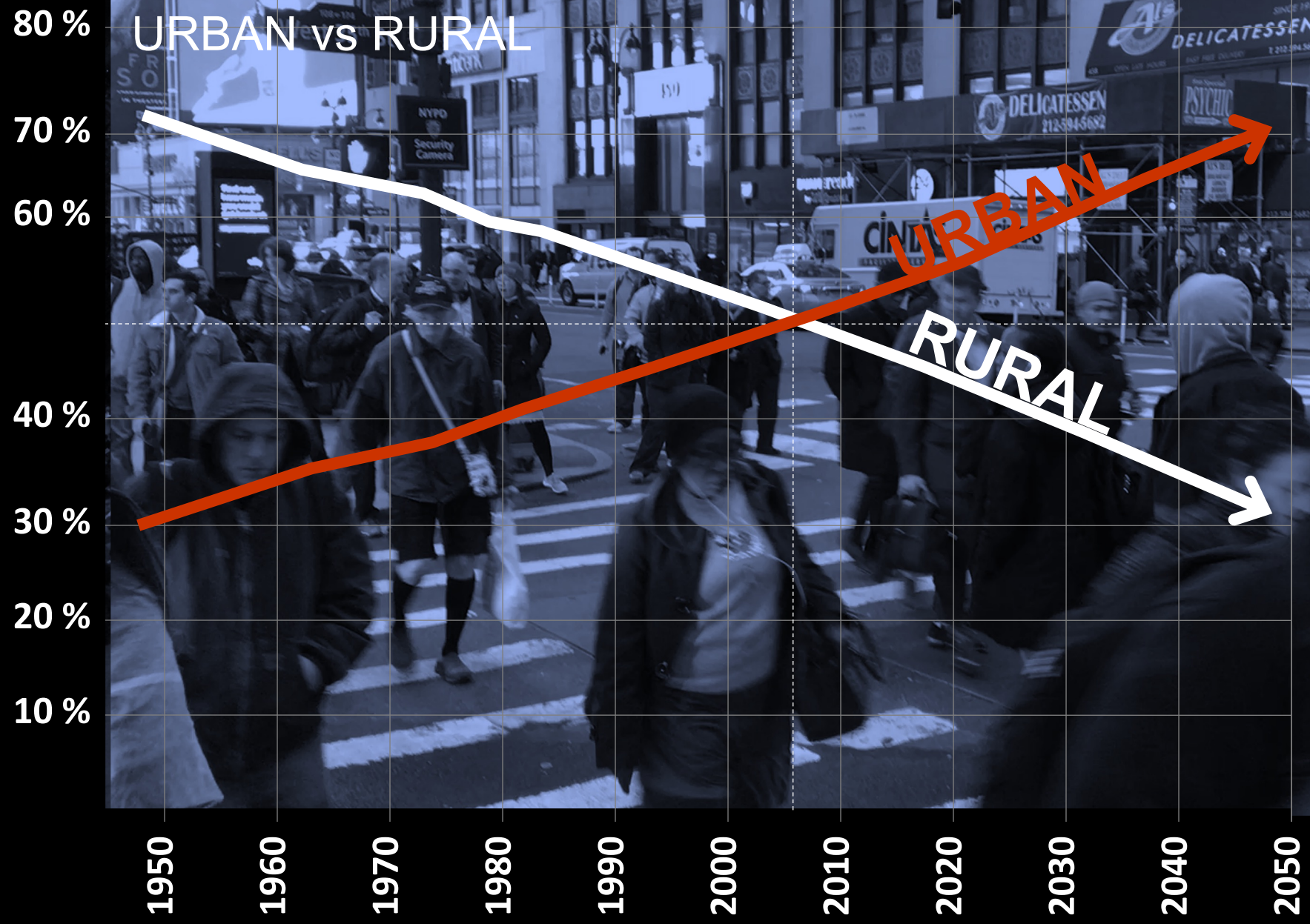
source: United Nations, Population Division





# GLOBAL POPULATION

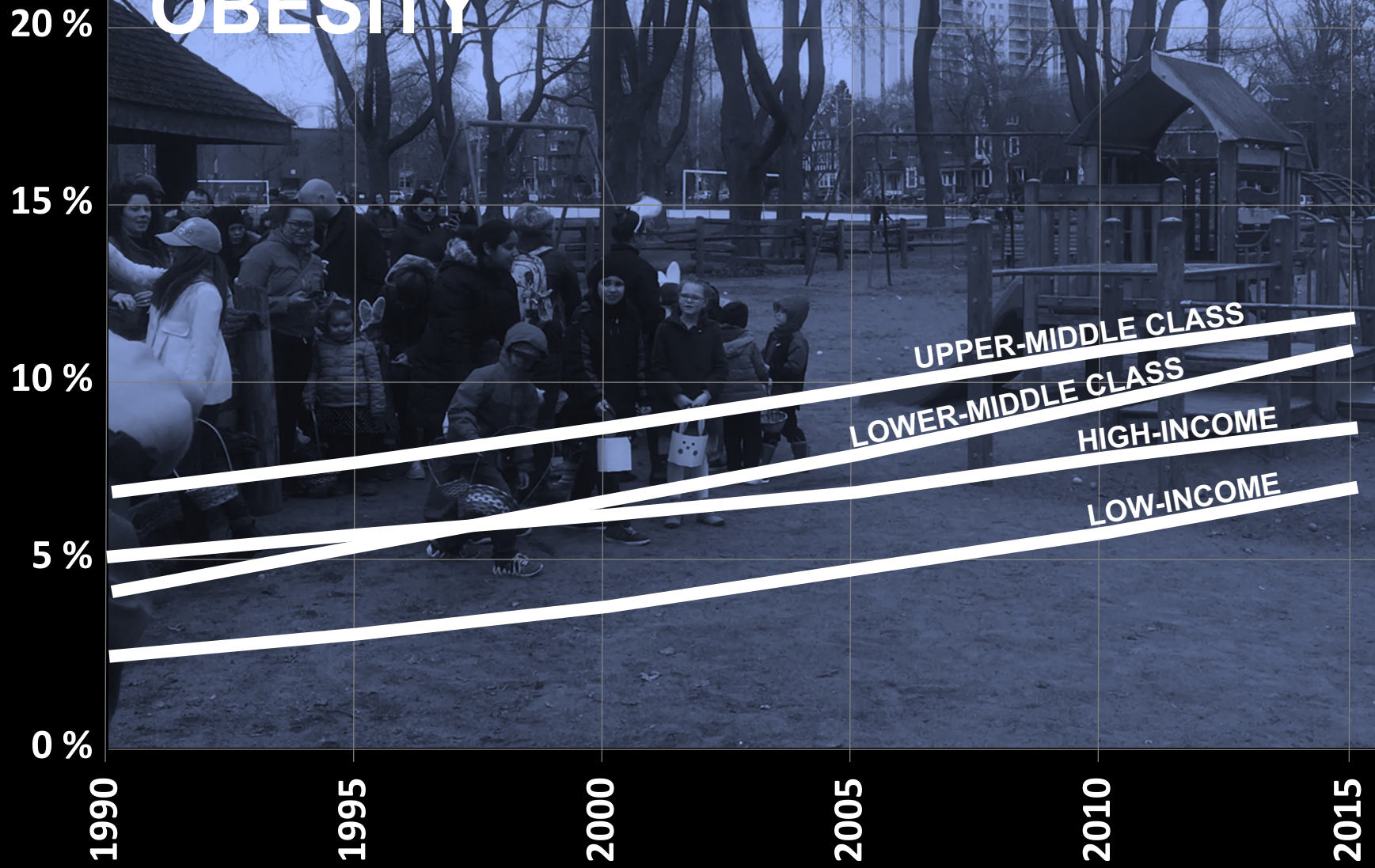
## URBAN vs RURAL



source: United Nations, <http://en.wikipedia.org/wiki/Urbanization>



# GLOBAL CHILDHOOD OBESITY

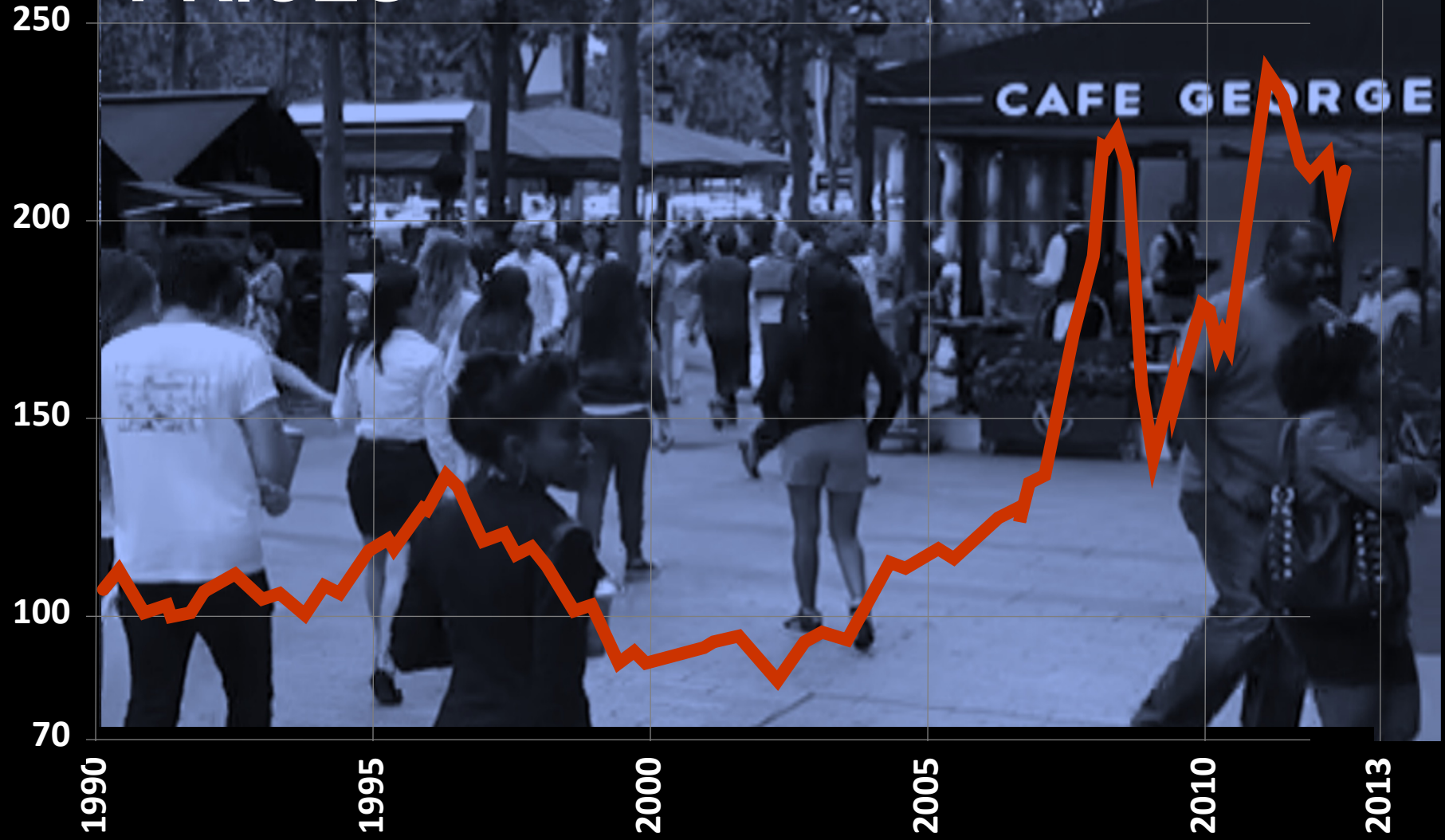


Source: Partnership to Fight Chronic Disease

<http://www.fightchronicdisease.org/media-center/news/obesity-growing-global-trend-and-risk-factor-chronic-disease>



# GLOBAL FOOD PRICES

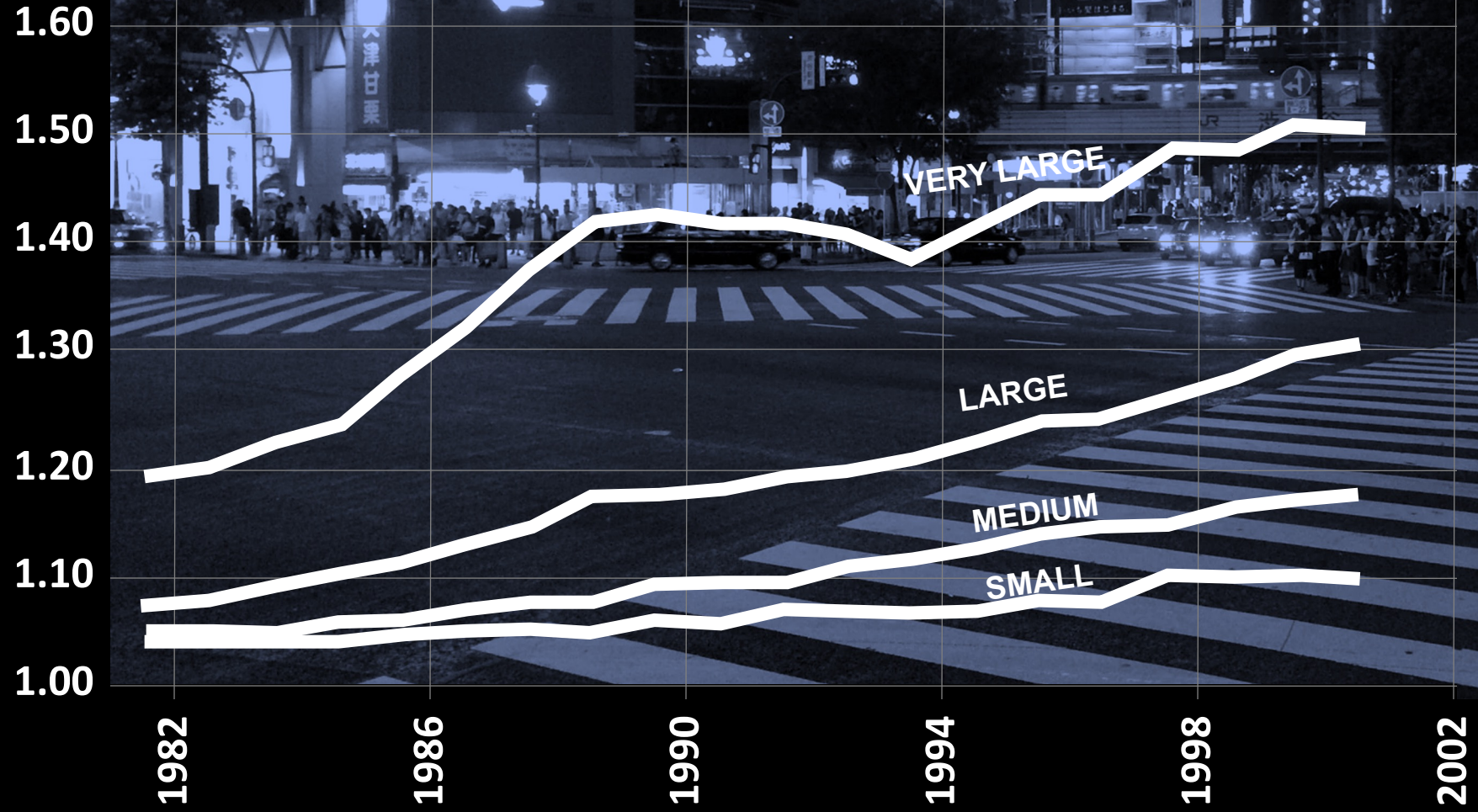


source: United Nations FAO Food Price Index  
[http://en.wikipedia.org/wiki/File:FAO\\_Food\\_Price\\_Index.png](http://en.wikipedia.org/wiki/File:FAO_Food_Price_Index.png)



# PEAK-PERIOD CONGESTION

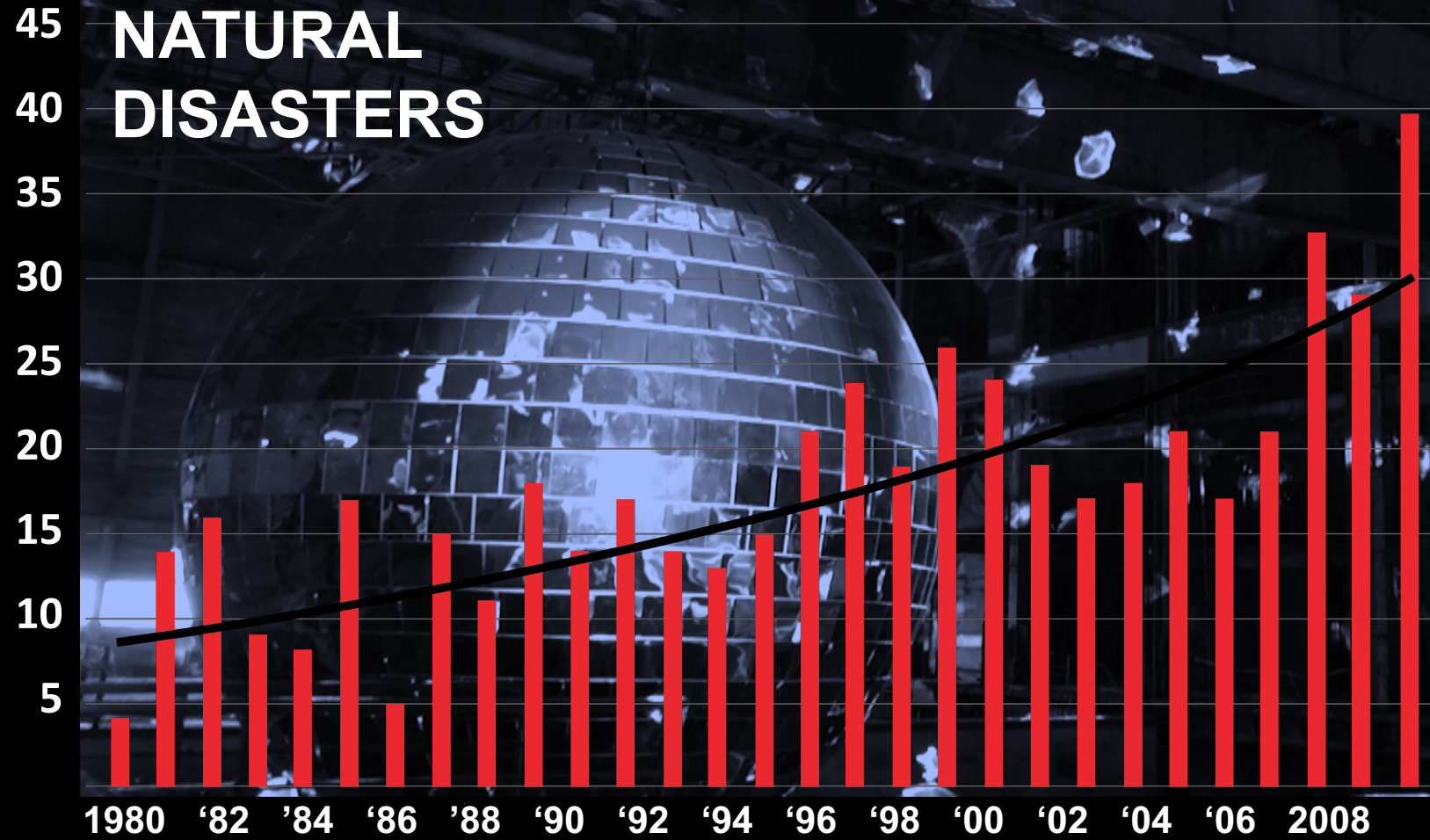
(TRAVEL TIME INDEX)  
TRENDS BY U.S.  
POPULATION GROUP



Source: US Department of Transportation  
[http://www.ops.fhwa.dot.gov/congestion\\_report\\_04/executive\\_summary.htm](http://www.ops.fhwa.dot.gov/congestion_report_04/executive_summary.htm)



# NUMBER OF DEVASTATING (CATEGORY 5) NATURAL DISASTERS





# GLOBAL REFUGEES and DISPLACED POPULATION

MILLION 45

37.5

30

22.5

15

7.5

0

1950

1960

1970

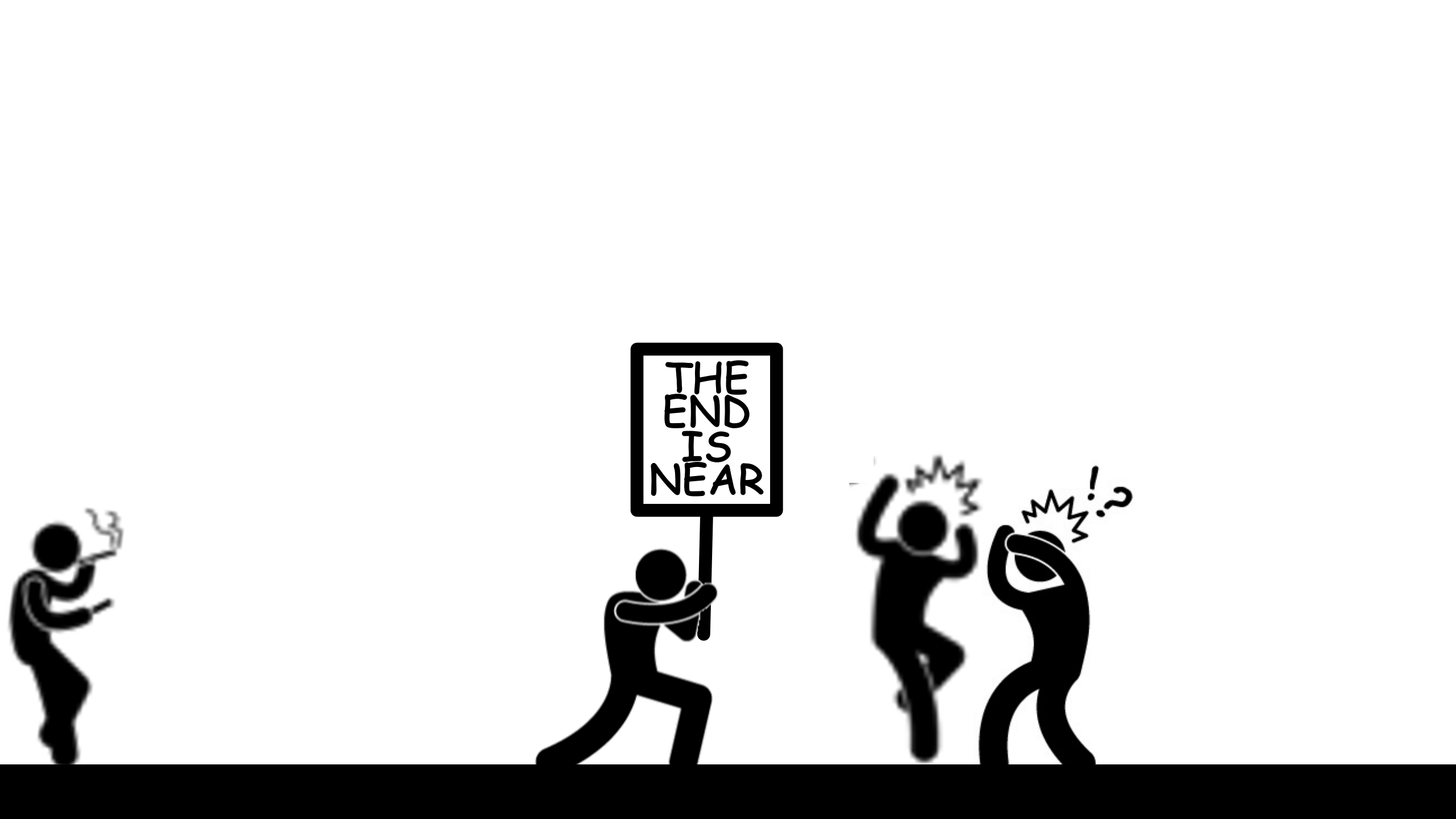
1980

1990

2000

source: Centre for Systemic Peace  
<http://www.systemicpeace.org/conflict.htm>





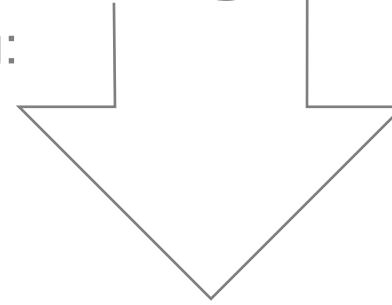
THE  
END  
IS  
NEAR





# SEDENTARY LIFESTYLES, & POOR DIETARY HABITS

contribute to serious **HEALTH** problems, including:



RESPIRATORY AILMENTS

CORONARY HEART DISEASE

NON-INSULIN DEPENDENT DIABETES (TYPE II)

OVERWEIGHT & OBESITY

HIGH BLOOD PRESSURE & STROKE

OSTEOPOROSIS

CANCERS

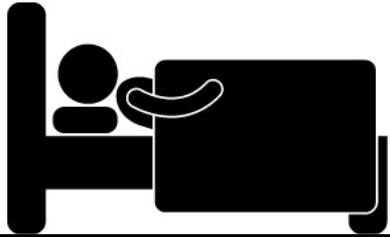
STRESS & DEPRESSION





the economic burden of  
**physical inactivity  
and obesity** **\$9.6B**

**4.8%** of total  
Health Care  
costs in  
Canada



**40%**

of several Provincial budgets are  
**health related**

and is growing faster than  
**Canada's economy**







1853 etching by  
Phiz (Hablot K. Browne)

in Charles Dickens's  
*'Bleak House'*

# WORLD HEALTH ORGANIZATION

OTTAWA CHARTER  
FOR HEALTH PROMOTION  
1986



## HEALTHY MUNICIPALITIES and/or COMMUNITIES INITIATIVES:

Argentina (100+)

Canada

Brazil

Costa Rica

Cuba

El Salvador

Guatemala

Honduras

Nicaragua

Mexico (1000+)

Panama

Paraguay

Peru (130)

Trinidad & Tobago

Uruguay

USA

etc.



# VANCOUVER FOUNDATION Vital Signs Report

18

## Environmental Sustainability

We have good intentions, but progress is slow

Recycling, driving less, reducing our water use – there are many ways we can live more sustainably. Our community is still struggling with choosing between the easy thing and the right thing to do for a healthy environment.




**Citizen Grade**

B-

**Citizen Priorities**

Improve transit service	21%
Reduce reliance on cars	12%
Cut down on waste	12%

**RESEARCH FINDINGS** ↓

 <p><b>Water use</b> <b>9%</b> decrease region-wide over two years but still high when compared to European cities <small>2008</small></p>	 <p><b>Waste</b> <b>56%</b> of our waste is diverted from landfills – the regional target is 70% by 2015 <small>2008</small></p>	 <p><b>Greenhouse gases</b> <b>8%</b> increase in emissions over two years, with the majority (55%) coming from transportation <small>2007</small></p>	 <p><b>Taking action</b> <b>90%</b> of residents believe individual actions can improve the quality of our environment, making us more optimistic than the average Canadian <small>2010</small></p>
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# 5 Whole Health Elements

Nested within the "Whole Health" vision, there are 5 fundamental elements that unify the design of the future Pearson Dogwood Neighborhood. The 5 elements tell the story of life in the neighbourhood.

The 5 Whole Health Elements were developed based on best practices, evidence-based design, and consultation with stakeholders including Pearson residents, Dogwood residents' families, Marpole residents, therapeutic pool users, health services professionals, Urban Farmers on 57th, representatives from the disabilities community, and others.



## FLOW

Water and energy flow through and within the neighbourhood, shaped by unique topography with therapeutic offerings for humans and ecosystems.



## ACCESS

The neighbourhood is "turned inside out" through strong connections and destinations within reach by all.



## GROW

The neighbourhood is a place of creation and growth. Celebrating seasonality, it yields food, community, beauty, and wellness. It also yields a financial endowment for health across the region.



## THRIVE

The neighbourhood is a nourishing and healing landscape. It provides people with the opportunity to touch every aspect of their being. It restores healthy human-earth relationships.



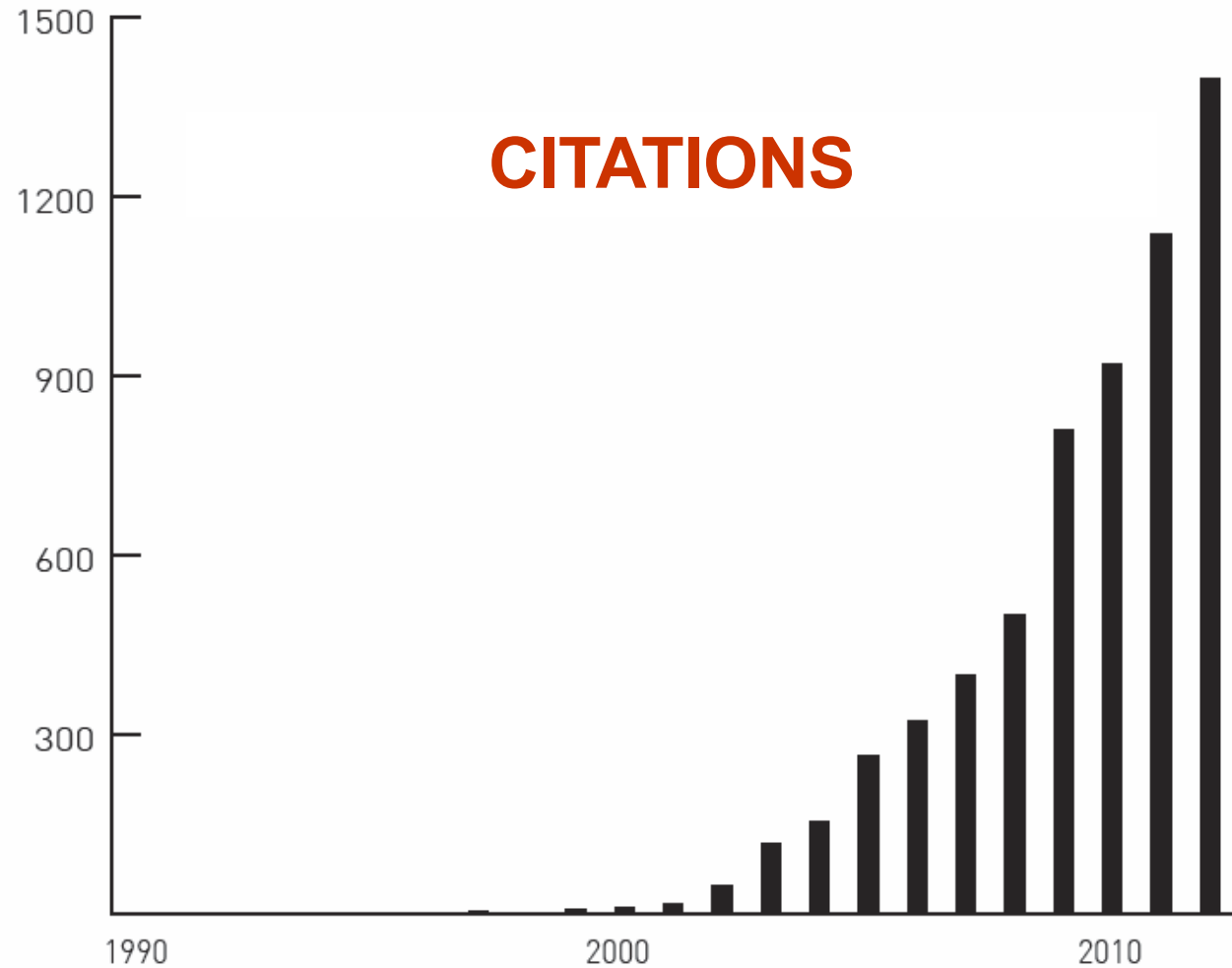
## HARMONIZE

Diverse needs, desires, and aspirations are brought together in integrated housing, health services, and other destinations that allow residents and visitors to shop, work, play, and rejuvenate within walking or wheelchair distance of home.





# HEALTH + URBAN DESIGN/PLANNING:



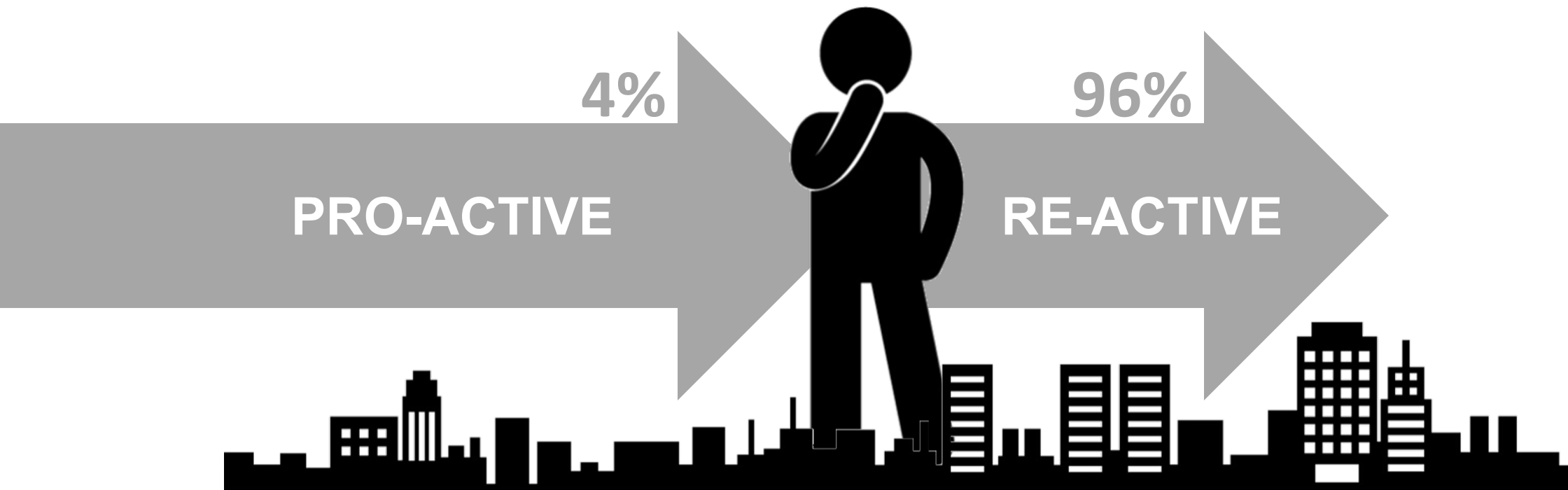
# COGNITIVE **DISSONANCE**



our collective  
ability to ignore  
the seemingly  
inconvenient



Where should we invest our money, resources, energy...?



**WE ARE PASSIONATE ABOUT DESIGN**  
WE BELIEVE IT CAN, AND SHOULD,  
**MEANINGFULLY IMPROVE**  
**THE WELLBEING OF COMMUNITIES**  
AND THE ENVIRONMENT WE SHARE.

**DIALOG®**





**the research**

**DIALOG<sup>®</sup>**

+





ECONOMISTS  
LANDSCAPE ARCHITECTS  
MECHANICAL ENGINEERS  
ARCHITECTS  
CLIENTS  
CHIEF MEDICAL OFFICERS  
CITY PLANNERS  
HEALTH OFFICIALS  
TENANTS  
INDUSTRY PARTNERS  
INTERIOR DESIGNERS  
CITY OFFICIALS  
BUILDING OCCUPANTS  
URBAN DESIGNERS  
ACADEMICS  
SOCIAL WORKERS  
COMMUNITY LEADERS  
STRUCTURAL ENGINEERS  
DIALOG STAFF  
ELECTRICAL ENGINEERS  
INDIGENOUS GROUPS

**3000+**





ecosystem

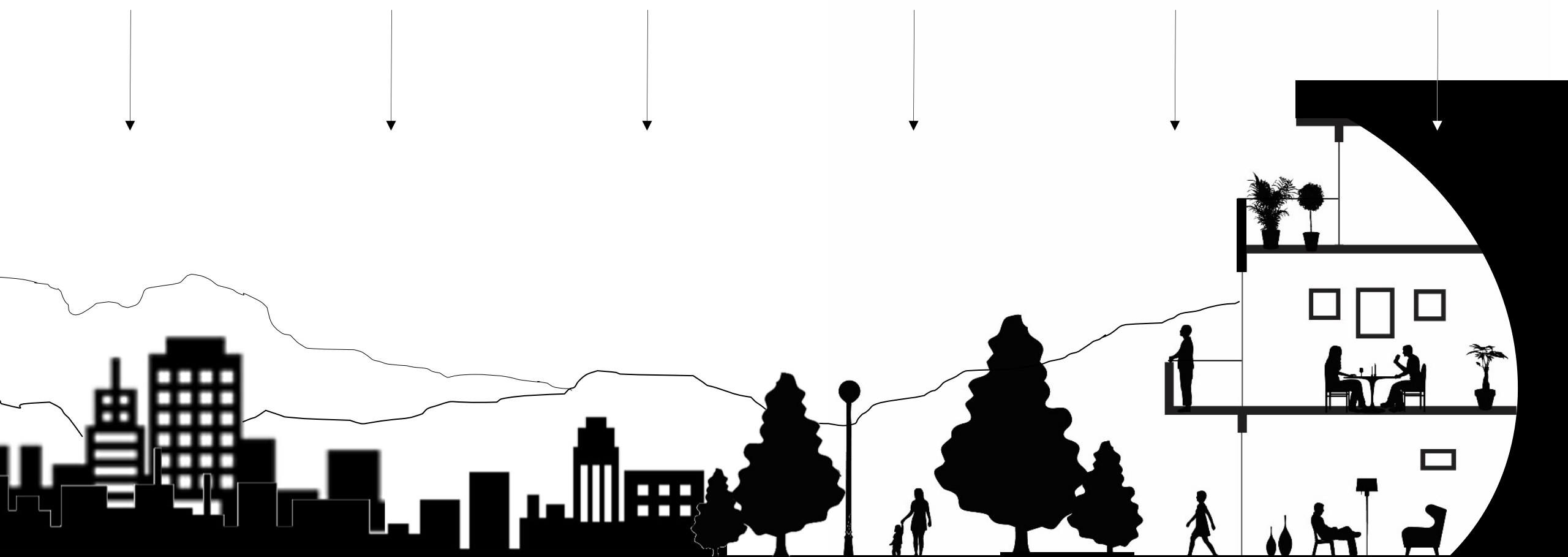
region

neighbourhood

site

building

interior



COMMUNITY **WELLBEING...**

# COMMUNITY WELLBEING

*the combination of social, economic, environmental, cultural, and political conditions identified by individuals and their communities as essential for them to flourish and fulfill their potential \**

\*Adapted from Wiseman and Basher's definition (2008:358)



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**Community  
Wellbeing  
Framework**







# metrics

## Community Wellbeing Framework





# SOCIAL



## Socialization

do people have spaces (indoors/outdoors) to engage socially (formally/informally)?

## Welcoming

do people feel welcomed, safe, and engaged, 24/7 regardless of background or physical ability?

## Support systems

do people have access to support facilities and services on a day to day basis, and during moments of need?







## ENVIRONMENT

### **Natural Systems**

does the project have a positive impact on the functioning of natural systems (local/global) and the ecology?

### **Delight and enjoyment**

can people enjoy high quality, beautiful spaces with abandon?

### **Mobility**

does the project increase the uptake for active transportation and reduce single-car-occupancy miles traveled?

### **Resilience**

does the project implement a plan for operational continuity and to manage and adapt to identified hazards?



## Local Economy

does the project support a healthy local economy and in particular a knowledge economy?

ECONOMIC

## Affordability and quality of life

can people of different income-levels afford a high quality of life?

## Complete Communities

can people realize the activities of everyday life within walking distance?

## Life-cycle costing and future-proofing

does the project account for full-life-cycle costing and the costs to the environment and community?



## Sense of belonging

do people feel included in their communities, connected to their social networks, and engaged in civic and community life, regardless of their background?

## Learning

do people of all ages have opportunities to learn and develop?

## Play

do people have quality spaces to relax and engage creatively?

## Cultural and recreational vitality

do people have access to cultural, recreational, and art facilities?

CULTURAL



## Sense of ownership and stewardship

- do people have the ability to understand, control, manage, interact with, and transform their environment. Are they personally invested in its function/success?

POLITICAL

## Integrated process

are a diversity of perspectives and disciplines meaningfully integrated from the outset and throughout the life of the project?

## Collaborative process

are decision-makers, stakeholders, and the public at-large meaningfully integrated from the outset and throughout the life of the project?











# Community Wellbeing

## What does "Community Wellbeing" mean for North King's Town?

Community well-being describes the inter-related factors: social, environmental, economic, cultural, political that influence broader quality of life and health. Sense of wellbeing, as the North King's Town's Secondary Plan outlines, can be the community well-being of a place to make decisions about the governing and delivery of the community. It allows us to be more comprehensive and thorough in addressing the wide range of factors that impact people's day to day lives.

## The Community Wellbeing

As part of its own initiative, DIALOG has partnered to create the following Community Wellbeing Framework to guide the planning and delivery of the community. The design team will be questioned on how well the plan addresses the wide range of factors that impact people's day to day lives.



### Social Domain

The social domain involves the social conditions that enable individuals and their communities to flourish and fulfil their potential. It spans to the external circumstances, recent circumstances for people to participate in community life and realisation.

### Environmental Domain

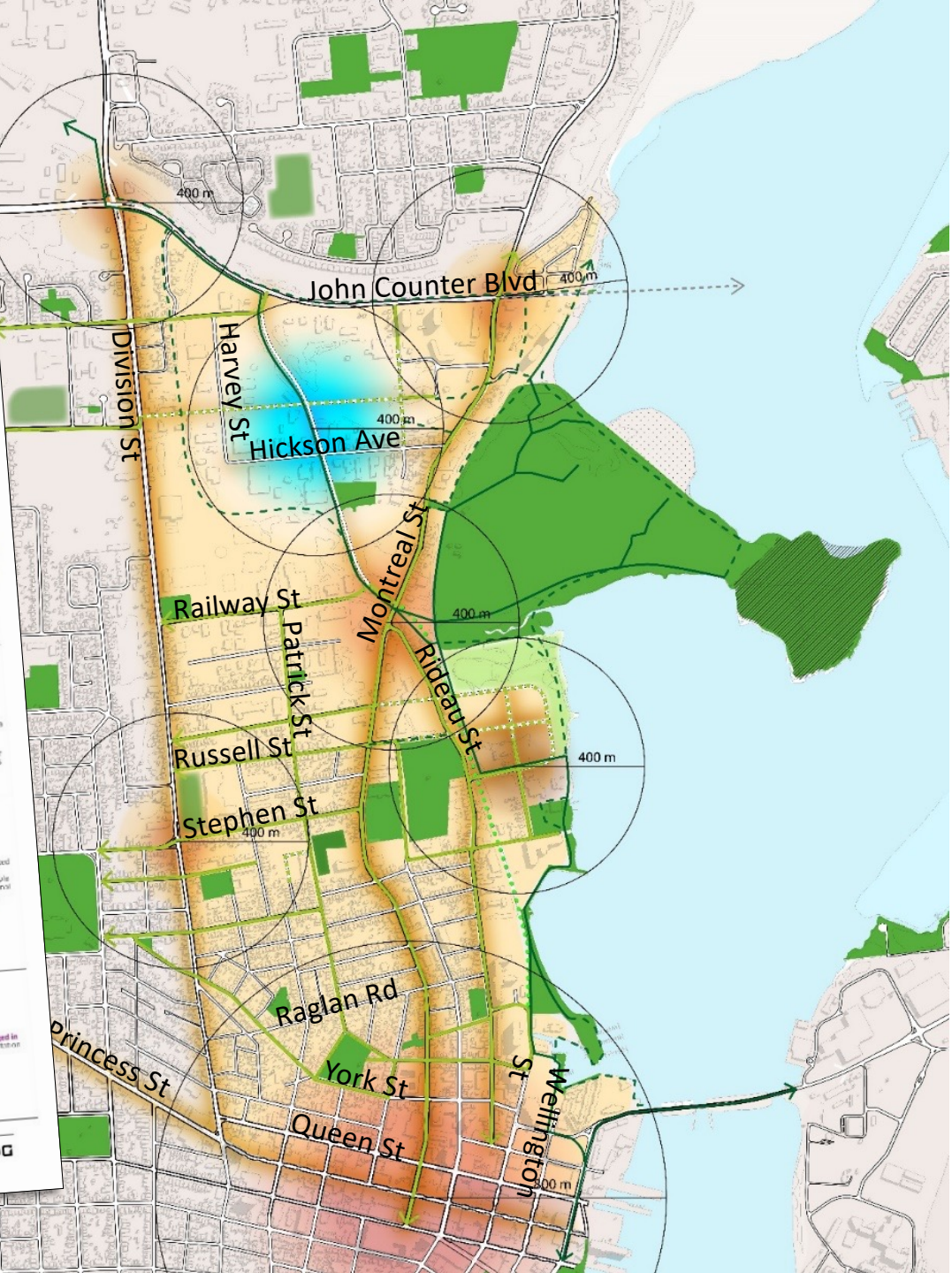
The wellbeing of the environment and of natural systems is inherently linked to the wellbeing of people. One in nature is to think of the other. The natural environment provides the context for the ecosystem services and elements that sustain and enhance life on the planet and beyond. It also shapes the way we live and work, influencing the health, functioning and resilience of societies that sustain and enhance the wellbeing of the planet and beyond.

### Economic Domain

The key economic factors that influence population health and community wellbeing are economic wellbeing and social stability. Economic wellbeing includes income, housing, labour force, and other factors. Social stability includes the quality of life, health, and other factors.

# Community Wellbeing As Measured Against the Secondary Plan

Criteria	Land Use	Public Realm	Transportation
<b>Social</b> <b>Socialization</b> Can people enjoy high quality, beautiful spaces and amenities for a variety of activities? <b>Support Systems</b> Do people have access to support systems in their communities? <b>Wellbeing</b> Do people feel safe and engaged, 24/7, regardless of age, ability or physical ability?	<b>Public Realm</b> Can people enjoy high quality, beautiful spaces and amenities for a variety of activities? <b>Natural Systems</b> Does the project have a positive impact on the environment? <b>Mobility</b> Does the project facilitate the use of public transportation, active modes, and other modes? <b>Resilience</b> Does the project include a plan for operation and maintenance in the event of a disaster or emergency?	<b>Quality of Life</b> Can people of different income levels enjoy a high quality of life? <b>Complete Community</b> Does the project include a mix of land uses and amenities that support a wide range of activities and lifestyles? <b>Life-Cycle Costing</b> Does the project include a plan for operation and maintenance in the event of a disaster or emergency? <b>Knowledge Economy</b> Does the project include a plan for operation and maintenance in the event of a disaster or emergency?	<b>Public Realm</b> Can people enjoy high quality, beautiful spaces and amenities for a variety of activities? <b>Natural Systems</b> Does the project have a positive impact on the environment? <b>Mobility</b> Does the project facilitate the use of public transportation, active modes, and other modes? <b>Resilience</b> Does the project include a plan for operation and maintenance in the event of a disaster or emergency?







Ottawa





Ottawa



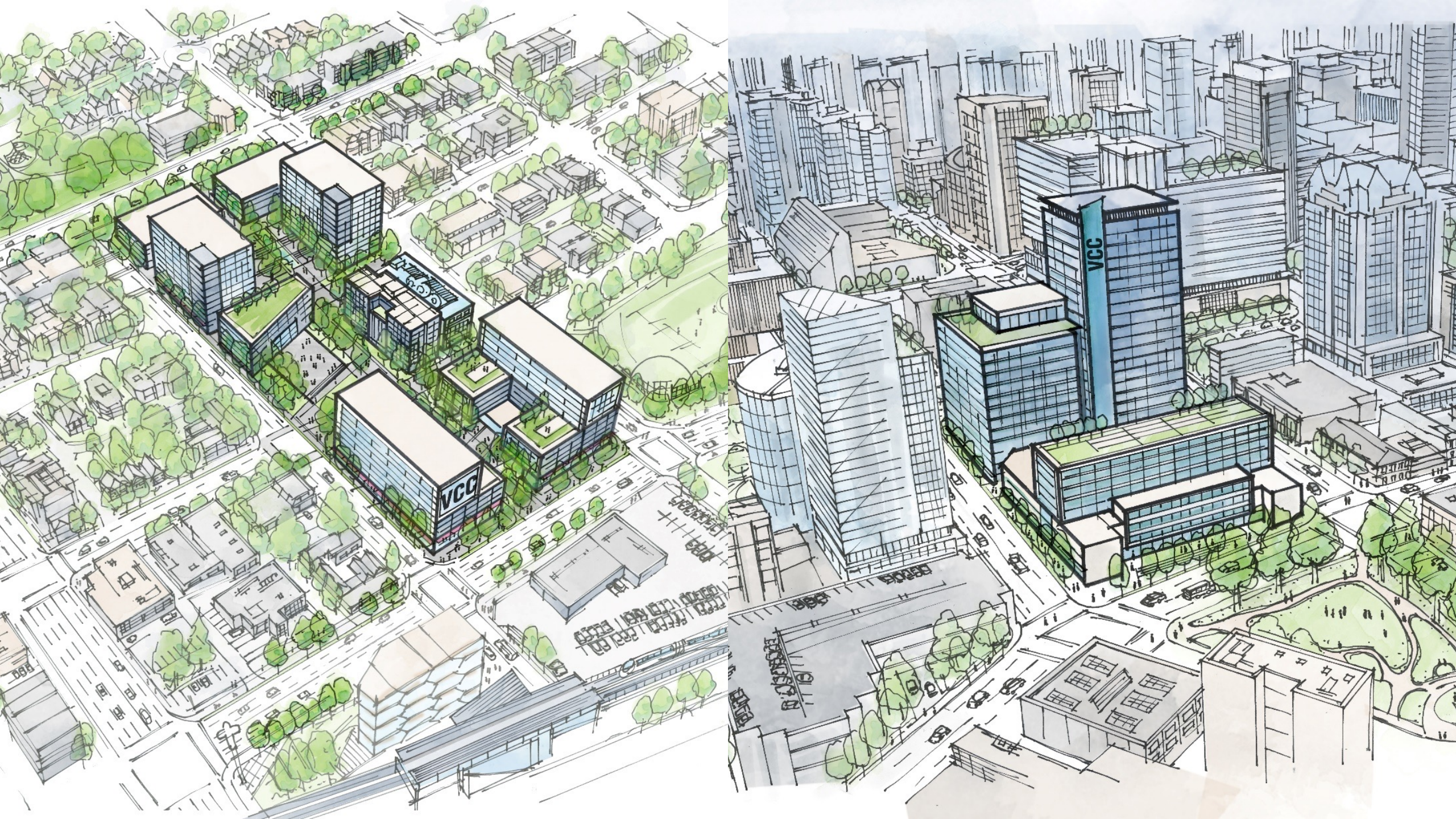










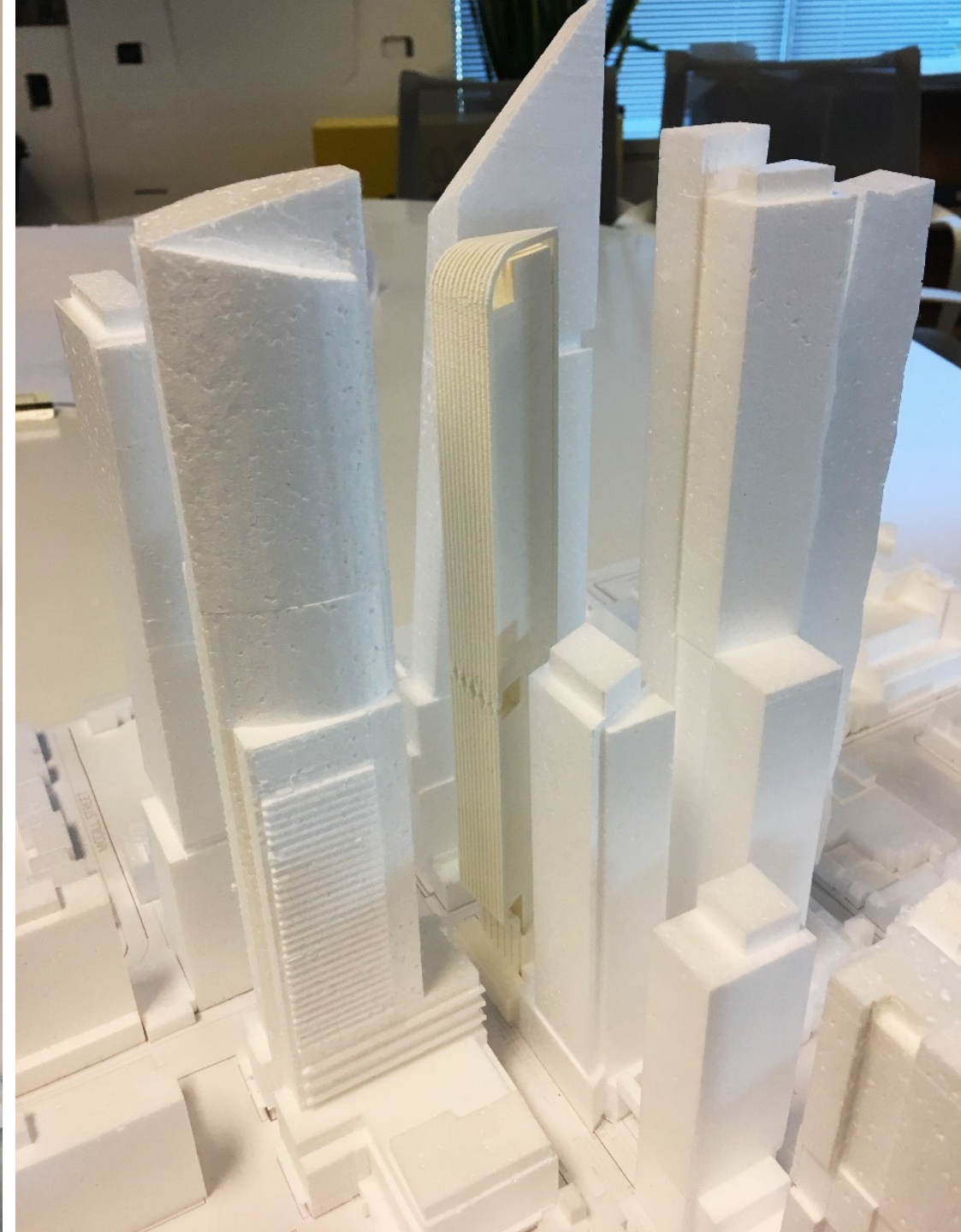
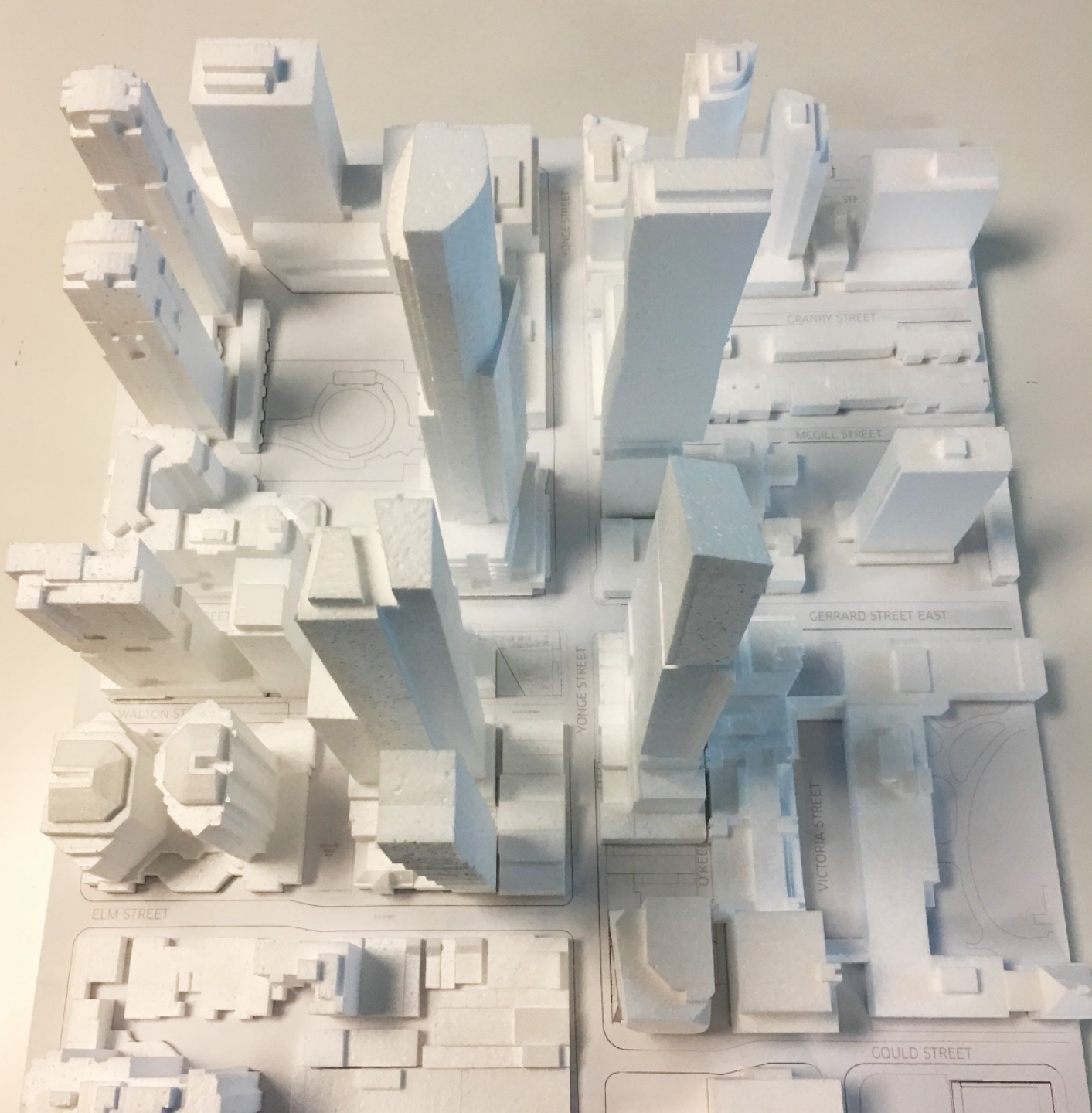






Toronto









Oakland



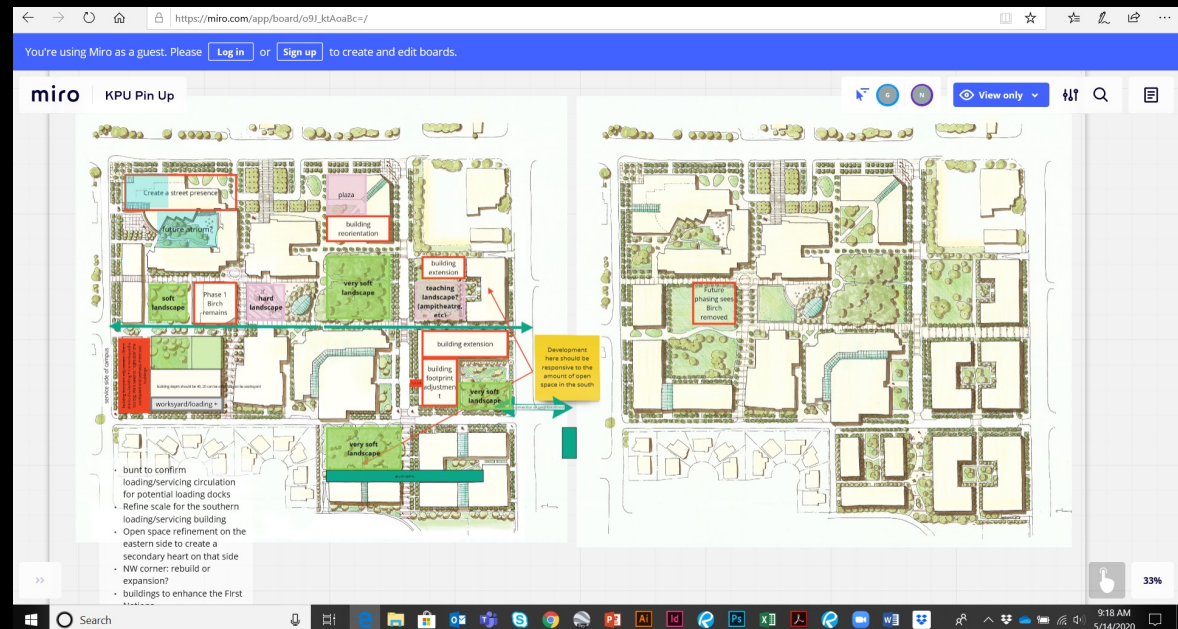
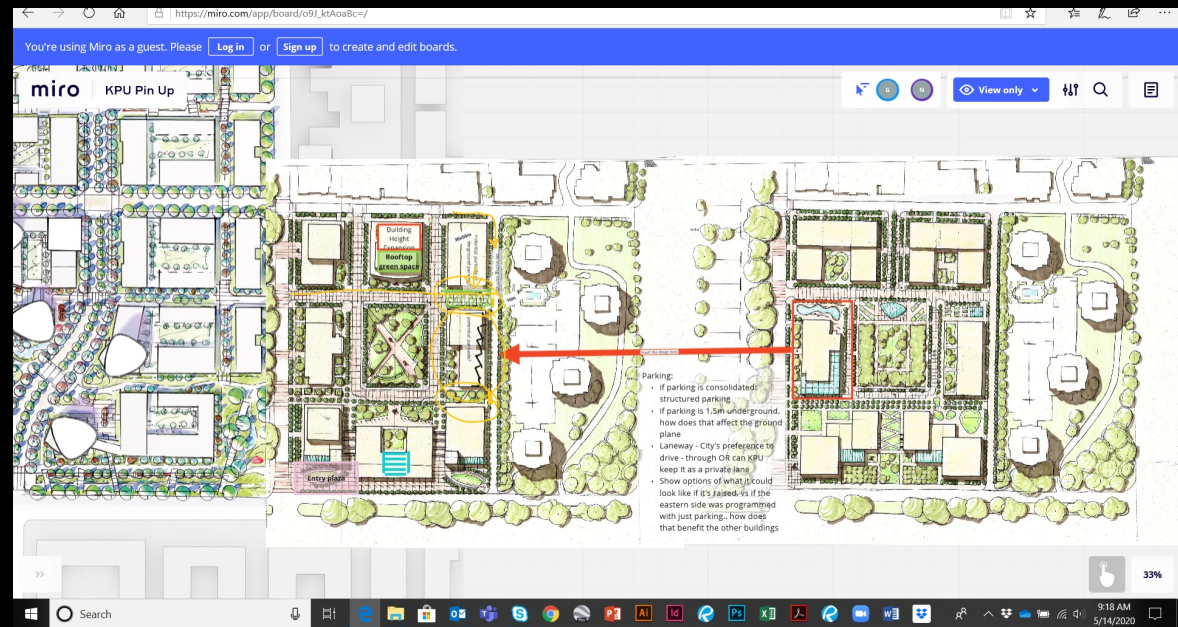






Toronto







# Field Evaluation

**Urban Parks Analysis: Beltline**

Please rank the quality of each park using the following scale

5 - Excellent  
4 - Good  
3 - Fair  
2 - Poor  
1 - Very Poor

Category	Criteria	Neighbourhood Parks					Historic Parks		Municipal School Reserves		Mid Block Parks	
		Thomson Family Park	Connaught Park	Bark Scott Park	Healthy Park	Humpy Hollow Park	Central Memorial Park	Beaulieu Gardens	Connaught School	Western High School	Tomkins Park	Rouleauville Square
Political	Safe	4	3.5	4	4	4	4	4	3	4	4	4
	Score	4	4	3.5	3.5	2	3.5	3	3	3	3	3
	Accessible	4	3.5	4	4	4	4	4	3	4	4	4
Economic	Revenue	2.5	3	3	3	3	3	3	3	3	3	3
	Adverse Impacts	4	4	3	2	4	4	4	3	4	4	4
	Score	4	3.5	4	3	4	4	4	3.5	4	4	4
Social	Use	4	3.5	4	4	4	4	4	3	4	4	4
	Score	4	3.5	4	3.5	3	4	3.5	3	4	4	4
	Score	4	3.5	4	3.5	3	4	3.5	3	4	4	4
Cultural	Access	4	3	4	4	4	4	4	3	4	4	4
	Score	4	3	4	4	4	4	4	3	4	4	4
	Score	4	3	4	4	4	4	4	3	4	4	4

**Urban Parks Analysis: Beltline**

Please rank the quality of each park using the following scale

5 - Excellent  
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# #CommunityWellbeing

[www.dialogdesign.ca/community-wellbeing](http://www.dialogdesign.ca/community-wellbeing)