

From People To Data



Measuring People-friendly Streets
Global Designing Cities Initiative

April 11, 2018

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A Paradox:

“We know very much about the habitat of Siberian tigers and mountain gorillas, but only very little about the habitat of homo sapiens.”

*Enrique Peñalosa,
Mayor of Bogotá, Columbia*

A Daily Reality:



© marketoonist.com



"we measure
what we care
about" - Jan

Gehl + Gehl Institute

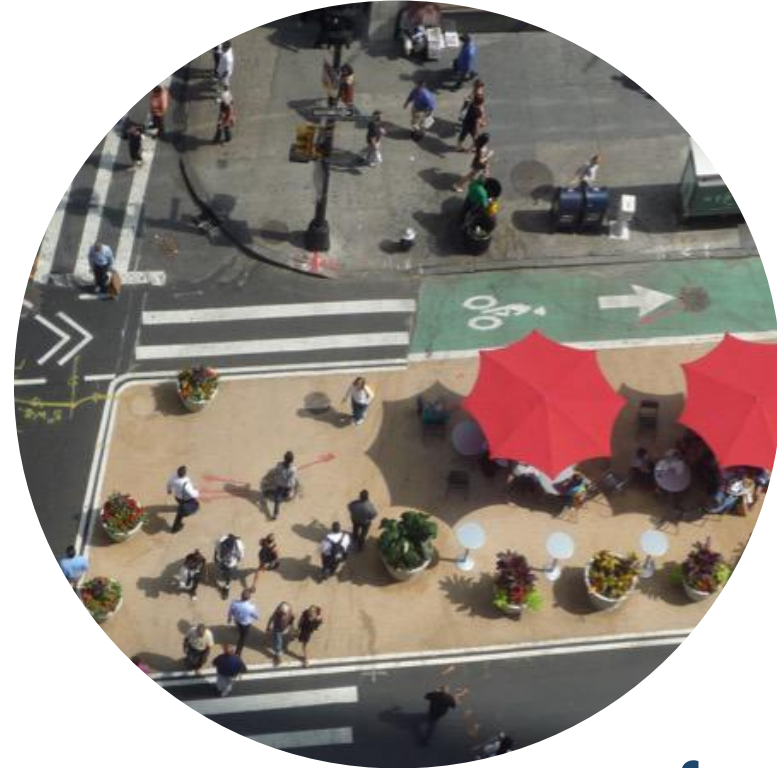
A shared vision: cities for people

Gehl Institute creates conditions for cities for people by creating knowledge and cultivating champions.



**Gehl
Institute**

Gehl makes cities for people through consulting and design.



for public life



How We Measure The Public Realm Today

Speed
Reliability
Flow
Capacity
Efficiency
...?

It Seems Like We Care A Lot About...



Poor Quality Places Inhibit Well-Being





The 21st Century Street Is Also a PLACE





Where What We Value Isn't Just Efficiency, Numbers and Geometry...

...It's Also About The Experience

Pioneers of People-First Planning



People-first Planning, Policy + Design

Gehl Institute
enables cities for
people...



...through
knowledge
creation that
advances systemic
change.

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for public life

Public Life Is...

Public life is what a collective group of people create when they live their lives outside their homes, workplaces, and cars.



- Public space is the backdrop for our:
- Everyday Routines
 - Culture
 - Community
 - Social Activities
 - Physical Activity
 - Civic life

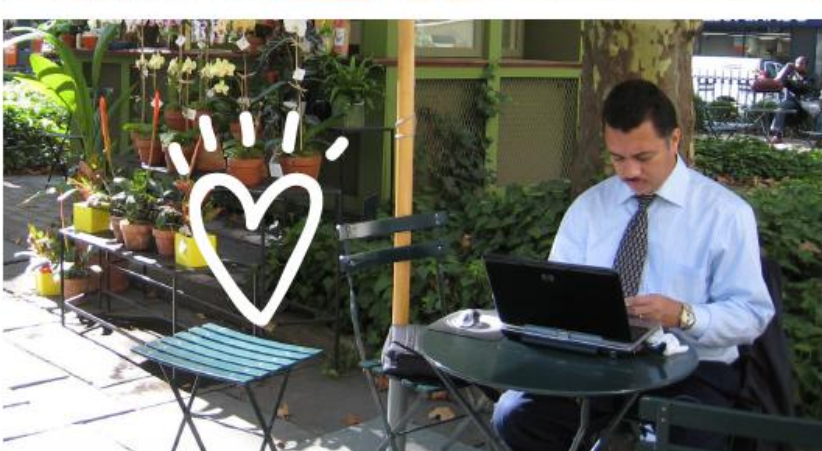
Public Life Is A Driver Of...



1. PHYSICAL AND MENTAL HEALTH
2. SUSTAINABLE MOBILITY
3. SOCIAL BENEFITS
4. IDENTITY AND SENSE OF PLACE
5. SAFETY
6. ECONOMIC DEVELOPMENT

Can We Realign Our Priorities?





People Are The Key!

Cultures and climates are different from city to city...



...but we all experience our environment from the same starting point...

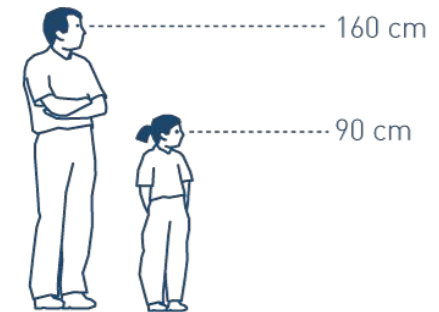
How Do YOU Experience the City?



Average speed

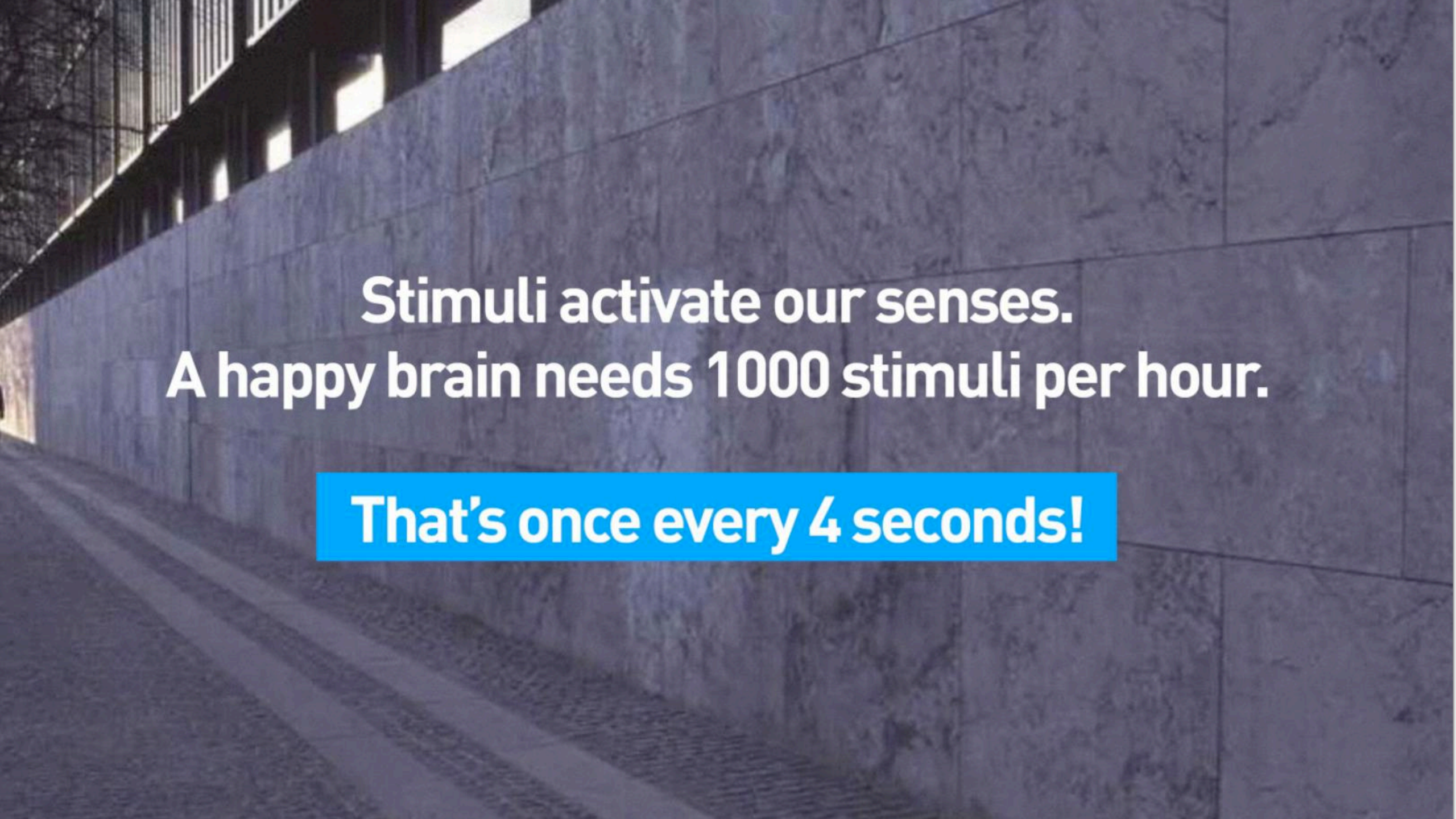


Need for stimuli



Average human
viewpoint

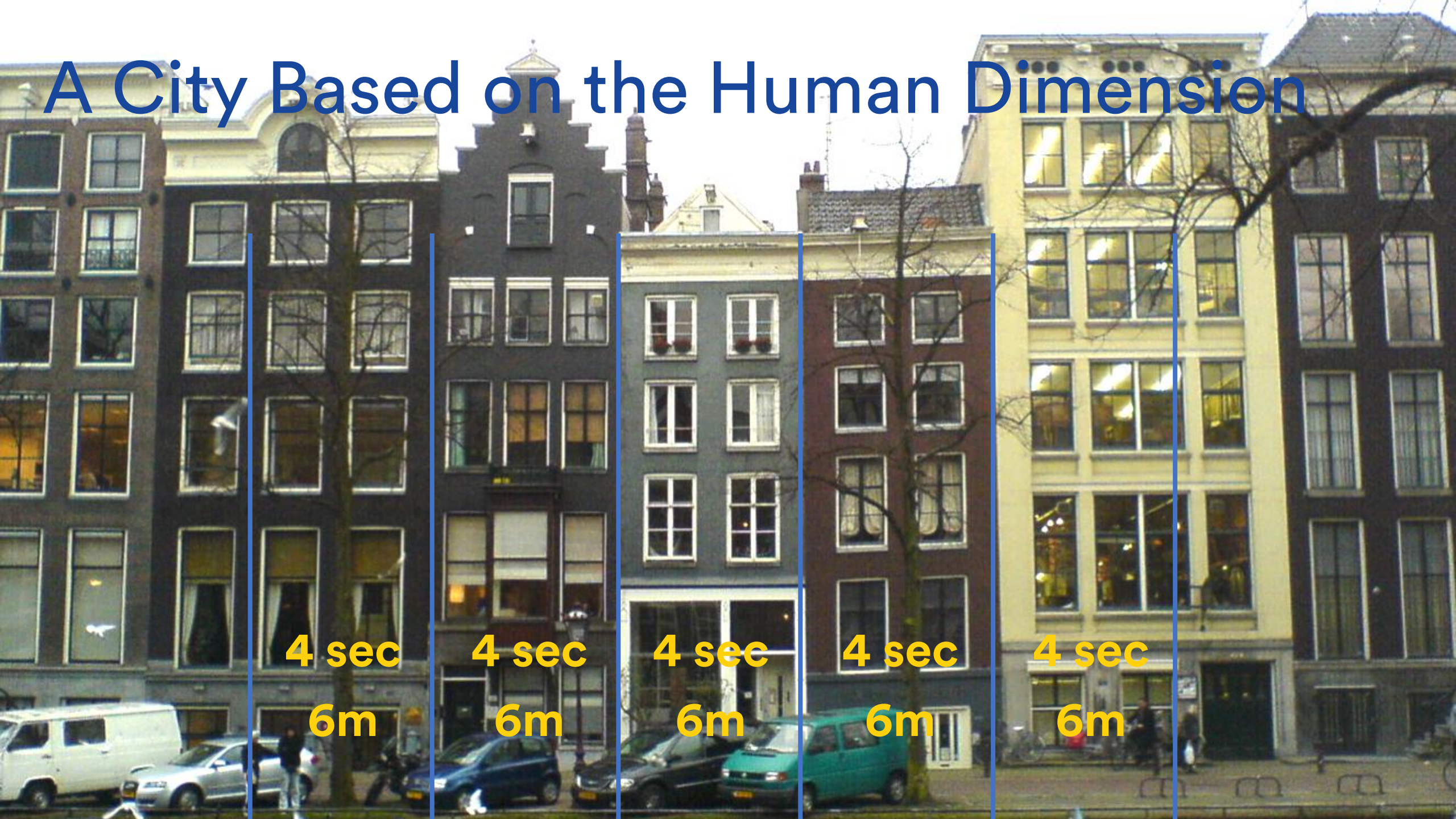
for public life

A photograph of a modern building with a textured stone wall. A walkway with a metal grate runs along the base of the wall. The building has several windows, some of which are illuminated from within, creating a warm glow. The overall scene is in a cool, blue-toned color palette.

**Stimuli activate our senses.
A happy brain needs 1000 stimuli per hour.**

That's once every 4 seconds!

A City Based on the Human Dimension



4 sec

6m

4 sec

6m

4 sec

6m

4 sec

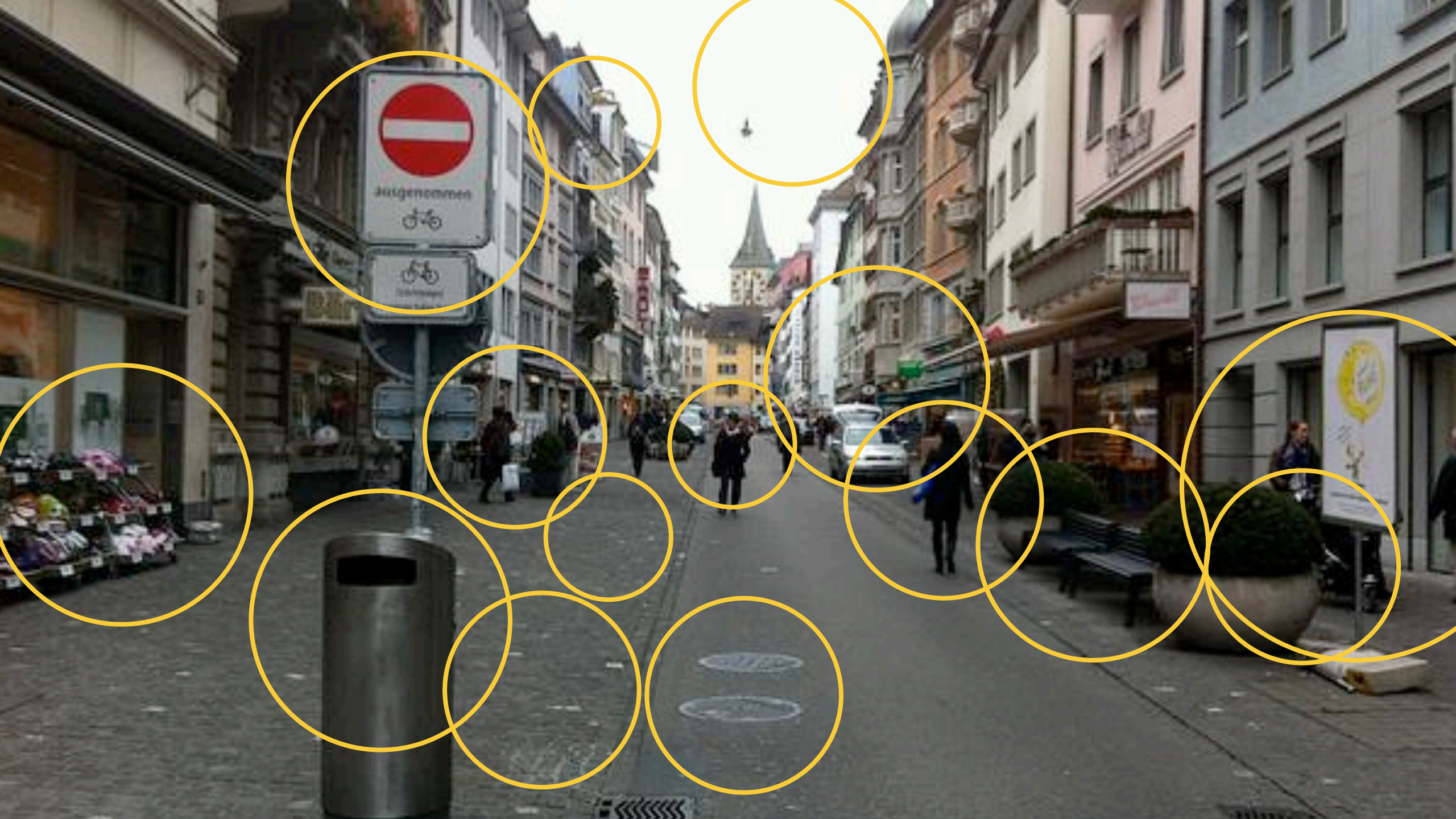
6m

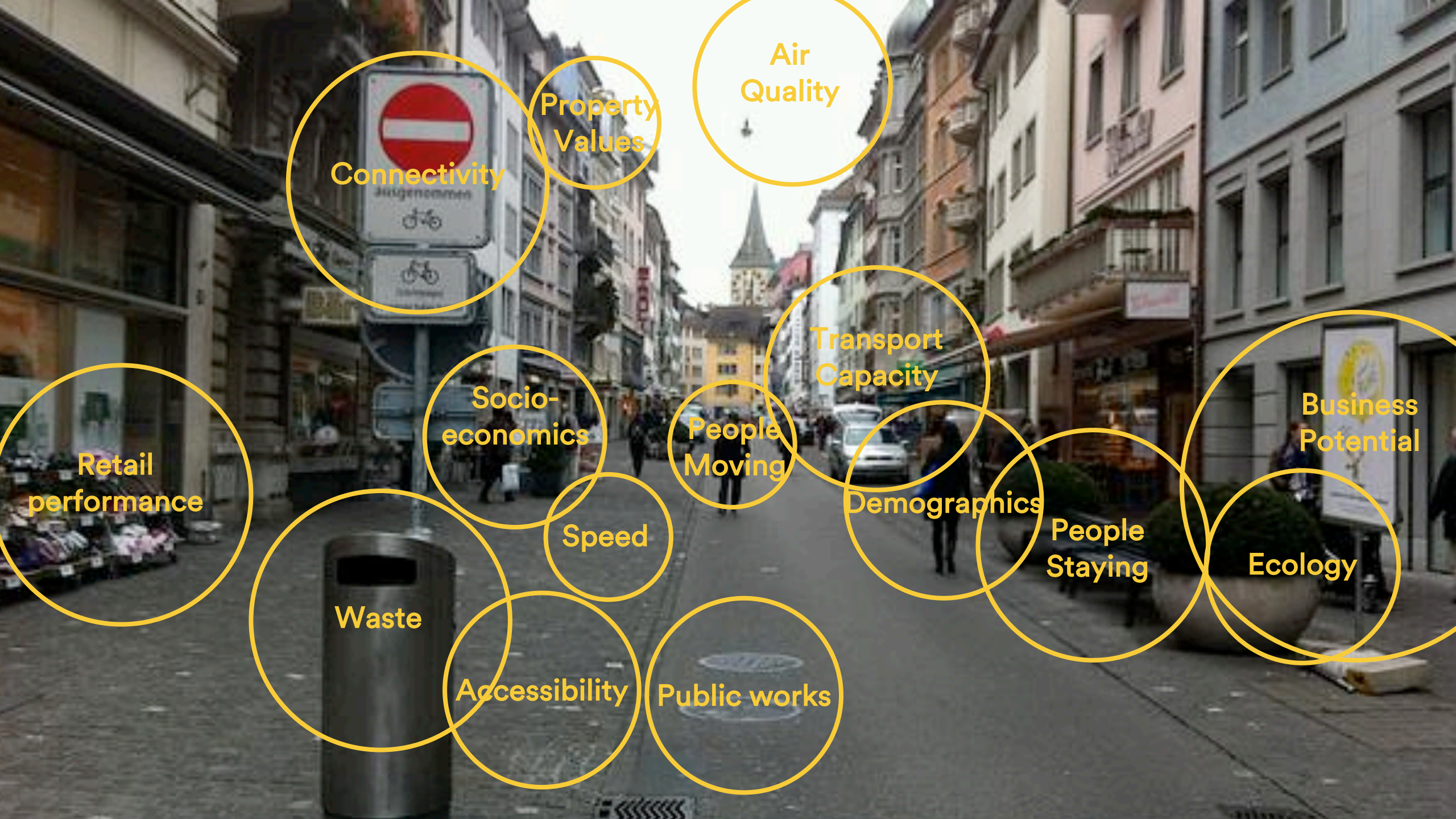
4 sec

6m

Understanding public life
requires understanding many
different components







Air
Quality

Property
Values

Connectivity

Transport
Capacity

Business
Potential

Ecology

People
Staying

Demographics

People
Moving

Speed

Public works

Accessibility

Waste

Socio-
economics

Retail
performance

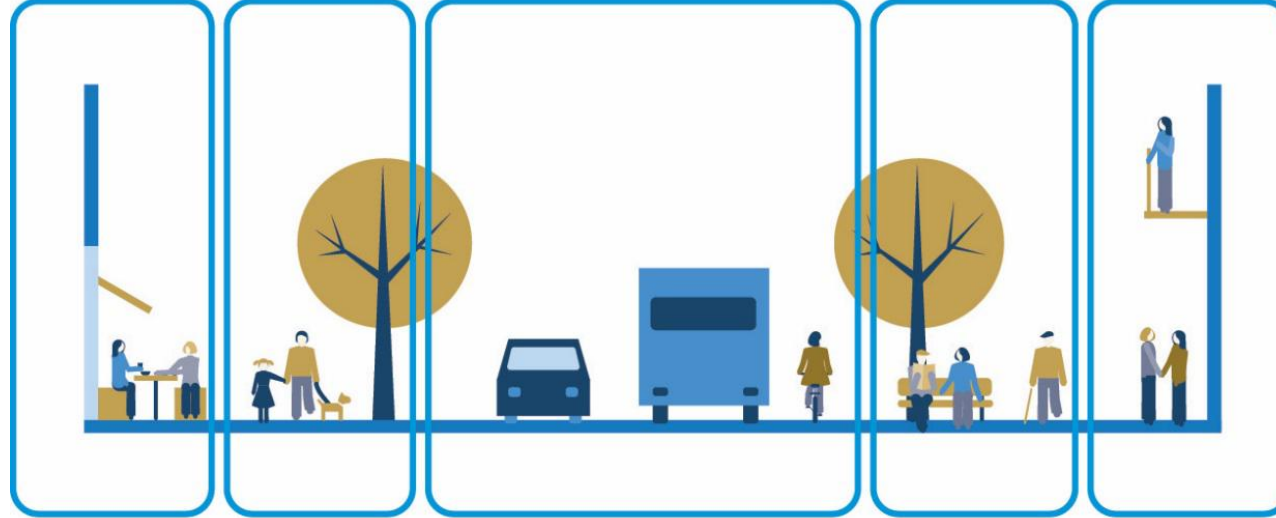
Planning

Transportation

Parks

Buildings

GOVERNANCE

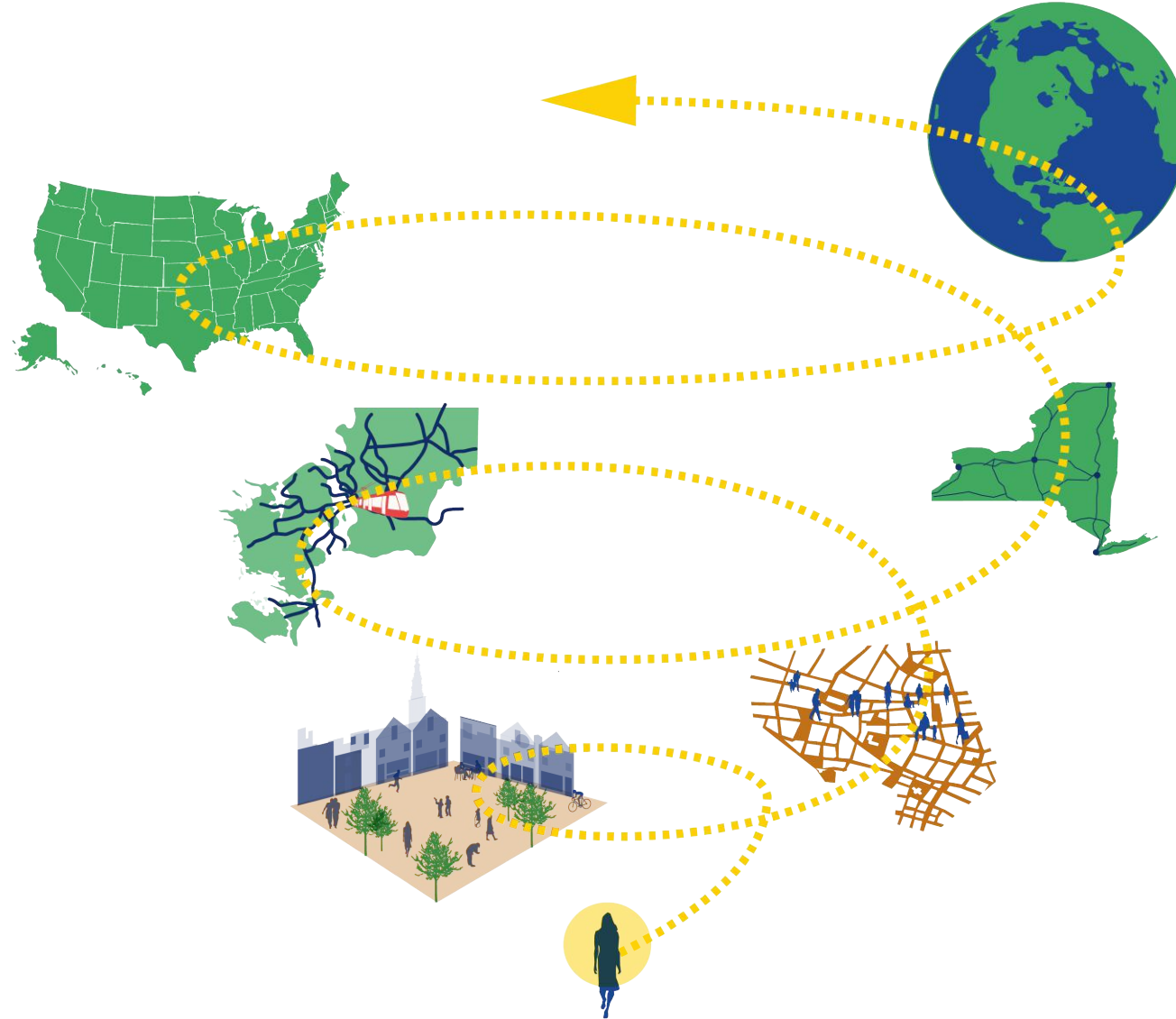


EXPERIENCE





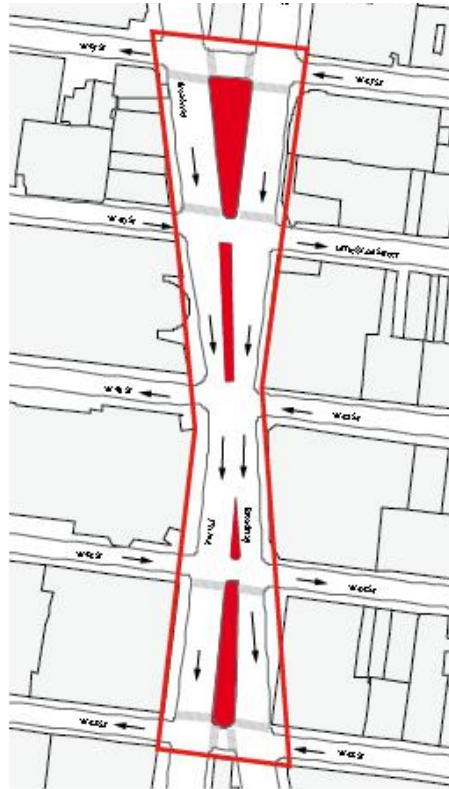
Global Best Practices Will Be Needed





How does
this translate
to streets?

Seeing a Place with Fresh Eyes



TIME SQUARE
total area: 16 960 m²
Pedestrian area: 1 880 m²



Times Square consists of
89 % road space
11 % people space

Understanding Impacts and Change

90% of
users were
pedestrians

10% of area
for people



10% of users
were
motorists

90% of area
for cars









Highlights from Our Toolkit

What Do We Measure?



Counting
people walking
and cycling



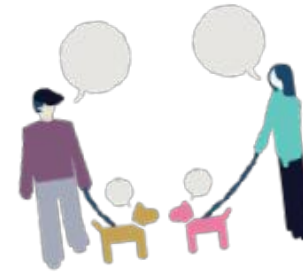
Tallying age
and gender



Mapping how
people spend
time



Surveying
social
dimensions of
public space



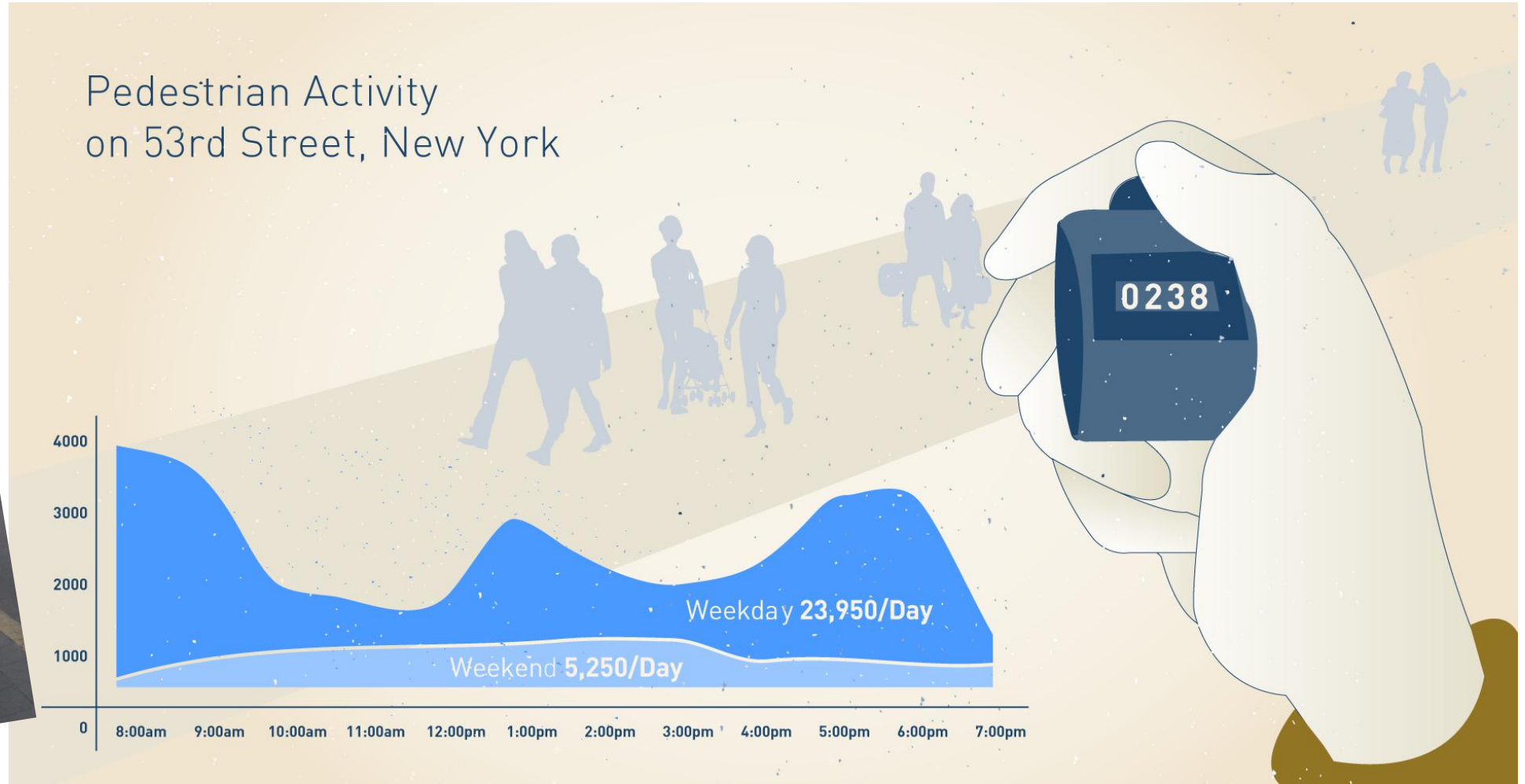
Observing
design –
spatial
interaction



Evaluating
Spatial
components

Observation, Surveys & Analysis

We look at both
quantitative
factors...



Observation, Surveys & Analysis

...and qualitative ones.

TWELVE URBAN QUALITY CRITERIA			
LOCATION:			
3 = YES 2 = IN BETWEEN 1 = NO			
Protection	Protection against traffic and accidents. Do groups across age and ability experience traffic safety in the public space? Can one safely bike and walk without fear of being hit by a driver?	Protection against harm by others. Is the public space perceived to be safe both day and night? Are there people and activities at all hours of the day because the area has, for example, both residents and offices? Does the lighting provide safety at night as well as a good atmosphere?	Protection against unpleasant sensory experience. Are there noises, dust, smells, or other pollution? Does the public space function well when it's windy? Is there shelter from strong sun, rain, or minor flooding?
	Options for mobility. Is this space accessible? Are there physical elements that might limit or enhance personal mobility in the forms of walking, using of a wheelchair, or pushing a stroller? Is it evident how to move through the space without having to take an illogical detour?	Options to stand and linger. Does the place have features you can stay and lean on, like a façade that invites one to spend time next to it, a bus stop, a bench, a tree, or a small ledge or niche?	Options for sitting. Are there good primary seating options such as benches or chairs? Or is there only secondary seating such as a stair, seat wall, or the edge of a fountain? Are there adequate non-commercial seating options so that sitting does not require spending money?
Comfort	Options for seeing. Are seating options placed so there are interesting things to look at?	Options for talking and listening/hearing. Is it possible to have a conversation here? Is it evident that you have the option to sit together and have a conversation?	Options for play, exercise, and activities. Are there options to be active at multiple times of the day and year?
	Scale. Is the public space and the building that surrounds it at a human scale? If people are at the edges of the space, can we still relate to them as people or are they lost in their surroundings?	Opportunities to enjoy the positive aspects of climate. Are local climatic aspects such as wind and sun taken into account? Are there varied conditions for spending time in public spaces at different times of year? With this in mind, where are the seating options placed? Are they located entirely in the shadows or the sun? And how are they oriented/placed in relation to wind? Are they protected?	Experience of aesthetic qualities and positive sensory experiences. Is the public space beautiful? Is it evident that there is good design both in terms of how things are shaped, as well as their durability?
Enjoyment			



Public Life Toolkit



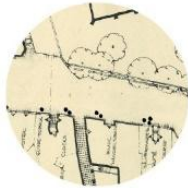
Counting

Counting is a widely used tool in public life studies. In principle, everything can be counted, which provides numbers for making before-and-after comparisons, between different geographic areas over time.



Looking for traces

Human activity often leaves traces, which can give the observer information about city life. Traces can be counted, photographed or drawn on a map.



Plotting

Activities, people, places for staying and much more can be plotted in, i.e. drawn as symbols on a plan of an area being studied to mark the number and type of activities and where they take place. This is also called behavioral mapping.



Photographing

Photographing is an essential part of public life studies as it helps to document situations where urban life and form either interact or don't after changes have been made.



Tracing

People's movements inside or crossing limited spaces can be drawn as lines of movement on the plan of the study area.



Keeping a diary

Keeping a diary can register details and nuances about the interaction between public life and space. Noting observations can later be categorized and/or quantified.



Tracking

In order to observe people's movements over a large area or for a longer time, observers can discreetly follow people without their knowing it or follow someone who knows and agrees to be followed and observed. This is also called shadowing.



Test walks

Taking a walk while observing is underway can be made more or less systematic, so that the observer sees problems and potentials for himself on any given route.

Telling Stories About Impact



Longitudinal Analysis



Investment



Surveys or
Testimonials



Impact on
Public Life

Democratizing Data

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ABOUT

WORK

NEWS

DIALOGUE

BOOKSHELF

TOOLS



Contact



People Moving Count



12 Quality Criteria



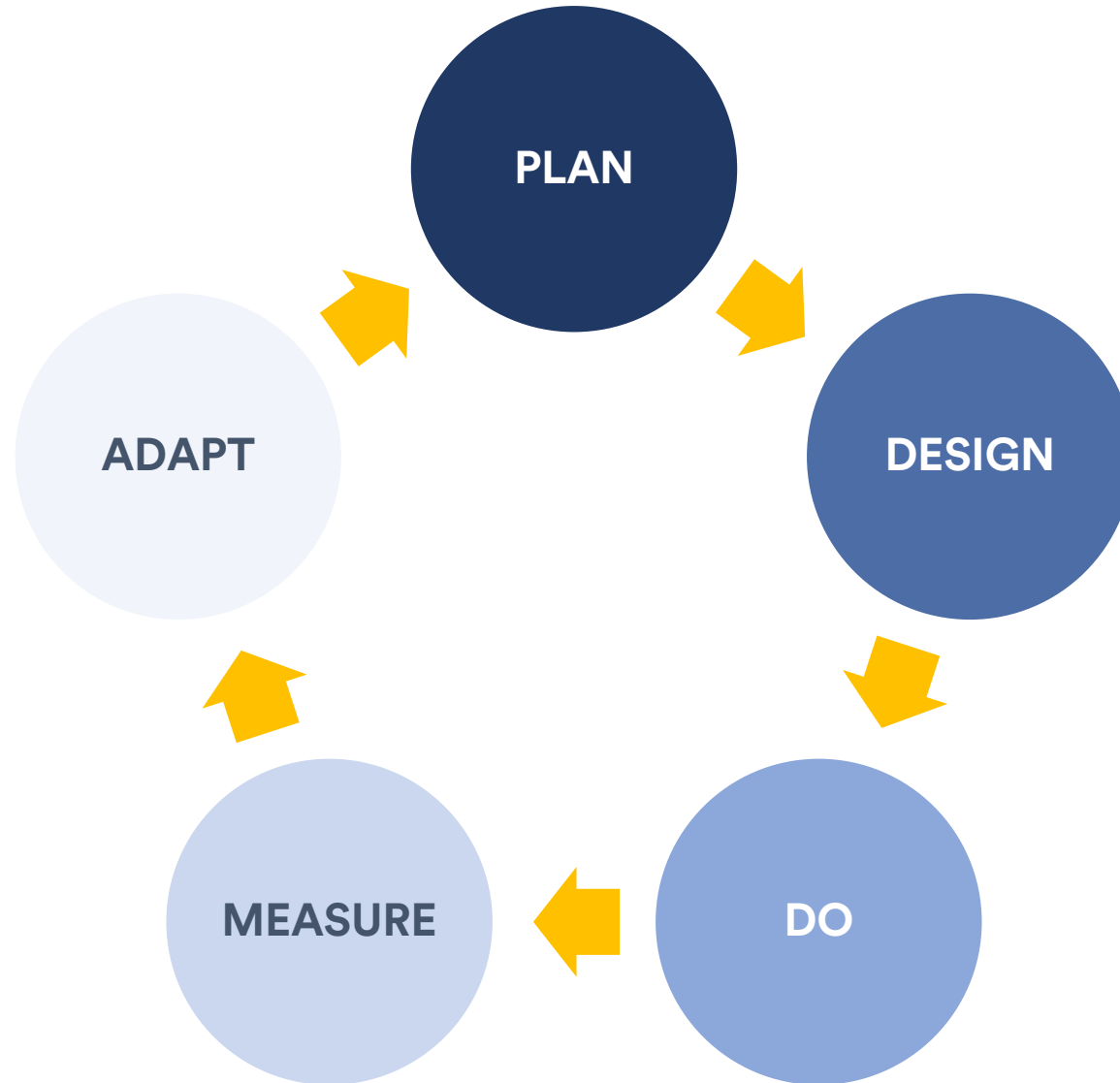
Stationary Activity
Mapping

See All Tools

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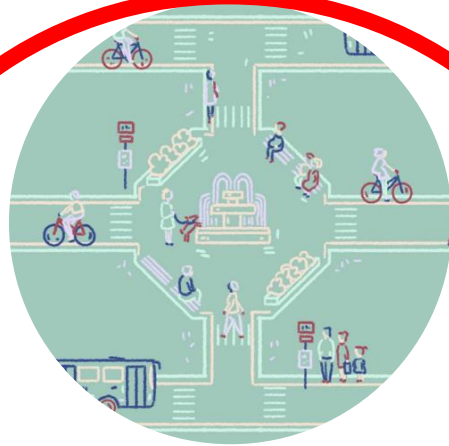
Connecting Action and Evaluation



More Ways To Understand Public Life



New knowledge:
Inclusive Healthy Places



Open, standard language:
Public Life Data Protocol



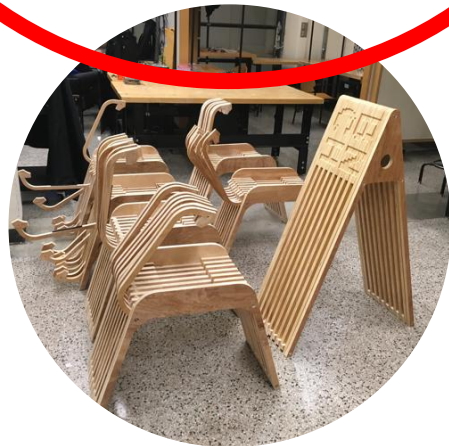
Learning experiences:
Public Life Dialogues



Dialogues:
Public x Design



Targeted Reference
Guides



Implementation
Experiments



Open resources:
Public Life Tools



Applied engagement: Study
Tours/Policy Labs



Shift focus to
people, life,
and culture to
tackle urban
challenges





What Can We Learn From This Approach?

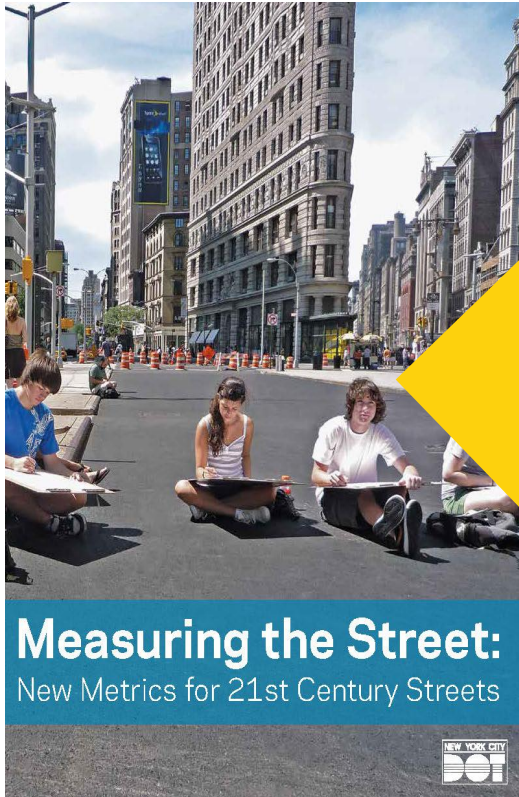
New York City Plaza Study

A blue-tinted photograph of a public plaza. In the foreground, several people are sitting on low, white, rectangular concrete blocks. A man in a plaid shirt is sitting on a block, looking down at something in his hands. A woman in a patterned top is sitting next to him, also looking down. To the left, a woman is sitting on a block, and a stroller is parked nearby. In the background, more people are walking around, and a large white bookshelf is visible on the right side. The bookshelf has several shelves filled with books, and the words "reading room" are visible on one of the shelves. The overall scene depicts a community gathering space.

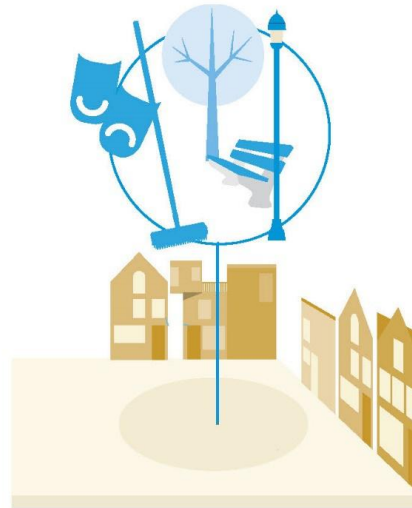
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Measuring Economic + Social Impact

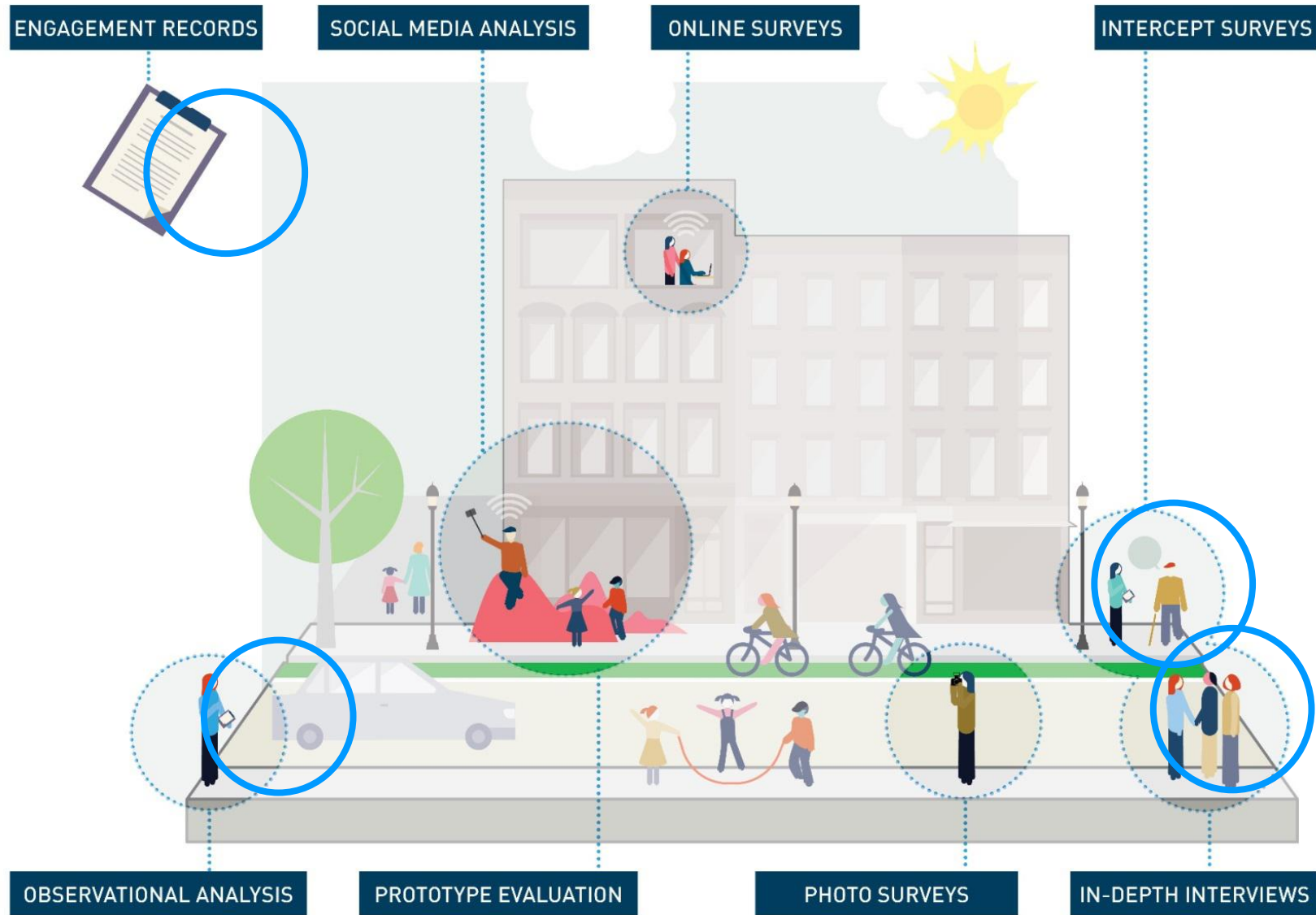


Economic impacts are often the sole metric.

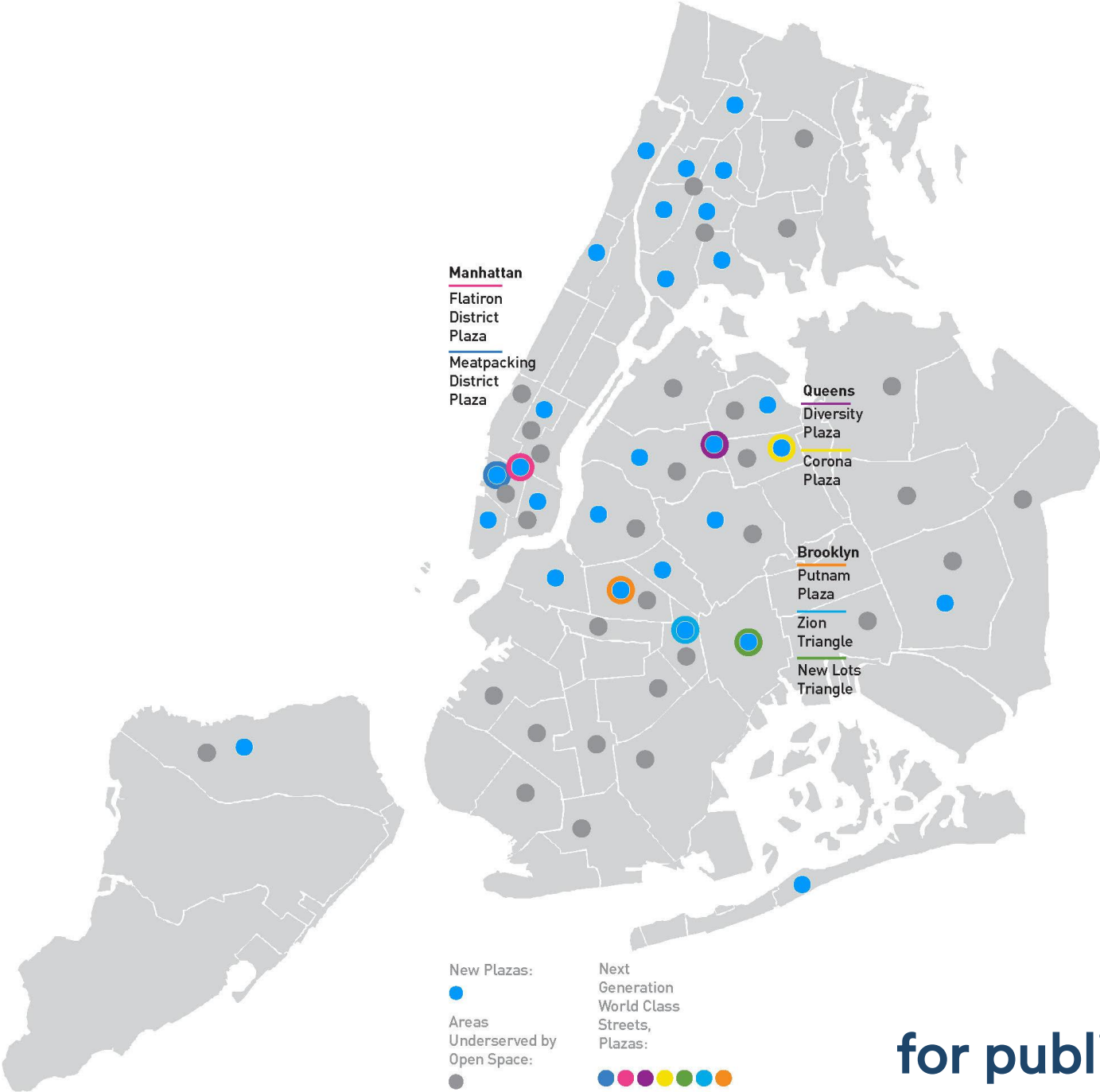


Social impacts have been less explored

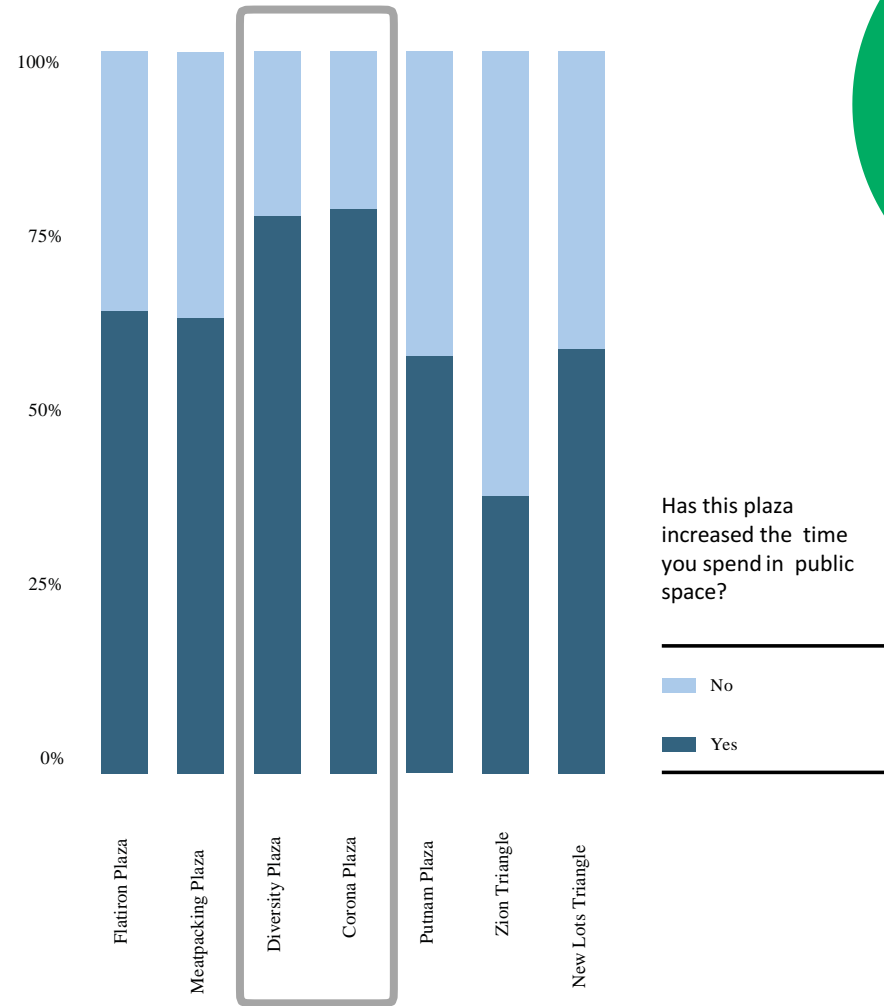
NYC Plazas: Evaluation Methods



7 Plazas



Use Increased



Neighborhoods that lack open space the most reported a greater increase in time spent outside.



53%

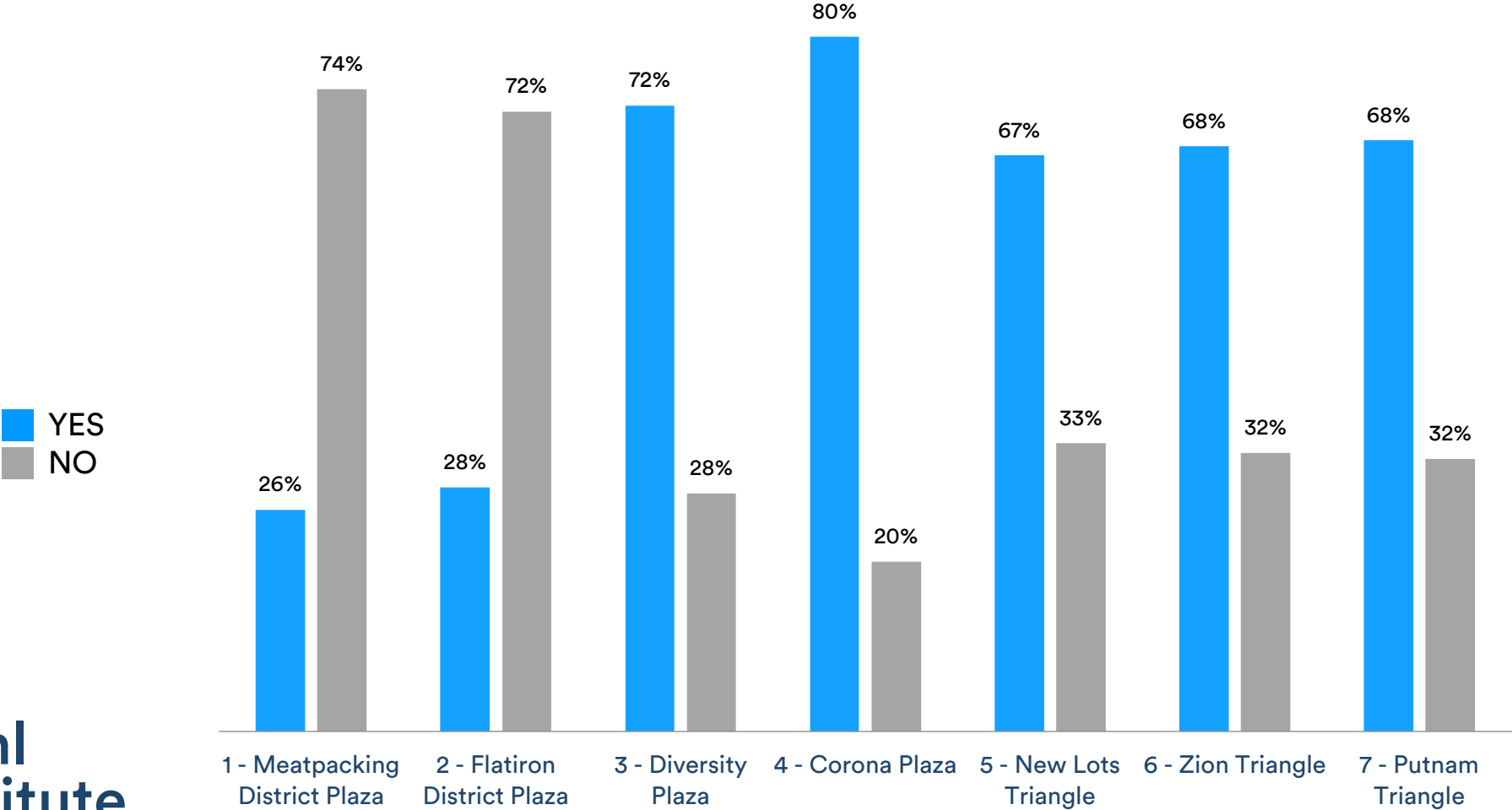
across all 7 plazas
recognize or
know more
people since the
plaza opened



Plazas foster social connections.

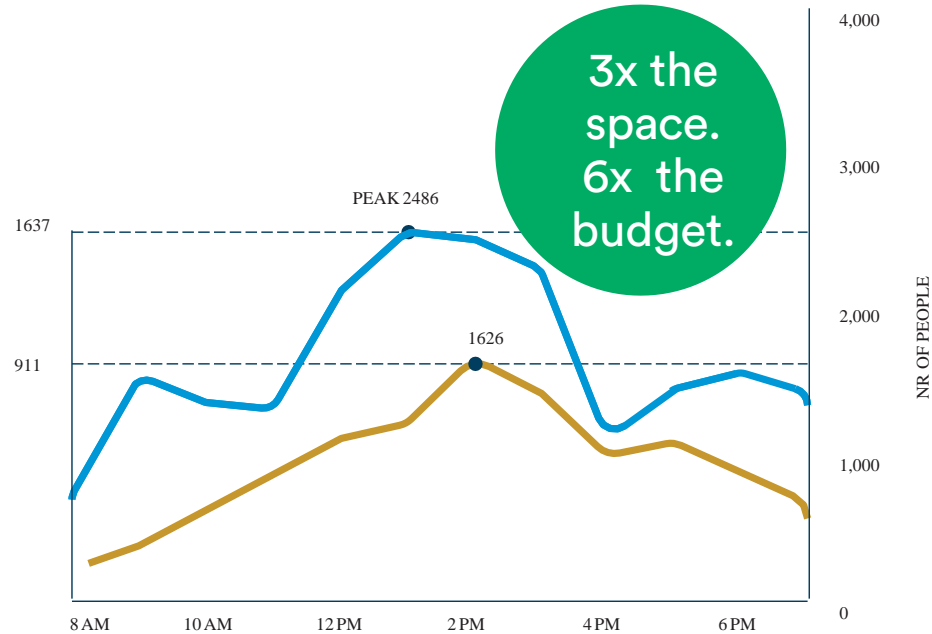
Everyday Spaces Create Cohesion

“Since the plaza opened, do you recognize or know more people in the neighborhood?”

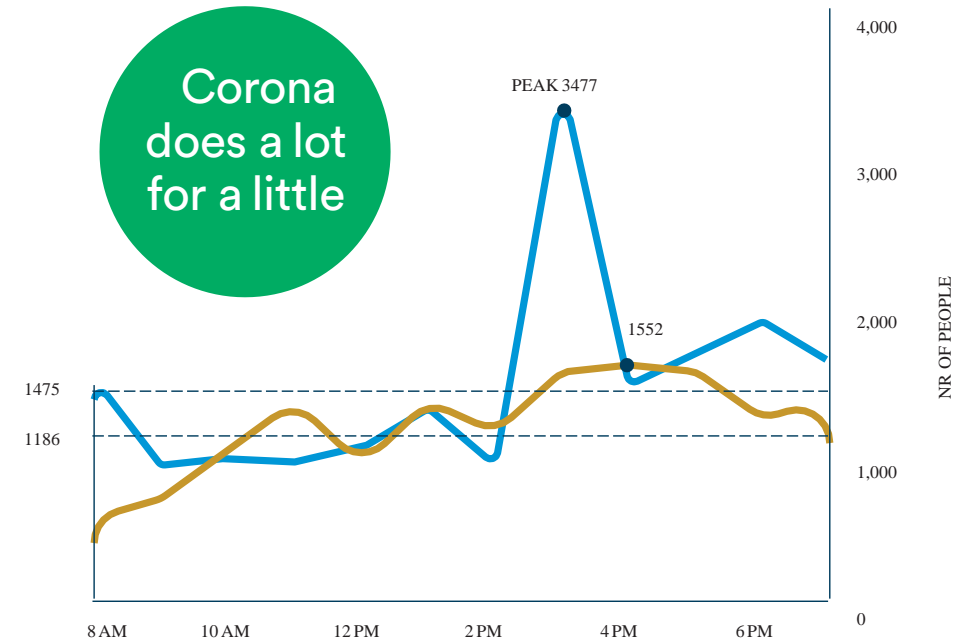


Plazas in residential communities, where users are local, seem to foster more interaction.

“Everyday” Spaces Do More With Less



Flatiron
45,000 sq ft.
Operations Budget (2014)
\$375,000

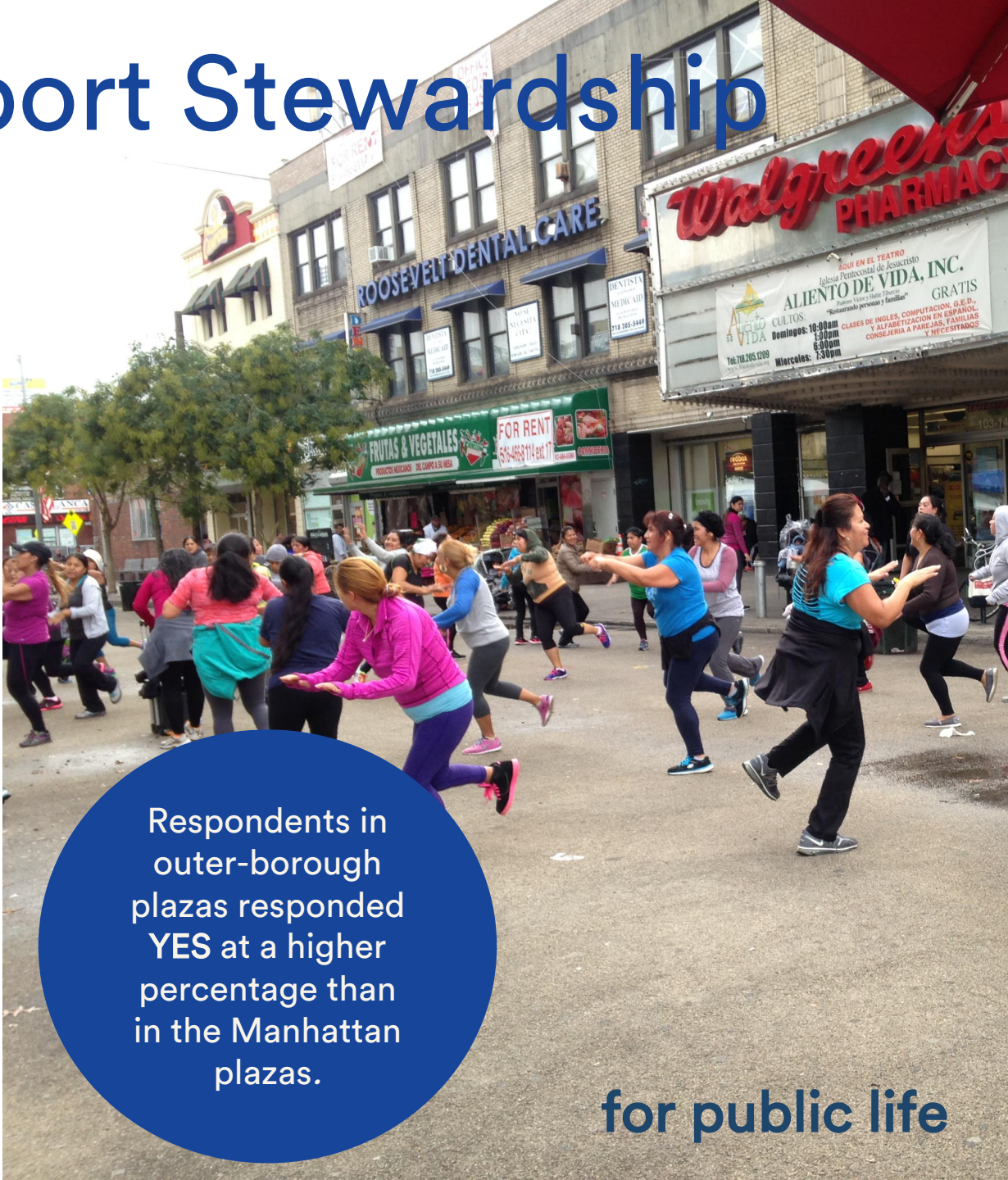
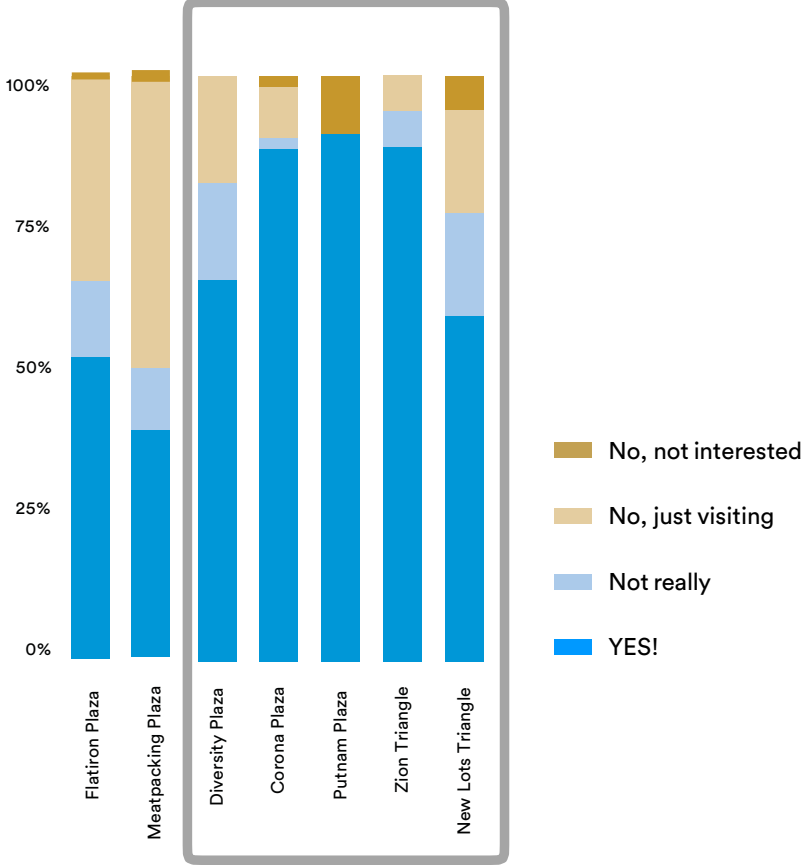


Corona
13,500 sq. ft.
Operations Budget (2014)
\$65,000

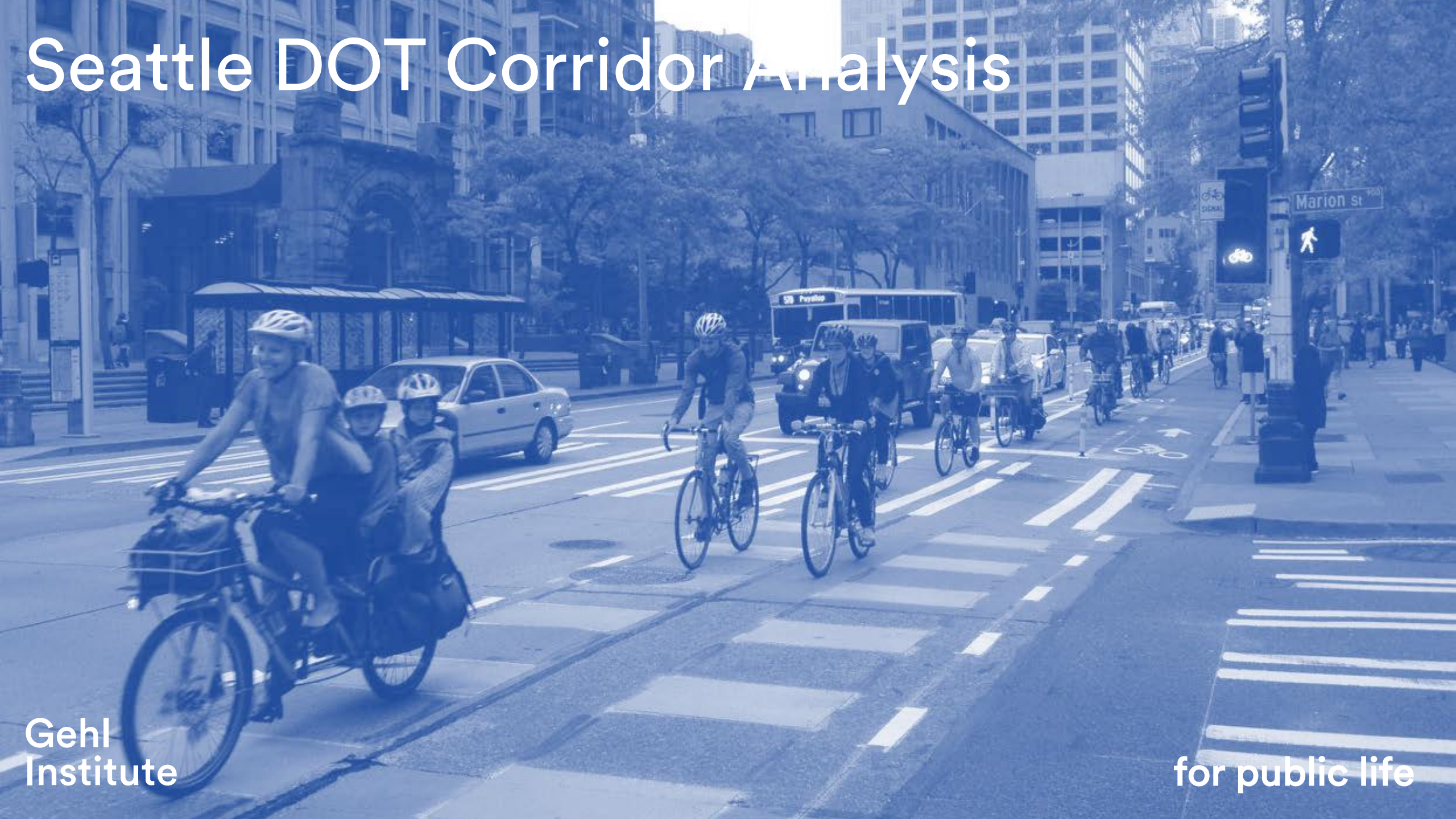
pedestrian volumes
— weekday
— weekend

Everyday Spaces Support Stewardship

Is this plaza *your* plaza?



Respondents in outer-borough plazas responded YES at a higher percentage than in the Manhattan plazas.



Seattle DOT Corridor Analysis

Corridor Performance

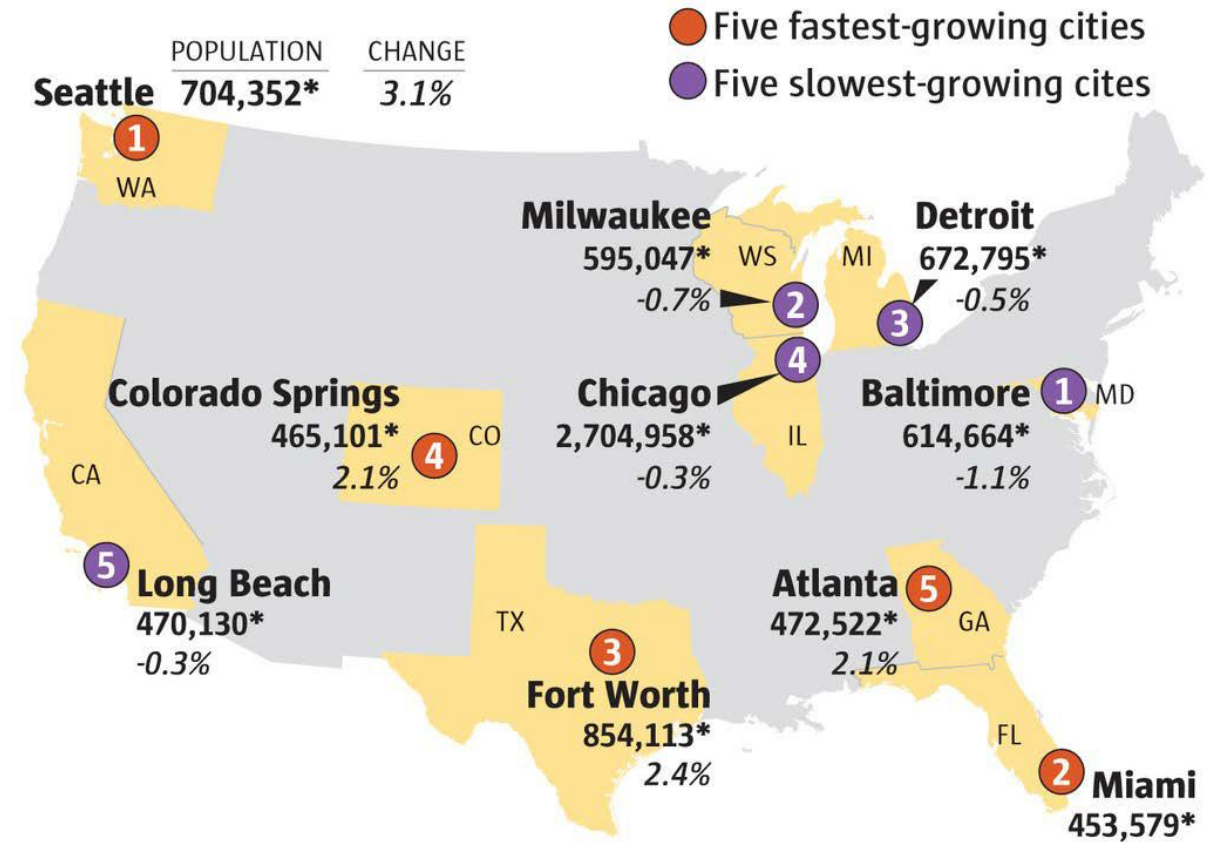
Seattle DOT's MISSION:

- Deliver high-quality transportation system for Seattle

Seattle DOT's VISION:

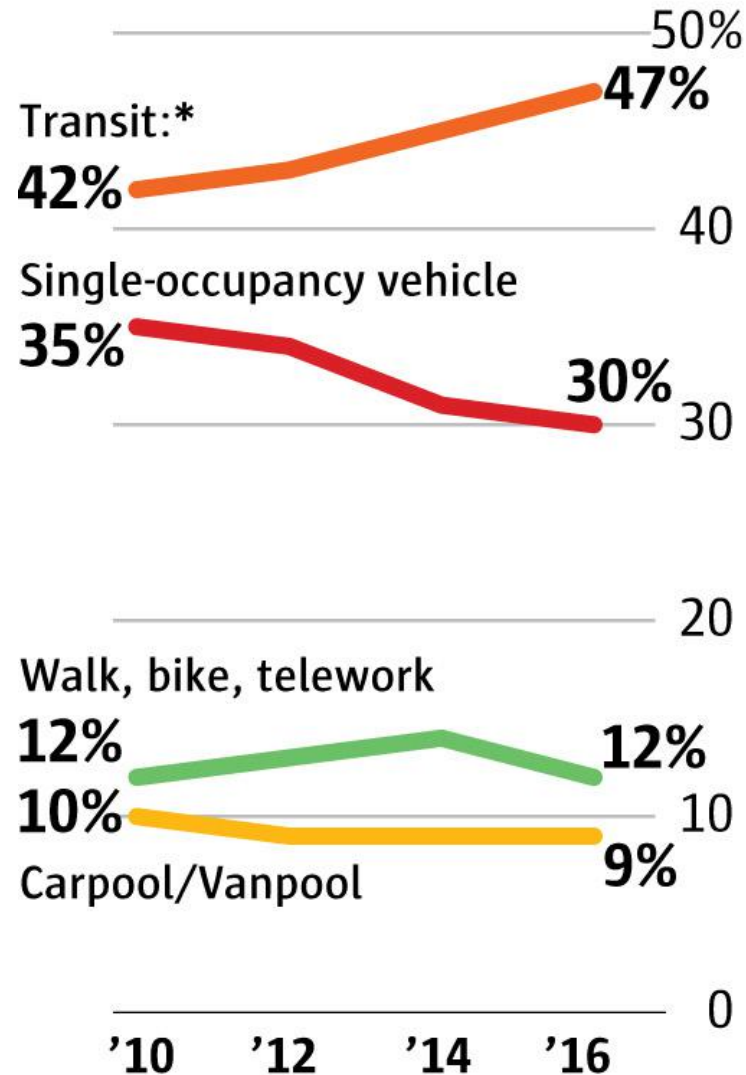
- Connected people, places, and products

Seattle DOT's CHALLENGE:

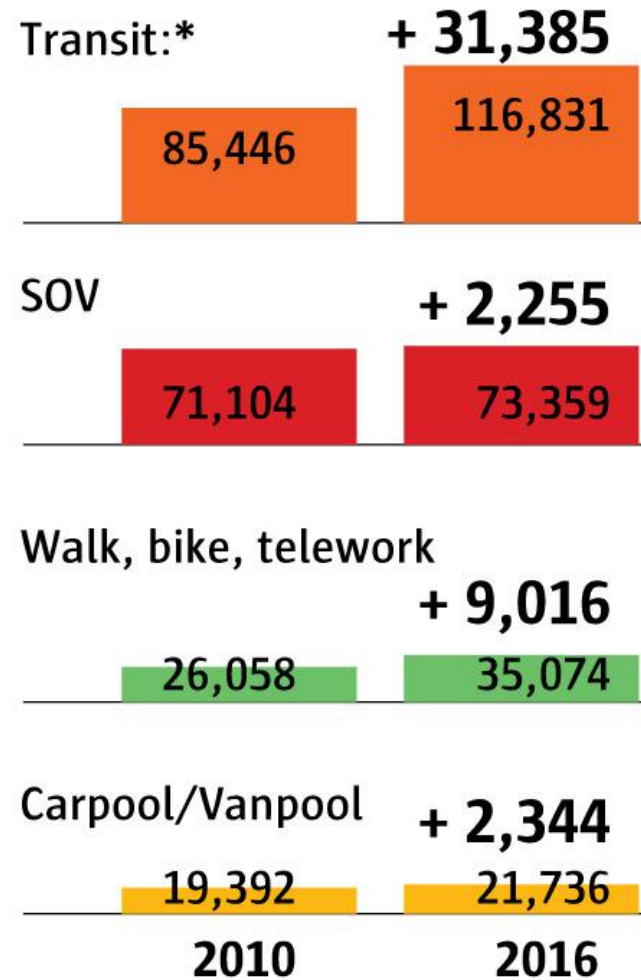


Shifting the commute

Transit use has increased to 47 percent of central-city commuters, while solo driving has dipped to 30 percent.



Source: Commute Seattle



*Bus, rail, walk-on ferry

MARK NOWLIN / THE SEATTLE TIMES

Study Locations

amazon



Microsoft



Center for Infectious
Disease Research

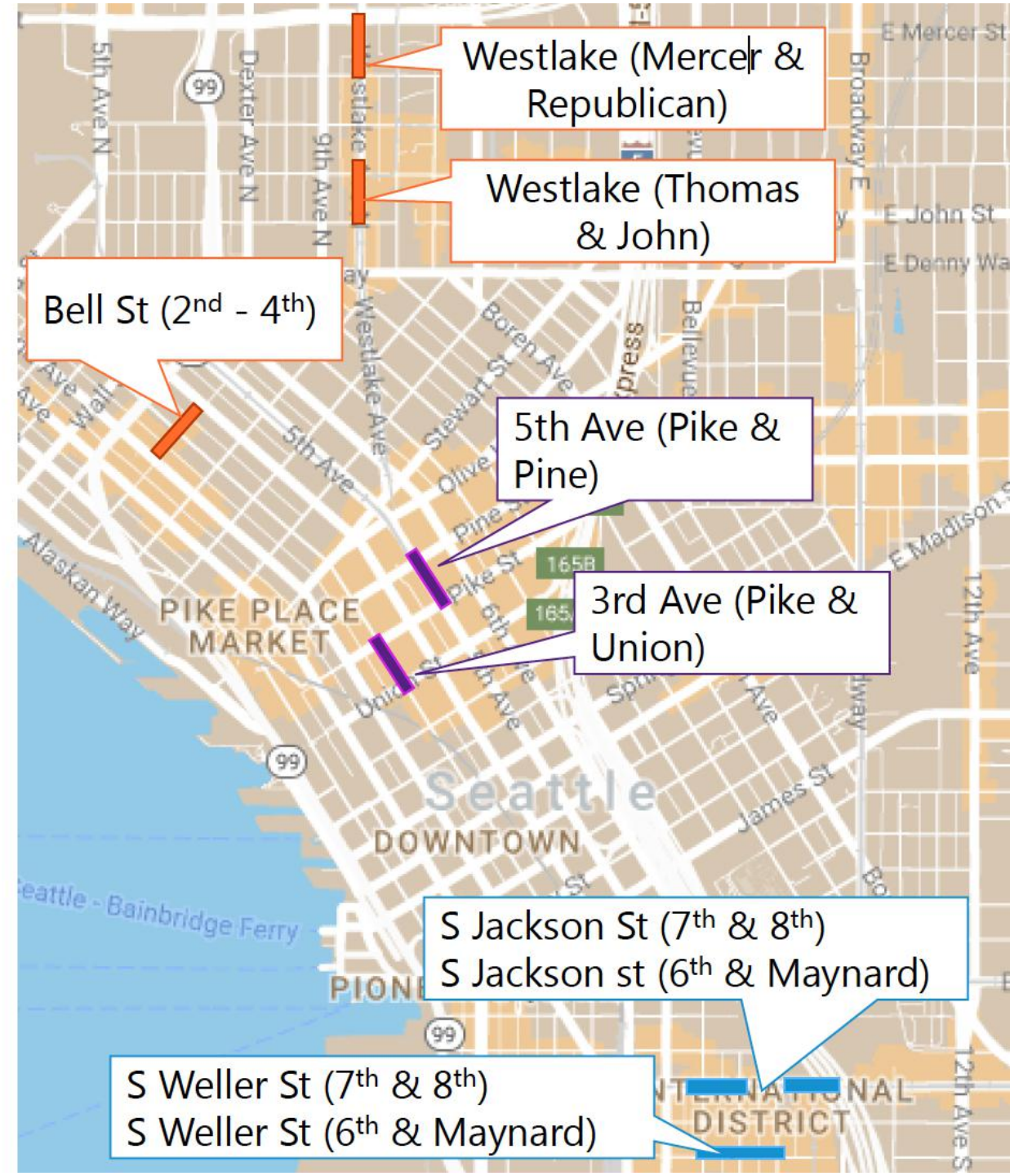
ANTHROPOLOGIE

ROSS
DRESS FOR LESS

NORDSTROM



UWAJIMAYA
Quality Asian Grocery & Gifts Since 1928



Age Friendly Design

Study:

- Amount, type of activity
- How activity aligns with pedestrian infrastructure provided
- Relationship to retail activity/active uses

Market to MOHAI

Study:

- Amount, type of activity
 - Pedestrian
 - Bike
- How activity aligns with pedestrian infrastructure provided

One Center City

Study:

- Type of stationary activities present
- Emphasis on social behaviors and transit queuing

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Adapting The Tools

PEDESTRIAN
COUNTS

One Center City

Street name: _____
between: _____
&
Side of street: N S E W

Date: _____
Day of week: _____
Time: _____
Surveyor: _____

Count 1.

Number of pedestrians, split by group size. 10 minutes.

START: _____

STOP: _____

SIZE	TALLY	TOTAL
1 person		
2 people		
3 people		
4 people		
5 people		
6 people		
7 people		
8 people		
>8 people		
TOTAL:		

PEDESTRIAN
COUNTS

One Center City

Street name: _____
between: _____
&
Side of street: N S E W

Date: _____
Day of week: _____
Time: _____
Surveyor: _____

Count 2.

Number of pedestrians, split by age. Indicate also if pedestrian is carrying shopping bag. 10 minutes.

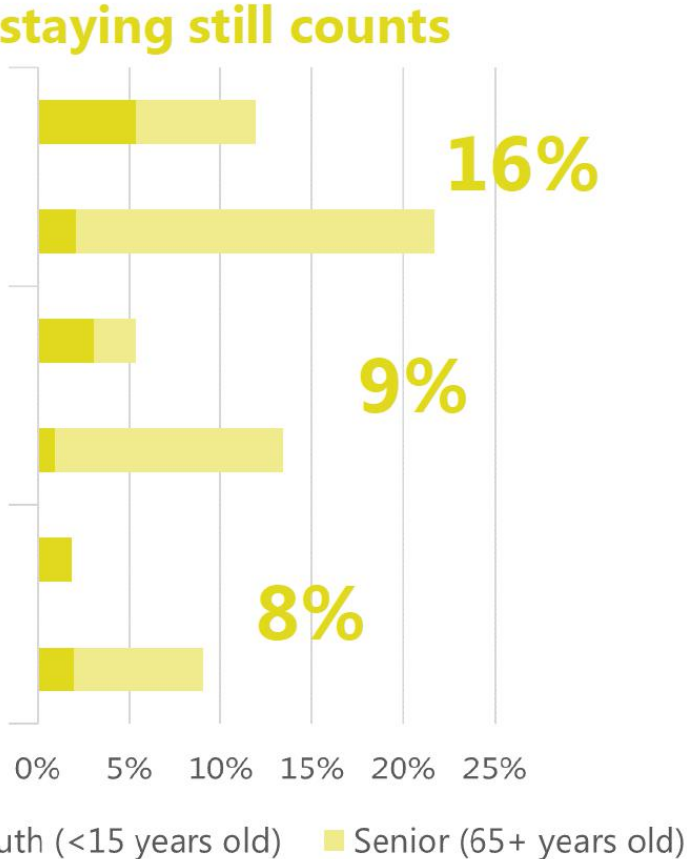
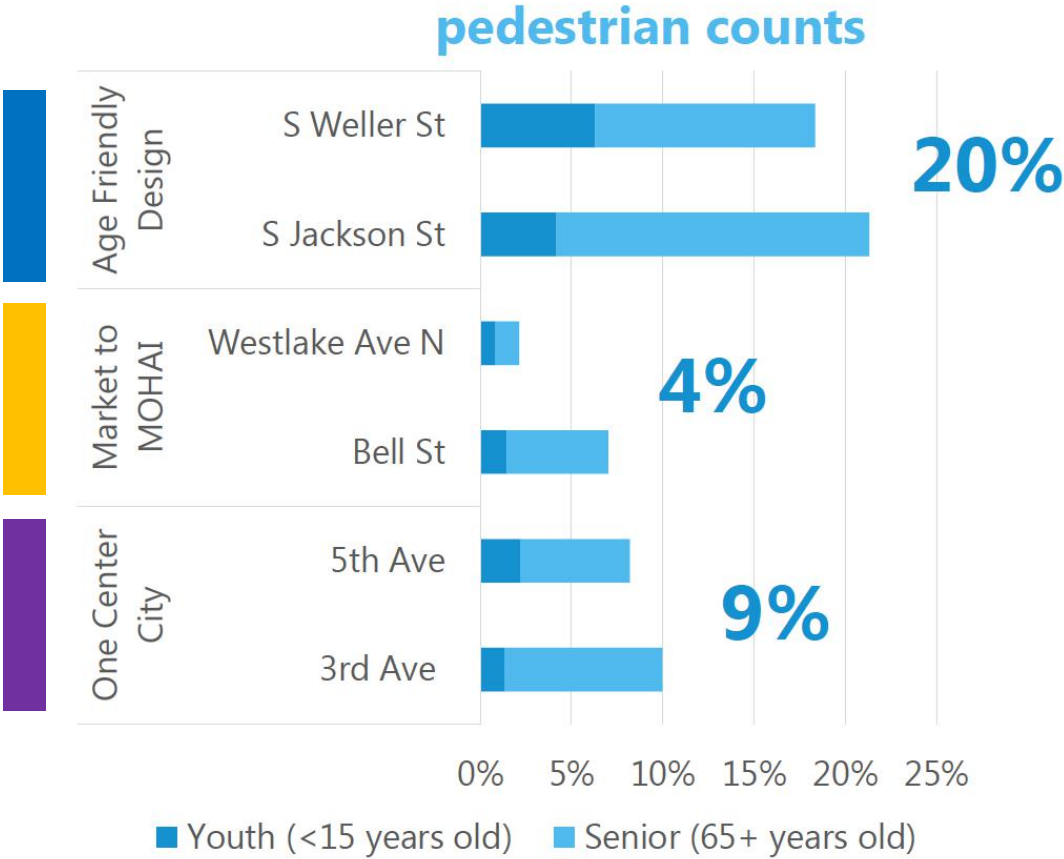
START: _____

STOP: _____

AGE	TALLY <small>(Add an asterisk for mobility assisted)</small>	with shopping bag	TOTAL
0 - 4 <small>(strollers/ toddlers)</small>			
5 - 14 <small>(kids)</small>			
15 - 24 <small>(teens/ young adults)</small>			
25 - 44 <small>(adults)</small>			
45 - 64 <small>(middle aged adults)</small>			
65+ <small>(seniors)</small>			
TOTAL			

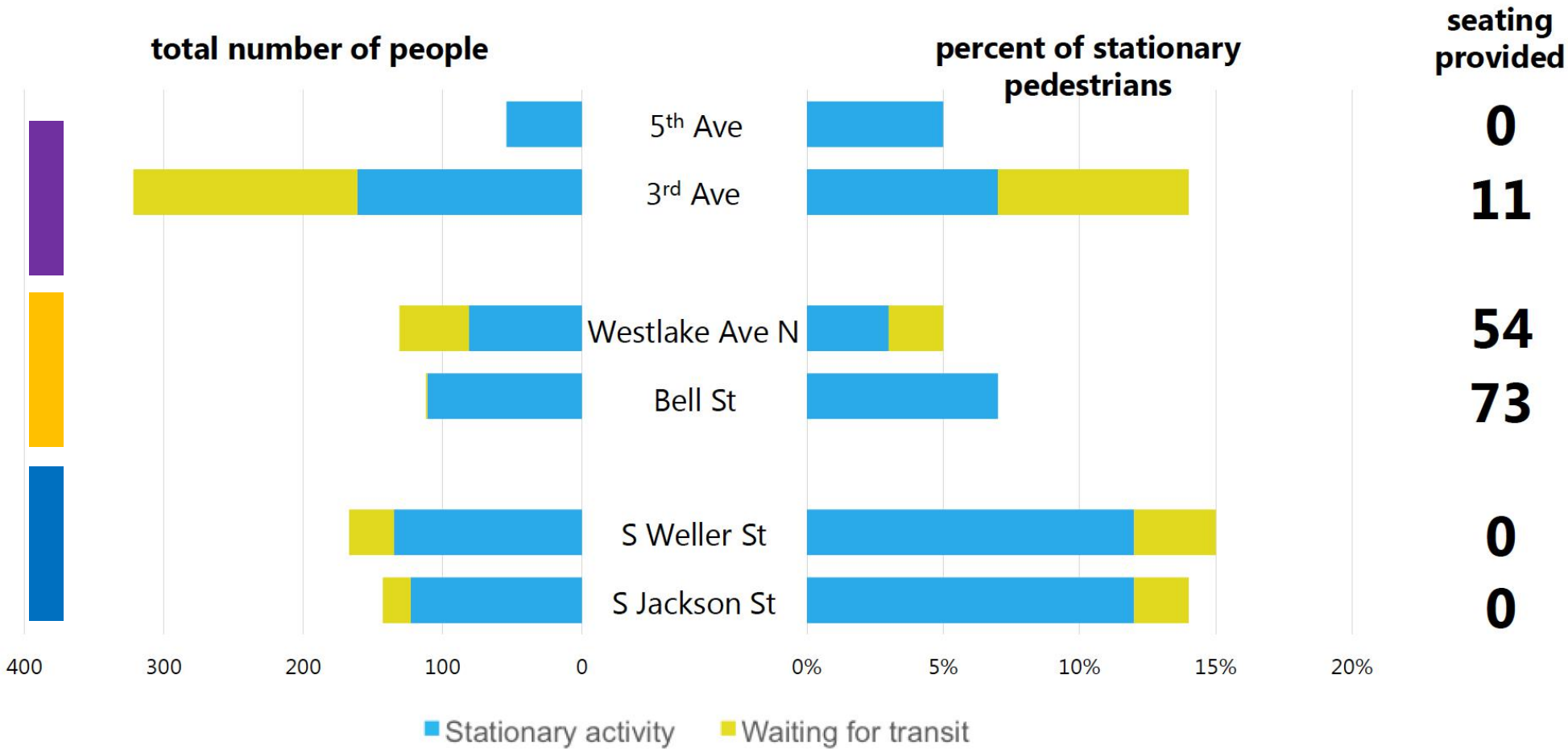
Seattle's Findings

Indicator: age

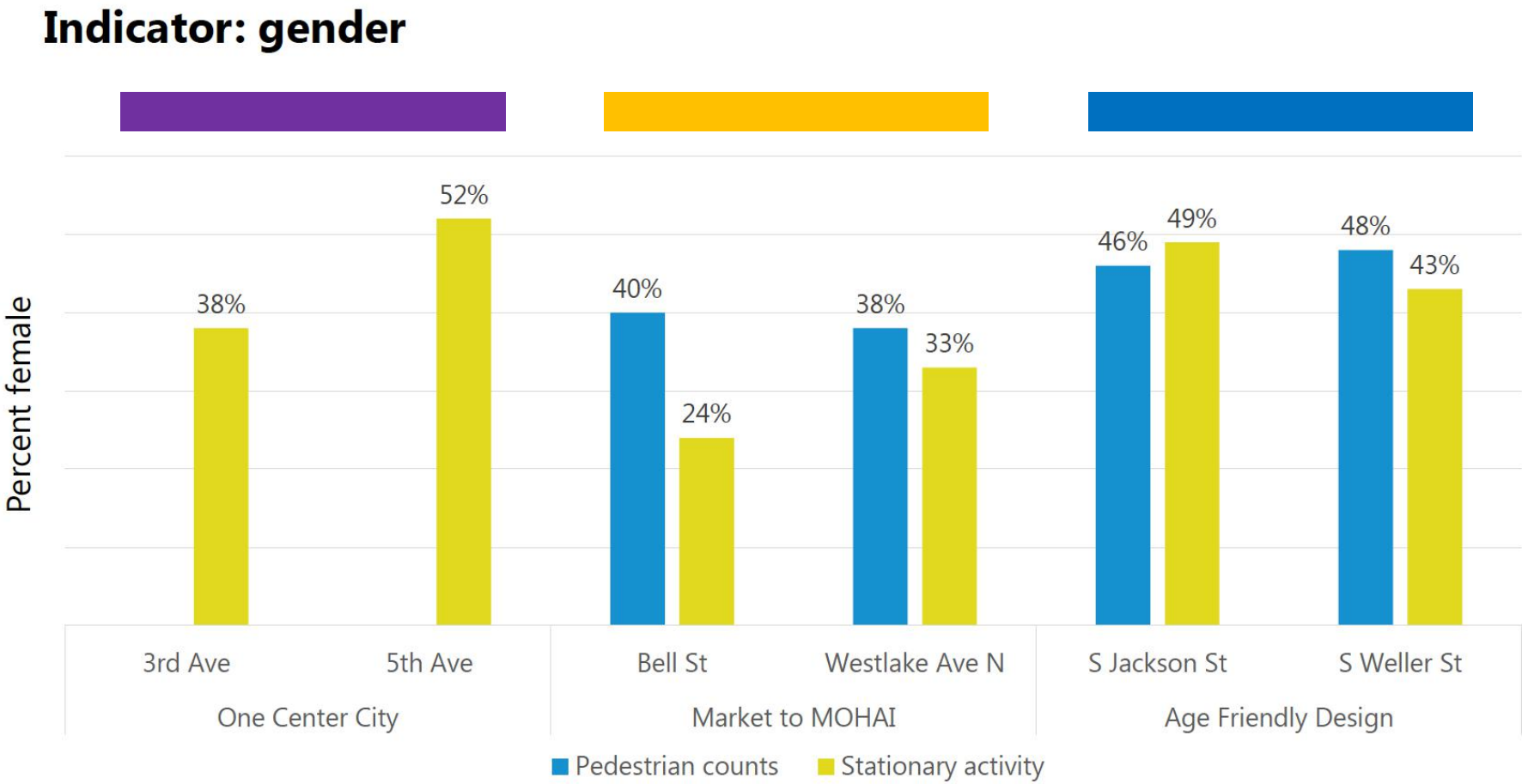


Seattle's Findings

People staying still



Seattle's Findings





Thank you!

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