

CITYSTUDIO

VANCOUVER



## CITIES

- Citizen engagement
- Prototypes
- Staff support

## COMMUNITY

- Citizen expertise
- Lived experience
- Engagement

## SCHOOLS

- All levels of students and faculty
- Employable skills
- Something real in school



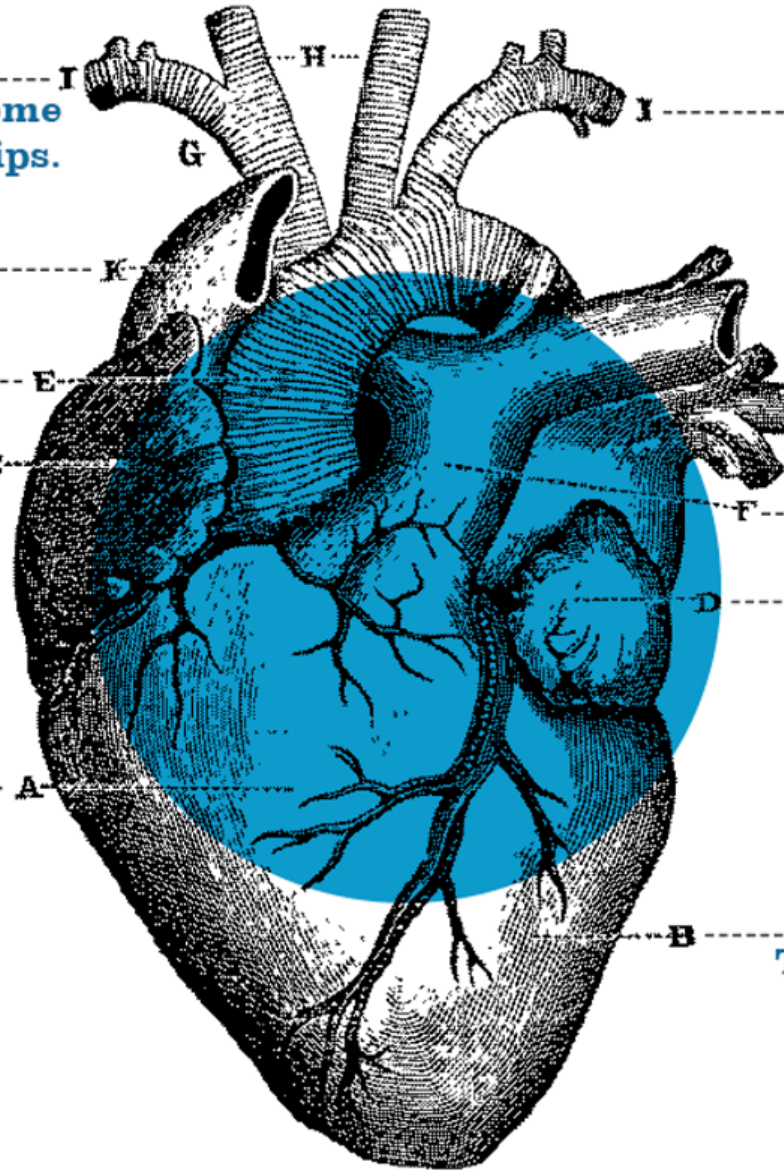
We learn that good projects come from good relationships.

We learn by doing.

We learn to listen.

We learn that aesthetics matter.

We will see that small projects can add up to big changes in your community, your city and in yourself.



We find ways to work on global issues by putting a project on the ground in a local place.

And if we do it right, we will be high fiving at the end.

We hear Yes more than No.

We've been to the future and it ends well.

Trust the Process.

#### CityStudio Vancouver

City of Vancouver  
Simon Fraser University, University of British Columbia, Langara College, British Columbia Institute of Technology, Emily Carr University of Art + Design

#### CityStudio Victoria

City of Victoria  
Royal Roads University, University of Victoria

#### CityStudio Abbotsford

City of Abbotsford  
University of the Fraser Valley

#### CityStudio North Vancouver

City of North Vancouver  
Capilano University

#### CityStudio London

City of London  
Brescia University College, Fanshawe College, Huron University College, King's University College and Western University

#### CityStudio Waterloo

City of Waterloo  
Wilfrid Laurier University

#### CityStudio Brantford

City of Brantford  
Wilfrid Laurier University

#### CityStudio Montreal

City of Montreal  
Concordia

#### CityStudio Corner Brook

City of Corner Brook  
Grenfell (Memorial University)

#### CityStudio Oslo

City of Oslo  
University of Oslo, The Oslo School of Architecture + Design, Norwegian University of Life Sciences, Oslo Metropolitan University, BI Norwegian Business School

#### CityStudio Bendigo

City of Greater Bendigo  
La Trobe University

#### CityStudio Logan

Logan City Council  
Queensland University of Technology

North Vancouver

Abbotsford

Vancouver

Victoria

Corner Brook

Montreal

Brantford

Waterloo

London

Oslo

Logan  
Bendigo

CITYSTUDIO  
Network





2018/19		TOTAL IMPACT
720	students	5,620
240	projects	790
36	courses	251
48	faculty	320
51	city staff	252
20,820	student hours	153,744



**1. CONVENE CITY STAFF ANNUALLY**



**2. MATCH PROJECTS WITH SCHOOLS**



**3. DESIGN PROJECTS TOGETHER**



**4. LAUNCH PROJECTS IN PUBLIC**



**5. SHARE AND EVALUATE PROJECTS**

**Project  
Process**



# CITYSTUDIO

FALL 2017 PROJECTS			
1) Marine Birds 2) Reduced FC	UBC - Enviro Sci	• Access to Nature / Water	Nick Page - Angela Danyluk
Reducing Single-Use Items	UBC - LFS	• Zero Waste	Paul Gagnon
Reducing Single-Use Items	UBC - Economics	• Zero Waste	Paul Gagnon
Ecological Land Use Planning	UBC - M Ed / Urban	• Access to Nature / Land Use	Various
Destination Artistic Interventions	UBC - Planning	• Access to Nature / Land Use	Jonathan Molyneux + Kevin Connors
Sustainable Food Practices	SFU - Business	• Zero Waste	TBC
Business Models: What's Next for the City?	SFU - Business	• Green Business	Pietra Basilji
Getting Our Five Votes	SFU - IAT	• Cultivating Connections	Paul Gagnon + Jonathan Molyneux
Foodshare: Art in Residence	SFU - IAT	• Access to Nature / Land Use	Maria Lopes
Planning with the Public Art	SFU - Urban Science	• Safe + Included	Ty Henry + Building
Sea Level Rise	SFU - IAT	• Climate Leadership	Tina Bantley + Lisa Bridger
Plaque House	BCIT - Interior Design	• Green Buildings	Chris Higgins
TBC/Various	Langara - Urban Science	• Access to Nature / Land Use	Various
Community Engagement (Various)	ECUAD - Urban Science	• Safe + Included / Connections	Kellie Cooze
Patio Joints	SFU - Dialogue	• Connections / Place-making	Paul Gagnon, VIVA Vancouver
Buddy Mail	SFU - Dialogue	• Cultivating Connections	Paul Gagnon, VIVA Vancouver
City Game: Wild	SFU - Dialogue	• Resilient / Equilibrating	Paul Gagnon, VIVA Vancouver
Chalk Talks	SFU - Dialogue	• Cultivating Connections	Paul Gagnon, VIVA Vancouver
Connect Fort	SFU - Dialogue	• Cultivating Connections	Paul Gagnon, VIVA Vancouver

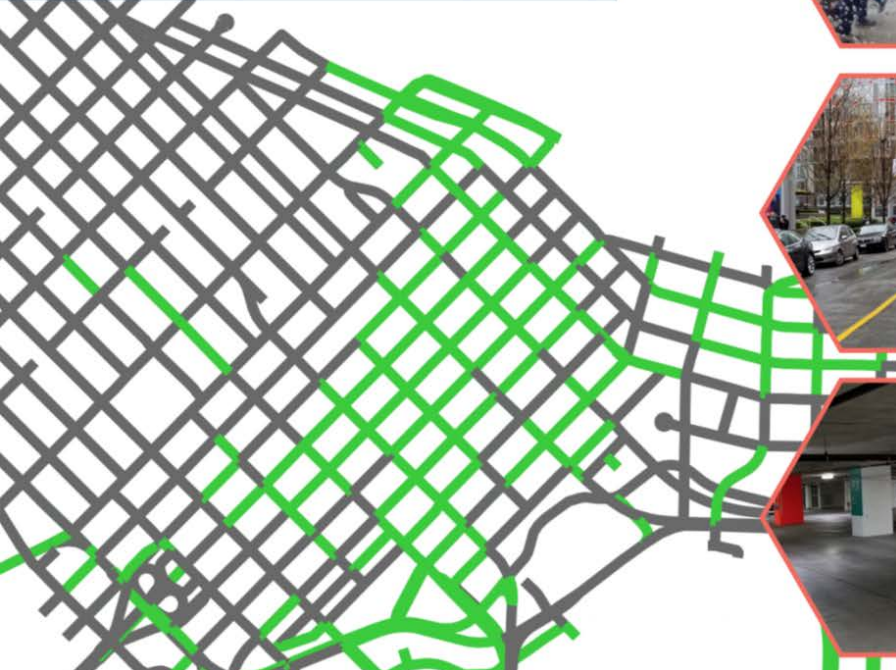
SPRING 2018 PROJECTS			
1) Marine Birds 2) Reduced FC	UBC - Enviro Sci	• Access to Nature / Land Use	Nick Page, Angela Danyluk
Reducing Single-Use Items	UBC - LFS	• Zero Waste	Paul Gagnon
Reducing Single-Use Items	UBC - Economics	• Zero Waste	Paul Gagnon
Reduce Meat Consumption	UBC - Science	• Lighter Footprint	Wendy Av
Diverse Cultural Engagement	UBC - Science	• Lighter Footprint	Wendy Av
Life of the Woodward's Piano	UBC - Film	• Safe + Included	Mira Obadia
Urban Cycling	UBC - Kinesiology	• Green Transport	Mike Zipf
TBC	Langara - Geography	TBC	TBC
Activating Vacant Storefronts	SFU - Communication	• Safe + Included	David Lew
Resilient Neighbourhoods	Langara - Planning	• Cultivating Connections	Katia Tynan
1) Park Tour Survey 2) Forest Walks	UBC - Urban Forestry	• Access to Nature	Dana McDermott
Voter Engagement Pop-Ups	SFU - Comm'n's	• Cultivating Connections	Paul Henderson
Voter Awareness Tools	SFU - Comm'n's	• Cultivating Connections	Paul Henderson
Voting Barrriers + Recommendations	BCIT - Urban Science	• Cultivating Connections	Paul Henderson
Zero Waste	BCIT - Urban Science	• Cultivating Connections	Paul Henderson
Impact Evaluation	BCIT - Urban Science	• Cultivating Connections	Paul Henderson
Enviro Ed	BCIT - Urban Science	• Cultivating Connections	Paul Henderson
Civic In	BCIT - Urban Science	• Cultivating Connections	Paul Henderson

City Plan	Meg O'Shea
GCAP	Neal Wells
GCAP	Neal Wells
Systems	Brad Badelti, Angela Danyluk
Zero Waste	Paul Gagnon
Healthy Human Services	Paul Gagne, Colleen Hamilton
City Plan	Jason Hsieh
Environments to Thrive	Zane Hill + Megan Herod
Clean Air	Tamsin Mills
Climate Leadership	Chris Higgins
Collaborative Leadership	Colleen Hamilton



# Smarter Parking

Using AI to Identify Parking Inefficiencies



**PROBLEM**

Parking Downtown can be an unpleasant experience. Free spots are rare in peak hours, and drivers can cruise from block to block without finding a spot. In fact, according to Transportation 2040, up to 40% of traffic can be the result of such cruising. At the same time, nearby lots sit almost empty. Vancouver could be using its parking resources more efficiently.

**WHAT WE DID?**

We identified areas where drivers can save time by parking off-street instead of on-street. We did this by employing AI to simulate parking behaviour in and around the downtown core using traffic data from Google Maps and parking data from the city. We produced a map that shows areas which represent an opportunity for the city to manage curbside space to meet its transportation goals.



**WHY IT MATTERS?**

On- and off-street parking is managed by different agencies with little coordination. By analyzing data from multiple sources and using cutting edge AI tools, we found that this lack of coordination has resulted in inefficient use of parking resources: many off-street lots are often very under-occupied, while nearby street parking is full. Furthermore, on-street parking has been found to be bad for traffic and safety, increasing the risk to pedestrians and cyclists and reducing transit reliability. City life can be improved for everyone by moving parkers from streets to lots.



**HOW IT WORKS?**

Our simulator uses Deep Learning and Monte Carlo simulation to model traffic and parking behaviour. We predict on-street parking occupancy from observed payment data using a deep feedforward neural network trained on a combination of occupancy spot-check and meter payment data. We simulate the behaviour of a driver searching for street parking with a Monte Carlo simulation by assuming a driver chooses which street to search next based on it's expected occupancy. Then for each block in the city we estimate the fastest time to park both on- and off-street (at an EasyPark lot) and look at the difference.

**WHAT'S NEXT?**

Correct these imbalances by implementation of an off-street reservation system, price changes, time restrictions in off-street lots, and/or providing better information to the public through signage and apps.



**UBC**  
CPSC 532L  
AI for Social Impact

Kevin Leyton Brown

**Harvard**  
Scott Kominers

**COV Plan:** Transportation  
2040

**City Staff**  
Tadhg Healy, Digital  
Channels

Rene Cravioto, Enterprise  
Data & Analytics Program

Christopher Darwent &  
Jeffrey Li, Parking  
Management



# BUILDING FOR BIODIVERSITY



**UBC**  
ENVR 400  
Projects in Environmental  
Science

Dr. Michael Lipsen

Dr. Tara Ivanochko

Tamara Walton

Marie Donohue

Weihao Wang

Qin Li

**COV Plan**  
GCAP

**City Staff**  
Angela Danyluk,  
Sustainability Group





## LANGARA

NURS 4163, Lyren Chiu

MARK 4820, Frederica Jensen

BUSM 4300,  
Kevin James,  
Caroline Dickson



## COV Plan:

New Start Strategy

## City Staff

Nadia Carvalho, Social  
Policy & Projects



# Be Smart with Sharps



**BCIT**

MKTG 4418,

Tom Jopling

NURS 5030,

Karla Green

**COV Plan**

Healthy City

**City Staff**

Tobin Postma, Strategic  
Initiatives

**Vancouver Coastal  
Health**

Chris Van Veen

**CITYSTUDIO**



# The Vancouver Plan

**5 Projects: 6 COV Staff with 371 Students on 4 Vancouver campuses**

- **Marketing to Engage Youth**
- **Engagement Survey to 2000 millennials and 40 focus groups**
- **Equitable Community Participation toolkit**
- **Dynamic Youth Engagement and Activity Recommendations**
- ***I wish Vancouver*, 1st Place Hubbub #13 (Langara MARK 2400)**

**LANGARA**  
MARK 2400  
MARK 4820

**BCIT**  
MKTG 3309

**UBC**  
SOC1 361

**SFU**  
SA 402

**COV Plan**  
Vancouver Plan

**City Staff**  
Cory Dobson  
Neal Wells  
Arthur Ruiz  
Mumbi Maina  
Lara Honrado  
Jason Hsieh



*You're Invited!*

April 3, 2020



HUBBUB

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Vancouver City Hall

CITYSTUDIO