

TRANSIENT OCCUPANCY

THE RESURGENCE OF PUBLICS IN
DOWNTOWN TORONTO

by

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A thesis submitted to the Faculty of Graduate and Postdoctoral Affairs
in partial fulfillment of the requirements for the degree of

Master of Architecture

Carleton University
Ottawa, Ontario

ABSTRACT

This thesis uses contemporary architectural theory to investigate a distinct set of concerns in the financial district of Toronto. In its investigation it uses two of Rem Koolhaas's ideas, that of Bigness as described in 1994 in "Bigness or the Problem of Large" and that of the Staging of Uncertainty a concept defined in Koolhaas's 1994 article "What Ever Happened to Urbanism" and largely consistent with ideas developed in his book *Delirious New York*, 1978 to examines how Toronto's financial district is currently driven by capital.

To explore the issue of capital through the lens of Bigness and the Staging of Uncertainty the work uses a research-by-design methodology to develop a speculative design project that questions how this urban condition might be shifted to become more inclusive to concepts such as the Staging of Uncertainty instead of its singular focus on neoliberalism.

ACKNOWLEDGMENTS

To my advisor, Johan Voordouw I would like to thank you for your dedication to this project. Without your guidance, advice and design sense, this project would not have been possible.

To my family, thank you for your undying support throughout my entire schooling. You guys are the reason I didn't fully lose my mind.

To my friends (both at school and outside of it), the last six years feel like a fever dream but we've always had fun. Although not all of you are here at the moment, I know that wherever life has taken you you've always got my back.

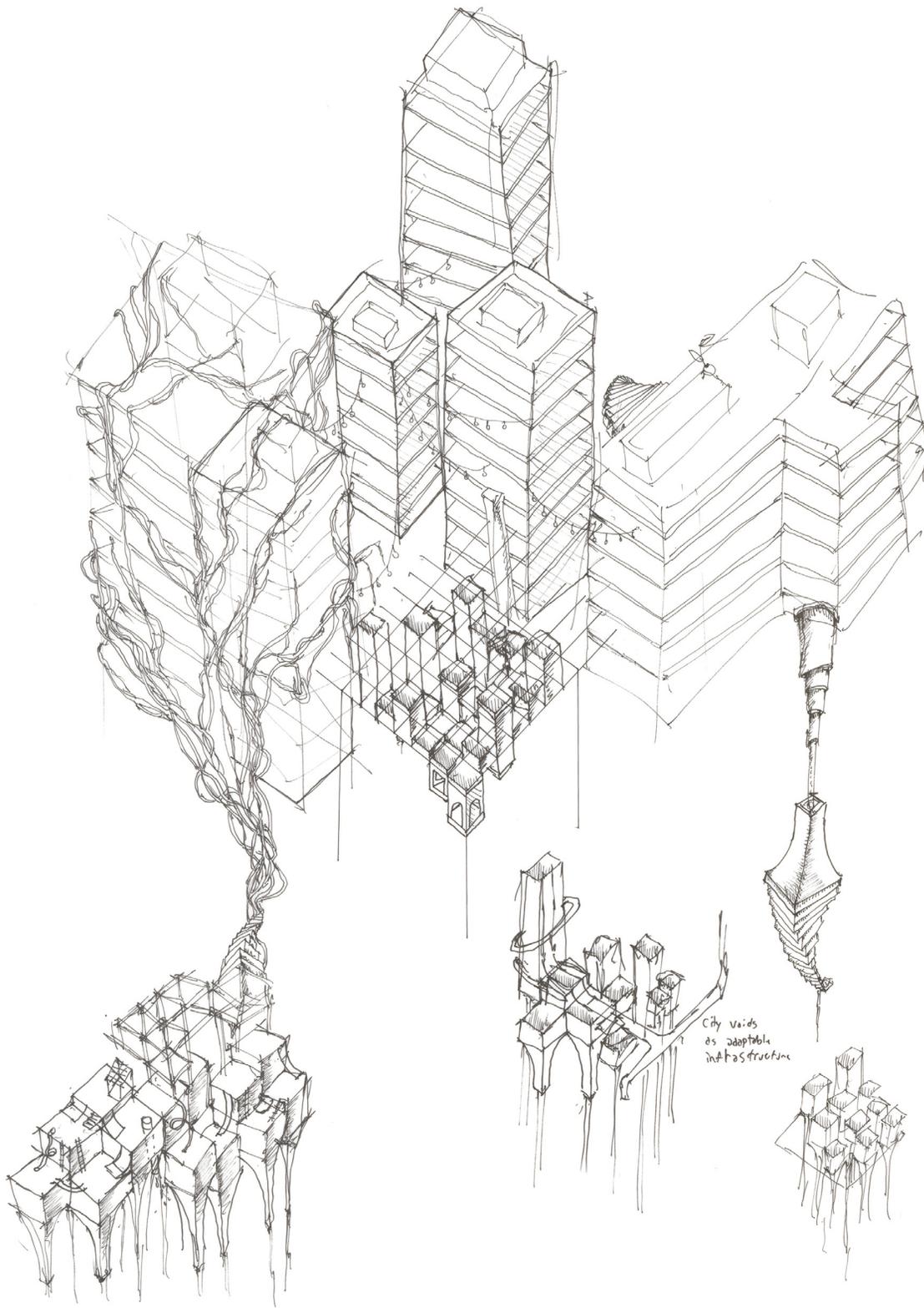
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City voids
as adaptable
infrastructure

Img 01 | Initial Sketch

Considering the city as a system of infrastructure that adapts to the changing needs of society. This sketch was drawn at the beginning of the thesis to imagine the potential of the city center.

KEY TERMS

1 Koolhaas, Rem, and Bruce Mau. S, M, L, XL. Monacelli Press, 1993. pp. 511

2 Koolhaas, Rem. Delirious New York. Monacelli Press, 1978. pp. 85

3 Koolhaas, Rem, and Bruce Mau. S, M, L, XL. Monacelli Press, 1993. pp. 961-971

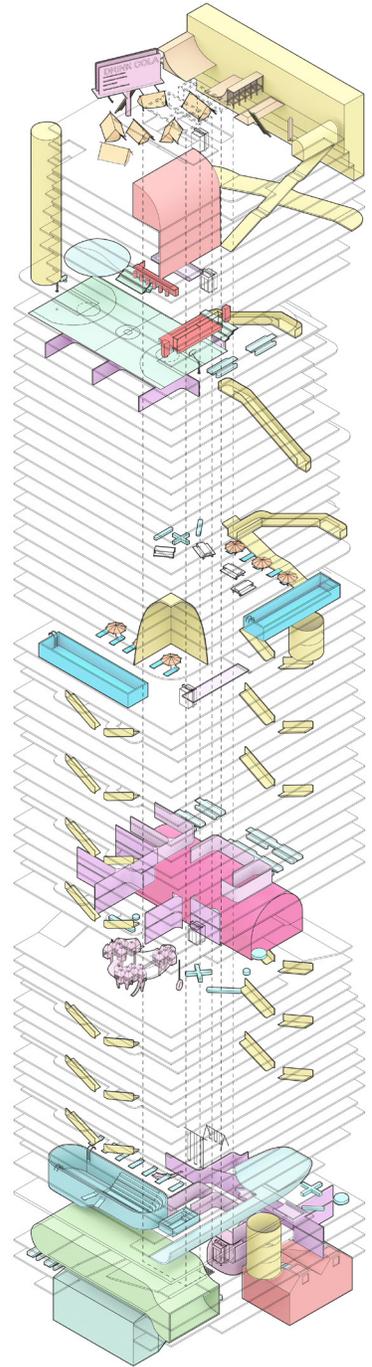
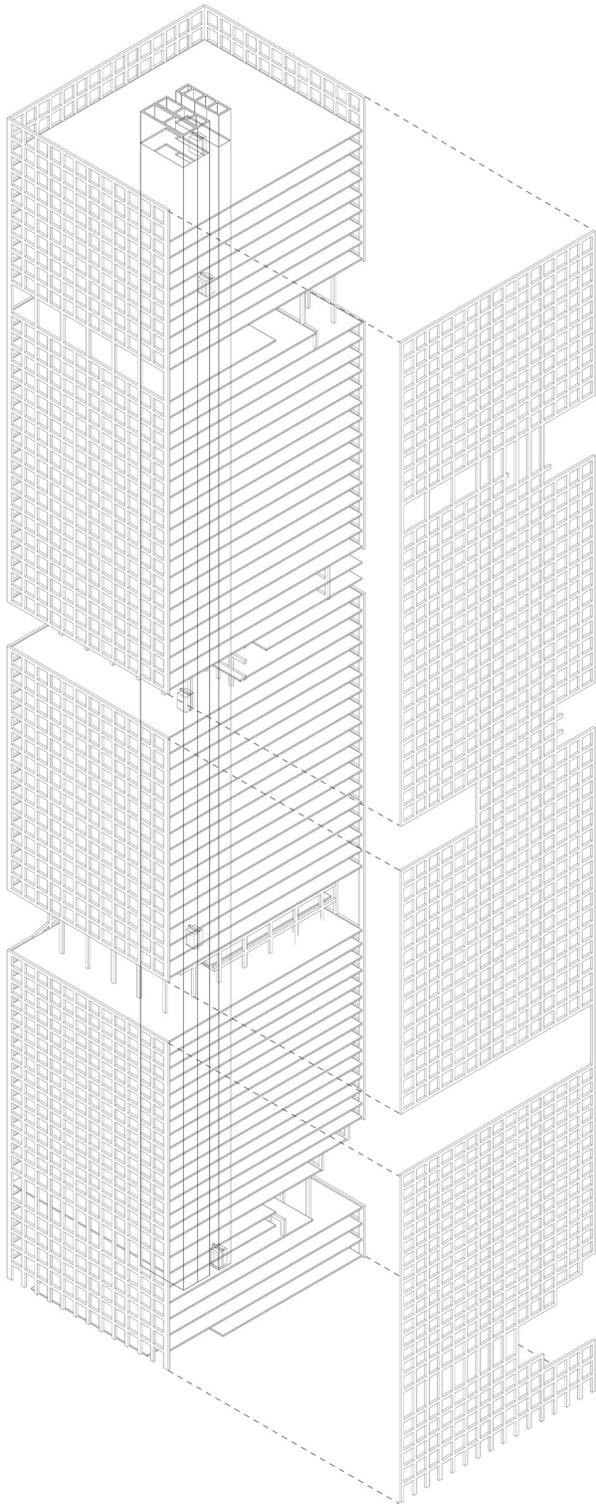
Bigness

Bigness was coined by Rem Koolhaas to embody the essence of the extremely large building and their inability to be controlled by a single architectural gesture once they reached a critical mass. The big building becomes acontextual, it becomes the urban tissue that it replaces. “A paradox of Bigness is that in spite of the calculation that goes into its planning – in fact, through its very rigidities – it is the one architecture that engineers the unpredictable.”¹

It is this unpredictability that allows this thesis to consider Bigness and the Staging of Uncertainty together as two theoretical inspirations for the design project. These two concepts are not in opposition, but different extensions of the same observation of the large, finance-driven urban center.

Staging of Uncertainty

The exact term was first used by Koolhaas in his 1994 essay, What Ever Happened to Urbanism yet its roots call back to his analysis of the skyscraper (or more specifically the Downtown Athletic Club) in *Delirious New York*. The analysis of the skyscraper views each separate floor as no longer beholden to a single predetermined purpose.² The Staging of Uncertainty is characterized by its lack of permanence and solidity as it exists within its existing urban condition, this ephemerality allows this new architecture to adapt to the shifting needs of society.³



Img 02 | Bigness / Uncertainty

Left : Bigness exemplified in the large empty floorplates disconnected from the facade and the rest of the urban tissue
Right : Uncertainty as it integrates spaces for fluctuating program within the framework of Bigness

The uncertainty is examined in the multiple design stages of the thesis, the varying societal necessities create new impermanent programs. Toronto's financial district provides the context for new transient methods of occupation.

Neoliberalism

Neoliberalism is a political alignment that supports unrestricted free trade and open markets. This free market capitalism focuses on the minimal interference from governing agencies, and the reduction of taxation and regulation. The move towards the privatization of industry is largely supported by conservative individuals and corporations.⁴

The existing state of the financial district of Toronto is founded in its neoliberal structure, the Bigness of the district is a result of this. The thesis will examine how inhabitation and uncertainty is possible in a district dominated by this system. While this thesis addresses the neoliberal aspects of the financial district's environment, it focuses on the publics' inhabitation within this system and less on the economics of the spaces themselves.

Control

A confining system that removes non-conformity to strictly adhere to a set of predefined parameters. The site will be analyzed as a system of control. Control will focus on how spaces in a city are dictated by companies through the design of their built architecture. Direct control is exercised on the site through the manufactured hostility of built architecture and privately-owned spaces.

The thesis studies power as it relates to the corporations that control the site. Control is not used to directly dictate the movements and lives of the population that inhabits the region, it is used to create a neighbourhood that is homogenized in its inhabitants, spaces and operations.

Publics

When describing publics, it is important to note the difference as indicated by Michael Warner in *Public and Counterpublics* between *The Public* and *A Public*. As a general description, the public is a much broader term that encompasses a grouping of people in general. This general grouping of people encompasses willing or unwilling populations within a certain area, demographic or country. The definition is different from *A public* which cannot be identified through an external framework, such as government identification or demographic polls. *A public* is self-organized and exists through occupant participation or self-identification. *A public* becomes a grouping of people that share common interests and positions. This definition of public leads to the conclusion that there is not a singular public in which everything can be tailored to and addressed. A body of people is composed of a multitude of different overlapping publics that contains different goals, participants and social classes.⁵

The thesis studies how the architecture of Bigness in Toronto can be transformed to adapt to the various publics that do not currently inhabit the site. The multiplicity and ambiguity of the various publics require spaces that can adapt to their overlapping and changing desires. The design of the thesis addresses the nebulous needs of the publics with designs that adapt.

02 LITERATURE REVIEW / THEORETICAL FRAMEWORK

6 Scott, Felicity. *Architecture or Techno-Utopia: Politics after Modernism*. MIT Press, 2007.

7 Koolhaas, Rem. *Delirious New York*. Monacelli Press, 1978. pp. 100

8 *Ibid.* pp. 85

Delirious New York. 1978. Rem Koolhaas.

A central theme of the thesis revolves around Rem Koolhaas' notion of The Staging of Uncertainty. He explores ideas of architecture as a framework for unknowable urbanism through his retroactive reading of New York. The term Manhattanism is coined for the urban condition created by the density of skyscrapers dictated by its lack of ideologies and doctrines. This condition is seen as a product of capitalist development and not intentional urbanism.⁶ This new form of architecture does not follow a movement or manifesto; it is simply a result of the city. It is in this text, Rem Koolhaas lays the groundwork for his essay on Bigness found in *S,M,L,XL* (1995). The term Bigness does not appear in *Delirious New York*, but he identifies the city's urbanism as buildings that have gone beyond a critical mass and have become monuments. The New York skyscraper represents a separation between the interior programmatic occurrences and the exterior expressions of the buildings.⁷ Floorplates have increased in size to the point where the vertical circulation of the building has no effect on the buildings' articulation. It is this split that enables each building lot to accommodate "an unforeseeable and unstable combination of simultaneous activities, which make architecture less an act of foresight than before and planning an act of only limited prediction."⁸ Koolhaas reads Manhattan's urban fabric as a grid of monoliths that house unstable and unpredictable program.

Manhattanism is embodied in the Downtown Athletic Club through its vertical stacking of program, completely disconnected from the surrounding urban environment. The new technology of the elevator enabled buildings such as the Downtown Athletic Club to divide its organization vertically. The vertical circulation renders the existing streetscape obsolete.

Bigness or the problem of Large. *S,M,L,XL*. 1994. Rem Koolhaas.

The direct lineage from *Delirious New York* to Bigness is apparent in Koolhaas' own words, he describes Bigness as a condition without thinkers, *Delirious New York* implies a “latent ‘Theory of Bigness’”⁹ The impossibly large mass of the structure creates independent parts and programs that collectively create the *Big Building*. This new architecture negates the urban fabric and becomes its own context. Koolhaas argues that the new urban typology created by Bigness enables programmatic “hybridizations/proximities/frictions/overlaps/superpositions”.¹⁰ The overlapping of program and social spaces is reminiscent of the utopian visions of the *Social Condenser* theorized by the Russian Constructivists. They focused on programmatic superposition with the intent to achieve “social cohesion through appropriate forms of architecture and urban design”.¹¹ The Constructivists were deeply critical in their approach to architecture as a tool for social change. In Bigness, Koolhaas is identifying its programmatic capabilities and exploring the skyscraper as a method to organize relationships within the existing capitalist system. Despite its potential for programmatic instability, Koolhaas declares that Bigness is also a blueprint for blandness.¹² This blandness is due to the unmitigated vastness of the *Big Building*, it yields to the whim of the market forces that drive its program. It is at this moment when the fantastical reading of the Downtown Athletic Club in *Delirious New York* is faced with opposition.

9 Koolhaas, Rem, and Bruce Mau. *S, M, L, XL*. Monacelli Press, 1995. pp. 499

10 Ibid. pp. 506-507

11 Yoos, Jennifer, et al. *Parallel Cities: The Multilevel Metropolis*. Walker Art Center, 2016. pp. 30

12 Koolhaas, Rem, and Bruce Mau. *S, M, L, XL*. Monacelli Press, 1995. pp. 512

13 Koolhaas, Rem, and Bruce Mau. *S, M, L, XL*. Monacelli Press, 1995. pp. 961

14 *Ibid.* pp. 969

15 *Ibid.* pp. 971

What Ever Happened to Urbanism. *S, M, L, XL*. 1994. Rem Koolhaas.

Rem Koolhaas' polemical essay *What Ever Happened to Urbanism* expresses his views on the failures of Modernism's "Alchemistic promises - to transform quantity into quality through abstraction and repetition".¹³ He identifies and criticizes Modernism's *tabula rasa* approach to urbanism and their attempts to create a new beginning through the design of urban plans. Koolhaas removes urbanism from the equation of city design and replaces it with chaos and architecture. He views cities as an amalgamation of transitory objects without definition. "If there is to be a 'new urbanism' it will not be based on the twin fantasies of order and omnipotence; it will be the staging of uncertainty; it will no longer be concerned with the arrangement of more or less permanent objects but with the irrigation of territories with potential;"¹⁴ Urbanism in this new setting is not the design of definitive forms, but the staging of impermanent occupation of space. This chaos cannot be deliberately manufactured to fit specific goals, instead it is given the potential to develop in urbanizing cities. This essay aims to redefine the role of designer and their relationship with the city.¹⁵ The relationship shifts from that of a designer to that of a participant that is subjected to the current of the whims on the city and shifting needs of the population and markets. This relationship is in accordance with Koolhaas' own approach to criticality in work with the Office for Metropolitan Architecture (OMA) and its associated research office (AMO). It comments on the state of architecture as it relates to society, without proposing radical change; it is an observer, not an active agent. The proposed urbanism does not deny the pre-existing, it layers, modifies and superimposes. The new relationships/hybridizations of the new and old will create the new urban condition.

Synthesis

This thesis evaluates the current applications of the concept of Bigness as it exists in Toronto's urban center and explores how this architecture can become the framework for the Staging of Uncertainty. Bigness as it exists within the chosen site takes the shape of the high-rise office tower. Increasingly, the towers become taller and the floorplates become larger, separating the use of the building from the exterior expression and larger urban context. This schism, emblematic of Koolhaas' theory of Bigness, is said to enable programmatic instability, yet in this context, it consolidates the business-oriented design. This project analyses how Bigness is used in the financial district and how the influence of commercially driven powers create the exclusionary design of the region. The large building, instead of being used as a tool for intensity, is used for homogeneity. The study of the urban condition is done in two ways: 1. In the analysis of the companies that own and lease the space (both at street level and in the air) 2. Through the identification of the subordinated publics that are excluded from the district. The thesis will explore how the existing context of Bigness can enable the programmatic hybridizations and superpositions that are visible in Koolhaas' writing of *What Ever Happened to Urbanism* and his reading of the Downtown Athletic Club and in *Delirious New York*.

INTRODUCTION

16 Koolhaas, Rem, and Bruce Mau.
S. M. L. XL. Monacelli Press, 1993.
pp. 495-516

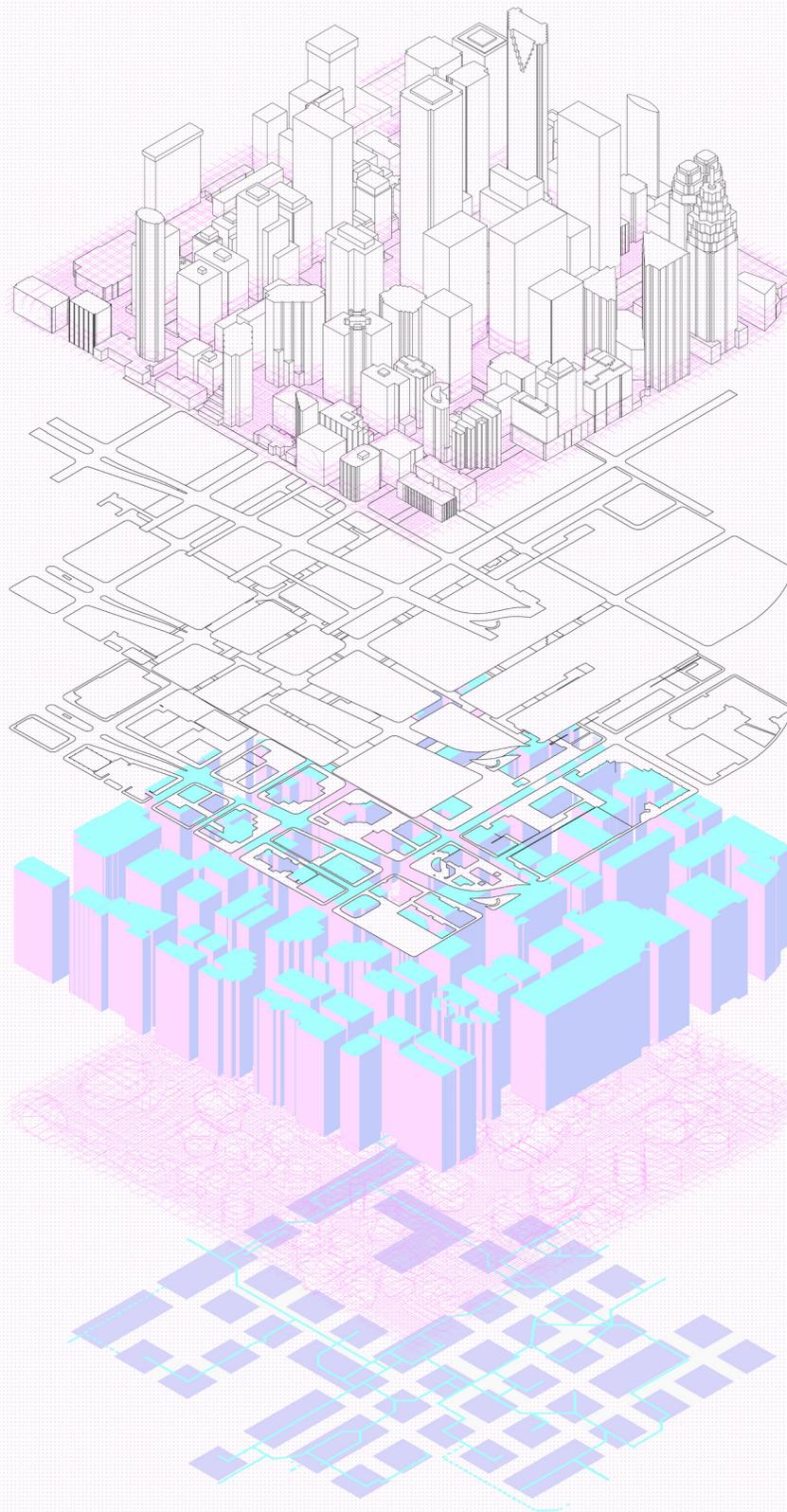
Bigness exists in its lack of context,¹⁶ Toronto's financial district is comprised of a grid of isolated monoliths that adhere to its the principles of Bigness. The system of skyscrapers is splintered into vertical parcels completely distinct from each other, vertical circulation in this district is limited, this creates a disconnect between the ground plane and the privatized space in the sky. The design of the neighbourhood is dictated by the consumer and capital driven goals of private corporations. The companies' primary objectives are that of generating income for the owners and stockholders. These goals have no overlap with the interests of the alternate publics. This lack of alignment between the dominant publics of the corporation and the non-dominant publics creates spaces that are suited for the office-worker, not community activity.

The proposed design of the thesis questions the nature of power and its influence on design. The design task was chosen due to the site's existing potential for programmatic overlaps, hybridizations and community space. The existing infrastructure and large amount of people inhabiting the site provides a rich context that currently is not being utilized to benefit a broader group of people. The research analyses the constituent parts of the site and proposes a new framework that encourages occupation inside the constraints of the existing neoliberal structures.

A time-based system of design developed in three stages will occupy the financial district and subsequently the surrounding areas, creating a network of staged uncertainty.

17 Fraser, Nancy. "Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy." *Social Text*, no. 25/26, 1990. pp. 65-69

The nature of space and its relation to people requires different publics to be addressed. The dominant publics that subordinated classes traditionally oppose are the owners and participants of the capitalist companies that control the site. This public represents those working in the most common industries of finance, real estate and professional services. The non-dominant (or alternative) public exists in relative opposition to the powers that oversees the district. The different publics described in this thesis are comprised of varying groups of people that hold different values, goals and belong to vastly different social classes. The alternative publics are the multiple groups of perceived lower status individuals that do not directly participate in this consumerist system. The alternative publics are subject to the public sphere that is dominated by the dominant publics.¹⁷ It is important to note that individuals often belong to many publics, one person's entire identity and needs cannot be reduced to their profession. As a result of this, one person might belong to several different publics throughout the course of a day. The new architectural language will be brought to life in a system that denies the non-dominant public's relationship to the space. A negotiation of the divide between public and private must occur to create a theory that speculates the future of multiple publics' occupation of the district.



— TORONTO

— ROADS
Space dedicated to automobiles.
Pedestrians unwelcome

— LAND PLOTS
Land divided among those who
can afford it. All unwell land will
be developed.

— RESIDUAL SPACE
Buildings subtract space to
create the financial district's
fabric.

— MONOLITHS
Building height doesn't matter
much to the pedestrian; they
only exist on the outside until
they have reached their
destination.

— POPULATION FLOW
A grid on people is pushed and
pulled by intersections, buildings,
and interactions. The resulting
grid creates pockets.

— PATH
Underground network of paths
leading from a building to
building. Expands further than
the boundaries of the financial
district. Most of this network
consists of shopping.

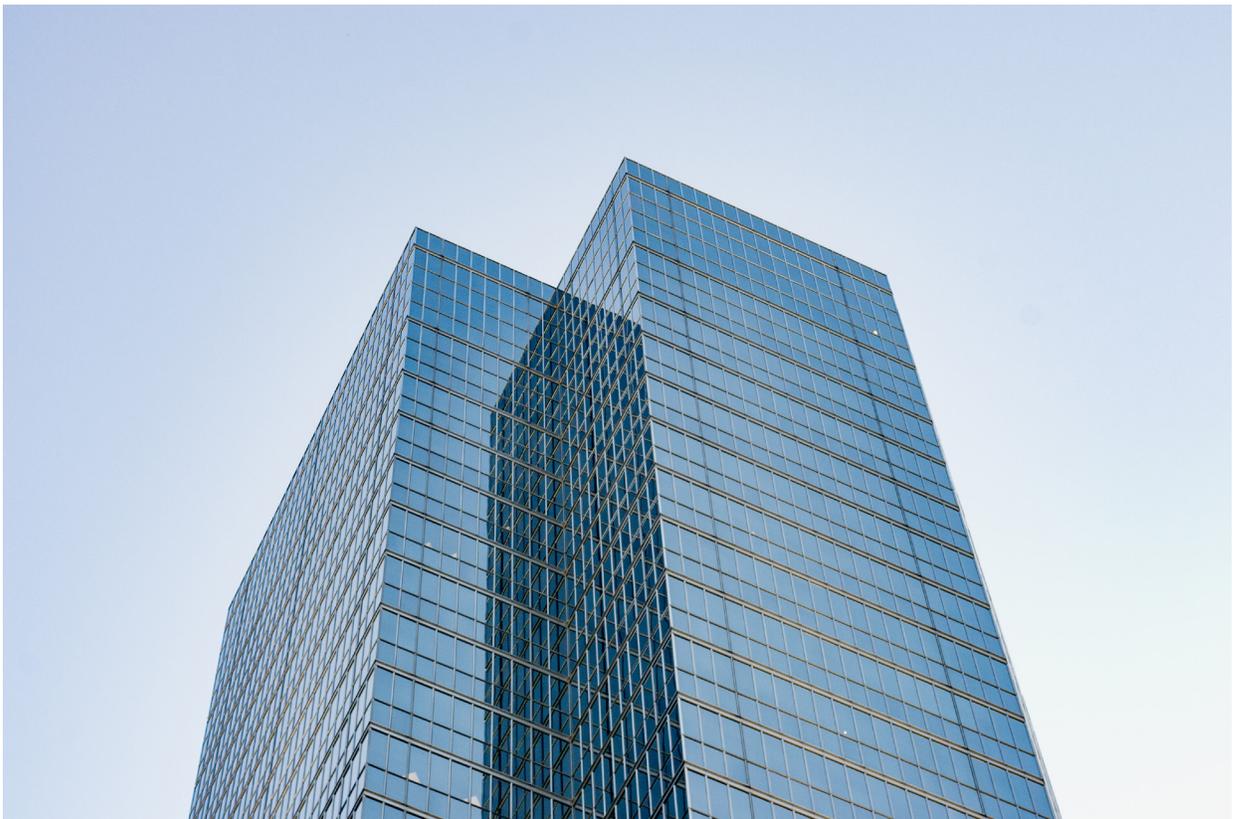
Img 03 | Site Analysis

Considering the site and how people move through it. The analysis looks at how the large footprints of the buildings affects human occupation on the site

04

SITE

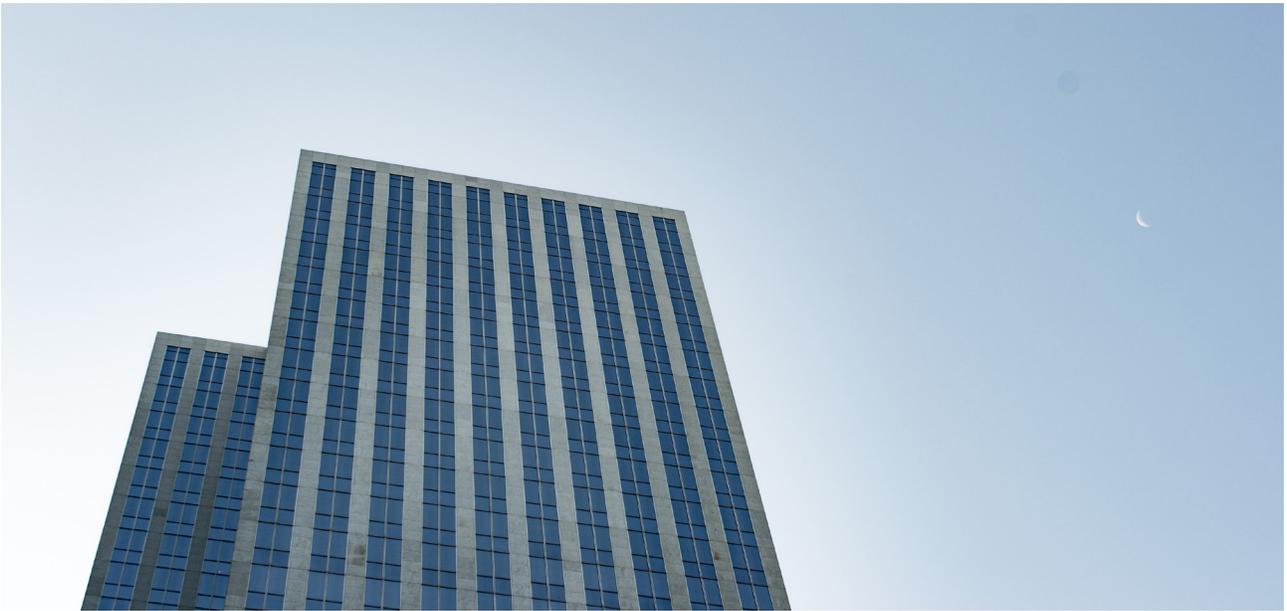
The project's site is located in the financial district of Toronto. The district is bordered by Yonge St. and Simcoe St. on the East/West borders and between Queen St. W and Front St. W on the North/South. The site occupies 17 km/sq. and houses approximately 30 high-rise buildings and approximately 15 low to mid-rise buildings. The site was selected for its density and verticality. Due to its central location, real estate is at a premium, this premium promotes the skyscraper as the only building option when purchasing land in the district.



Img 04 | Site Photo



Img 05 | Site Photo



Img 06 | Site Photo



Img 07 | Site Photo

Downtown Toronto serves as a working destination for the Greater Toronto Area. This area is home to almost 6 million inhabitants. A great number of suburbs have direct train or express busses to the center. Toronto's amenities and transportation systems are predominantly focused on the financial market. Many commuter and inter-city trains arrive at Union Station. The Line 1 subway, the Queen streetcar and King streetcar run directly through the site. Accessing this neighbourhood 24 hours a day can be achieved easily. The neighbourhood sees most of its activity between 9am and 6pm Monday to Friday.



Img 08 | Site Photo

18 Brookfield Property Partners L.P. 2018 Annual Report. 2018. Web. 10 November 2019 <https://bpy.brookfield.com/reports-and-filings/financial-reports/annual-reports>

19 Sun Life Financial Inc. 2018 Annual Report. 2018. Web. 12 November 2019 https://www.sunlife.com/Global/Investors/Presentations+and+events/Annual+meetings?vgnLocale=en_CA

20 Sun Life Financial Inc. Management Information Circular. 2019. Web. 12 November 2019 https://www.sunlife.com/Global/Investors/Presentations+and+events/Annual+meetings?vgnLocale=en_CA

Proprietorship of the buildings that occupy the financial district can be narrowed down to five companies and their subsidiaries. The companies that hold majority stakes either run the buildings and tenants themselves or have a subsidiary branch owned by the corporation that runs the day to day operations and leasing of the space. Out of the 30 high-rise buildings in the district, 25 are owned by either: Brookfield Property Partners L.P., Bentall Greenoak Real Estate, Cadillac Fairview, Oxford Properties or Quadreal Property Group. The 5 high-rises that are not owned by these companies and their subsidiaries are hotels or residential buildings, every large office or commercial tower is owned by the corporations listed. The result of this proprietorship is a district that has homogenized its spaces, operations, corporate/leasing policies and general relation to the market, this homogenization is counter to Bigness' potential for causing uncertainty.

Brookfield Office Properties (subsidiary of Brookfield Asset Management) is a publicly traded company of the Toronto and New York stock exchange. Their net income for 2018 was \$3.654 billion USD and the total value of their assets is \$122.520 billion USD. This corporation holds \$80.196 billion USD in investment properties across multiple countries.¹⁸

Bentall Greenoak Real Estate (subsidiary of Sun Life Financial) is a publicly traded company on the Toronto and New York stock exchange. Their net income for 2018 was \$2.947 billion USD and the total value of their assets is \$951.142 billion USD. This corporation holds \$2.809 billion USD in investment properties across multiple countries.¹⁹ The salary of the chief executive officer of Sun Life Financial is \$9.3 million USD per year.²⁰

21 Ontario Teachers' Pension Plan. 2018 Annual Report. 2018. Web. 10 Nov 2019 <https://www.otpp.com/corporate/ontario-teachers-reporting>

22 Ontario Municipal Employees Retirement System. 2018 Annual Report. 2018. Web. 13 Nov 2019 <https://www.omers.com/About-OMERS/Annual-Reporting>

23 British Columbia Investment Management Corporation. Corporate Annual Report. 2018. Web. 13 Nov 2019 <https://www.bci.ca/publications/>

Cadillac Fairview (subsidiary of Ontario Teacher's Pension Plan) is a privately held company. Their net income for 2018 was \$5.2 billion CAD and the total value of their assets is \$191.1 billion CAD. This corporation holds \$27.5 billion CAD in investment properties. The salary of the chief executive officer of the Ontario Teacher's Pension Plan is \$4.892 million CAD per year.²¹

Oxford Properties (subsidiary of Ontario Municipal Employees Retirement System) is a privately held company. Their net income for 2018 was \$9.266 billion CAD and the total value of their assets is \$111,862 billion CAD. This corporation holds \$22.256 billion CAD in investment properties. The salary of the chief executive officer of the Ontario Municipal Employees Retirement System is \$4.126 million CAD per year.²²

Quadreal Property Group (subsidiary of British Columbia Management Corporation) is a privately held company. Their net income for 2018 was \$4.555 million CAD and the total value of their assets is \$129,4 billion CAD. This corporation holds \$3.1 billion CAD in investment properties. The salary of the chief executive officer of the British Columbia Management Corporation is \$3.315 million CAD per year.²³

BROOKFIELD PROPERTY PARTNERS L.P.

BROOKFIELD OFFICE PROPERTIES

PUBLIC COMPANY
 TORONTO STOCK EXCHANGE **BYPUN**
 STOCK PRICE **CAD \$25.13**

BOARD OF DIRECTORS

- Ric Clark**
Chairman of the Board of Directors
- Jeffrey Bichard**
Director, Managing Partner, Brookfield Asset Management
- Soon Young Chang**
Director, Senior Advisor to the Investment Corporation of Dubai
- Omar da Cunha**
Independent Director, Senior Partner, Dealmaker Ltd. and BOND Consultants Engprossal & Participacoes
- Stephen DeNardo**
Independent Director, Managing Director and President and CEO of RiverOak Investment Corp. LLC
- Lou Maroun**
Independent Director, Chairman of Sigma Real Estate Advisors/Sigma Capital Corporation
- Lars Rodert**
Independent Director, Founder and CEO of Oaktree Capital Management
- Scott Cutler**
Independent Director, Senior Vice President, Americas, eBay
- Caroline Atkinson**
Independent Director

Liberal Party of Canada

SALARIES
 \$125,000/yr
 + \$15,000/yr Retainer

Political Affiliations
By Donation

Stock Prices
2014-2019



Financial data gathered from Brookfield Property Partners LP public financial statement December 2018

FINANCIAL (USD)

Net Income	\$3,654,000,000
Total Revenue	\$7,239,000,000
Investment Properties	\$80,196,000,000
Total Assets	\$122,520,000,000

ANCHOR TENANTS

Bank of Montreal

Bank
 Revenue \$21,700,000,000
 2018

Osler, Hoskin & Harcourt LLP

Business Law Firm

Bennett Jones LLP

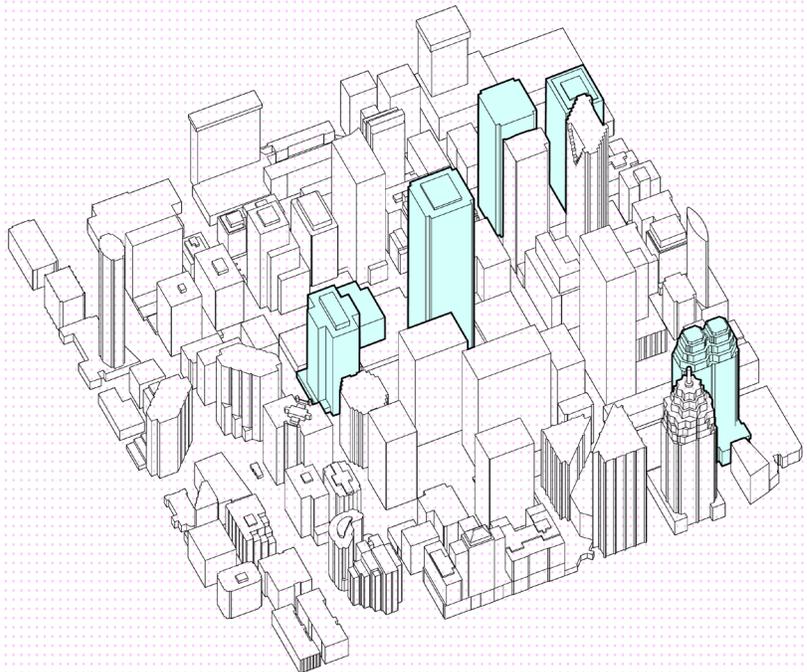
Law Firm

Deloitte

Accounting
 Revenue \$46,200,000,000
 2019

Toronto Stock Exchange

Stock Exchange
 Revenue \$817,100,000
 2018



SUN LIFE FINANCIAL

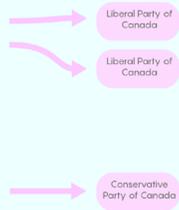
BENTALL GREENOAK REAL ESTATE

PUBLIC COMPANY

TORONTO STOCK EXCHANGE SLF
 STOCK PRICE \$58.88

BOARD OF DIRECTORS

- William D. Anderson**
Chairman, Sun Life Financial Inc.
- Ashok K. Gupta**
Corporate Director, Member of Management Resources Committee, Member of Risk & Conduct Review Committee
- James M. Peck**
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- Dean A. Connor**
President & Chief Executive Officer, Sun Life Financial Inc.
- M. Marianna Harris**
Corporate Director, Member of Management Resources Committee, Member of Risk & Conduct Review Committee
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Corporate Director, Member of Audit Committee, Member of Risk & Conduct Review Committee
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Corporate Director, Member of Audit Committee, Member of Risk & Conduct Review Committee
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Corporate Director, Member of Management Resources Committee, Member of Risk & Conduct Review Committee
- Christopher J. McCormick**
Corporate Director, Member of Governance, Nominations & Investment Committee, Member of Management Resources Committee
- Barbara G. Szymiest**
Corporate Director, Member of Audit Committee, Member of Risk & Conduct Review Committee



SALARIES
 \$9,300,029/yr - CEO
 \$405,000/yr - Chairman of the Board
 \$210,000/yr - Directors

FINANCIAL (USD)

Net Income	\$2,947,000,000
Total Revenue	\$31,034,000,000
Investment Properties	\$2,809,000,000
Total Assets	\$951,142,000,000

Political Affiliations By Donation

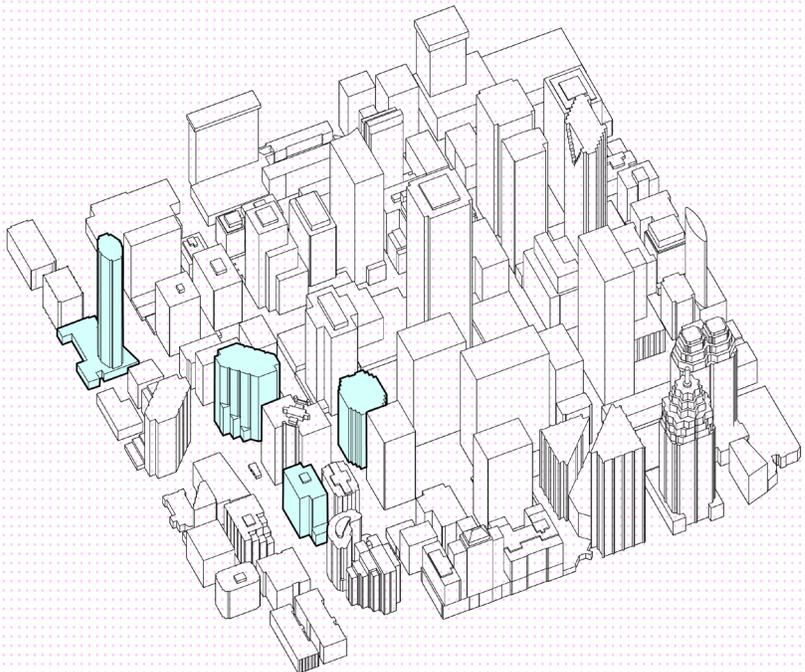


Stock Prices 2014-2019

Financial data gathered from Sun Life Financial Inc. public financial statement December 2018

ANCHOR TENANTS

- Sun Life**
 Insurance
 Revenue \$31,034,000,000
 2018
- Swiss Re Reinsurance**
 Reinsurance
 Revenue \$31,942,000,000
 2018
- JLT**
 Insurance
 Revenue \$1,386,000,000
 2017
- Crawford & Company**
 Claims Management
 Revenue \$1,017,000,000
 2018
- Lennard Commercial Realty**
 Realty, Brokerage



img 10 | Sun Life
 Analysis of the finances of the building owners.

ONTARIO TEACHERS' PENSION PLAN

CADILLAC FAIRVIEW PRIVATE COMPANY

BOARD OF DIRECTORS

- Steve McGirr**
Chairman
- Bill Chinery**
Chair, Human Resources & Compensation Committee and Succession Committee
Vice Chair, Investment Committee Member, Audit & Actuarial Committee
- James M. Peck**
President of Cadillac Fairview's Office, Transition, Member of Management Resources Committee Member of Risk & Conduct Review Committee
- Cathy Cranston**
Member, Audit & Actuarial and Operational Risk Committees
- Patricia Croft**
Chair, Benefit Administration and Governance Committee Member, Audit & Actuarial, Human Resources & Compensation and Succession Committees
- Lise Fournel**
Chair, Operational Risk Committee Member, Governance Committee
- Gene Lewis**
Vice Chair, Benefit Administration Committee Member, Audit & Actuarial and Operational Risk Committees
- M. George Lewis**
Member, Operations and Finance Resources & Compensation Committee
- John Murray**
Member, Audit & Actuarial and Human Resources & Compensation Committees
- Kathleen O'Neill**
Chair, Audit & Actuarial Committee Member, Operational Risk and Succession Committee
- Barbara Paik**
Chair, Investment Committee Member, Human Resources & Compensation, Governance and Succession Committees
- Daniel Sullivan**
Member, Human Resources & Compensation and Governance Committee

SALARIES
\$4,892,641/yr - CEO
\$1,578,603/yr - CFO
\$110,000/yr - \$190,000/yr - Directors

Political Affiliations
By Donation

- Liberal Party of Canada
- Conservative Party of Canada

FINANCIAL (CAD)

Net Income	\$5,200,000,000
Total Revenue	\$2,104,000,000
Investment Properties	\$27,500,000,000
Total Assets	\$191,100,000,000

Financial data gathered from Ontario Teachers Pension Plan public financial statement December 2018

ANCHOR TENANTS

Toronto Dominion Bank

Bank
Revenue \$38,834,000,000
2018

WeirFoulds LLP

Law Firm

McCarthy Tetrault

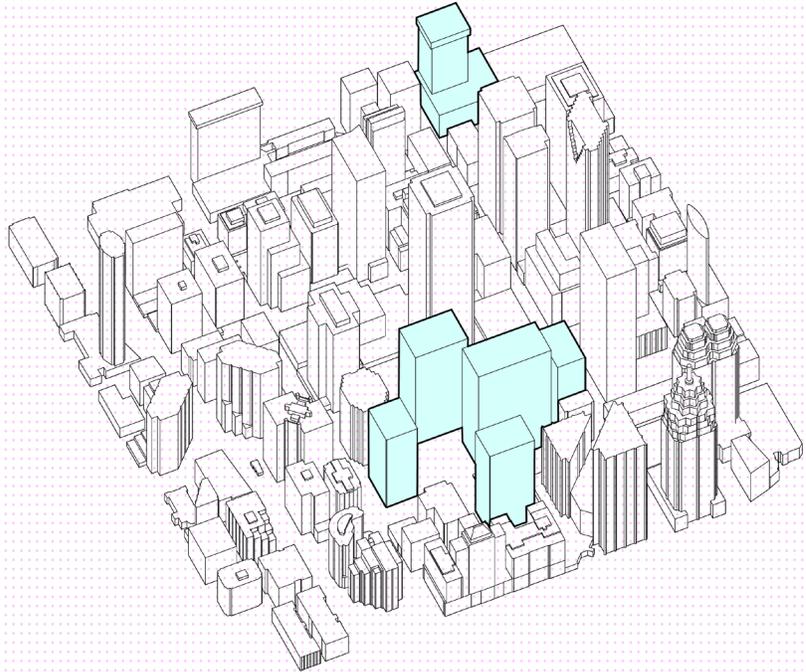
Business Law Firm

AGF

Asset Management
Revenue \$471,126,000
2018

Folger Rubinoff LLP

Law Firm



Img 11 | OTPP
Analysis of the finances of the building owners.

ONTARIO MUNICIPAL EMPLOYEES RETIREMENT SYSTEM

OXFORD PROPERTIES PRIVATE COMPANY

BOARD OF DIRECTORS

- George Cooke**
Chairman
- Bill Azz**
Bill Azz is Chair of the Investment Committee and also serves on the Human Resources Committee of the OAC Board
- Monty Baker**
Monty Baker is Chair of the Human Resources Committee and also serves as a member of the Audit & Actuarial Committee
- David M. Beatty**
David M. Beatty serves as a member of the Investment Committee and the Human Resources Committee
- Darcie Beggs**
Darcie Beggs serves as a member of the Governance Committee, Human Resources Committee, Risk Oversight Committee, and Special Committee
- William (Bill) Butt**
Bill Butt is Chair of the Audit & Actuarial Committee and serves as a member of the Investment Committee
- Paul Elliott**
Paul Elliott serves as a member of the Audit & Actuarial Committee, Investment Committee and Special Committee
- Michael Fann**
Michael Fann serves as a member of the Audit & Actuarial Committee and Governance Committee
- Laurie Hutchinson**
Laurie Hutchinson serves as a member of the Audit & Actuarial Committee and Risk Oversight Committee
- Cliff Inskip**
Cliff Inskip is a member of the Audit & Actuarial Committee, the Investment Committee and the Risk Oversight Committee
- Charlene Mueller**
Charlene Mueller is one of two Directors appointed by the OMERAC Board on the nomination of the Canadian Order of Public Employees (COPE)
- Jim Phillips**
Jim Phillips is Chair of the Governance Committee and serves as a member of the Appeals Committee and the OAC Joint Council Sub-Committee
- Penny Somerville**
Penny Somerville serves as a member of the Investment Committee and Governance Committee. In addition, she also serves as Chair of the Risk Oversight Committee
- David Tsubouchi**
David Tsubouchi serves as Chair of the Appeals Committee. Mr. Tsubouchi is also a member of the Governance Committee and the Human Resources Committee
- Yung Wu**
Yung Wu serves as a member of the Investment Committee and Governance Committee

- Conservative Party of Canada
- Liberal Party of Canada
- Conservative Party of Canada
- New Democratic Party
- Conservative Party of Canada
- New Democratic Party
- Conservative Party of Canada
- Liberal Party of Canada

SALARIES
 \$4,126,622/yr - CEO
 \$1,660,128comp/yr - CFO
 \$65,000/yr - \$165,000/yr - Directors

Political Affiliations
By Donation

FINANCIAL (CAD)

Net Income	\$9,266,000,000
Total Revenue	\$2,752,308
Investment Properties	\$22,256,000,000
Total Assets	\$111,862,000,000

Financial data gathered from Ontario Municipal Employees Retirement System public financial statement December 2018

ANCHOR TENANTS

VALE Canada Limited

Subsidiary of Mining Company

Revenue \$36,575,000,000
2018

EY

Professional Services

Revenue \$34,800,000,000
2018

Sprott Asset Management

Asset Management & Resource Financing

Revenue \$109,269,000
2018

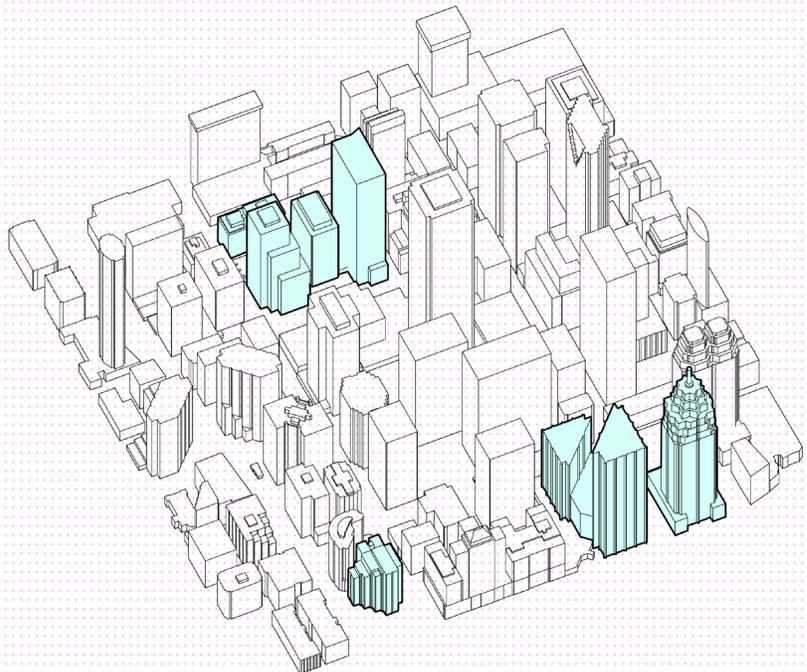
Centerra Gold

Gold Mining

Revenue \$1,129,000,000
2018

Lerners LLP

Law Firm



img 12 | Omers
Analysis of the finances of the building owners.

BC INVESTMENT MANAGEMENT CORPORATION

QUADREAL PROPERTY GROUP

PRIVATE COMPANY

BOARD OF DIRECTORS

- Peter Milburn**
Chair of the Board of Directors
Member/Chair, Minister of Finance and Secretary to Treasury Board
Appointed by the Minister of Finance
- Paul Finch**
Chairman and Chief Financial and Administrative Officer, British Columbia Government and Service Employees' Union
Appointed from the Public Service Pension Plan Board of Trustees
- Gayle Garrill**
Vice-Chairman Finance and Operations
Appointed by the Minister of Finance
- Donna Lomimer**
Vice-Chairman Support Services and Chief Financial Officer Inshore Health
Appointed from the Municipal Pension Board of Trustees
- Karen Maynes**
Member
Appointed from the College Pension Board of Trustees
- Ken Tanner**
Member
Appointed from the Teachers Pension Board of Trustees
- Sheila Taylor**
Member
Appointed by the Minister of Finance

Green Party of Canada

New Democratic Party

New Democratic Party

Green Party of Canada

Political Affiliations
By Donation

FINANCIAL (CAD)

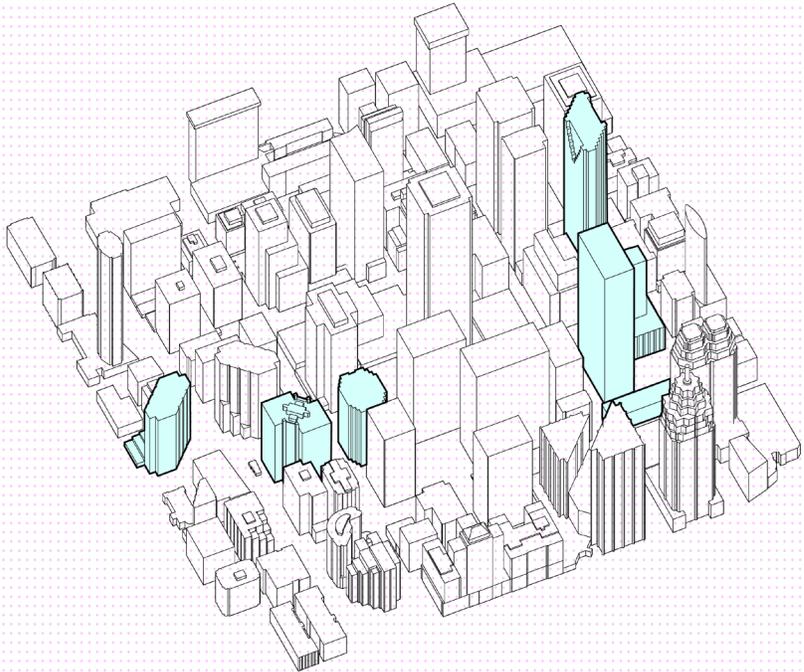
Net Income	\$4,555,000
Total Revenue	\$416,563,000
Investment Properties	\$3,100,000,000
Total Assets	\$129,400,000,000

SALARIES
 \$3,316,636/yr - CEO
 \$1,880,128/comp/yr - CFO
 \$6,950/yr - \$46,374/yr - Directors

Financial data gathered from BC Investment Management Corporation public financial statement December 2018

ANCHOR TENANTS

- Bank of Nova Scotia
Bank
Revenue \$29,000,000,000
2018
- Amazon
Online Retailer
Net Income \$10,073,000,000
2018
- Cassels Brock & Blackwell LLP
Business Law
- GMP Richardson Wealth Management
Wealth Management
Revenue \$290,100,000
2018
- MCAP Mortgages
Mortgage Financing

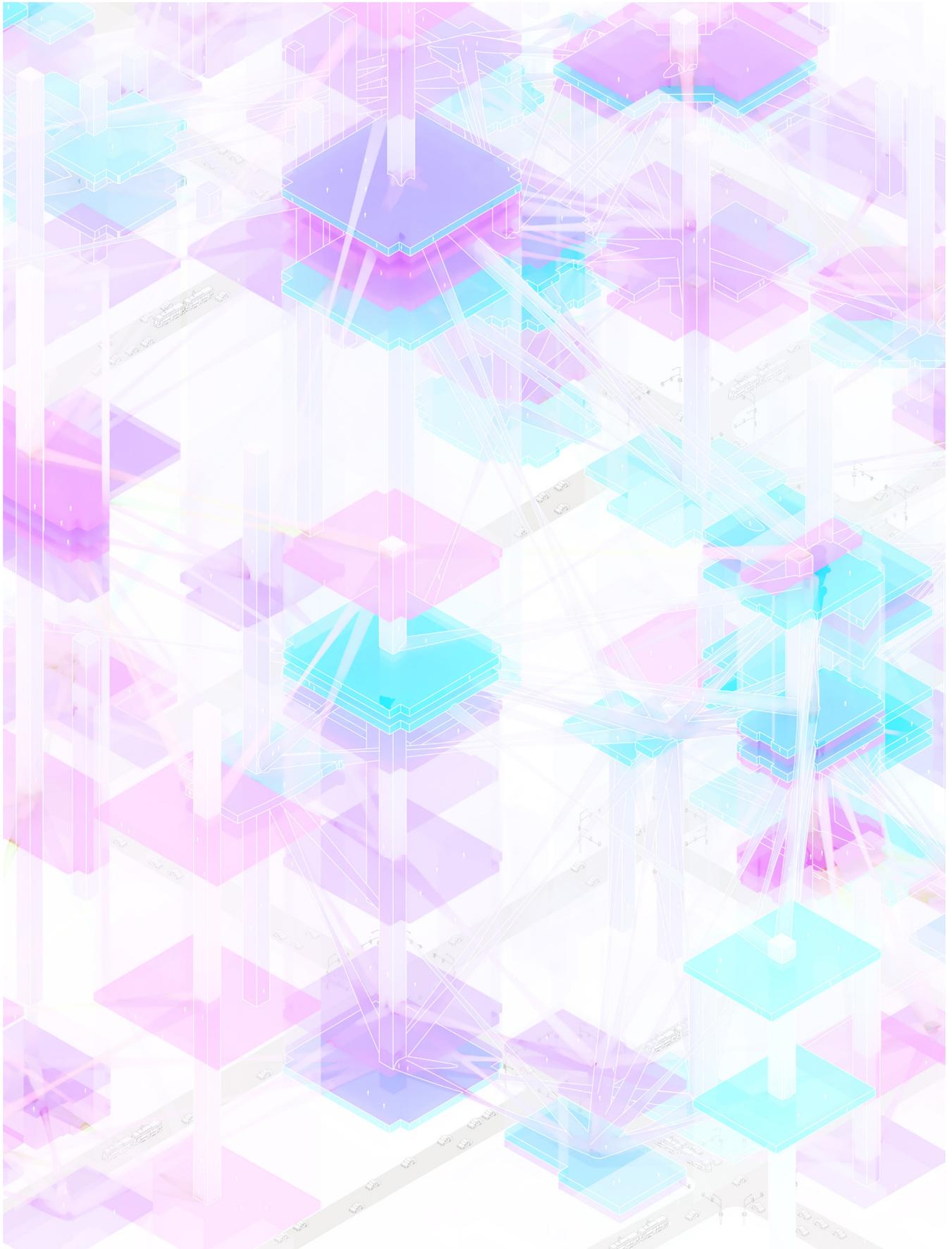


Through my personal experience of the site, despite its density and convenience, this district does not encourage wandering or leisure activities and remains unwelcoming to the alternate publics. Temporary inhabitation of the neighbourhood by those that do not work there is uncommon due to the lack of publicly accessible, private or intimate spaces. The buildings become less distinct pieces of architecture and the neighbourhood becomes an unremarkable ; the financial district is composed of the fabric these large buildings create. The desire to have a unique experience in this scenario is drowned out by scale, density and dullness.

Publicly accessible spaces are tailored to economically driven and consumer-based corporations creating a hostile and uninviting neighbourhood. The exclusionary elements of the area are exemplified in the high levels of security and surveillance, the lack of community oriented spaces, the businesses/restaurants specialized for high end clientele and through the design of outdoor space. Privately owned public spaces create a series of small parklets, outdoor fountains and alcoves used by primarily by office workers to eat lunch. The parklets, are scarcely planted and hardscaped, they provide no long-stay appeal. These outdoor spaces while appearing public, remain in the control of the property managers and the security staff they employ. The lack of public amenities, affordable eating options and uncomfortable benches imply the loiterer must move through the space quickly. The interests of the companies that run the district are economic in nature, their decisions are dependent on the most profitable outcome. The most profitable outcome is only beneficial to the dominant public.

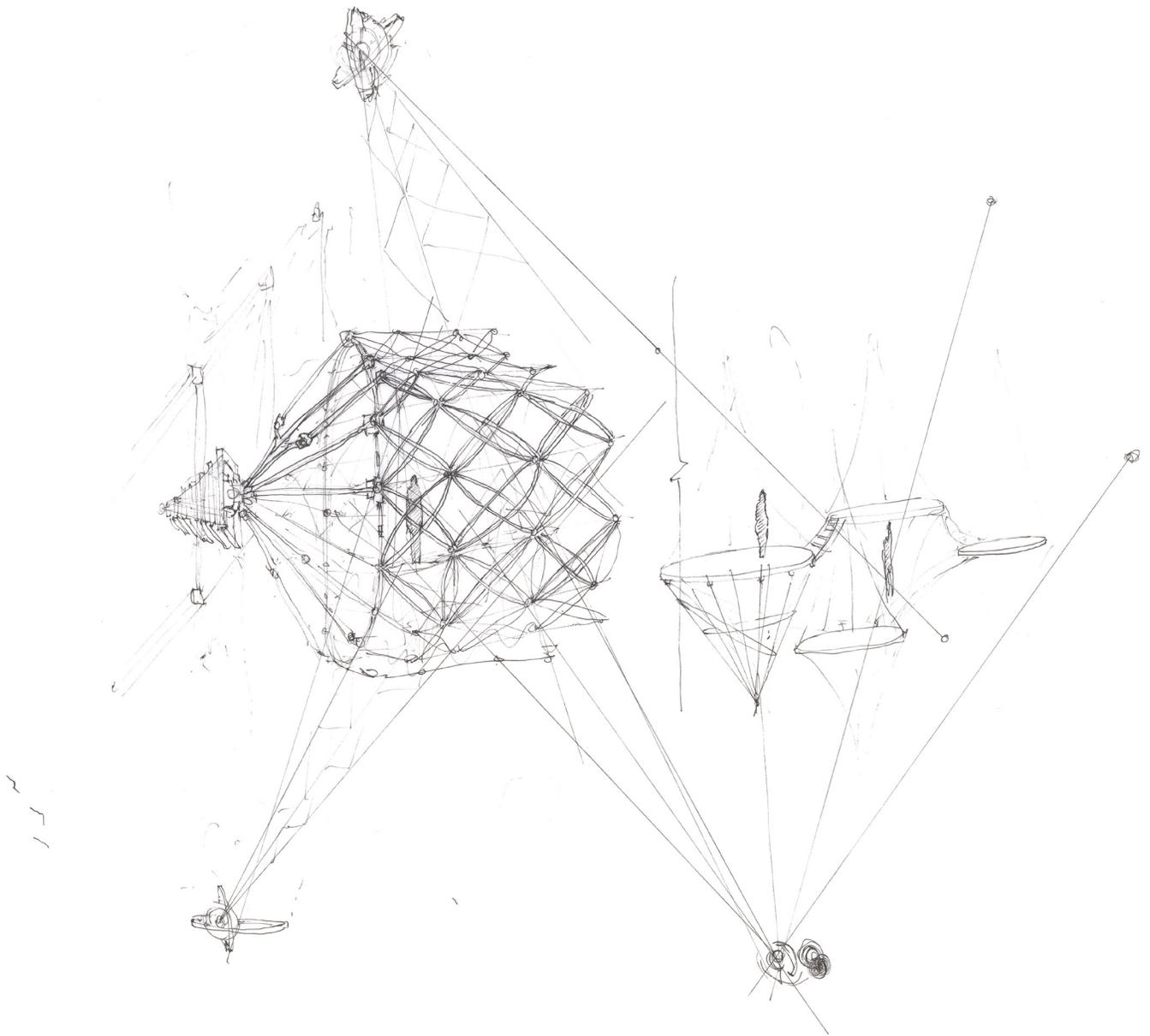
DESIGN PROCESS

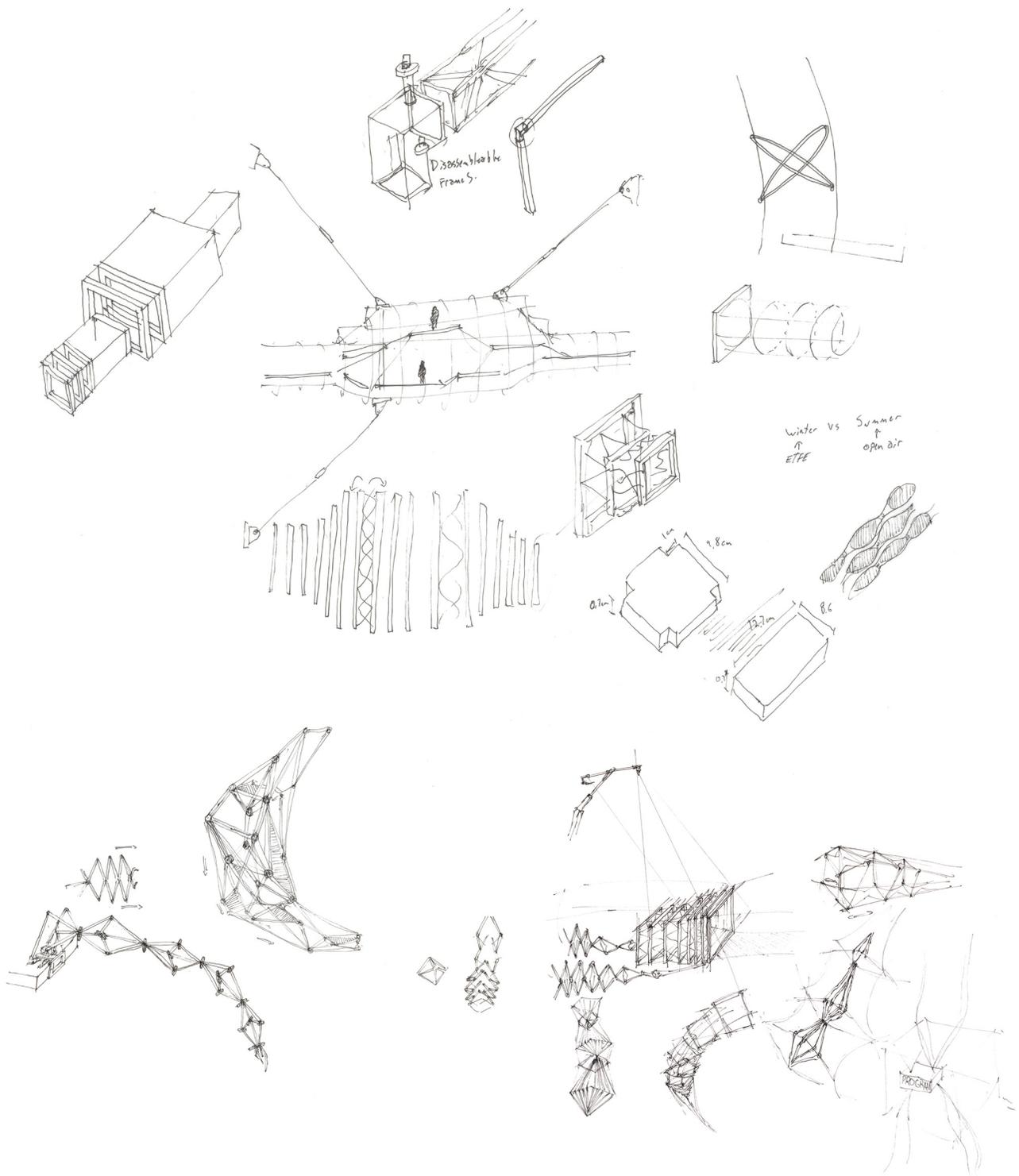
The research-by-design methodology of the thesis progressed from an initial site analysis and questioning of the power dynamics of the urban condition to a series of designs that addressed these concerns. The initial issue considered the exclusionary and corporate design of the district. A first approach was for the public to occupy traditionally privatized space, most notably the temporary vacant floors in the existing buildings. Unleased spaces were mapped and visualized to represent the possibility of non-office workers occupying unleased floors in skyscrapers. The identification of these spaces was abstracted as the office vacancy rates for the neighbourhood were well documented by the CBRE Commercial Real Estate Services Canada, yet the exact locations of these openings are not documented for the public record. These occupations were decided to be temporary in nature as they followed the cycles of the leasing market. Phase two of the project aims at articulating these new programs on the external face of the buildings. A series of elevated connections were designed that would link these alternative programs. This approach was first expressed in Colloquium 2. This design approached intensification and programmatic overlaps almost completely within the existing constructed architecture and was therefore dependant on the structures and its operations that it simultaneously aimed to subvert.



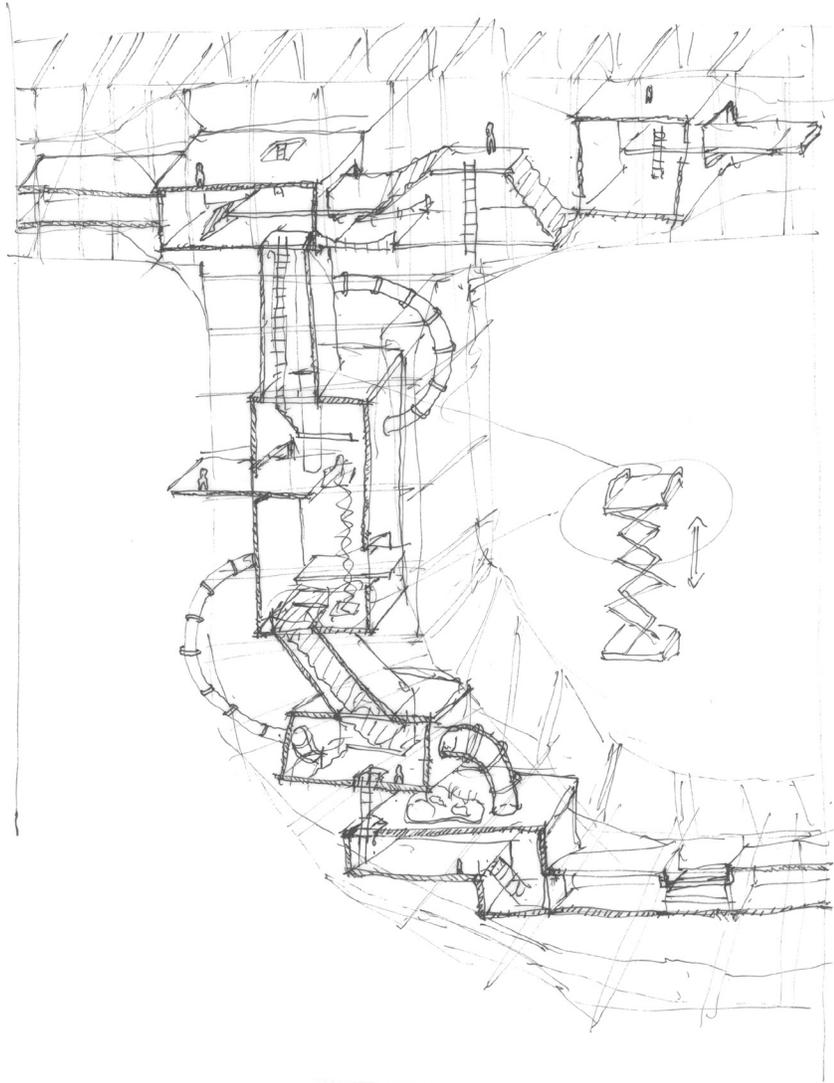
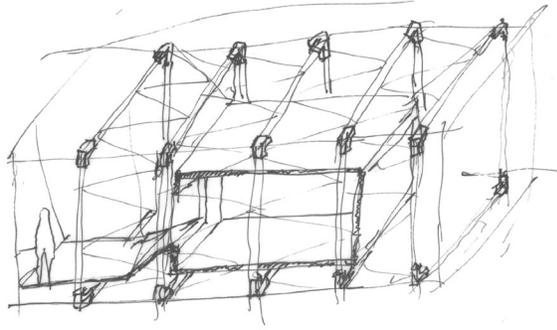
Img 14 | Temporal Connections
Illustration of vacancies in downtown Toronto over different time periods (indicated in different colours) showing the possible linkages between them. Completed for Colloquium 1, this drawing illustrated abstract connections between spaces within the existing buildings.

Img 15 | Tensile Connection
First sketch of the possible tensile structure that could attach to the existing buildings on the site



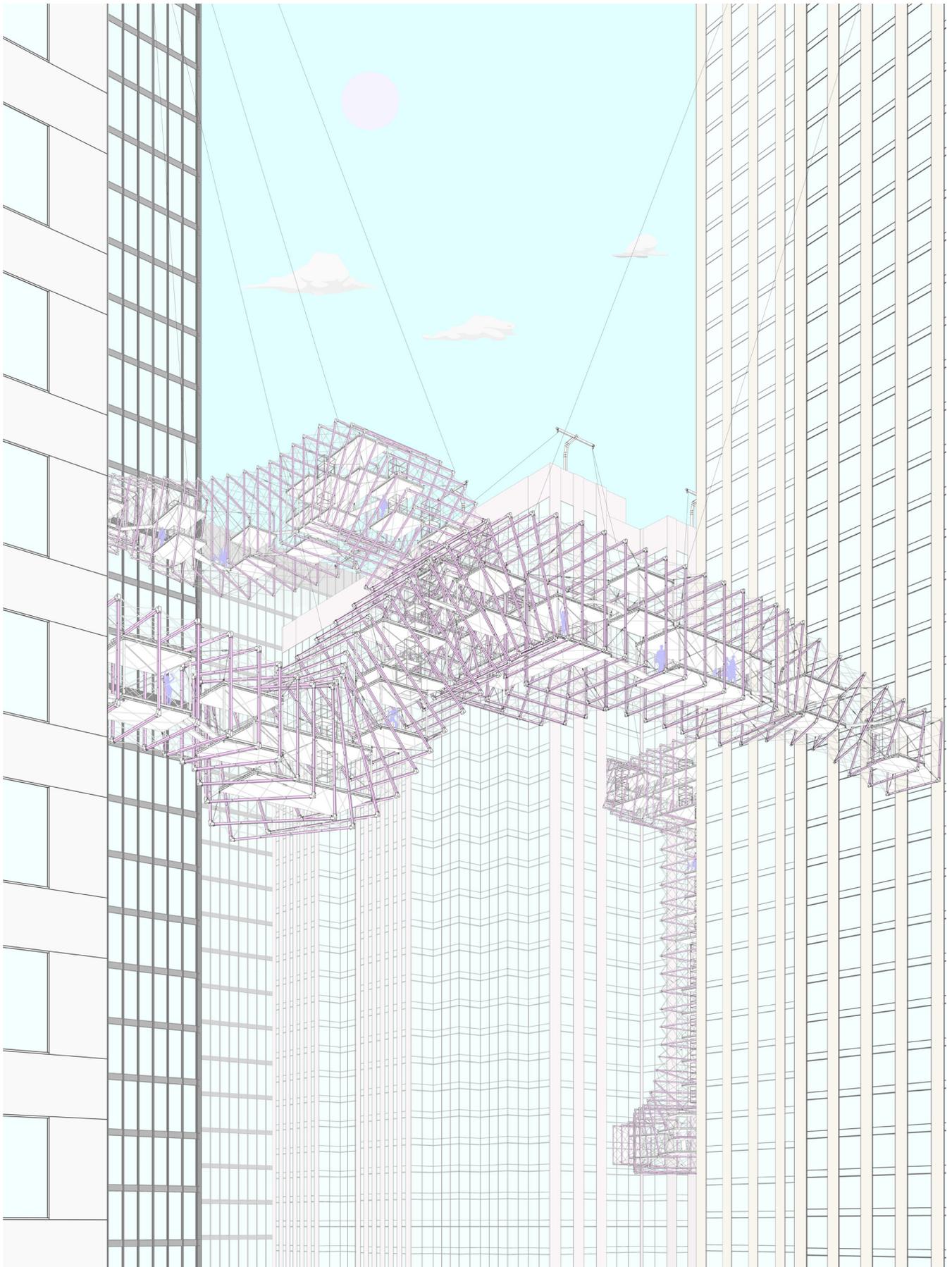


Img 16 | Iterative Sketches
Schematic drawings of the tensile structures as a dismantlable set of parts.



Img 17 | Vertical Inhabitation

Original sketch of the circulation through the tensile framework. Further investigations proved a more horizontal approach to the tensile system would be more efficient and suit the green space program. The vertical nature of this iteration requires more infrastructure to function.



Img 18 | Hanging Structures

Illustration of the tensile system as it becomes a framework that propagates throughout the site. This iteration of the tensile system was more horizontal yet it neglected the green space program in favour of an empty suspended floor system. This model was later adapted for the green space program.

Following this initial design approach, public and private spaces were further studied. Ownership and power were expanded upon and researched. This led to the finding that most large buildings in the area are owned by the same five multi-billion dollar corporations. The companies and their subsidiaries publish their financial data and the salaries of their top board members and chief executive officers, indicating that those who have influence over the ownership and operation of the space are held accountable for the financial success of the most profitable corporations in the city.

From these considerations, connections and urban green spaces were explored in an elaboration of the next phase of design. The abstract linkages presented at Colloquium 1 were expanded upon to create elevated park spaces to be occupied by both the subordinate and dominant publics. The connecting armatures were designed to be temporary demountable structures that shift with the programmatic and leasing needs of the neighbourhood. This design aimed to occupy the space above the street and combine a different population with the existing workers in the district. This second iteration of design did not identify the alternate publics, only specified space for this nebulous group to occupy. This ambiguity led to a lack of specificity in the program. The concept of the subordinated publics was ambiguous, their only defining trait was that of those opposed to the dominant publics.



Img 19 | Drink Cola
Advertisements thrive in a time without livable housing. The nature of space and housing is questioned, billboards tower over informal living.

24 Yoos, Jennifer, et al. *Parallel Cities: The Multilevel Metropolis*. Walker Art Center, 2016. pp. 30

25 Ibid. pp. 36

26 Ibid. pp. 135

The research-by-design methodology initially analysed Rem Koolhaas' ideas on Bigness and *The Staging of Uncertainty* and shifted them to adapt to the varying publics of Toronto. The design research became a redefinition and exploration of the possible spatial tactics that speculated a new Bigness that could house uncertain elements. This research shifted my thoughts on *The Staging of Uncertainty*. Moving away from Koolhaas' downtown athletic club, where uncertainty occurs on distinct separate floors, the uncertainty of the thesis blurs the boundaries vertically and horizontally.

This conception of the city, as a series of elevated programs, is situated within its own urban history. The idea of a multilevel city and its social potential has been extensively theorized, both from a capitalist and socialist perspective. The Soviets saw elevated paths and connectivity as *Social Condensers*. Absorbing many ideas from French Social Utopians, the Soviets saw the communal potential of these programmatic overlaps.²⁴ The Soviet multilevel cities were designed to be opposed to the existing capitalist urbanism that removed the horizontal circulation, favoring the vertical skyscraper.²⁵ The Soviet Constructivists relied primarily on Modernist forms and symbols to create new social spaces. The spatial and programmatic relations that the Constructivists aims to create demanded a new design. "New social relations demand a new space"²⁶

The design of new social spaces required a different architecture than the traditional capitalist downtown. I remain skeptical of the utopian visions of the multi-level urbanism as a system that solves all societal issues, yet the notions of program hybridizations are important for this thesis as they illustrate the usefulness of these moments of overlapping community space.

PROGRAM

27 SimplyAnalytics (2019).
Environics Daytime Population CA.
Retrieved January 17th, 2020, from
SimplyAnalytics database.

28 "GO 2020 Strategic Plan." 2019.
[http://www.ontla.on.ca/library/
repository/mon/25005/309721.pdf](http://www.ontla.on.ca/library/repository/mon/25005/309721.pdf).

The programmatic requirements of the site were determined by an analysis of demographics and needs of those who reside there and those who commute from within the city and the adjacent suburbs. The needs were arranged to supplement the existing community services in the neighbourhood. Data examined from Environics Analytics for the financial district (census tract 0014.00) showed a 7163% increase in daytime population, jumping from 2031 residents at night to 149,772 people occupying the space during the daytime hours. The change in daytime occupation is significantly lower in the rest of the city. The seven surrounding districts (census tracts 0011.00, 0012.03, 0013.01, 0015.00, 0034.02, 0035.00, 0036.00) show a 369% change and the city of Toronto shows a 105% change.²⁷ A combination of Statistics Canada census data and commuting data from GO transit, creates a more accurate depiction of the occupants of the district. 1.2 million people commute to Toronto during peak hours, Union Station sees 190,000 peak hour arrivals via the GO Train system, and 150,000 work in the financial district. Of those commuting for work, 67.7% arrive by automobile.²⁸ The financial district relies heavily on commuters to thrive, this reliance has created a downtown that lacks public amenities such as schools, nurseries, community centres and proper park space.

29 Statistics Canada. 2017. 5350014.00 [Census tract], Ontario and Toronto [Census metropolitan area], Ontario (table). Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed January 21, 2020).

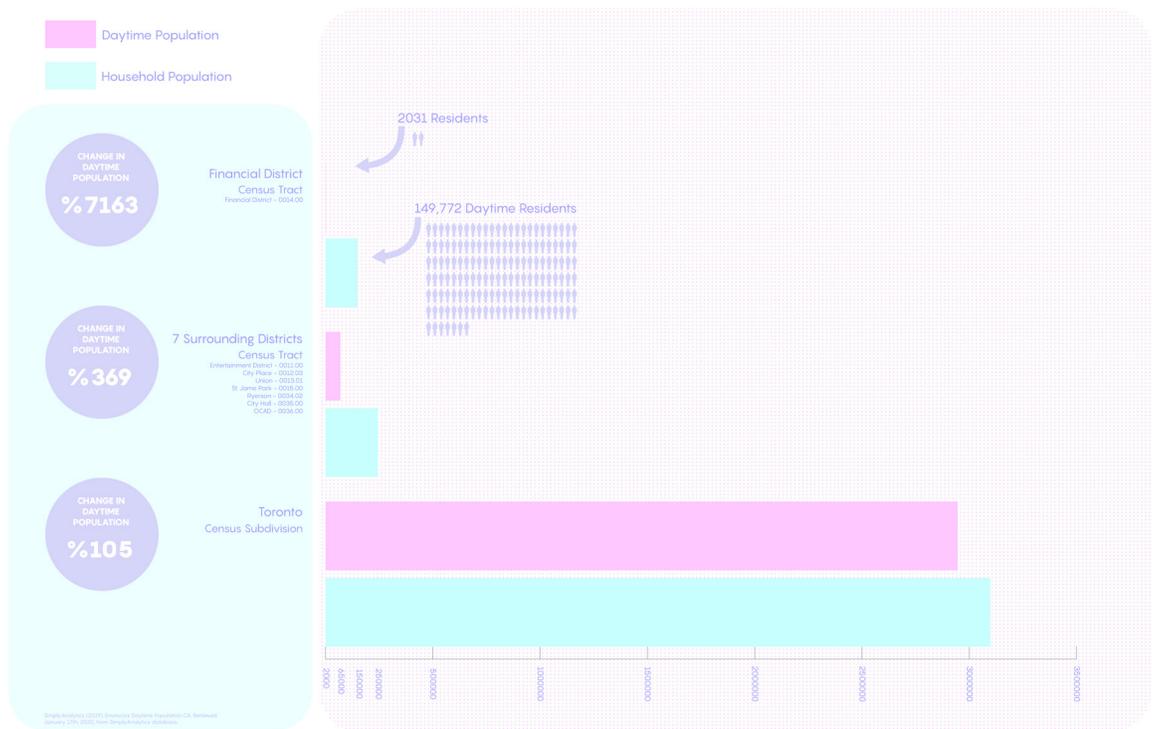
30 City of Toronto. "Child Care & Before-After School Program Locator." City of Toronto, 14 Nov. 2018. [www.toronto.ca/community-people/children-parenting/children-programs-activities/licensed-child-care/child-care-locator/#location=130 Adelaide St W&lat=43.649694&lng=-79.383922](http://www.toronto.ca/community-people/children-parenting/children-programs-activities/licensed-child-care/child-care-locator/#location=130%20Adelaide%20St%20W&lat=43.649694&lng=-79.383922).

31 Statistics Canada. 2017. 5350014.00 [Census tract], Ontario and Toronto [Census metropolitan area], Ontario (table). Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed January 18, 2020).

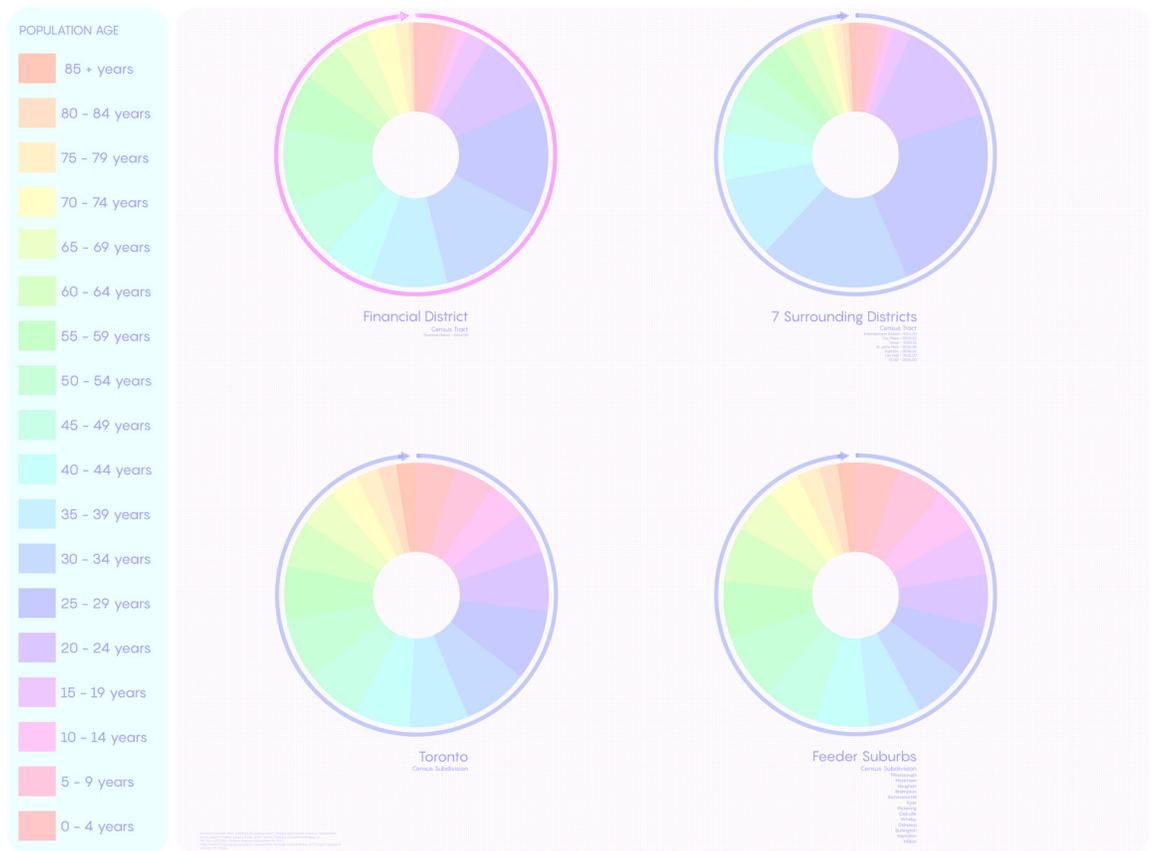
32 Kalinowski, Tess. "Who Lives and Works in the Financial District, Toronto's 9-to-5 Neighbourhood." *The Star*, 15 Sept. 2015. <https://www.thestar.com/news/gta/2015/09/15/who-lives-and-works-in-the-financial-district-torontos-9-to-5-neighbourhood.html>.

In the site, education and child spaces are scarce, nor are education facilities for children and adults located near the district. The downtown population houses a large number of individuals with small children aged 0-9 without enough nurseries or daycares.²⁹ There are 4 Daycare/Nursery/Preschools in the financial district, data provided from the city of Toronto indicates only 1 of the institutions as having availability in their preschool program, the other programs are full, or the data is incomplete.³⁰ There are few elementary, secondary or adult schools within a reasonable distance of the neighbourhood. Individuals commuting long distances must find suitable accommodations for their children far from their place of work.

A majority of employment in the core is centered on *Finance and insurance, Real Estate and Renting and Leasing, and Professional Scientific and Technical Services*.³¹ 57% of the daytime residents of the financial district work in either finance or Real Estate Sectors.³² Speaking in terms of Publics, those belonging to those industries are considered in this thesis to be the dominant Publics as they represent a large majority and dictate the design of the space. The excluded Publics in the area are those that belong to the less numerous yet still present industries of *Retail Trade, Healthcare and Social Assistance, Educational Services and Administrative, Waste Management and Remediation Services*. Those that do not follow the strict daytime schedule of the finance industry find themselves in a district without hospitable amenities and leisure space.



Img 20 | Daytime Population
 Analysis of the of the daytime population.

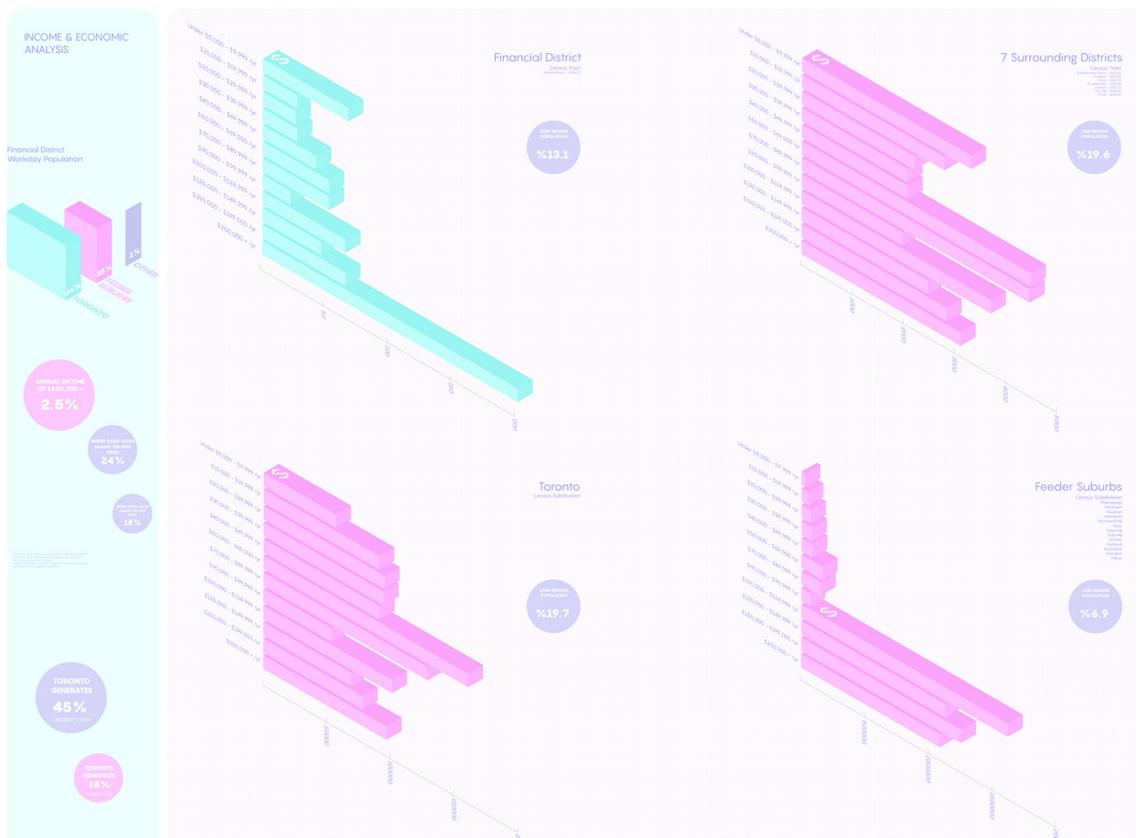


Img 21 | Population Age
 Population age breakdown.

Kalinowski, Tess. "Who Lives and Works in the Financial District, Toronto's 9-to-5 Neighbourhood." The Star, 15 Sept. 2015. <https://www.thestar.com/news/gta/2015/09/15/who-lives-and-works-in-the-financial-district-torontos-9-to-5-neighbourhood.html>.

"Toward a Toronto Region Economic Strategy." 2014. https://www.bot.com/portals/0/unsecure/advocacy/2014_TRBOT_CPPaper.pdf.

Statistics Canada, 2017. 5350014.00 [Census tract], Ontario and Toronto [Census metropolitan area], Ontario (table). Census Profile, 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed January 18, 2020).



Img 22 | Income
Income breakdown and analysis.

"2016 Census: Education, Labour, Journey to Work, Language of Work, Mobility and Migration." 5 Dec. 2015. <https://www.toronto.ca/wp-content/uploads/2017/12/94ce-2016-Census-Background-Education-Labour-Journey-to-work-Language-Mobility-Migration.pdf>.

Statistics Canada, 2017. 5350014.00 [Census tract], Ontario and Toronto [Census metropolitan area], Ontario (table). Census Profile, 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed January 18, 2020).

Kalinowski, Tess. "Who Lives and Works in the Financial District, Toronto's 9-to-5 Neighbourhood." The Star, 15 Sept. 2015. <https://www.thestar.com/news/gta/2015/09/15/who-lives-and-works-in-the-financial-district-torontos-9-to-5-neighbourhood.html>.



Img 23 | Labour Types
Categories of employment sectors.

City of Toronto. "Education." City of Toronto, 14 May 2018, www.toronto.ca/business-economy/industry-sector-support/education/.

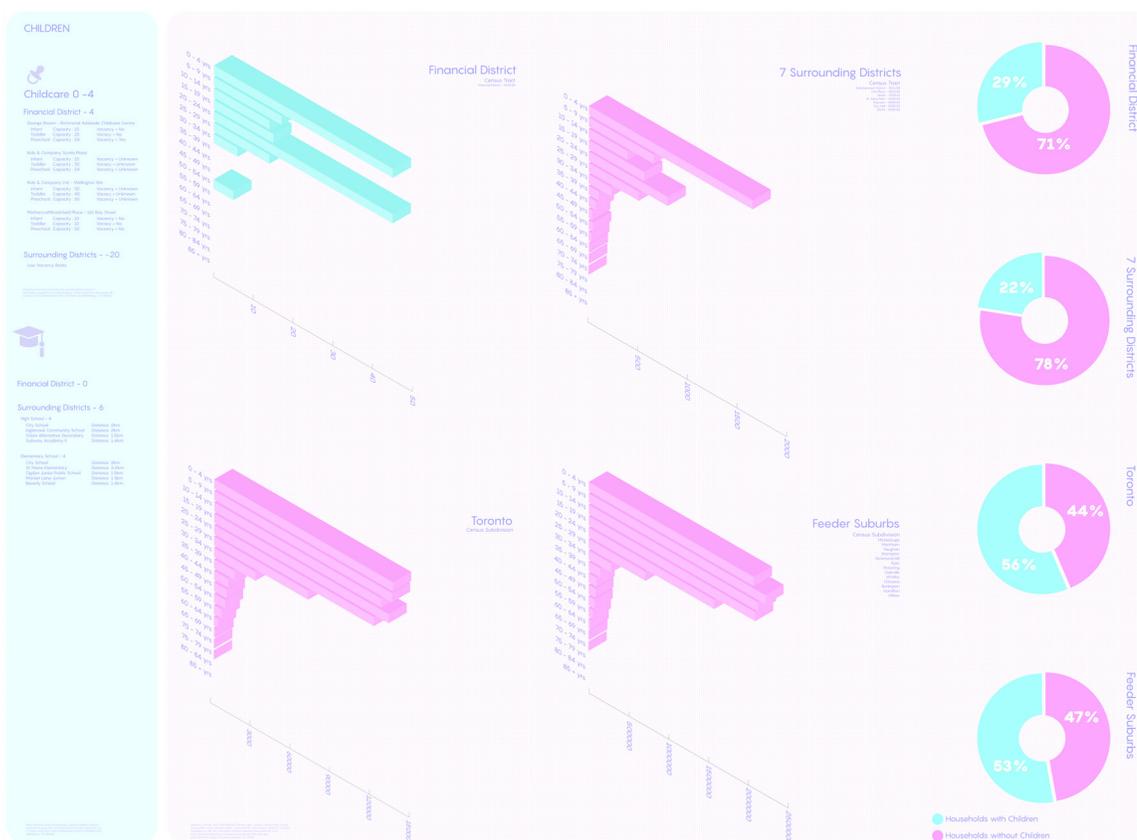
Statistics Canada. 2017. 5350014.00 [Census tract], Ontario and Toronto [Census metropolitan area], Ontario (table). Census Profile, 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017.
<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed January 19, 2020).



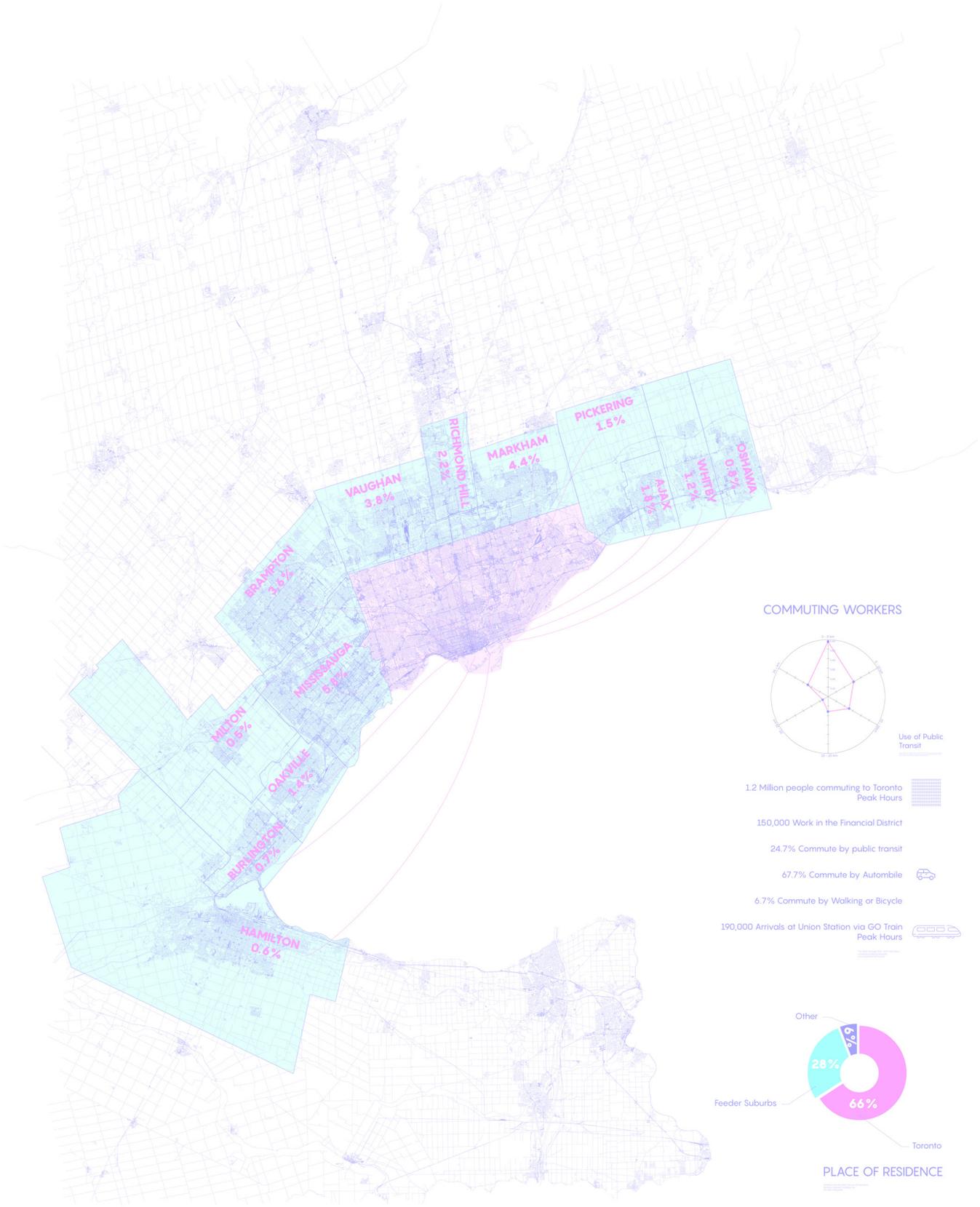
Img 24 | Education
Education levels and availability.

<https://www.toronto.ca/community-people/children-parenting/children-programs-activities/licensed-child-care/child-care-locator/#location=130%20Adeleide%20St%20W&lat=43.64964&lng=-79.383922>

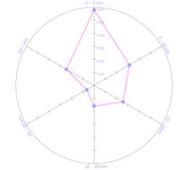
Statistics Canada. 2017. 5350014.00 [Census tract], Ontario and Toronto [Census metropolitan area], Ontario (table). Census Profile, 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017.
<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed January 21, 2020).



Img 25 | Children
Homes with children and childcare options.



COMMUTING WORKERS



Use of Public Transit

1.2 Million people commuting to Toronto Peak Hours

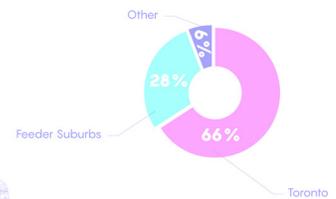
150,000 Work in the Financial District

24.7% Commute by public transit

67.7% Commute by Automobile

6.7% Commute by Walking or Bicycle

190,000 Arrivals at Union Station via GO Train Peak Hours



PLACE OF RESIDENCE

Img 26 | Commute Data
Analysis of the commutes of those working in Toronto.
Data gathered from :

Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016325

"GO 2020 Strategic Plan." 2019. <http://www.ontla.on.ca/library/repository/mon/25005/309721.pdf>.

Savage, Katherine. "Results from the 2016 Census: Commuting within Canada's Largest Cities." Insights on Canadian Society, 29 May 2019. <https://www150.statcan.gc.ca/n1/pub/75-006-x/2019001/article/00008-eng.htm#moreinfo>.

From the analysis of demographics, needs and available resources, a list of programs emerged.

Offices : While the office-worker public has not been the primary focus of the thesis, to separate them from the non-dominant publics would recreate the initial problem with the site. The site, as it currently exists, separates offices from areas where the population resides. This separation is the catalyst for the homogenous downtown.

Market Rate Housing : Introducing habitation to the site increases variation in the publics found there. Introducing living spaces is important for the thesis as it directly addresses the issues of uniformity in the district. The creation of housing shifts the area away from its daytime and single use nature and promotes community living.

Social Housing : Those who work and live in the district do not exclusively occupy roles as high-ranking executives. The heterogeneity of the district relies heavily on the mixing and overlaps of publics. The introduction of social housing creates spaces that are not exclusively adapted to the affluent.

Elevated Green Spaces : Provides leisure areas and creates suspended connections between programs. The elevated spaces provide alternate methods of circulation and moments of repose.

Community Centres : Social space is important to fostering community and ownership of the neighbourhood. This nebulous program encompasses a wide variety of programs open to all.

Library

Amphitheatre

Basketball Court

Pools

Steam Rooms

Squash Courts

Gymnasiums

Playgrounds

Skateboard Park

Music Performance Space

Schools : Elementary through Secondary for children, and adult learning spaces during the off hours. Eliminates the need to commute to different parts of the city for education

Childcare / Nurseries : With a growing number of households with young children, increasing the amount of childcare facilities in the neighbourhood facilitates the lives of the parents.

REALIZATION

The design proposals are time-based processes that occurs at varying scales with different levels of cooperation with the existing corporate structure. These different design schemes work in union to achieve the common goal of adapting the existing Bigness of the financial district of Toronto to better suit non-dominant publics through the Staging of Uncertainty. The new programs adopt the large spaces of Bigness in the retrofitting of existing structures and the building of new ones. New transitory programs are created to shift with the needs of the publics. The design follows three phases : the first phase occurs informally through the occupation of vacant spaces in the skyscrapers, the second phase erects transitory armatures to create park space and connectivity in the neighbourhood, the third and final phase constructs a series of new-build mixed use towers to introduce community and a mixing of programs.

The phasing of the three strategies is not fixed, the design elements do not occur on a set schedule or follow an established order of implementation. The framework that these strategies create is not driving towards a predetermined end condition, instead the designs negotiate with time, the public and the programs to create a system that shifts with the transient occupants. Multiple instances of the phases will be happening simultaneously to address the programmatic needs of the publics. The future of the city is difficult to determine as it is in constant flux, the design speculates a series of strategies that occur over time within the city.

Img 27 | Masterplan

The system begins in the dense financial district and spreads to the rest of the city. As need diminish in one area, they grows in another. The framework that houses uncertainty is not static, it ebbs and flows.



The master plan expands beyond the boundary of the financial district. The dense fabric fluctuates with the changes of daily life.

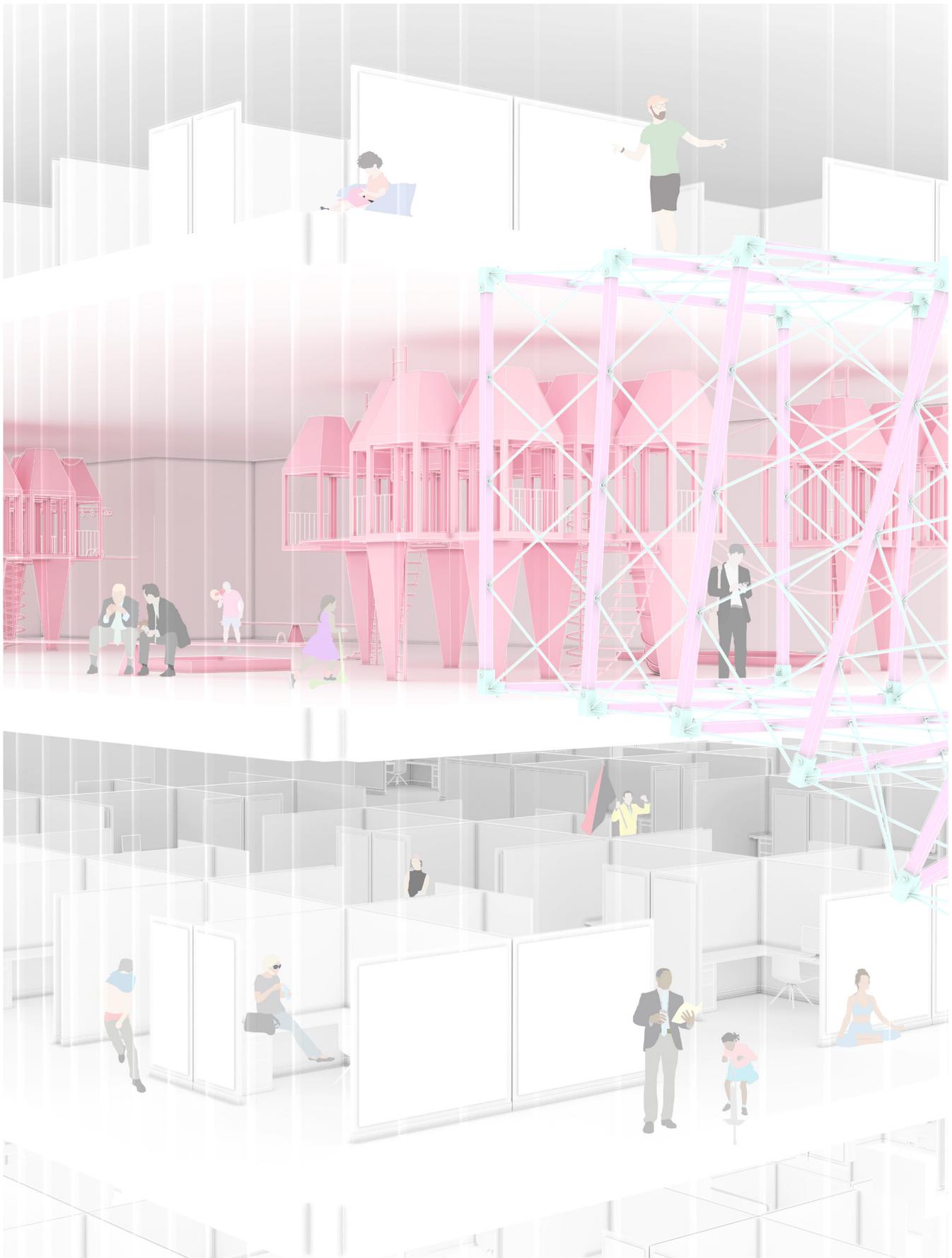
Point towers become appropriated for increased office space yet the framework remains. The system allows the space to eventually be reclaimed by the alternate public or expand to other parts of the city.

The multi-phase design creates a system that adapts to whatever scale and time frame that is necessary, the expanding system combats the fragmentation of single use districts and celebrates integrated space.

Phase 1 Inhabit

33 "Greater Toronto Area Office Marketview, Q4 2019." CBRE. Web. Feb 19 2020
<https://www.cbre.ca/en/research-and-reports/local-market-reports/toronto-real-estate-market-reports>

The first phase of the design is the most temporary and insurgent, it represents a more literal embodiment of the core's transition from Bigness to Uncertain. Due to the changing needs of businesses and the fluctuating leasing market, vacancies are common in the skyscrapers. Floors in the district lie vacant, the owners of the buildings do not make any profit from these vacancies and the community does not benefit them either. According to the CBRE Commercial Real Estate Services, as of the fourth fiscal quarter of 2019, 2.8% of commercial office space in the financial core lies vacant (Down 0.1% since the third fiscal quarter). Of the 26,652,388 sq. ft of office space, 746,266 sq. ft is empty.³³ The conventional method for office leasing leaves a shell that is customized by the tenants. This shell is comprised of empty floors without finishes, furniture or partitions. The downtimes between leases offers a unique opportunity for informal public occupation of the empty floor. The pop-up adoption of vacant floors takes advantage of the Bigness of the skyscrapers, the large spaces open up the possibility of a vast array of temporary programs. Transient playgrounds and childcare facilities could inhabit a space for the months between leasing contracts. The border between the corporate and community spaces begins to blur.



Img 28 | Skyscraper Occupation
The occupation of a floor by the playground contrasts the standard office cubicle and its workers. Playful occupation lives directly above.

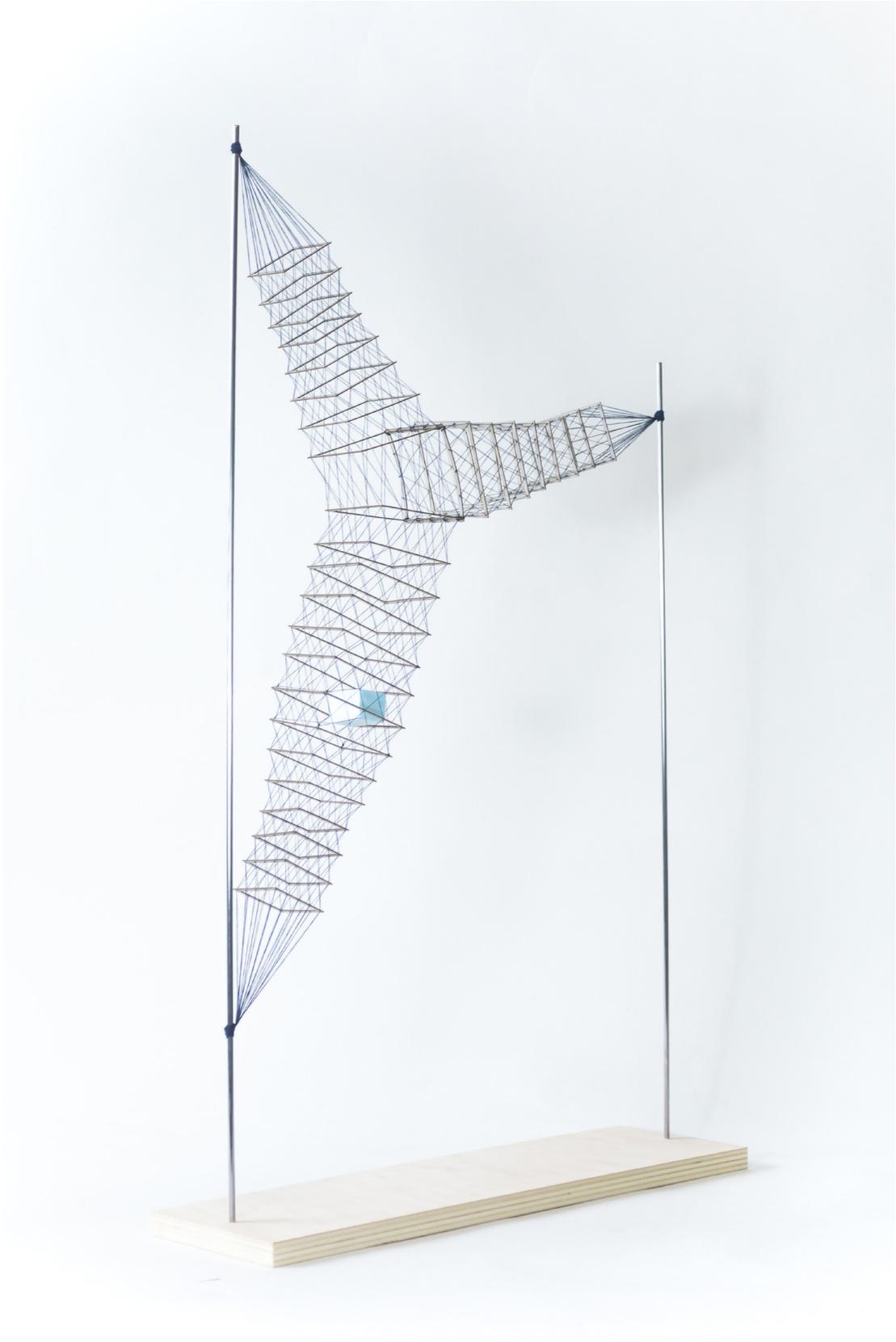
Phase 2

Connect

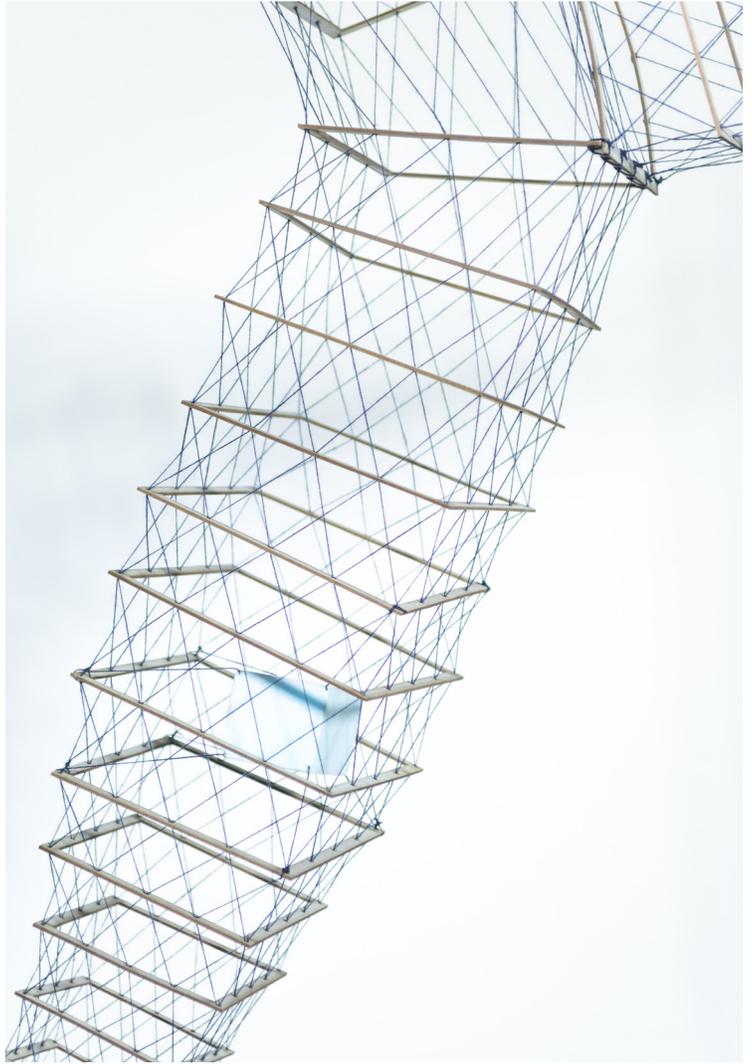
The second phase addresses two issues of the site: 1. The lack of horizontal circulation. 2. The lack of green space. The proposed green space varies from the traditional public space and the hardscaped parks of the financial district as it creates zones whose sole purpose is that of leisure. This lightweight program removes the need to be doing something productive from the dweller, their occupation of space is its own end. The design of suspended connections examines the vertically divided parcels of the skyscrapers and imagines transient structures that link them together with suspended parks and program. This phase requires co-operation with the existing power structures of the financial district and provides multiple publics with access to these paths. This alternative public access to the network is essential as it mitigates the exclusionary tendencies of other multi-level urbanism. Temporary connections meld the office-worker public with the park-goers and residents of the neighbourhood through the connection of the existing buildings and the new towers. The large structures provide a framework to be clipped-onto, elevators provide vertical access to the elevated system.

Structure

The elevated connections work as a temporal system that shifts with the leasing fluctuations of the district and the community. The transient nature of the system requires a demountable, lightweight and simple structure. The elevated armatures are composed of easily disassembled square frames woven together with steel cables to form tensile structures. These tensile armatures clip onto buildings and are supported through the existing construction and connected to the building maintenance units on the roof through a secondary system of steel cables. Deployment of the tensile structures is achieved through portable hydraulic powered collapsible arms that extend the structure to meet an adjacent building where it connects to another armature. The proximity of the skyscrapers works to the advantage of this system as the tensile structures do not need to span long distances.



Img 29 | Tensile Model
To assess the structure of the tensile armatures, a physical model was made.



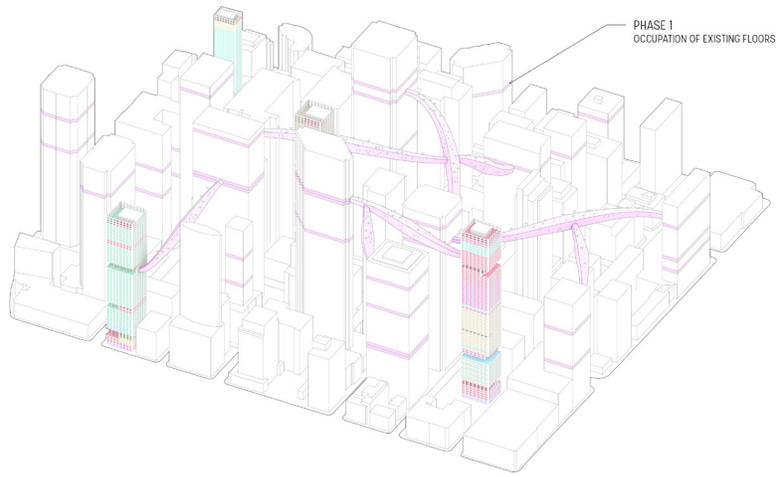
Img 30 | Tensile Model



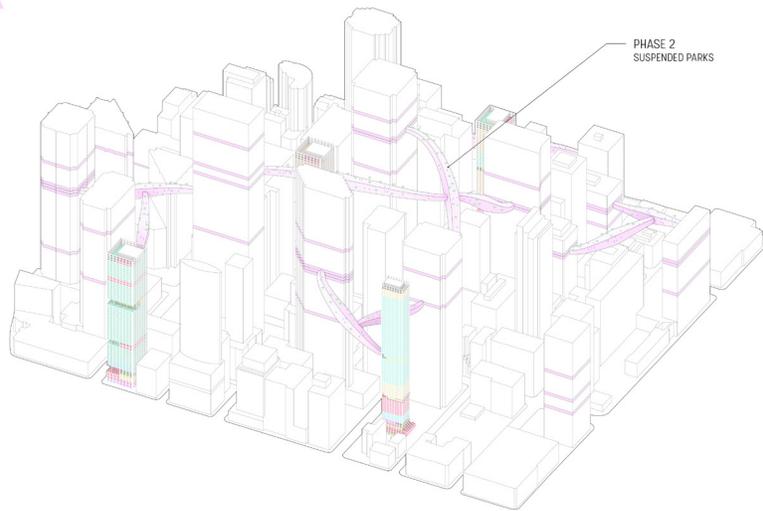
Img 31 | Tensile Model

The site analysis determined a lack of available housing and community services in the vicinity. The new building typology addresses the increasingly vast and complicated needs of a community while remaining in the existing neoliberal system. The scarcity and cost of land in the financial district makes towers the logical proposal for the construction of new buildings. The tower's temporality is important to note as the structure itself is physically solid, but the program and activities within are transitory and integrated. The system the towers exist within is in constant flux due to market forces. A lack in available office space might require the towers to house more space for companies, equally, lack of affordable housing or vacancies in nurseries require the towers' programs to shift in favour of those needs. The intention is that of a system of towers that ebb and flow to create a dynamic urban system.

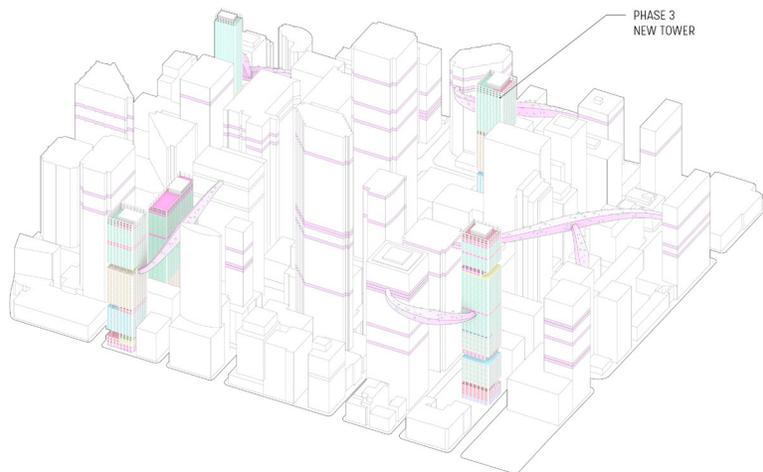
Embracing the pure size of Bigness, the new tower provides a framework for the uncertain by creating programmatic overlaps and slippages, enhancing vertical connection throughout the building and mixing permanent and temporary occupations. The tower design is created as a prototype to be implemented in different variations throughout the city. The towers' locations allow them to take advantage of The Path, a unique set of underground tunnels. The underground connections enable travels in a large portion of Toronto's downtown core without surfacing. Circulation is found on the original ground plane, above and below.



HORIZONTAL CONNECTIONS



VERTICAL CONNECTIONS



Img 32 | Duration Diagram

This series indicates possible iterations of the three phases. These phases may occur simultaneously and are transient. The tower uses and floor occupations fluctuate with demand.

Program

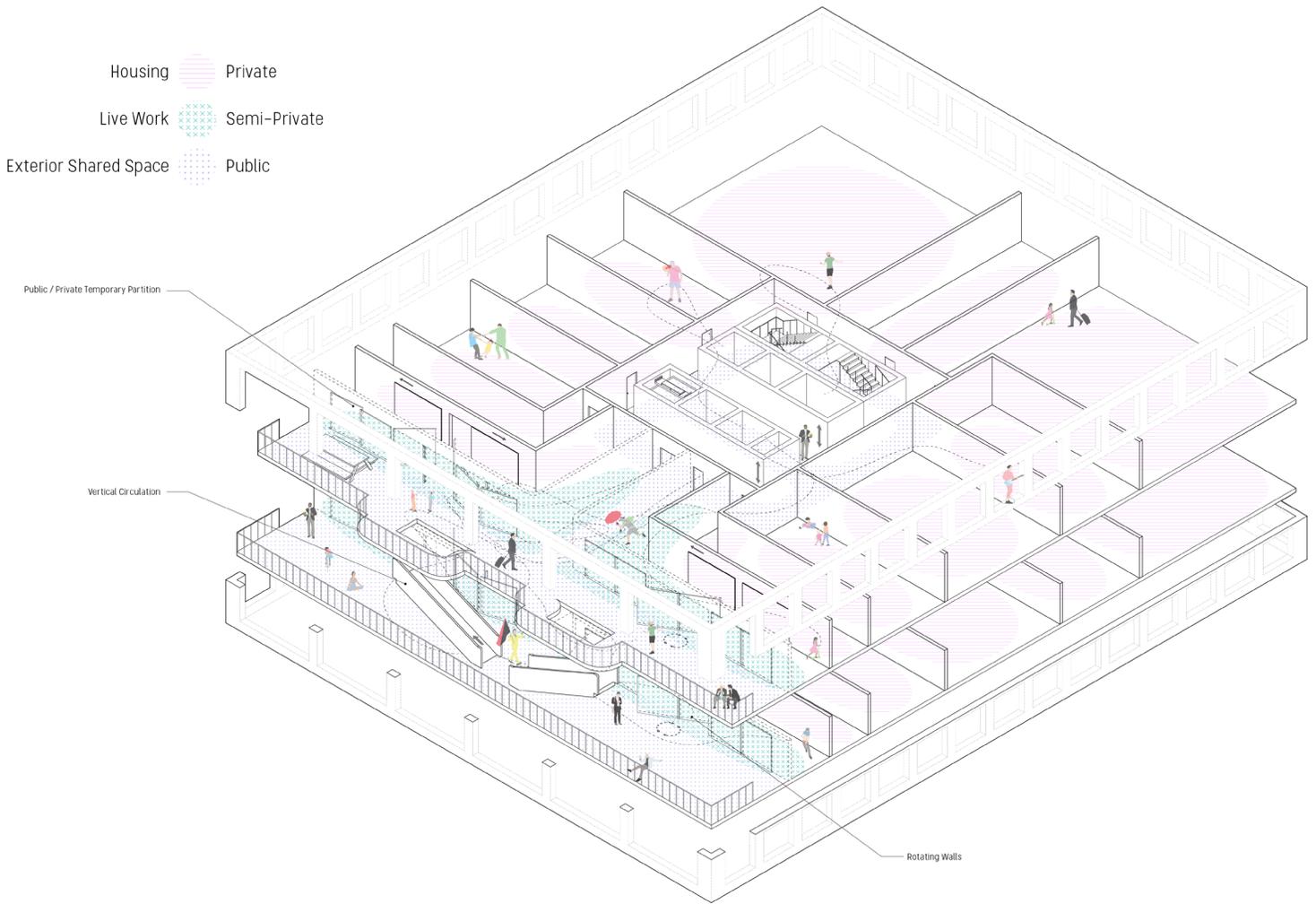
The links created by the tensile structures produces a series of connected parks. These parks are complimented by the possibility of programs to be sprinkled throughout the system. The programs in the elevated greenspaces must remain light and temporary to not interfere and clutter the space. The light programming will consist of moments of repose for adults and play areas for children in the outdoor leisure spaces. The elevated parks will be populated with : Playgrounds, seating and lounging options, alcoves for privacy and repose. The elevated green spaces provide moments of calm in an otherwise busy city center.

Office

The office floor is no longer confined to a single horizontal parcel, vertical openings, volumes, and community spaces are woven throughout the floors. The multi-story openings provide those leasing the space with connections to the varying publics and visual connections to the rest of the city.

Market Rate Housing

Living space is integrated into the neighbourhood. The isolation of traditional condominiums is mitigated by the sharing of facilities, elevators and public space with those in the affordable housing units.



Img 33 | Housing Community

Exterior space is shared on the housing floors. The housing program omits the private balcony in favour of communal outdoor space for public interaction. Floors are pulled away from the building's façade to create this double height exterior space that melds the public and private. Drawing initially completed for ARCH 5002A, Theories of Advanced Representation.

34 Statistics Canada. 2017. 5350014.00 [Census tract], Ontario and Toronto [Census metropolitan area], Ontario (table). Census Profile, 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed January 18, 2020).

Social Housing

Housing in the neighbourhood will not be limited to those who can afford downtown Toronto's high prices, 13.1% of the inhabitants of the district are considered low-income,³⁴ the introduction of affordable housing allows those working jobs with lower salaries to live in closer proximity to their work, reducing long commute times.

Community

The community centre program is the most variable as it contains several smaller types of public occupation under its umbrella. While it provides gathering spaces for the community as a whole it also encompasses all the community outdoor and physical activity spaces. These programs are possible within the framework provided by the tower, but they are not permanent or existing in every iteration of the tower. The buildings themselves provide space for such programs as there is no prescriptive formula for every site.

Circulation / Connection

The vertical circulation spaces in the towers are composed of a series of openings with the means to create linkages between floors. Ramps, staircases, tertiary elevators etc. These transient spaces are unprogrammed and are to be utilised by those in current need of the space. These areas provide stages for unforeseen overlaps by remaining open and being integrated throughout the buildings.

Building

The system of towers is providing alternate forms of inhabitation that do not follow traditional building developments in Toronto, but they must adhere to the existing financing models to be constructed. Developer profit margins in downtown Toronto vary from %12 - %20,³⁵ developing a new type of tower while still profitable will reduce these margins. The more profitable programs of the market rate housing, leasable office space, and underground parking aim to fund the public and community-oriented programs.

35 Scrinko, Jordan. "How Much Does It Cost to Build a Condo in Toronto in 2020?" Precondo, Precondo, 24 Feb. 2020, precondo.ca/how-much-does-it-cost-to-build-a-condo.

36 "Canadian Cost Guide 2019 - Our Commercial Real Estate Services: Altus Group." Our Commercial Real Estate Services | Altus Group, www.altusgroup.com/services/reports/canadian-cost-guide-2019/.

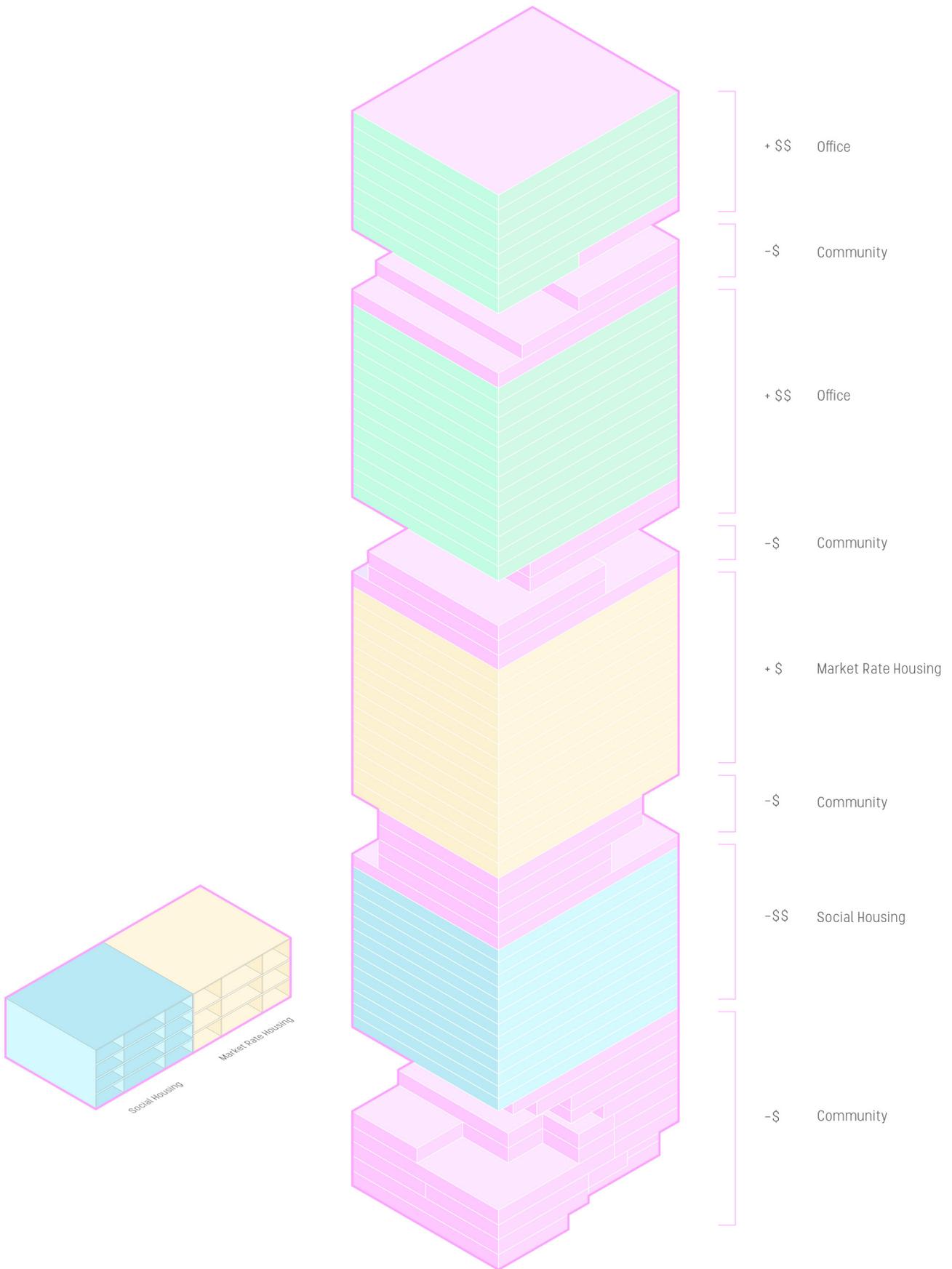
37 Ibid.

38 Cramdown, Ralph, et al. "What Does It Cost To Construct A Condo In 2018?" Toronto Realty Blog, 19 Mar. 2018, torontorealtyblog.com/blog/cost-construct-condo-2018/.

Construction

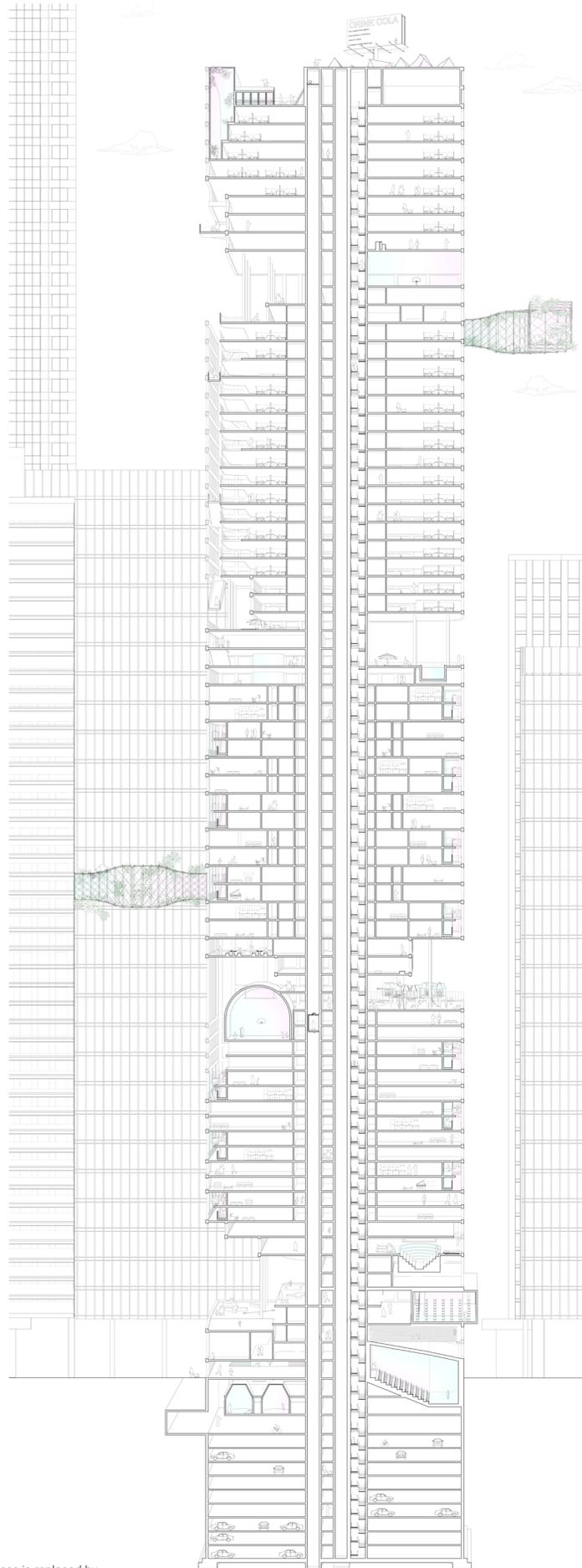
The construction of the towers is dependent on three types of cost: Land Cost, Construction Costs, and Soft Costs. Land costs in downtown Toronto are among the highest in Canada (Second only to Vancouver) roughly \$200 - \$250 per square foot.³⁶ The construction cost vary slightly depending on the use, the calculations were done while incorporating multiple uses. Residential: \$280 sqft. - Office: \$340 sqft. - Parking: \$150 sqft. - Schools: \$180 - \$265 sqft. - Supermarket: \$215 sqft. - Recreational: \$225 - \$330 sqft. - Library: \$290 - \$440 sqft. - Aquatic Facilities: \$385 - 490 sqft.³⁷ The soft costs associated with the construction are the marketing, contractors, city development fees and other adjacent costs, they augment the costs by roughly \$150 sqft.³⁸ Costs were estimated for the 60 story prototype point tower: Land costs \$3 million, hard costs : \$180 million, soft costs : \$9 million. With 30 office floors and 10 market rate floors for financing, the remaining 20 floors for affordable housing and community amenities were able to be constructed with an 8% profit margin.

Img 34 | Financing Model



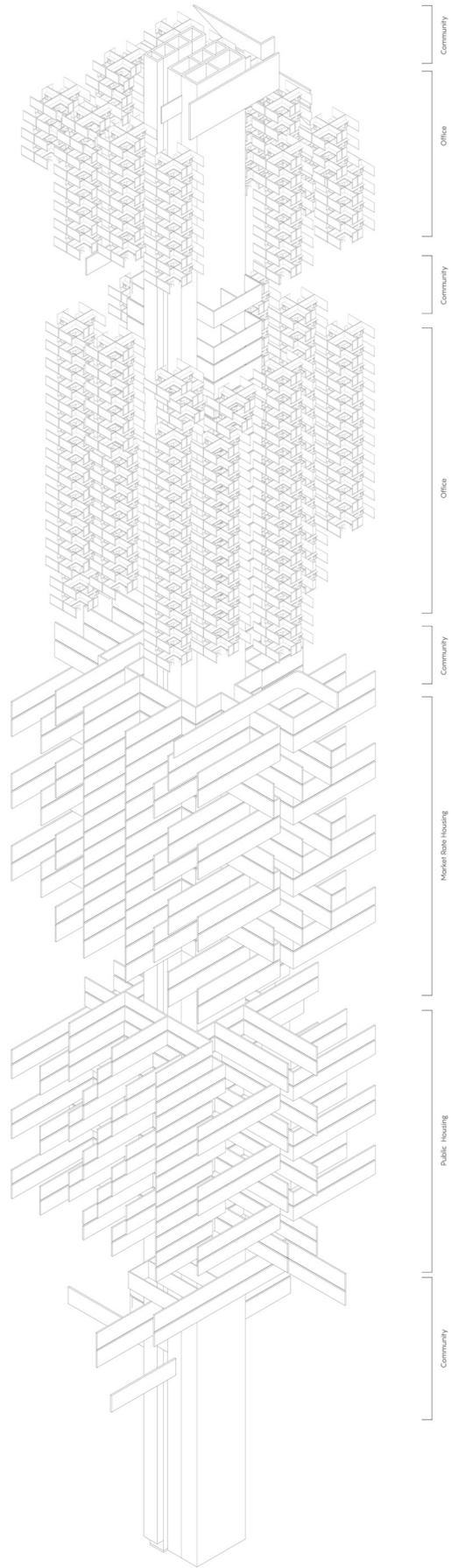
Design

The design of the towers is intended to exist within the context of the neighbourhood while allowing for the programmatic hybridizations to occur on the interior. The instability of the towers is rendered through the carving out of space on the interior masked by the grid façade. Floorplates are pulled away from the exterior of the towers to reveals moments of communal space. The subtractions and vertical connections enable light to enter the exterior spaces in the towers and remove the rigidities of the virgin site seen in most existing skyscrapers. The cutaways from the interior of the building provide essential outdoor space: a basketball court on the 59th floor would be much more enjoyable with access to outdoor air, the rooftop skatepark is a fun activity for the disenfranchised office-worker, the 37th floor playground provides a distraction for the kids living in the buildings so their parents can have a rest. The design of spaces and temporality of programs within the towers lends themselves to encompass the lives of the transient publics that inhabit them

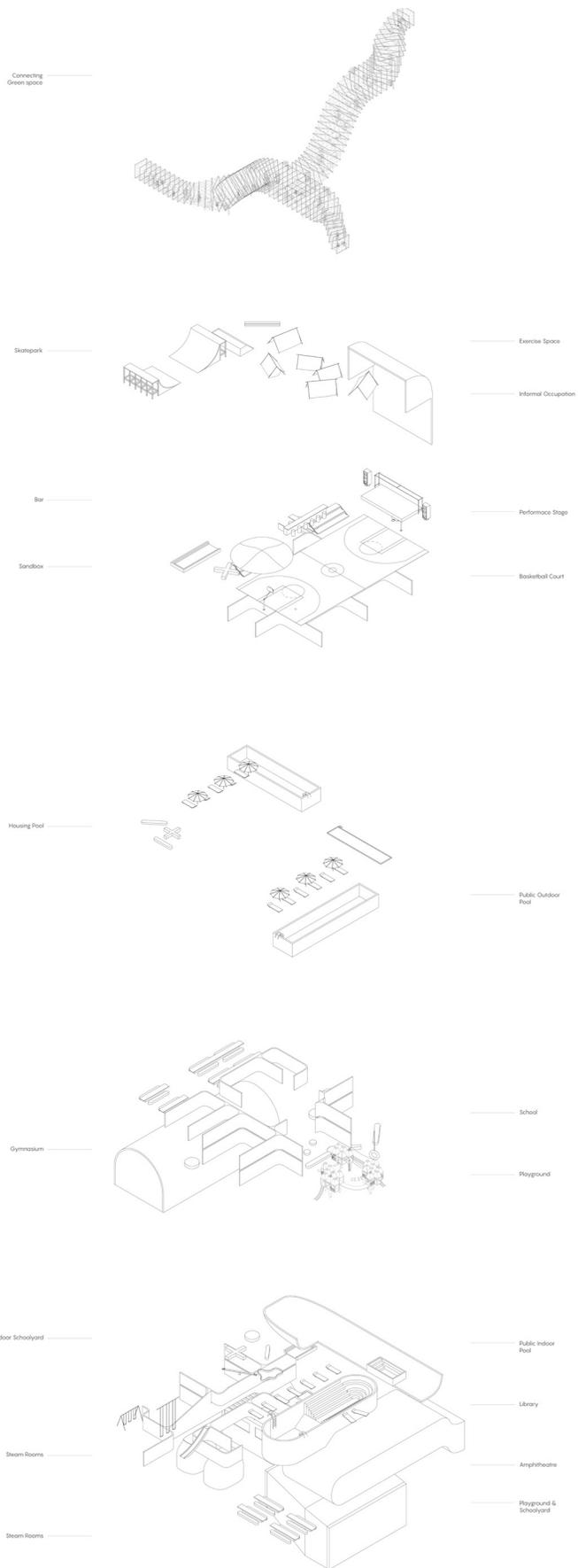


Img 35 | Building Section
Varying publics occupy the entire building. Bigness is replaced by the uncertain.

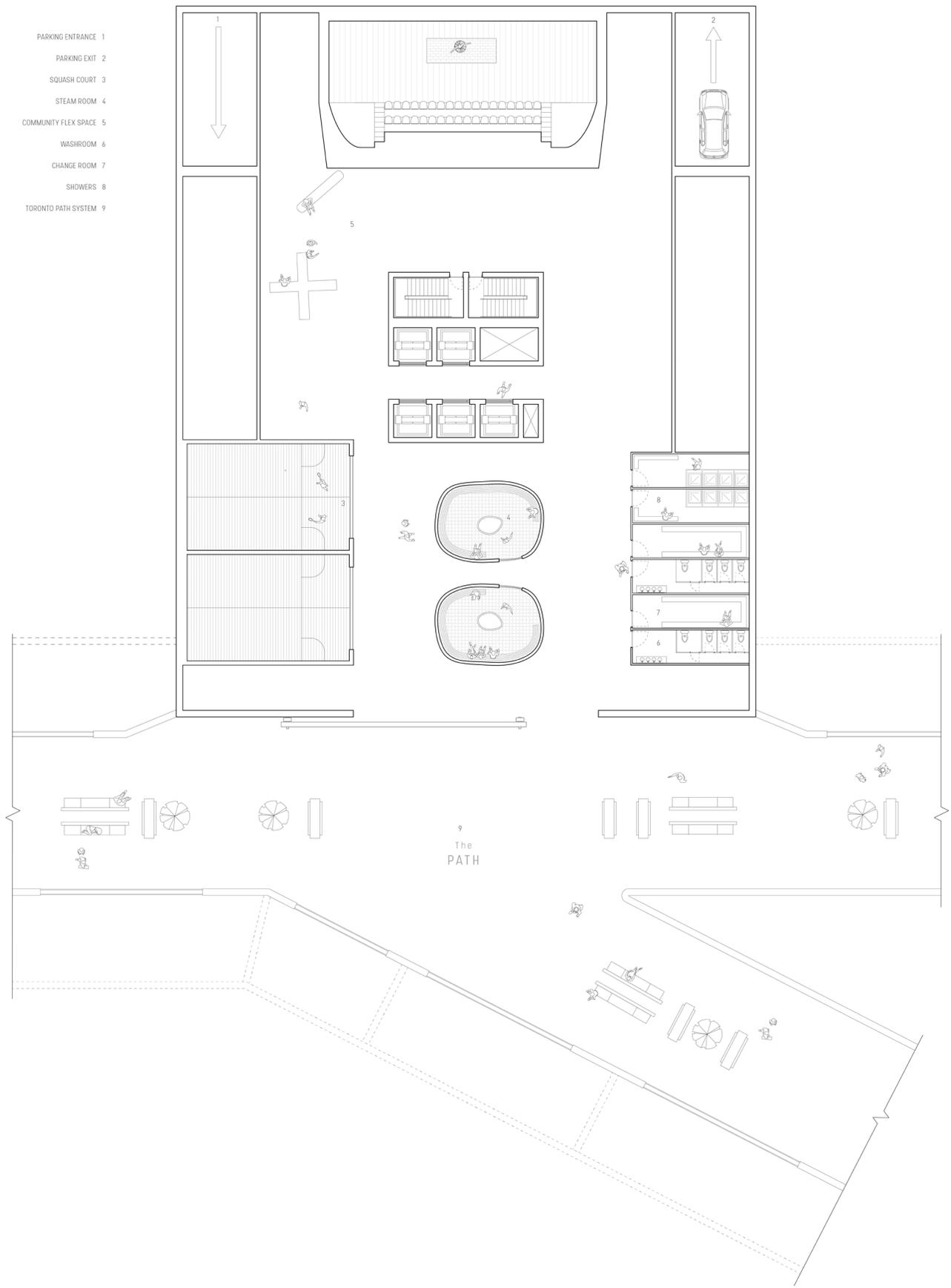
Img 36 | Private Program
Private spaces for business and living are no longer disconnected from the community.



Img 37 | Community
Shared community spaces are sprinkled throughout the towers.

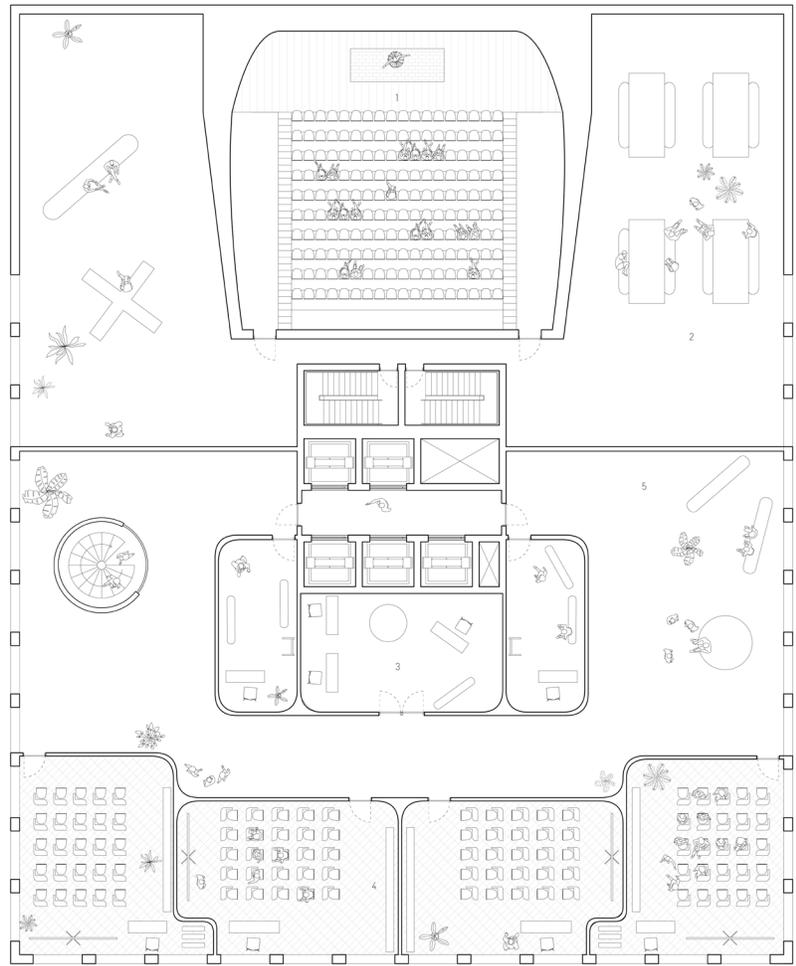


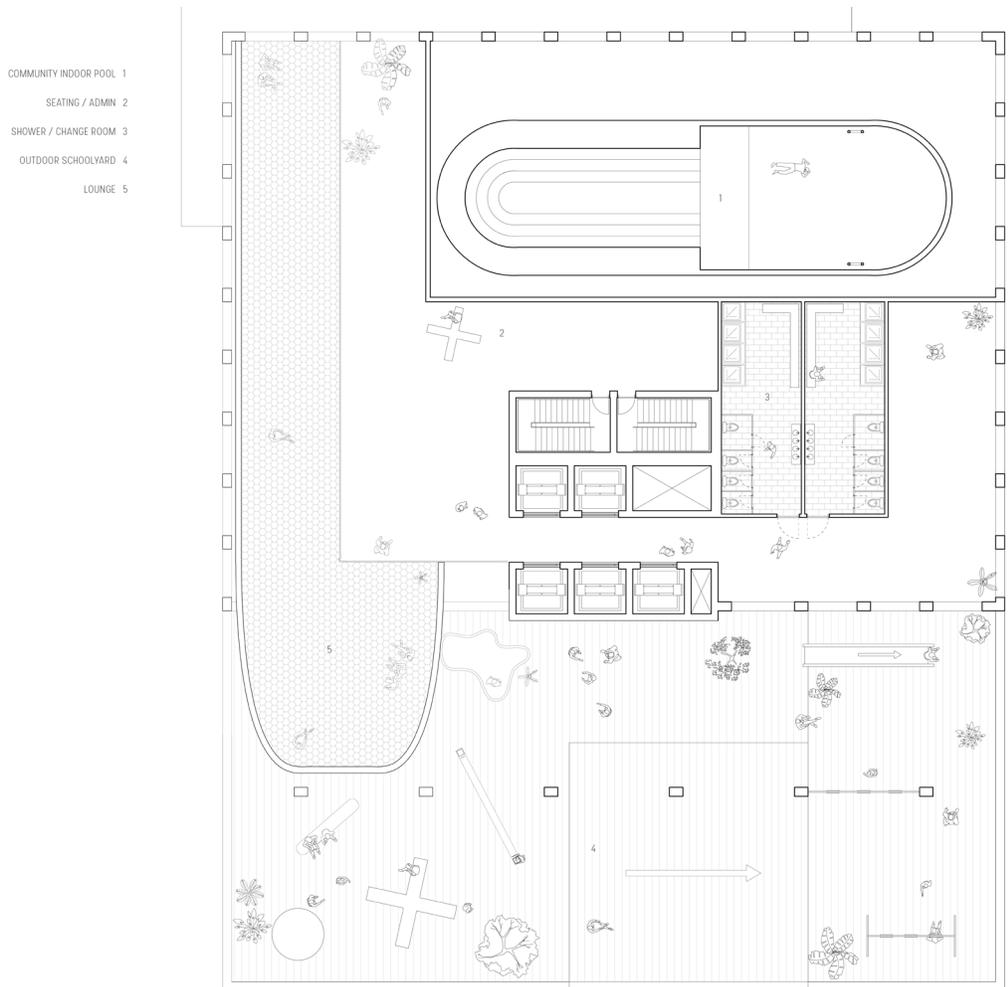
- PARKING ENTRANCE 1
- PARKING EXIT 2
- SQUASH COURT 3
- STEAM ROOM 4
- COMMUNITY FLEX SPACE 5
- WASHROOM 6
- CHANGE ROOM 7
- SHOWERS 8
- TORONTO PATH SYSTEM 9



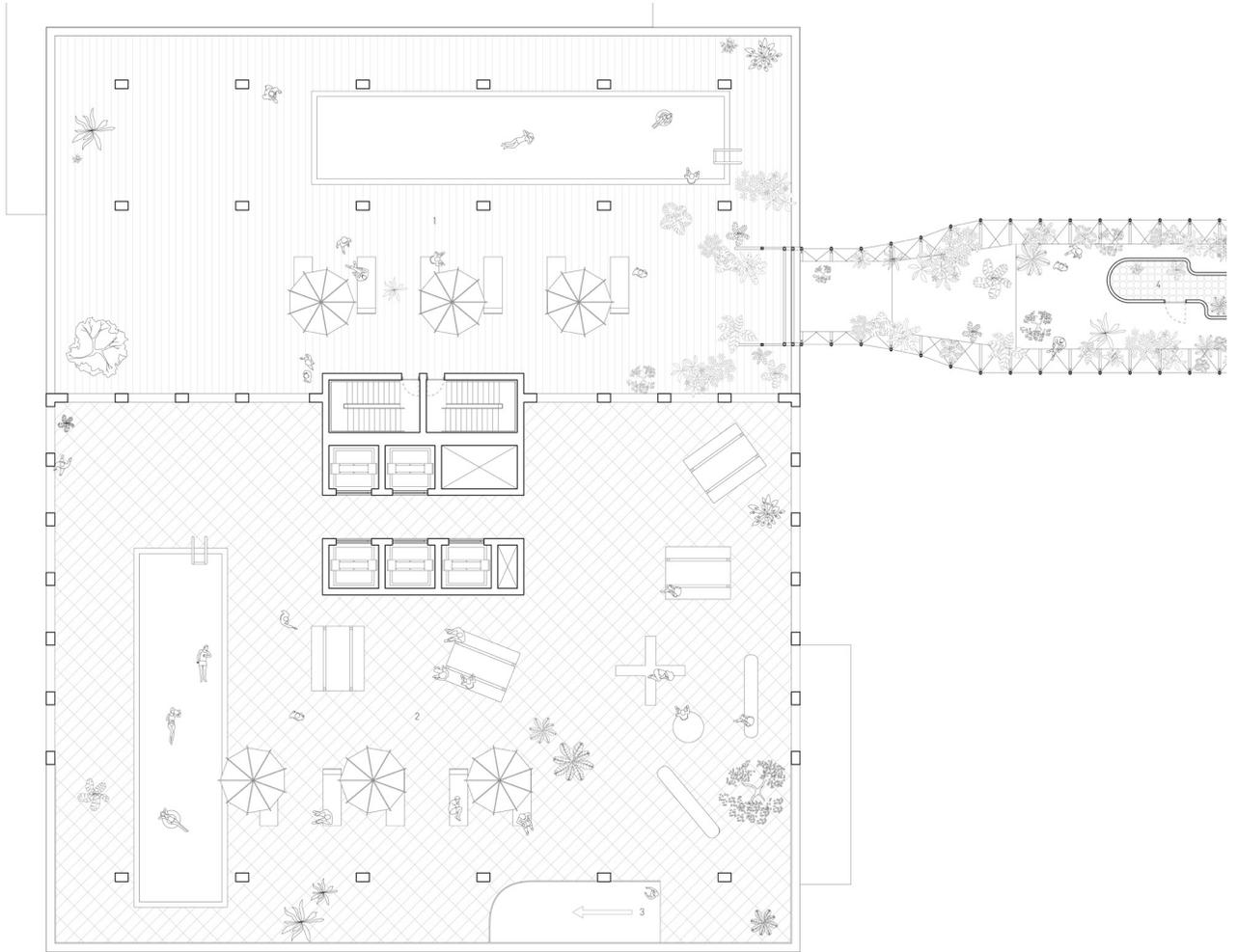
9
The
PATH

- COMMUNITY THEATRE 1
- SCHOOL SEATING 2
- SCHOOL & COMMUNITY ADMIN 3
- SCHOOL CLASSROOM 4
- SCHOOL FLEX SPACE 5

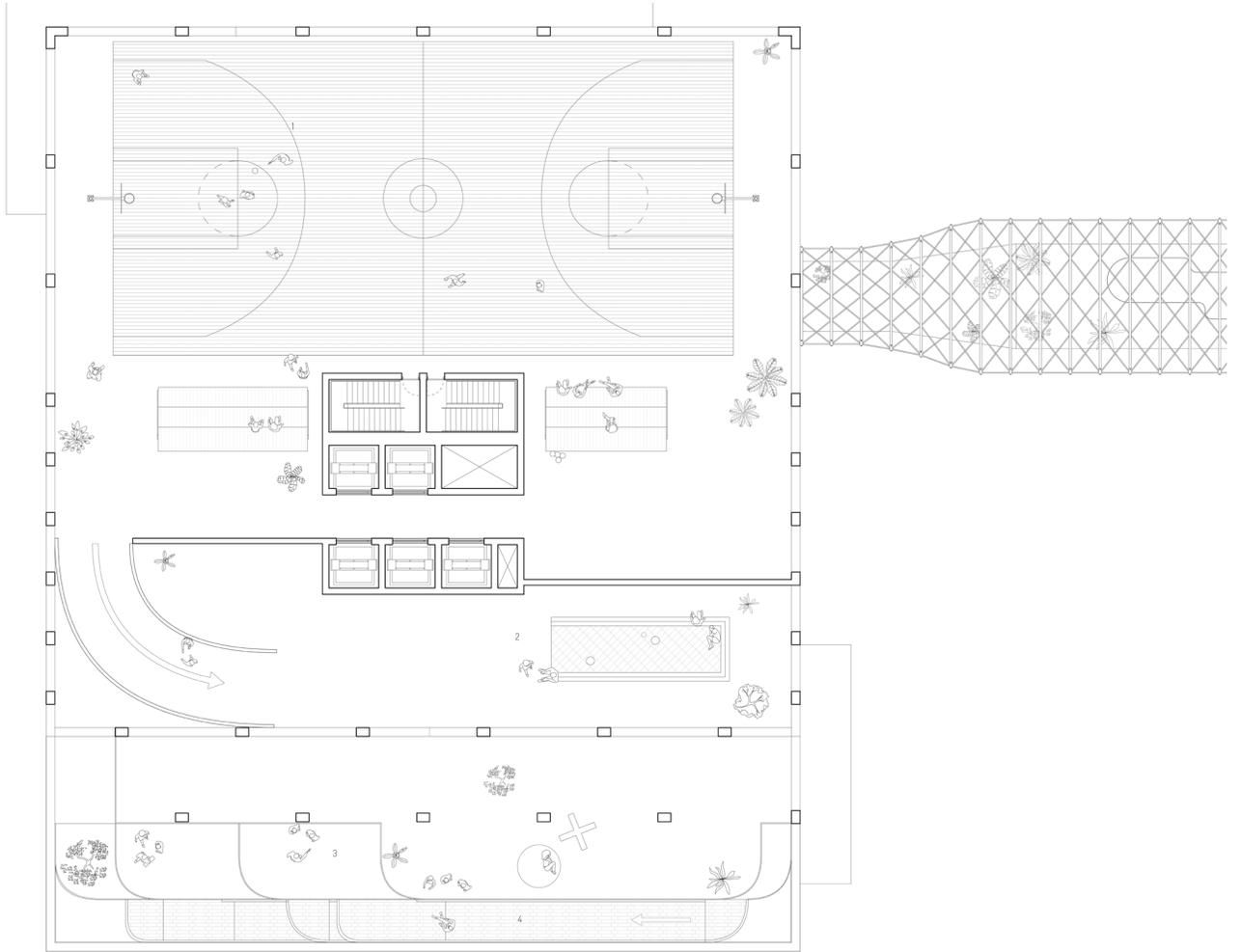


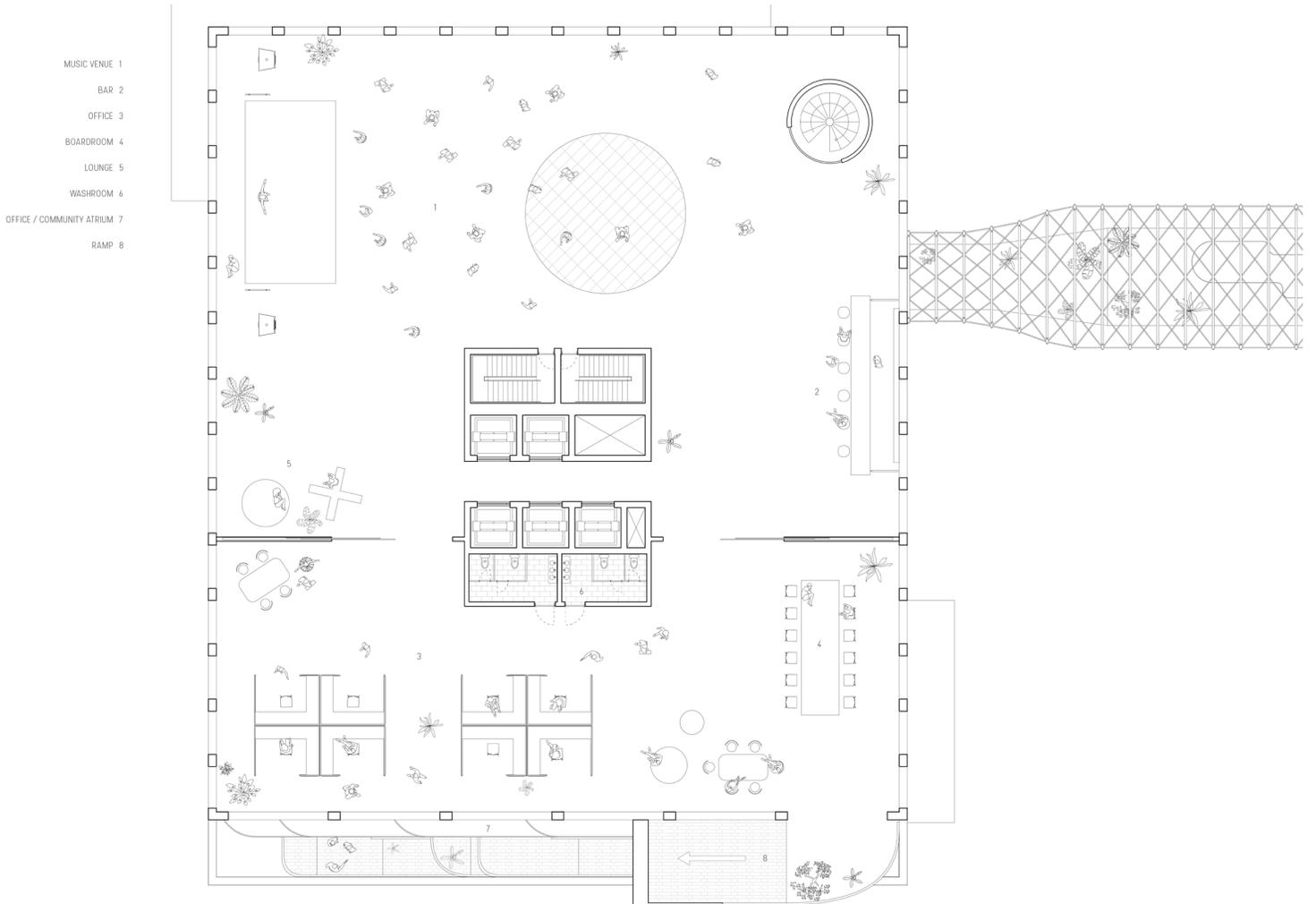


- / SOCIAL HOUSING OUTDOOR POOL 1
- COMMUNITY OUTDOOR POOL 2
- RAMP 3
- GREENHOUSE 4



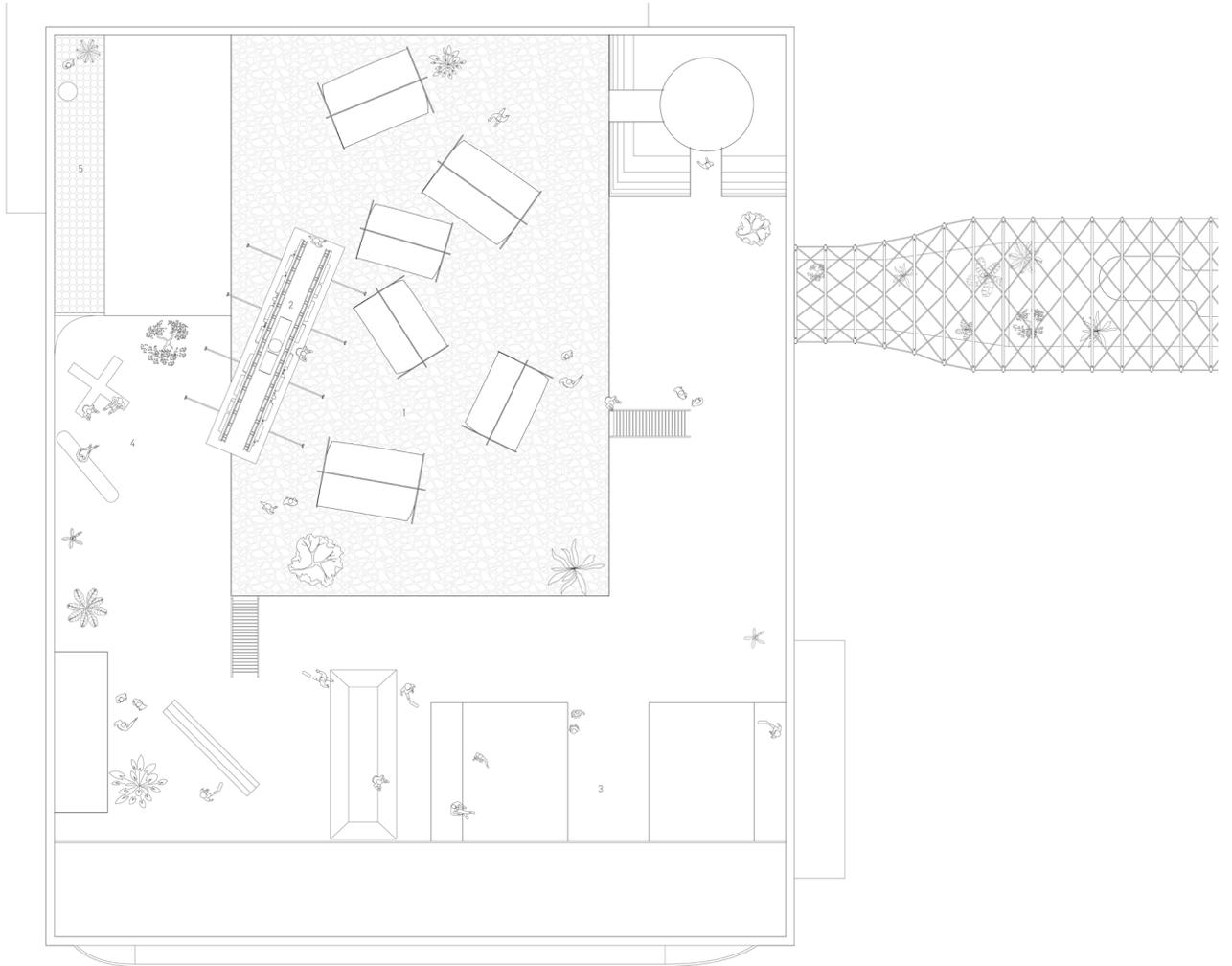
- BASKETBALL COURT 1
- COMMUNITY OUTDOOR SPACE 2
- OFFICE / COMMUNITY ATRIUM 3
- RAMP 4

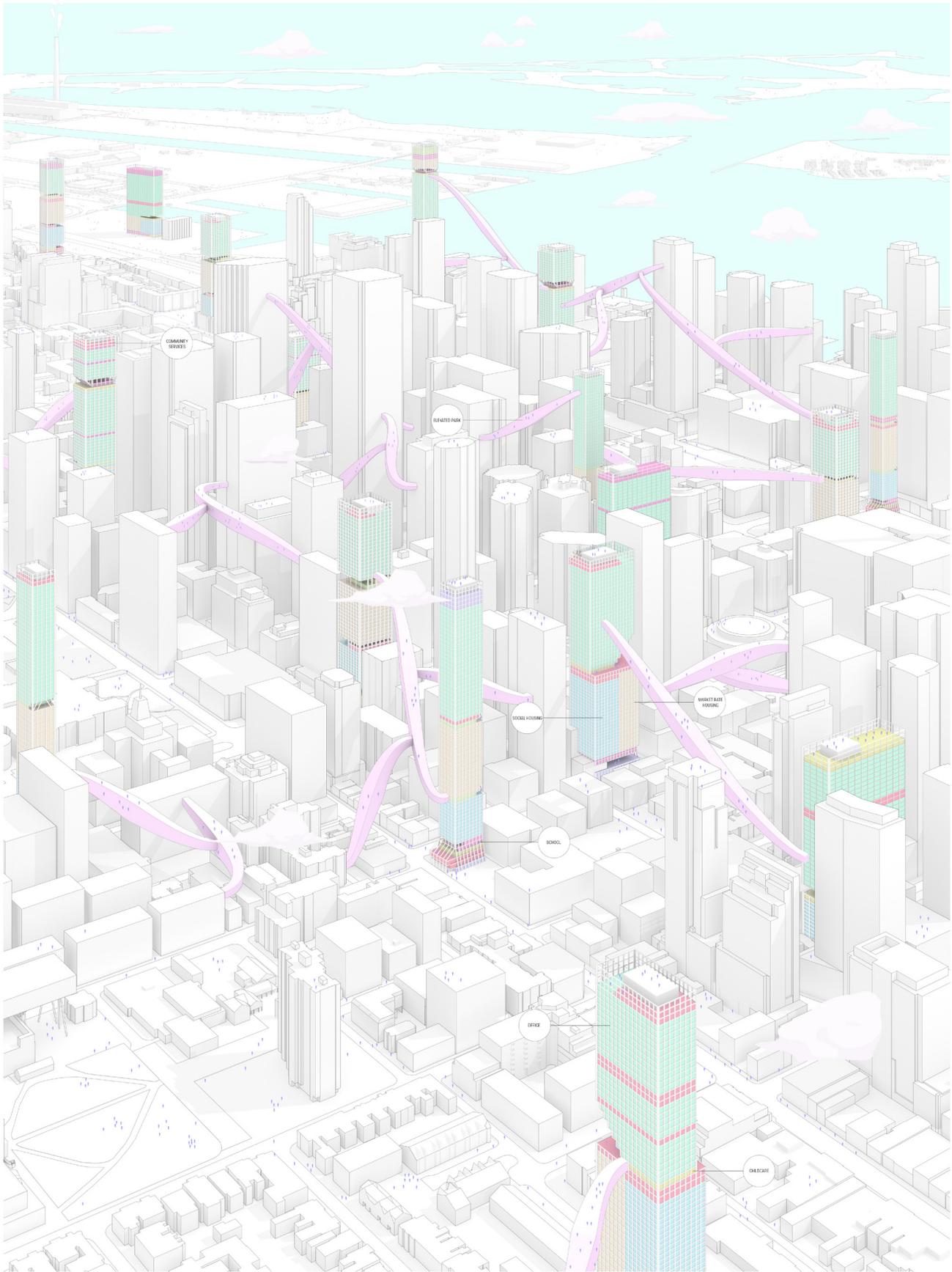




Img 44 | Floor 73 (Roof)

- CAMP SITE 1
- BILLBOARD 2
- SKATE-PARK 3
- LOUNGE 4
- BALCONY 5





Img 45 | Conceptual Diagram
The system of floor occupations, armatures and towers propagated throughout the city.



OFFICE OUTDOOR SPACE



HOT TUB



COMMUNITY POOL



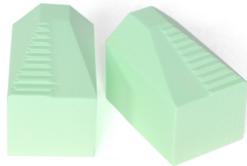
STEAM ROOMS



ATRIUM



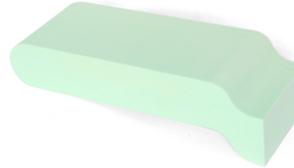
EATING SPACE



SQUASH COURTS



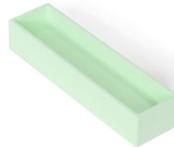
COVERED VERTICAL CIRCULATION



LIBRARY



LOUNGE



HOUSING POOL



SPORT FACILITY



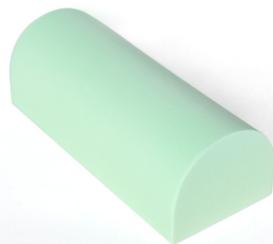
SPIRAL STAIR



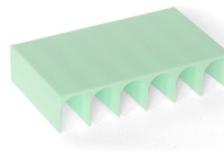
SPIRAL STAIR



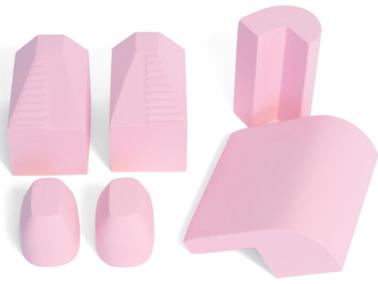
THEATRE



GYMNASIUM



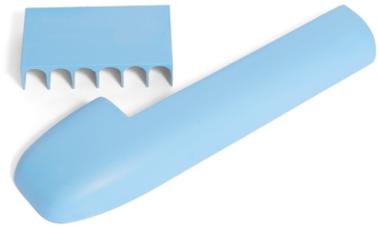
CHANGE ROOM / SHOWER



Exercise and recreation



Swimming



Lounging



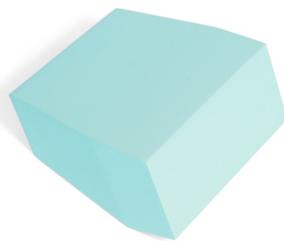
Vertical Circulation



Library



School Gymnasium



Theatre

Img 50 | Tower Model
Physical Model Scale 1:150



Img 51 | Tower Model



Img 52 | Tower Model





Img 53 | Tower Model

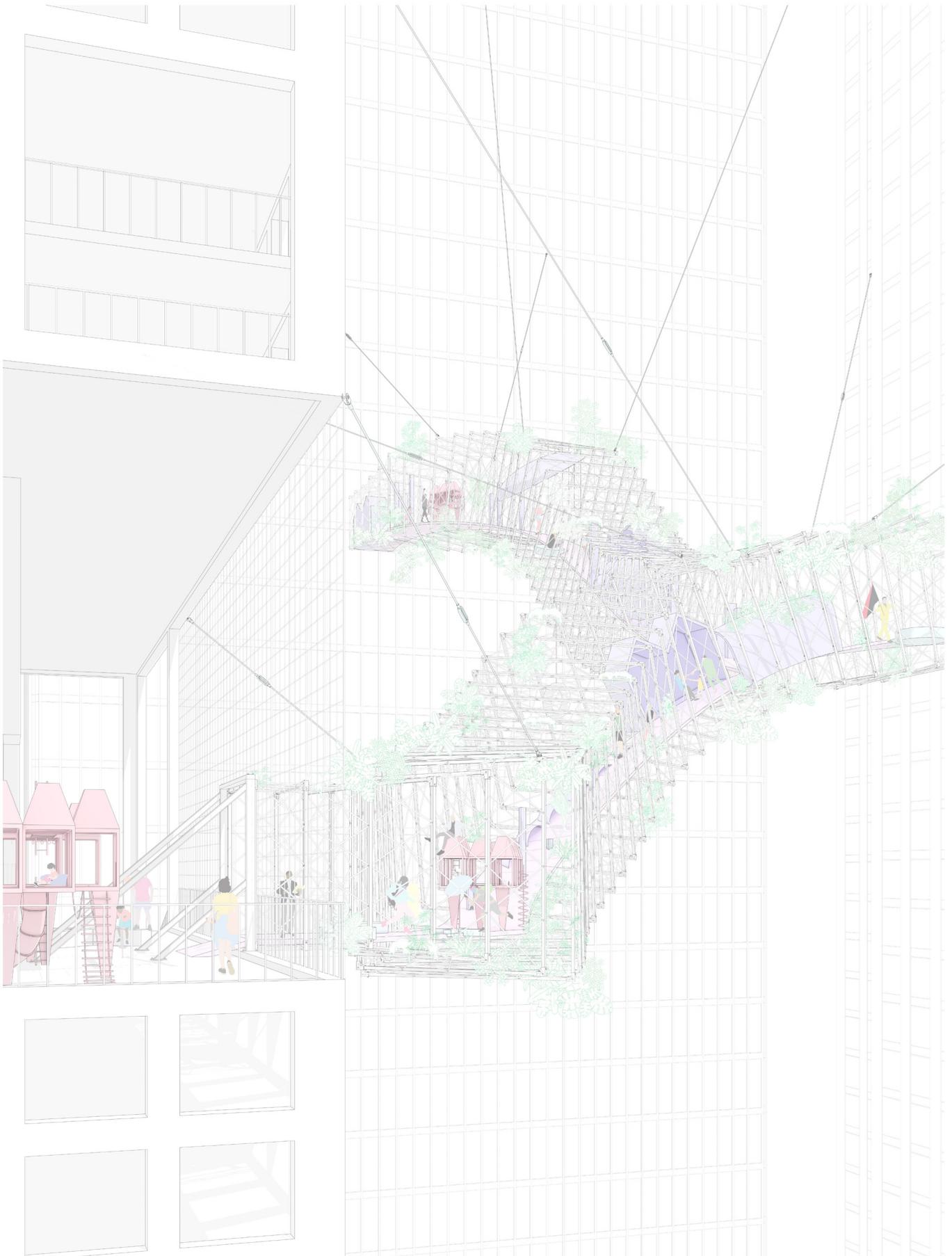


Img 54 | Tower Model



Img 55 | Tower Model





Img 57 | Armature Connection
Green space attaches to the new and existing towers.

CONCLUSION

Uncertainty is a driving force for this project, it exists as a foil to the encompassing Bigness of the skyscrapers. This uncertainty will not replace or abolish the neoliberal structures that control the site, it enables the adoption and transformation of the spaces to be inclusive to both the dominant and alternate publics that inhabit Toronto's financial district. An urban network is created that comprises the repurposing of existing floors in skyscrapers, creating horizontal circulation above the ground plane through suspended greenspaces and building community oriented mixed-use towers. These design strategies provide the frame for the Staging of Uncertainty that the publics inhabits. Life in the city's core acquires its qualities of heterogeneity through the overlaps of diverse publics.

The repurposing of Bigness and the neoliberal spaces of the district creates a system that is capable of adapting to the shifting unidentifiable publics. Creating spaces that cater to vast arrays of publics is crucial to the design of cities that are meant to be inhabited and not simply observed from the outside. Looking towards the future, Toronto's urban core is in constant flux. The research-by-design methodology created a learning process that evolved my understanding of social and power dynamics of the site to properly propose an alternate vision of habitation in the city core. The speculative nature of the design evolved as it shifted from solely spatial tactics to a proper understanding of the publics that experience the

site and their needs. Varying publics, communities and designed spaces continually reinvent themselves and the spaces they inhabit, wandering through the urban center becomes an exercise in experiencing community and culture. The public sphere is readdressed to incorporate life, not the strict adherence to the capital structures that do not design spaces for inhabitation.

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