

SIDE WALK

Key Objectives

Waterfront Toronto, the three levels of government, and Sidewalk Labs have certain objectives that must be aligned in order to unlock the Eastern Waterfront and enable the city to realize the area's untapped potential.



What We've Heard: Policy Objectives

- Strong economic growth and thousands of new jobs while protecting existing industries in the Eastern Waterfront, including film
- Substantial increase in affordable housing
- A series of other public policy outcomes to address certain urban challenges, including sustainability and congestion

What We've Heard: Deal Objectives

- Build off success—prove the model
- Adequate government control to ensure the best outcomes for citizens
- Ensure the local development community plays a prominent role in developing the Eastern Waterfront
- Appropriate standard for data and privacy

Sidewalk Labs Objectives

- Sufficient scale to achieve its objectives and prove the ability of its approach to positively impact urban quality of life
- Adequate return on its investment

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What Sidewalk Can Uniquely Bring

Sidewalk was formed to function at the intersection of urban planning, technology, and policy. The team we have brought together and the operating model we have developed reflect a unique set of capabilities.

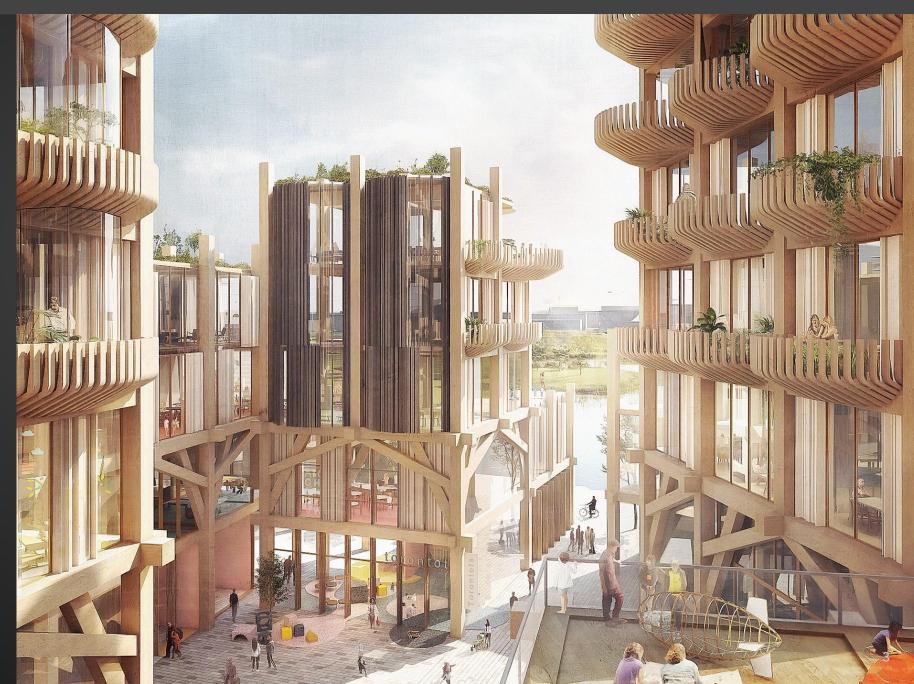
Approach to Innovation, incorporating both physical planning and a technology roadmap, that includes a series of key innovations and technologies while creating the conditions for others to build on

Investment in Economic Development

including the catalytic impact of Google jobs, and support for an urban innovation cluster

Patient Capital that has a different return profile and objectives than both traditional real estate and traditional venture investing, enabling more robust R&D than typical urban development

Innovative Infrastructure Financing that fills a gap in the capital markets, and creates a path for infrastructure delivery that both proceeds at a rapid pace and achieves ambitious sustainability and quality of life goals



Sidewalk as Catalyst

Sidewalk Labs aims to fill gaps that the public and private sectors are currently unable to fulfill themselves, to help deliver a series of outcomes that meet the shared objectives of all stakeholders. This reflects the feedback we have received from stakeholders in Toronto—to act as catalyst and do the minimum amount necessary for the project to flourish while creating the conditions for others to build on.

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Innovation Proofs of Concept

on a new set of programmatic opportunities and technologies, including buildings, by taking the initial risks that run counter to current market forces.

A New Economic Engine for Toronto

catalyzed by a
commitment of
Google Jobs and the
seed funding for an
Urban Innovation
Institute, that
becomes the home of
a global cluster in
urban innovation.

A New Standard for Affordable Housing

that serves the need of a more diverse set of residents and enables more inclusive mixed-use communities.

A New Standard for Data and Privacy

including the
establishment of an
independent Civic
Data Trust, which
we hope
will serve as model
of urban innovation
around the world.

Enabling Infrastructure

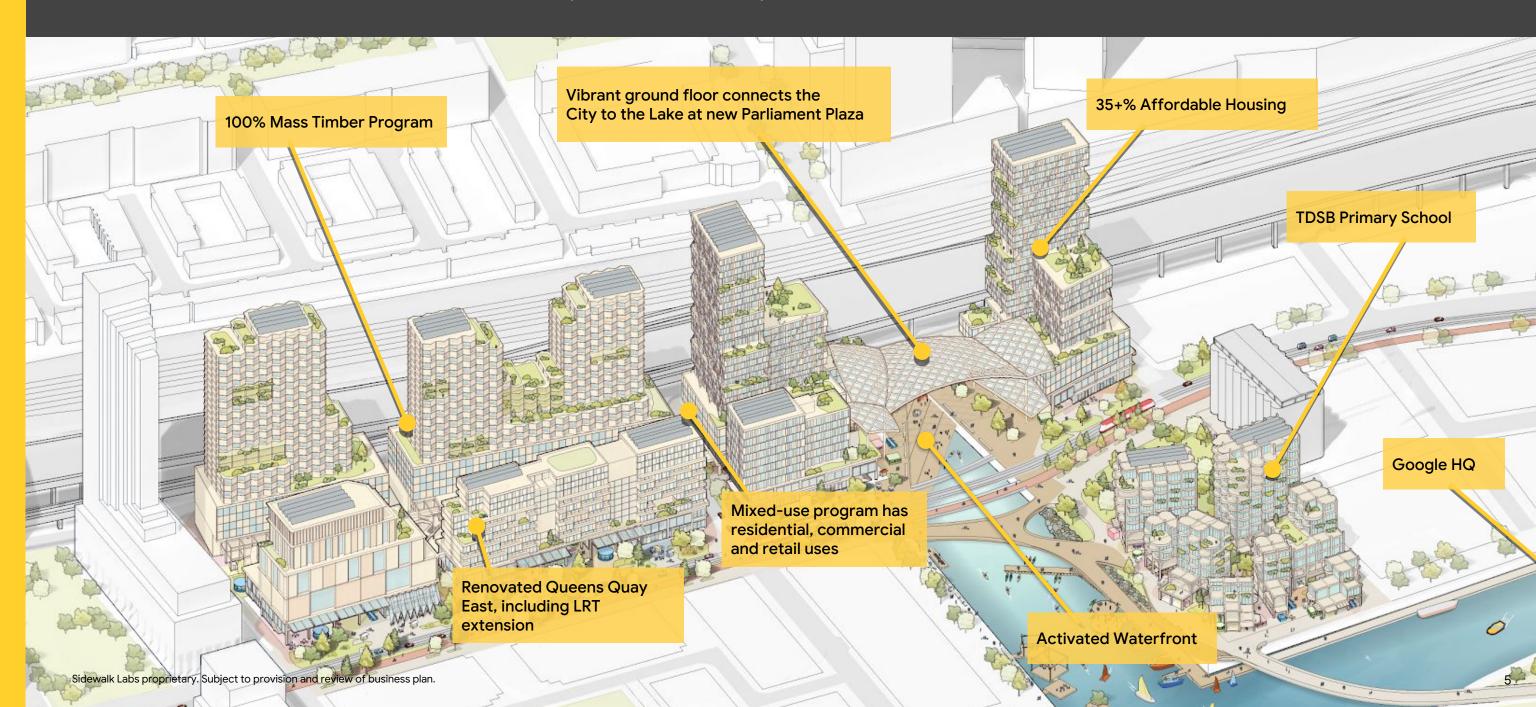
including LRT and next generation district utility systems, spurring outsized impact on quality of life, accelerating development, and creating more robust economic growth.

Sidewalk Labs in consultation with a variety of stakeholders. All such concepts and proposals are subject to approval by many of those same stakeholders, including but not limited to public entities, and Alphabet Inc.

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New Approaches to Urban Development

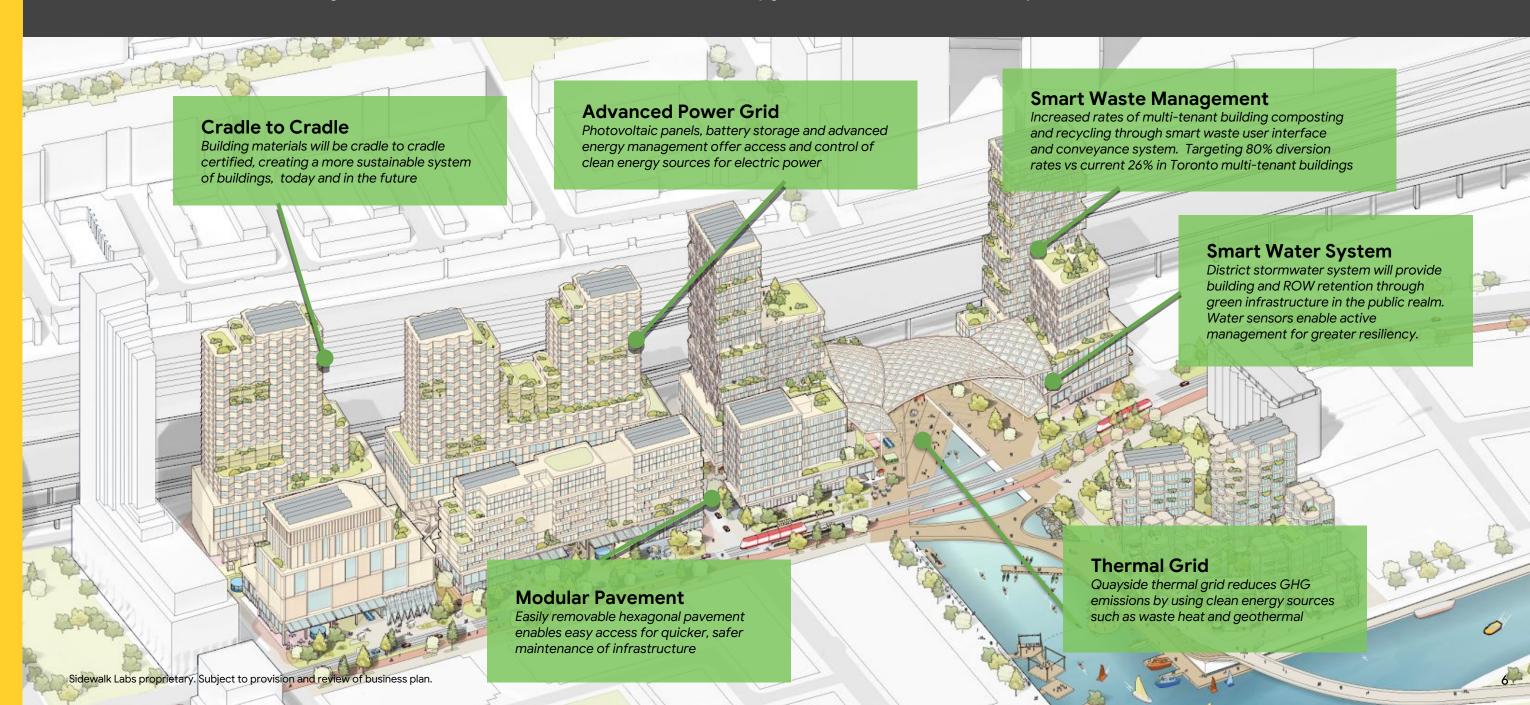
Quayside will be the beginning of a new approach to urban development on Toronto's Eastern Waterfront that sets a new standard for urban development in the 21st century.



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Starting the Path to Climate Positive

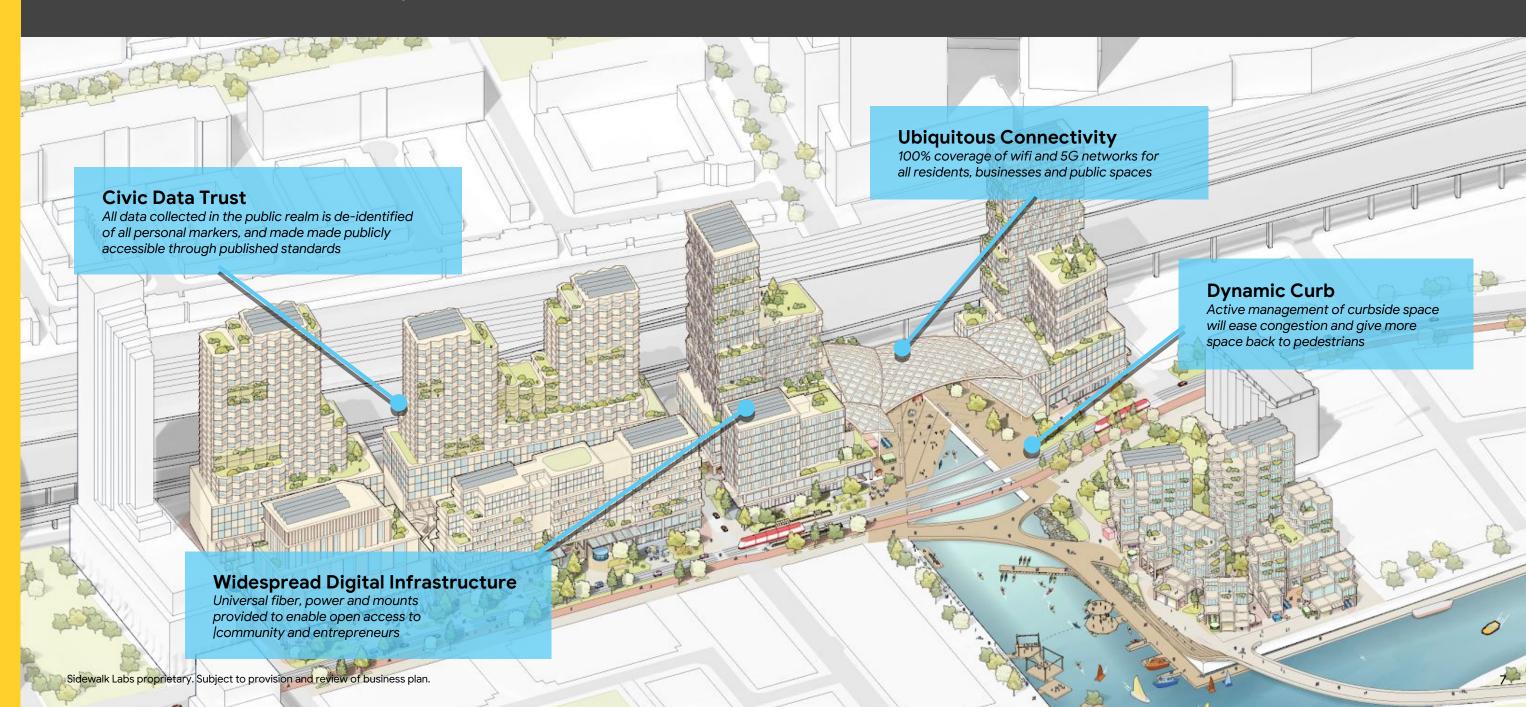
At Quayside, Sidewalk Labs will invest in a series of innovations that drastically reduce the level greenhouse gas (GHG) emissions, enable smarter management of resources, and reduce the cost of future upgrade and maintenance to the system.



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Piloting Digital Innovations

Quayside will be a fully connected neighbourhood and a testbed for digital innovations within Sidewalk Toronto's responsible data use framework.



Testing New Mobility & Enhanced Public Space

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Innovations in mobility management and building systems, combined with great urban design will create porous ground floor space that breaks down barriers between different uses and prioritizes the pedestrian experience.

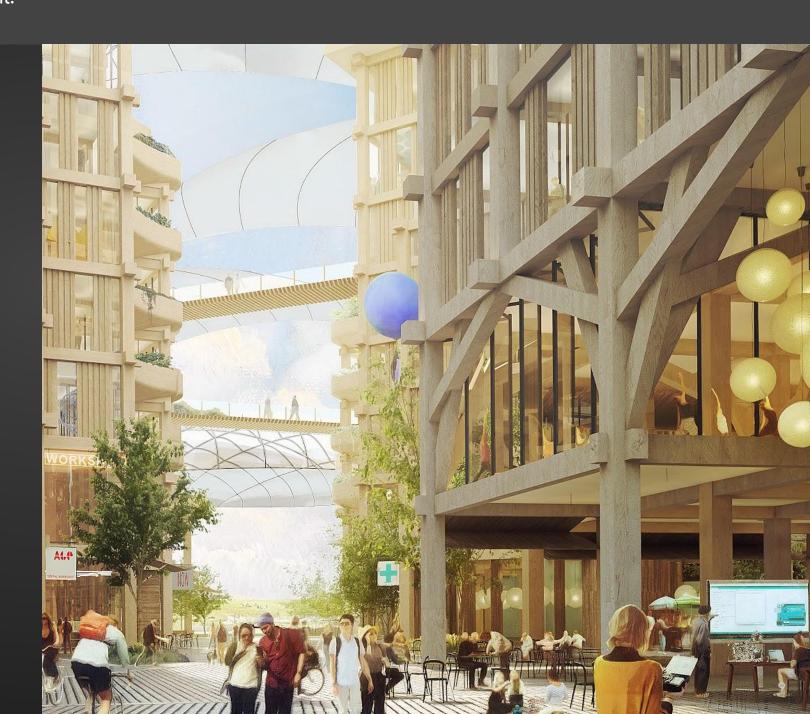


A New Economic Engine for Toronto

We believe the project can make Toronto the global hub in the field of urban innovation, catalyzing thousands of new jobs and generating billions in investment.

Economic growth within the project geography, and Toronto more broadly, would be driven by a series of key components:

- Significant increase in Google jobs over 10 years in the Eastern Waterfront as an initial catalyst
- An Urban Innovation Institute, leveraging the unique physical and digital infrastructure in Sidewalk Toronto to do cutting edge research, incubate new startups, and cultivate the next generation of urban innovators, would be a second catalyst. Sidewalk is prepared to make an initial seed investment to create the Institute.
- Together these two catalysts will spark a **cluster in urban innovation**, drawing entrepreneurs and companies from around the world to the laboratory on Toronto's Eastern Waterfront
 - **EXAMPLE:** Sidewalk's commitment to Mass Timber would accelerate step-change growth in the forestry, design and timber manufacturing industries
 - **EXAMPLE:** Sidewalk's unique approach to ground floor space, a flexible building system we call "Stoa", would enable a unique range of ground floor uses that encourage small business and entrepreneurship growth within mixed-use neighbourhoods
- Sidewalk has commissioned an independent third party, UrbanMetrics, to complete an
 Economic Impact Report on the Sidewalk Toronto Project, which will include estimates for
 job creation, both construction and ongoing investment, GDP growth, and incremental city
 revenues. We look forward to sharing that report upon its completion.



Google Canadian HQ

An new economic cluster on the Eastern Waterfront would be anchored by a significant commitment of Google jobs located at a campus on Villiers Island.

We have explored a series of design options for a Google Campus, including an approximately 1.5M-2M SF location on the western side of Villiers Island, located on a planned LRT stop.

This campus would have seats for a significant increase of Google jobs.

Within a brand new campus we imagine including a 600K–1M SF headquarters, integrated with a mix of other uses and amenities (commercial partners, retail, education, non-profit).







A New Standard for Affordable Housing

Our targets for affordable housing on Quayside and Villiers West would increase the provision of affordable housing by almost 4x compared to usual waterfront development in Toronto, and serve a much broader portion of the population.

More Affordable

40% Below Market Housing

20% affordable

Including 5% deep affordability

COMPARE TO

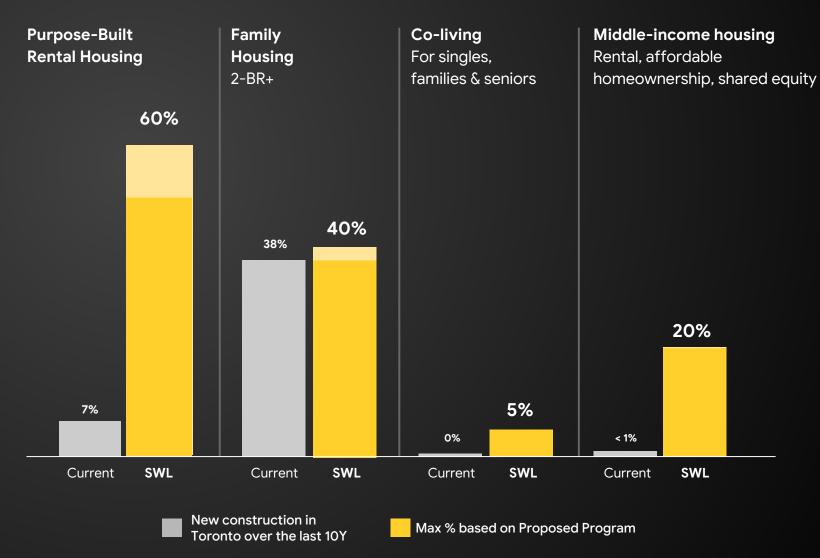
8% of total Toronto housing stock as affordable and social housing Up to 20% middle income

Including up to 15% affordable rental and 5% shared equity

COMPARE TO

<1% of total Toronto housing stock as affordable homeownership today

More Options



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A New Standard for Data and Privacy

Data can play a role in improving the day-to-day operation of the neighbourhood, leading to a more sustainable, accessible and responsible place to live. Sidewalk Labs will receive no special treatment and will not sell personal information or use it for advertising purposes.

Civic Data Trust

An independent entity to control, manage, and make publicly accessible all data that could reasonably be considered a public asset, and a set of rules that would apply to all entities operating in Quayside, including Sidewalk Labs.

RDUA

Responsible Data Use Assessment

Publicly auditable assessment for all public and private digital services required before data is collected and used.

Open Standards

Sidewalk will base its technology on open standards, making it easy for others to build and connect new services, offer competitive alternatives, and drive innovation.

RDU Guidelines

Responsible Data Use Guidelines

Application of the guidelines to all parties in Quayside, not just Sidewalk Labs, to put personal privacy and the public good first, while fostering innovation.

A New Global Standard for the Use of Urban Data

Sidewalk's proposed approach to digital governance in Quayside will demonstrate to Toronto, Canada, and the rest of the world that cities do not need to sacrifice their values of inclusion and privacy for opportunity in the digital age.

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Quayside in Context

The economic and conceptual viability of many elements of the Quayside site plan may only be possible at a larger scale.

Thinking at Scale

- From the RFP through the PDA, Waterfront Toronto has always sought solutions to address how we can maximize the impact of the shared objectives of the City, Province, Waterfront Toronto, and Sidewalk Labs, and we have responded as such.
- We believe that while Quayside will be an impactful starting point, scale actually plays a significant role because:
 - The impact of each individual innovation increases (for example, additional affordable housing, greater synergies in cutting carbon emissions, greater ability to reduce car trips, greater catalyzation of the tall timber industry)
 - Greater scale than 12 acres is likely needed given the initial investment in prototypes at Quayside
 - Holistic thinking is what can accelerate the provision of infrastructure on the Eastern Waterfront, and more quickly unlock the value of the Port Lands envisioned in the Port Lands Planning Framework
- Scale means different things for different outcomes and investments.

Impacts that Can Only Be Achieved with Scale

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The impact of Individual systems increases exponentially as the scale of the project increases.

Buildings

Meaningful reductions in costs (critical to achieving aggressive housing affordability savings) using factory-built timber buildings only works at scale.

Mobility



AVs only work at scale, enabling the achievement of mobility-as-a-service and lower family transportation costs

Active Ground Floor



Retail model enabling a much more dynamic retail environment and opportunity for small business built on Stoa and new building typologies only works at scale.

Sustainability



Achieving climate positive and building savings in energy costs with the thermal grid only are achieved at scale.

Freight



Business model for an Urban Consolidation Center and freight tunnels works at scale

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Transaction Principles

In designing a conceptual framework for an overarching transaction, Sidewalk Labs has followed a set of principles designed to meet all parties' objectives.

Transaction Principles

- Design a "win-win" structure in which the economic incentives for government and Sidewalk are aligned and transparent
- Ensure that experimentation and prototyping remain core to the project, while protecting government and the public from unreasonable downside risk
- Limit Sidewalk's role to the minimum amount necessary needed for the project to achieve its objectives to the fullest, and ensure third-party participation— particularly in real estate development
- Create a structure that enables Sidewalk to shoulder the burden of upfront risk, and be compensated in later stages
- Whenever possible, create discrete deal components in order to simplify and de-risk the transaction
- Whenever possible, utilize financing and implementation mechanisms based on precedents that have been validated previously, particularly in Toronto
- Incorporate stage gates and specific metrics for accountability

An IDEA District on the Eastern Waterfront

This document represents concepts and proposals developed by Sidewalk Labs in consultation with a variety of stakeholders. All such concepts and proposals are subject to approval by many of those same stakeholders, including but not limited to public entities, and Alphabet Inc.



The City of Toronto would create an "Innovative Development and Economic Activation District"—an IDEA District—corresponding to the project geography, to create the governance necessary to implement the Project. Waterfront Toronto would be the administrator of this district.

The IDEA District would leverage the combination of three elements to deliver on the project's public policy objectives:

- 1. A newly empowered Waterfront Toronto in an oversight and administrative role
 - Defined mission to promote innovation and development within the geography, and the mandate to oversee and steer key real estate, infrastructure, and technology decisions.
 - To be effective, this administrator must be accountable to the public; receive well-defined powers over development activity and the deployment of infrastructure within the jurisdiction; and engage seamlessly with other government agencies.
- 2. A custom set of regulatory, and policy tools—"An Innovation Framework"
 - A set of regulatory and policy tools (across categories like mobility, sustainability, housing, buildings) designed to foster the necessary conditions for
 delivering on the promise of the MIDP and using its success as a catalyst for spurring economic growth throughout the waterfront
 - 3 categories of reforms: (1) targeted relief from requirements (e.g., reduce parking requirements); (2) enhanced requirements for new developments (e.g., on-going performance targets related to carbon emissions); (3) legal authorization for management entities (e.g., a non-profit public realm management entity)
- 3. A special set of financing tools that enable the project to leverage its own value for implementation.
 - Financing tools could address project value created through development charges, incremental property tax, and increased land value

All three levels of government would determine the contours of the IDEA District in the course of its establishment.

As Innovation and Funding Partner to Waterfront Toronto, Sidewalk Labs would assist in achieving ambitious policy goals and accelerate development throughout the IDEA District.



Transactional Framework: Sidewalk Labs as Innovation and Funding Partner (Summary)

As Innovation and Funding Partner, Sidewalk Labs' role—and corresponding business models—is best summarized in discrete components:

- 1. Planning Partner
- 2. Real Estate Research and Development
- 3. Real Estate Economic Development Catalyst
- 4. Infrastructure Financing
- 5. Horizontal Development Partner
- 6. Advanced Infrastructure Facilitator
- 7. Technology Deployment
- 8. Investments in Economic Development
- 9. Value Sharing

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Project Concept





Transactional Framework: Sidewalk Labs as Innovation and Funding Partner (1 of 4)

Role		Description	Business Model
1	Planning Partner	In this role, Sidewalk Labs would support Waterfront Toronto in its role as IDEA DIstrict Administrator during the planning phases for each neighbourhood. This would include collaboration on:	 Contractual relationship with Waterfront Toronto
		 The overarching Innovation Framework and updates, Precinct Plans, Master Infrastructure Plans, guidelines for individual parcels and development agreements with third-party real estate developers 	Sidewalk Labs to receive payment for its advisory role
2	Real Estate Research and Development	In this role, Sidewalk Labs would develop, in partnership with local development entities, approximately 3.0M SF at Quayside .	Traditional real estate development economics
		The explicit mission of this development would be to prototype innovations or programmatic decisions that would achieve WT's objectives, but, because they go against market pressures, would likely lead to a below market return.	 Land price to be negotiated with Waterfront Toronto
		The current development plan includes approximately 3,000 units of housing (40% below market), room for 3,900 jobs, buildings entirely of tall timber, an expanded park network including the proposed Silo Park, a renovated Parliament Slip, and next generation infrastructure systems including: digital electricity, a thermal grid, and consolidated waste removal.	Profit-sharing with Waterfront Toronto if returns exceed certain threshold
3	Real Estate Economic Development Catalyst	In this role, Sidewalk Labs would develop, in partnership with local development entities, approximately 2.7M SF at Villiers West, relocating Google's Canadian HQ to the site.	Traditional real estate development economics
		The explicit mission of this development would be to create outsized economic growth through the relocation of the Google HQ into a mixed-use, open campus with multiple corporate tenants.	Land price to be negotiated with WT / City
			 Profit-sharing with WT / City if returns exceed certain threshold

Transactional Framework: Sidewalk Labs as Innovation and Funding Partner (2 of 4)

Role		Description	Business Model
4	Infrastructure Financing	In this role, Sidewalk Labs would fill a critical financing gap needed to deliver the full suite of infrastructure systems necessary to develop Quayside and the Eastern Waterfront on an accelerated schedule and achieve Waterfront Toronto's sustainability objectives.	1) Sidewalk would be paid back on all equity commitments used to bridge the gap between the time funds were needed to begin construction and funds were available from the project A financing fee would be applied to these funds
		Even beyond the in-progress \$1.2B Don Mouth Naturalization Project flood protection, billions of additional investment in enabling infrastructure—LRT, plus systems like electricity, heating, water and sewage, road networks, and fiber, new parks and public space, and extensive environmental remediation—would be necessary for complete communities to grow on the waterfront.	
		Were the status quo to proceed, this infrastructure would likely be implemented piecemeal and incrementally, as funding became available through either government allocations or as City Development Charges were realized in initial phases of Eastern Waterfront development.	The funds used to pay back Sidewalk in this capacity would be either the Development Charges or Incremental Property Taxes allocated to fund the associated infrastructure project
		Sidewalk estimates that if Toronto were to create a "value-capture zone" in which Development Charges and incremental property taxes were reserved for this specific geography, it could generate ~\$6B in value from the Project to pay for necessary infrastructure over the next ~30 years.	Advanced Infrastructure Systems would be operated through third-party entities, often in
		However, these traditional sources will not be available at the time needed to construct this infrastructure at the pace and scale required to deliver the outcomes WT desires, nor to achieve some of the more ambitious	partnership with current operators (like Toronto Hydro).
		policy objectives. As such, Sidewalk Labs will bridge this gap in two ways:	Third-parties operators would be chosen by an open RFP process, and all respondents would have the OPTION of choosing to use Sidewalk
		 Providing financing in advance of public funds being available for infrastructure projects like the LRT, parks, and utility systems. 	Labs-provided funding as part of their approach. Sidewalk would receive contractual-based market
		 Providing OPTIONAL "stapled financing" for Advanced Infrastructure systems that require innovative funding and operational models to achieve policy objectives 	economics if respondents elected to use this "stapled financing."



Transactional Framework: Sidewalk Labs as Innovation and Funding Partner (3 of 4)

Role		Description	Business Model
5	Horizontal Development Partner	In this role, Sidewalk Labs would support Waterfront Toronto in its role as IDEA District Administrator during the infrastructure implementation phases for each neighbourhood. This would include collaboration on:	 Waterfront Toronto and Sidewalk Labs would split a traditional "Developer Fee" applied to the total infrastructure cost, split in proportion to the allocation of responsibilities and associated resource requirements
		Delivery of systems such as parks, utility systems, site preparation work	
		Division of responsibilities between the two organizations generally fall to each organization's strengths. Waterfront Toronto would provide operational excellence in line with what it delivered in past projects—flood mitigation, West Don Lands, Bayside. Sidewalk Labs would provide design support, as well as manage the coordination of funding, and innovative project elements.	
		Note: This role can be shaped to meet the needs of all parties. From Sidewalk's perspective, a critical issue is the ability to have influence over the timing and management of the delivery of projects for which Sidewalk Labs' "bridge" financing is directly funding	
6	Advanced Infrastructure Facilitator	In this role, Sidewalk Labs would conduct initial design work, craft the RFP process, and coordinate the implementation among each Advanced Infrastructure system to ensure adherence to the project's innovation objectives.	 Sidewalk Labs to be reimbursed for costs related to initial design work and managing the RFP process.
			These costs will be allocated on a system by system basis and reimbursed by the operators selected for each system



Transactional Framework: Sidewalk Labs as Innovation and Funding Partner (4 of 4)

Role		Description	Business Model
7	Technology Deployment	In order to deliver on the project objectives, Sidewalk Labs would deploy a limited set of critical technologies. These technologies would be categorized as Purposeful Solutions, for which Sidewalk Labs and Waterfront Toronto would enter into agreements under predetermined and unique procurement and contractual rights.	 Rights to prototype, test, and deploy negotiated on an individual basis with WT or relevant agency Value from IP created in "testbed" conditions shared with public entities
8	Investments in Economic Development	In order to capitalize on, and catalyze, the enormous economic potential inherent in the vision of the Project, Sidewalk Labs will invest in a series of economic development initiatives that will benefit both the project area and Toronto writ-large. Category 1 Investments: Google HQ; Urban Innovation Institute; Workforce Development Initiatives Category 2 Investments: Tall Timber Factory, Toronto-based Venture Fund	Category 1 No specific, direct return to Sidewalk Labs Category 2 These investments have their own economics.
9	Value Sharing	Because of the holistic value Sidewalk Labs is bringing to the project across the first 7 buckets on this chart, Sidewalk Labs would share in the incremental value created within the overall project geography through the disposition of publicly-held lands to third parties in the project geography. In particular, buckets 1,2,4,6, 7, and 8 reflect economic constructs for which Sidewalk Labs is deploying capital / resources at below market rates of return, and deferring any possible return on investment to the potential long-term value created through its partnership with WT.	When public land within the IDEA District is sold to third-party developers through a WT-managed public RFP process, the incremental value would be split in a TBD negotiated proportion between Government parties and Sidewalk Labs

Project Concept



PROJECT SCOPE: Phase 1 (Quayside): 12 acres 3M SF ~5,000 residents (3,000 units of housing) ~3,900 jobs "on site" **Phase 1+2 (Complete Project):** 190 acres 35M SF ~50,000 residents (33,000 units of housing) ~45,000 jobs "on-site" **IDEA District** SWL executes horizontal and real estate development SWL facilitates horizontal infrastructure only SWL facilitates the Phase 1 LRT extension Note: In total, Sidewalk Labs proposed to complete ~5M SF of real estate development, less than 15% of



Potential Phase 3 Expansion (Dual Option)

In a potential Phase 3, the IDEA District would extend to south of the Ship Channel and there would be a mutual option for Toronto and Sidewalk Labs to deliver additional enabling infrastructure, including an extended LRT. The East Port and Film District have been excluded to protect existing uses.



Ensuring Accountability: Milestones & Phasing

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As the project proceeds, we believe permission for the the IDEA District to expand should be rooted in the ability of the initial neighbourhoods to achieve stated objectives.

A potential construct to expand the zone for which the innovation guidelines apply within Phases 1+2 would be based on specific targets:

- Stage gates, included as part of an initial set of agreements, would set the parameters that would need to be achieved in order to expand the project geography. These could potentially include:
 - Number of units of below market housing
 - o Delivery of key infrastructure components by a given date

