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Launching the Sidewalk Toronto Project and a Robust Public Engagement Process

The Sidewalk Toronto project teams solicited a wide range of feedback from residents, researchers, community leaders, and government agencies across the city. This unprecedented level of preliminary public input — reaching more than 21,000 Torontonians in person to date — helped shape the plan. Consultation by the numbers →~21,000 people engaged in person during Sidewalk Toronto and 307

- events →~280,000 online views of livestreamed events or videos
- → More than 11,000 visitors to 307 since June 16, 2018

To date, the Sidewalk Toronto public engagement program has reached more than 21,000 Torontonians of all ages. Credit: Jenna Wakani

In November 2017, some 530 Torontonians showed up on a chilly evening, packing the St. Lawrence Centre for the Arts to hear about the Sidewalk Toronto project. The live-streamed discussion from this initial Town Hall has since been viewed by over 5,000 people online.¹ It was the start of a sprawling conversation that, over the course of the next 18 months, would



After Sidewalk Labs was selected by Waterfront Toronto as Innovation and Funding Partner, the Sidewalk Toronto project launched in October 2017. In fact, this designation merely gave Sidewalk Labs the exclusive right to work with Waterfront Toronto and governmental partners to develop a plan and partnership proposal for creating a new type of community on the waterfront.

Public engagement began shortly after the project launch and occurred alongside this period of intensive planning work. This type of extensive engagement from the outset is critical to designing a plan that truly reflects the aspirations and ideas of Torontonians. become one of the city's largest-ever public discussions on an urban development — and it is still ongoing.

At that first Town Hall, Torontonians said they wanted a community engagement process that would be inclusive, transparent, frequent, wide-reaching, and meaningful. Soon after, Sidewalk Labs released its participation plan: 13 different programs that would ultimately connect the project with tens of thousands of Torontonians.²

Sidewalk Labs' subsequent outreach has included dozens of community meetings and programs.³ A series of large-scale roundtable meetings helped to keep people informed of the latest project updates and asked them to weigh in on key topics, from the principles guiding the planning process to the initial drafts of the plan for Quayside. A series of public talks brought local and global experts to broaden the conversation on safe street design, housing affordability, accessibility, and sustainable buildings.

The engagement plan included two intensive programs for representative groups of Torontonians. One was the Sidewalk Toronto Residents Reference Panel: a group of 36 residents from every corner of the city and diverse backgrounds. Across six Saturday sessions, spread over nine months and dozens of hours, the panelists received an in-depth look at many aspects of the Sidewalk Toronto project and provided a detailed set of recommendations, helping to shape the plan in the best interests of all Torontonians.⁴

The other intensive program was the Sidewalk Toronto Fellows program, designed as an opportunity for 12 early-career Torontonians aged 19 to 24 to travel to cities across North America and Europe and learn about waterfront revitalization and the use of technology. The fellows represented a range of perspectives, skills, and educational backgrounds from all over Toronto. They synthesized their learnings and published a report of recommendations that has directly influenced Sidewalk Labs' planning teams.



Sidewalk Labs' Amina Mohamed discusses a student-created model imagining the future of Quayside with visitors to 307. More than 11,000 **Torontonians have** visited 307 since it opened in June 2018. Credit: Jenna Wakani

The outreach effort stretched across all ages, including a partnership with the YMCA that led to a kids camp.

Bringing informed scrutiny into the heart of the project was essential. Sidewalk Labs convened six topic-specific advisory boards filled with local experts to challenge and improve the project's assumptions. Project members also held hundreds of one-on-one or small group meetings - including concerted outreach to the business, academic, nonprofit, and institutional sectors - and engaged extensively with Waterfront Toronto and public officials at all three levels of government.

This programming was complemented by consultations held by Waterfront Toronto, including Civic Labs that focused on digital elements of the project and "design jams" that provided stakeholders and residents with an opportunity to engage deeply with aspects of the project focused on vertical living, cycling, and the water.

Learning from many voices

In June 2018, Sidewalk Labs opened a Toronto office and innovation workspace in Quayside called 307, housed in a former fish-processing plant in Quayside. All summer long, 307 hosted special events that attracted residents, artists, and innovators to learn more about the Sidewalk Toronto project, engage with early explorations into a variety of urban innovations, and provide valuable feedback.⁵

Since its opening, 307 has welcomed more than 11,000 people, creating a dynamic and original venue for consultation and exploration.

In the latter half of 2018, Sidewalk Labs reached out to groups whose voices had been missing and brought them to the design and planning table, and also sought to meet people in their own communities.

Teams worked with members of the Indigenous community for a design workshop; engaged seniors in a charrette around housing; travelled to middle schools to ask children and youth for their ideas; and held a series of co-design sessions with members of the accessibility community and with people with lived experience of addiction and mental health challenges, in collaboration with the Inclusive Design Research Centre at the Ontario College of Art and Design University.6

Consultation by the numbers ightarrow 100+ hours spent

- co-designing with communities ightarrow ~1,700 total hours
- volunteered by **Resident Reference Panel members** \rightarrow ~2,300 total hours
- committed by Sidewalk Toronto fellows
- \rightarrow Worked with 75 experts, across six expert advisory groups

Planning teams also commissioned ethnographic research that emphasized the inclusion of diverse voices or voices often missed in the traditional public engagement process for reasons such as geography, awareness, or access. These studies focused on public space, family housing, and community care.

"North of the Water": Generating open space principles.

Sidewalk Labs collaborated with Doblin, Deloitte's consulting practice on human-centred design, and Park People, Canada's leading charity devoted to improving public space, to understand which factors contribute to a sense of belonging in public space. The "North of the Water" research involved 40 Torontonians who had previously not participated in a formal public engagement process, representing 23 different neighbourhoods and a mix of ages and backgrounds. The work drew from in-depth interviews, "research walks" through public space, and daily diaries. A final report – available on the Sidewalk Toronto website resulted in six design principles for great, details on this research. inclusive public space.



See the "Public Realm" chapter of Volume 2, on Page 118, for more

> "Living Well on the Waterfront": Understanding health needs. Sidewalk Labs commissioned the design firm Idea Couture to provide an understanding of the health needs of Torontonians. Twenty residents

Consultations were also held with residents and students from the inner suburbs of Rexdale and Scarborough, with the Lived Experience Advisory Group to the City of Toronto's Poverty Reduction Strategy, and with the Toronto Community Benefits Network to explore ways in which the project could drive equity, opportunity, and social inclusion.

and service providers - from a mix of age groups and cultural, professional, and political backgrounds - were interviewed in their homes and communities. Idea Couture and Sidewalk Labs then hosted a co-design charrette at the Centre for Social Innovation in Toronto, with participants from both the public and private sectors, to co-create more than 90 ideas on the future of community care. The resulting report sketched out a concept for a new type of community-based care hub in Quayside.7

"Family Lifestyles": Informing a new housing toolkit.

With SHS Consulting, a Toronto-based housing research firm, Sidewalk Labs conducted research with 25 low- or middle-income couples and families to uncover the housing needs of Torontonians – beyond the typical downtown resident. This work interviewed couples and families from the Toronto core, Etobicoke, and Scarborough in their homes and conducted a three-hour co-design workshop at 307, where families responded to a unit mock-up, tried out digital prototypes, and filled out workbooks. This direct feedback helped the Sidewalk Labs planning teams develop and validate certain concepts in a new housing toolkit.

To date, Sidewalk Labs has heard first hand from more than 21,000 Torontonians.

But the listening does not stop here. Sidewalk Labs will continue learning from Torontonians and incorporating their feedback as the plans for Quayside and the eastern waterfront come to life.

Consultation milestones

February

March

May

November First Town Hall

More than 530 people attend the Sidewalk Toronto project's first town hall meeting, at the St. Lawrence Centre for the Arts, with another 5,700 more participating via livestream.

Public engagement plan release

The Sidewalk Toronto team releases its full public engagement plan, outlining dozens of ways for Torontonians to get involved across a variety of programs.

First public roundtable Waterfront Toronto and Sidewalk Labs host the first public roundtable. Roughly 800 people attend in person, with another 1,700 joining via livestream.

Initial data framework and second public roundtable

Sidewalk Labs issues its initial Responsible Data Use Policy Framework, laying out the project's proposed approach to data privacy, stewardship, access, and security, and raises the possibility of a data trust to ensure transparent governance over data issues. Sidewalk Labs presents the framework for feedback at the second public roundtable, which is attended by roughly 400 people, with another 1,300 joining via livestream.

Opening of 307 Sidewalk Labs opens a Toronto

June

August

office and experimental workspace at 307 Lake Shore Boulevard East, welcoming the public to learn about the Sidewalk Toronto project and participate in regular programs held in partnership with local vendors. About 2,000 Torontonians attend.

Third public roundtable

Waterfront Toronto and Sidewalk Labs host the third public roundtable, focused on initial thinking for public realm, streets, and buildings. Roughly 460 people attend in person, with another 8,700 joining via livestream.

September Design jams

Waterfront Toronto hosts three "design jams": full-day sessions for local residents to help shape the project. Themes include vertical living, water connections, and cycling.





After participating in 70 hours of co-design sessions with the accessibility community and hosting 14 accessibility-related events, Sidewalk Labs releases a set of draft accessibility principles to guide the planning process for the Sidewalk Toronto project.

Sidewalk Labs releases its Draft Site Plan for Quayside, laying out specific goals for the neighbourhood: 40 percent below-market housing, mass timber construction up to around 30 storeys, a 75 percent reduction in greenhouse gas emissions, and more.

Fourth public roundtable

Waterfront Toronto and Sidewalk Labs host the fourth public roundtable. Roughly 400 people attend in person, with another 3,400 joining via livestream.

Advisory Working Groups' final meetings

After six months to a year of meetings, the Advisory Working Groups which include 75 experts from across six critical areas: community services, sustainability, mobility, digital governance, housing, and public realm meet for the final time.

Draft accessibility principles

March

Unveils new prototypes

At the fourth of a series of Open Sidewalk events at 307, Sidewalk Labs unveils two new prototypes: the modular pavement and building Raincoat systems. About 785 people attend.

May

Reference Panel recommendations

The 36-member Residents Reference Panel releases its 60-page final report. Across six sessions spread over nine months, and a collective 1,728 hours, the residents received an in-depth look at the Sidewalk Toronto project, provided feedback, and helped to shape the plan in the best interests of Torontonians.

June

Draft MIDP release

Sidewalk Labs submits its Master Innovation and Development Plan to Waterfront Toronto and the City of Toronto for consideration.

What we heard: The big themes that emerged during public consultation

Two visitors who

After each public event, a summary report was produced and posted online, often garnering further comments and interaction. Together, all of these events, consultations, and online postings generated thousands of comments.

Next, the Sidewalk Labs public engagement team sorted through this feedback - all the reports, meeting minutes, session notes, 307 "feedback cards," and more - and presented it to the planning teams. This process came to characterize the deeply iterative nature of the project, leading from an initial, high-level vision to a detailed final proposal that reflects the shared aspirations of thousands of Torontonians.

Sidewalk Labs has reflected deeply on how this feedback could help the MIDP achieve Waterfront Toronto's priority outcomes. Throughout all these

consultation touchpoints, several key themes emerged, and each one is reflected in Sidewalk Labs' proposals throughout the MIDP.

Theme 1: **Focus on priority** outcomes

Overwhelmingly, Torontonians have expressed a desire for the project to achieve objectives that match Waterfront Toronto's priority outcomes: job creation and economic development, sustainability and climate-positive development, housing affordability, new mobility (including accessibility to ensure outcomes are available to the broadest diversity of Torontonians), and urban innovations (including data privacy and governance).



attended "Open Sidewalk: The Accessible City" chat by the picnic tables outside 307. Credit: Jenna Wakani

How we responded

Achieving the priority outcomes. Sidewalk Labs proposes a new development approach that not only meets Waterfront Toronto's five ambitious priority outcomes but exceeds them beyond the ability of any traditional developer, across the full scale of the proposed IDEA District (see Overview, Page 162 for more):

 \searrow Generating 93,000 total jobs (including 44,000 direct jobs) and \$14.2 billion in annual GDP output by 2040

Ontario factory

gases by 89 percent

"When I think of the environment, I think of the stewardship of our planet. The things we do have ripple effects beyond our own neighbourhood or our city. And we can try to be carbon-neutral but it's just not possible in the city we have now. We have to use our resources responsibly."

Fatema C., Regent Park



- \rightarrow Creating 2,500 manufacturing jobs and catalyzing the mass timber industry through a new
- \searrow Realizing a climate-positive district that cuts greenhouse

 \rightarrow Generating \$1.4 billion in private funding for below-market housing, supporting an ambitious housing vision with the potential to create 13,600 below-market units (with additional government support)

 \rightarrow Enabling 77 percent of all trips to be made by public transit, walking, or cycling

 \rightarrow Increasing pedestrian space on streets by 91 percent, as compared to traditional development

 \rightarrow Enabling an open ecosystem for urban innovations to flourish, establishing the eastern waterfront as a global hub for new city solutions

 \searrow Setting a new standard for responsible data use in cities by protecting privacy and the public good while still supporting innovation "I think affordable housing is Toronto's biggest challenge, and once we put our minds to tackling that, other things will come in its wake. Sidewalk Toronto says there are innovative ways to build pre-fabricated housing so that they can be built faster and less expensively.... Toronto has a reputation for inclusiveness. I hope it stays that way."

Shaheen M., Etobicoke, near the subway terminal



Sidewalk Labs **Director of Public Realm** Jesse Shapins presents initial ideas for the Quayside plan at a session of the Sidewalk Toronto **Residents Reference** Panel. Credit: David Pike

Theme 2: Be inclusive and make room for all

To create a welcoming, inclusive community, Torontonians urged Sidewalk Labs to plan the Sidewalk Toronto project with a broad diversity of populations in mind. All Torontonians should be able to live in, work in, and visit Quayside and the broader eastern waterfront. As roundtable participants noted, services and opportunities in these places should be accessible to people elsewhere across the city.

Additionally, Torontonians want to see a broad group of businesses, non-profit organizations, and innovators actively participate in the new opportunities created by the project – especially Canadian companies and entrepreneurs. Consequently, they want to see open standards ("no technology lock-in"), so multiple parties can develop innovations in response to tastes, trends, and technological advances.

How we responded

Prioritizing affordability.

Planning for a place where people of all ages, abilities, incomes, and backgrounds can thrive and belong means prioritizing affordability. Towards this end, Sidewalk Labs' proposals include:

Ensuring accessibility.

To ensure that the IDEA District is accessible to all Torontonians, Sidewalk Labs' proposals include:

- of the IDEA District

 \searrow Setting a housing vision that includes 20 percent affordable housing units (with at least a quarter going towards households with "deep" affordability needs) and 20 percent of units for middle-income households

 \rightarrow Creating adaptable spaces, flexible lease terms, co-tenancy options, new operating tools, and a small business incubator program, making it easier for community groups, arts and cultural installations, and startups to occupy ground-floor space

 \searrow Going all-electric affordably through a suite of energy innovations, including an advanced power grid that would keep bills comparable to existing ones while reducing greenhouse gas emissions

 \rightarrow Designing an integrated mobility package that would provide access to a full range of affordable trip options, saving households \$4,000 a year by reducing the need to own a car

 \searrow Continuing to work with the accessibility community to ensure the physical and digital accessibility

 \rightarrow Extending public transit and connecting into Toronto's broader system, helping the whole city access the waterfront

 \rightarrow Expanding publicly accessible spaces open to all, including a wide range of pedestrian-only streets, wide promenades, parks, plazas, and water spaces

Catalyzing an open ecosystem.

To ensure that Canadian businesses, non-profit organizations, and innovators benefit from the opportunities generated by the project, Sidewalk Labs' proposals include:

- \rightarrow Identifying appropriate local partners to deliver many of the elements described in the MIDP. The actual business arrangements could take various forms, including but not limited to partnerships, joint ventures, and licence arrangements
- \rightarrow Purchasing third-party technology whenever there are existing companies that have the capability to implement the systems required. Sidewalk Labs plans to give priority to technology local to Toronto, Ontario, or Canada
- \rightarrow Publishing properly protected data in standard formats and making software source code public under free software licences
- \searrow Seeding \$10 million to launch a new venture fund focused on Canadian startups

Creating opportunities for all.

To ensure that the opportunities created by the IDEA District are accessible to everyone, Sidewalk Labs proposes to launch a new workforce development program and a construction jobs program for equity-seeking populations.

Theme 3: No tech for tech's sake

Torontonians felt strongly that technology should not be the go-to answer for every problem, but used only if it can demonstrably prove to be a better alternative to an existing solution or approach. They want technology that targets significant urban challenges, not technology for its own sake.

As participants from the first public roundtable pointed out, technology alone does not make a community great, but it can potentially enhance a community. As the Residents' Reference Panel put it: "technology should only exist to serve people."



How we responded

Establishing an independent Urban Data Trust.

Sidewalk Labs proposes a new category of data called "urban data," which includes both personal information and information collected in a physical space in the city, where meaningful consent prior to collection and use is hard, if not impossible, to obtain. Sidewalk Labs proposes that an independent, government-sanctioned entity called the Urban Data Trust manage urban data and establish a transparent process for approving the use or collection of urban data - given its potential to impact people's daily lives.

Ensuring responsible data use.

To ensure that digital technology is being used to help address significant urban challenges, Sidewalk Labs proposes that the independent Urban Data Trust establish a set of Responsible Data Use Guidelines, and recommends that these guidelines include the need to outline a clear beneficial purpose for the proposed use or collection of urban data.

Annick B., West Hill (Lawrence Avenue East and Kingston Road)



Participants at a public roundtable discussion at 307 give feedback on plans and concepts for the Sidewalk Toronto project. **Credit: David Pike**

"The challenge is to find ways for technology to help foster a sense of community. That seems utopian but it's possible.... We can find a way to make it happen. I think Toronto can be a global model for a new kind of technology that helps keep us human."

Theme 4: Make sure the public sector has a strong role

Many participants were unsure about the nature of Sidewalk Labs' relationship with government.

While some were excited about the potential of a private company to improve government responsiveness, others were concerned that the project would lead to the privatization of public services. The Residents Reference Panel noted that, historically, government has not kept up with the rapid pace of technological innovation and may not be able to provide appropriate oversight of the project.

Torontonians stressed the importance of public entities having clear mandates and adequate resources to negotiate with Sidewalk Labs effectively, and then to provide strong ongoing oversight and accountability of the partnership as it unfolds.



How we responded

Defining public- and private-sector roles. A project of this scope, complexity, and duration requires strong public oversight and a regulatory framework predisposed to new approaches. To ensure this outcome, Sidewalk Labs' proposals include:

- Solution Calling for government to designate a public entity to serve as revitalization lead for the IDEA District, with this public administrator empowered to hold Sidewalk Labs and others working in the district accountable
- Establishing a supporting role for Sidewalk Labs that includes providing advisory services, limited technology deployment, and optional infrastructure financing – doing only what is needed to ensure the MIDP's innovative approaches are properly implemented
- → Limiting Sidewalk Labs' role as lead real estate developer (working with local partners) to Quayside and Villiers West, for the purposes of proving out the innovative development approach

"I think I understand the concern about privacy. I share it, too. But in the overall scale I am positive about it, because I think of technology as a tool. Technology does not have a life of its own. It's humans who decide how it gets used to the benefit or detriment of society. I believe that through proper governance we will strive for good."

Ray J., Willowdale

A member of the Residents Reference Panel hands over written notes to a facilitator. Public engagement teams presented all feedback to the Sidewalk Labs planning teams and put the information on the project website for anyone to review. Credit: David Pike





Theme 5: Prove out the concept

Participants were concerned that, as a project proposed by a private American company, Sidewalk Toronto would not actually benefit Toronto or Torontonians. They urged Sidewalk Labs to be mindful of the project's Canadian context, to engage with local experts and companies, to reach out to Indigenous peoples, and to embrace the idea of "nothing about us without us."

Torontonians expressed concern about the potential that a complex, large-scale, long-term plan could fail. They support achieving a big vision through a phased approach: to prove out the development approach in Quayside as a demonstration project, before extending to successive phases.

As one advisory council member noted, Sidewalk Labs must demonstrate its ability to execute, to earn the right to proceed further.



How we responded

Building trust.

To ensure that the Sidewalk Toronto project benefits Toronto, Sidewalk Labs' proposals include:

- \searrow Engaging meaningfully by maintaining its significant Toronto presence via 307, its Toronto workspace that houses public events and local employees
- \searrow Continuing to solicit input from diverse groups of Torontonians, including the community, Indigenous groups, Waterfront Toronto, the City of Toronto, and other levels of government
- >> Starting small and working up to larger areas as urban innovations are proven and priority outcomes are achieved
- \searrow Proposing to pay the public sector a share of the upside value if Quayside and Villiers West prove more profitable than expected, as well as a profit-sharing model through which the public sector would receive a share of the profits generated by certain technologies first tested and deployed in the IDEA District
- \rightarrow Earning a "performance payment" if (and only if) Sidewalk Labs reaches a series of performance and growth targets directly tied to Waterfront Toronto's priority outcomes

come and say: 'Wow!'"

Jack G., Sunnyside

Theme 6: Build on what has been done

Over time, Toronto has made progress in developing the waterfront and in trying new ways to solve urban challenges, thanks in large part to the work of Waterfront Toronto. Torontonians emphasized the importance of building on this record and of recognizing and expanding approaches that have been successful.

From Indigenous consultations, Sidewalk Labs was further reminded that this land has a long history that precedes both industrialization and revitalization. Sidewalk Labs is committed to engaging in ongoing conversations and collaboration with Indigenous communities in Toronto, to treating the land with respect and humility, and to sharing peaceably in its resources.

"If we are successful Toronto can be a model for other cities. There are lots of concerns but they can all be managed. We can create standards that are better than what we have now. Let's build it so that people will



How we responded

Advancing the work of others.

To ensure that Sidewalk Labs is advancing the work of others who have a proven track record along Toronto's waterfront, Sidewalk Labs' proposals include:

 \rightarrow Taking an evolutionary approach that builds on existing planning approaches, including the Villiers Island, East Bayside, and Keating Channel precinct plans and the Port Lands Planning Framework

 \rightarrow Building on Canada's existing timber industry through support for an Ontario-based factory focused on mass timber building parts and a plan to develop Quayside as the world's first all-mass timber neighbourhood





- Advancing Toronto's successful tech ecosystem by creating a new urban innovation campus on Villiers Island, anchored by a new Google Canadian headquarters and a non-profit, applied research Urban Innovation Institute
- \searrow Accelerating the financing of a light rail expansion, building on the extensions identified as critical by existing planning initiatives, such as Waterfront Toronto's Transit Reset efforts
- \rightarrow Meeting and surpassing the City of Toronto's resiliency framework for flood management and establishing an ecological foundation for new sustainable communities built around spectacular parks and nature

"I like what Waterfront Toronto has been doing recently. ... They're making spaces to congregate so it feels like a neighbourhood. They understand that it needs to have its own unique flavour, and be more than just condos. That makes me optimistic for Quayside."

Alex B. L., Yonge-Dundas Square

Theme 7: **Present a transparent** business model

Torontonians highlight transparency as key to gaining public trust, particularly with respect to the financial obligations and benefits in any agreement, initially and over time. The complex and longterm nature of the transaction increases the need for clarity about roles, responsibilities, and how Sidewalk Labs intends to make money.

Common questions around the business model included: Who will own the land? What's in it for you? What's the scale of the project? Will Toronto and Canadian tech companies, real estate developers, or other third parties be involved? And will they be able to work together to solve Toronto's most pressing challenges?

Jason S., First Chinatown, then Riverdale

How we responded

Designing a fair transaction.

Sidewalk Labs proposes to make money from the real estate development it does, charges on any financing it provides, and, if all goes well, a performance payment considered at a time when the project's success against agreed-upon metrics can be judged. The project's finances and transactional framework are designed to ensure that all project participants, public and private, are treated fairly, and that the public interest is protected.

"People want to live in cities, but things like congestion and transit are problems everywhere. Eventually, the cities that figure out a better way to organize themselves are going to win."

Part 1 Mobility

The following summary describes feedback related to **mobility** and how Sidewalk Labs has responded in its proposed plans.

> As part of its public engagement process, members of Sidewalk Labs' planning and innovation teams talked to thousands of Torontonians - including members of the public, expert advisors, civic organizations, and local leaders – about their thoughts, ideas, and needs across a number of topics.

1 Put pedestrians and cyclists first

What we heard

From the very beginning of Sidewalk Labs' public engagement process, one mobility note kept coming up time and again across workshops, advisory working groups, and special reports: prioritize pedestrians and cyclists. Safety and the management of conflicts among road users were top of mind. As one roundtable participant put it: "Greater access to pedestrian laneways and safer bike lanes would make me more likely to even bike – and not think I may turn into roadkill!"

The Mobility Advisory Working Group pushed Sidewalk Labs to innovate when it came to road design, speed limits, and curb space, stressing the need to consider the unpredictability of shared streets; where and how pedestrians cross the street; and cycling infrastructure (for bikes as well as e-bikes and scooters) that is accessible in all conditions. The Sidewalk Toronto Fellows similarly advocated for safe, all-weather active transportation.

Participants at Roundtable 4 supported the decision to restrict vehicles, especially in Parliament Plaza, and were enthusiastic about water transportation modes, such as kayaks. Roundtable participants, as well as participants in co-design sessions pushed Sidewalk Labs to meet and surpass AODA compliance when designing for pedestrians and cyclists.



Public Engagement



How we responded

Designing people-first streets.

Sidewalk Labs proposes a people-first street network designed to enhance safety, comfort, and street life for pedestrians and cyclists. Lower-speed streets would require vehicles to travel at pedestrian or cyclist speeds, and boulevards that permit higher-speed traffic (up to 40 km/h) would contain dedicated bike lanes with physical separations (see Volume 2, Page 92).

Providing mobility choices.

Sidewalk Labs proposes a cost-effective, integrated mobility package that makes cycling and walking easier and more convenient. For example, a monthly subscription could cover a discounted TTC pass, an unlimited Bike Share Toronto membership, access to e-scooters and other low-speed vehicles, and credits for rides with ride-hail or car-share providers (see Volume 2, Page 65).

Improving bike infrastructure.

Sidewalk Labs proposes to include bicycle "green waves," which use signal coordination to help cyclists maintaining a certain speed avoid stopping at red lights, improving travel time and increase safety (see Volume 2, Page 49).

Creating all-weather infrastructure.

Sidewalk Labs proposes heated pavement in sidewalks and bike lanes, as well as an outdoor comfort system to shield pedestrians and cyclists from wind, rain, ice, and snow (see Volume 2, Page 52).

307 is home to the very first Bike Share Toronto station in Quayside. **Credit: David Pike**



Planning walkable neighbourhoods.

Sidewalk Labs proposes a truly walkable neighbourhood, where residents and workers can access jobs, homes, and daily goods or services within a 15-minute walk (see Volume 2, Page 44).

Ensuring accessibility.

Sidewalk Labs commits to physical and digital accessibility principles that require streets to be accessible for people of varying abilities. This plan would include curbless streets with sidewalks wide enough to accommodate pedestrians moving side by side in wheeled devices or walking and signing; consistent visual, auditory, and tactile cues to guide people through spaces; and special vehicle permissions for accessible ride-hail vehicles (see Volume 2, Page 106).



2 Improve transit, expand it, and make it inclusive

What we heard

Participants expressed frustration with the current transportation system, particularly traffic congestion, and excitement about the opportunity to rethink mobility in Toronto.

Torontonians felt strongly that public transit must be a central focus of any mobility plan, especially if the project aims to reduce levels of private vehicle ownership, and that the transit experience in Quayside must be efficient and easy to use. As one roundtable participant explained: "Personally, if transit were more accessible and affordable, I would use my car less."

The inclusivity of transit was also a key theme. The Mobility Advisory Working Group and the Sidewalk Toronto Residents Reference Panel encouraged the Sidewalk Labs mobility team to apply a user-experience lens to its plan, while co-design participants emphasized design and signage that would be accessible across visual, auditory, and cognitive abilities.

But public transit cannot be efficient, convenient, or inclusive if it is isolated from Toronto's greater systems. The Mobility Advisory Working Group encouraged Sidewalk Labs to build on the city's existing plans and research. This need to integrate public transit in Quayside into city and regional transit - and to plan in step with the city - was particularly important to Roundtable 4 participants and to those on the Residents Reference Panel.

A member of the public provides feedback on mobility "issues and opportunities" during a Sidewalk Toronto Public Roundtable. **Credit: David Pike**



How we responded

Expanding transit.

Sidewalk Labs proposes connecting Quayside with Toronto's existing transit system before any residents move in and accelerating the financing of a light rail expansion that builds on the extensions identified as critical by existing planning initiatives, such as the Port Lands Planning Framework and Waterfront Toronto's Transit Reset efforts (see Volume 2, Page 40).

Designing transit-friendly streets.

Sidewalk Labs proposes street designs with speed limits that encourage pedestrian travel, electric bikes, and other low-speed vehicles as attractive commuting options, improving last-mile connections and making public transit more attractive (see Volume 2, Page 92).

Offering integrated mobility options.

Sidewalk Labs proposes an integrated mobility package that would give residents and workers a real-time understanding of the real price of each transportation option, encouraging the choice of public transit via discounts and credits (see Volume 2, Page 65).

Ensuring accessibility.

The TTC's stated policy is to create step-free transit stops for streetcars and buses, and to provide the most updated, accessible vehicles available at present to serve Quayside. Sidewalk Labs plans to collaborate with city transit partners and commit to ensuring this reality (see Volume 2, Page 106).

Coordinating bus service.

Sidewalk Labs plans to ensure that bus service is well-integrated into other modes, making it easier and more convenient for riders to transfer across mobility options (see Volume 2, Page 45).

3 Be ambitious – but allow for transition

What we heard

"We've been designing roads the same way for 100 years. Maybe it's time to rethink how we do that, so that roads are more responsive and fluid," said one of the Reference Panel residents. Other engagement participants agreed. At Roundtable 3, when Sidewalk Labs presented five types of potential Quayside streets, Torontonians pushed for ambition in the plan's mobility aspirations.

At the same time, participants noted that any new technology must be introduced carefully. On this topic, no subject generated more excitement - and concern than self-driving vehicles.

Roundtable participants and the Mobility Advisory Working Group were vocal about the potential upsides of this technology. The Advisory Working Group was not only intrigued by the ability of self-driving fleets to reclaim street space typically devoted to curbside parking, but they also saw self-driving vehicles as an exciting solution to the challenge of firstand last-mile trips – for people as well as for the delivery of goods.

Many Torontonians also expressed concern with the cost, safety, and accessibility of self-driving vehicles, as well as their relationship with public transit.



Both the Mobility Advisory Working Group and the Residents Reference Panel emphasized the need to learn from leading experts; to take time to transition to self-driving vehicles; and to ensure that alternative transportation options are available, the public is educated, and proper regulation is in place. Reference Panel and Roundtable 4 participants cautioned that some parking and vehicle access in Quayside could be necessary to prevent the community's isolation from the GTA and to allow for TTC WheelTrans (an accessible paratransit service in Toronto) and emergency vehicles.

How we responded

Designing streets for the future. Sidewalk Labs proposes streets that anticipate self-driving vehicles but that can also be successful without them. The streets in Quayside can easily adapt to "make room" for these vehicles as they become more commonplace (see Volume 2, Page 96).

Providing occasional car access.

Sidewalk Labs proposes to provide access to a variety of on-site car-sharing and car-rental providers, helping residents make the occasional car trip while relying less on traditional private vehicle ownership (see Volume 2, Page 63).

Ensuring accessibility.

Sidewalk Labs proposes special permissions so accessible ride-hail, WheelTrans, and emergency vehicles can access any street (see Volume 2, Page 106).

Offering parking.

Sidewalk Labs' plans include an underground on-site parking garage offering 500 spaces to private vehicles using demand-based pricing. The plan also would include off-site parking facilities that feature charging stations to encourage use of electric vehicles (see Volume 2, Page 64).

Working with regulatory experts.

Sidewalk Labs has collaborated with MaRS, one of the world's largest urban innovation hubs, and is working with various branches of the Canadian government to determine a regulatory framework for self-driving vehicles that would ensure public safety. Sidewalk Labs is also pursuing future pilots that would incorporate a public focus (see Volume 2, Page 55).

4 Infrastructure and transportation systems that stand the test of time

What we heard

The importance of infrastructure, and the importance of maintaining aging infrastructure in particular, came up frequently in public engagement events.

Participants of Roundtable 4 wanted to know more about the nature of the funding and governance models for Quayside's infrastructure, and the Mobility Advisory Working Group stressed the importance of plans that are financially feasible over the long term. While the group supported a private-public mobility governance model – provided jurisdiction is clear – they also cautioned Sidewalk Labs to be practical about what the city could provide in terms of infrastructure development and maintenance. Roundtable 4 participants similarly echoed this governance concern, particularly in relation to extending the light rail system and working with the TTC. The Mobility Advisory Working Group also recommended that any mobility management system oversee both design and operations.



How we responded

Financing responsibly.

To pay for some of the significant transportation infrastructure needs of Quayside, including the expansion of the light rail and upgrades to the Parliament Street and Cherry Street underpasses, Sidewalk Labs proposes a self-financing system that pays for part of the costs of construction by borrowing capital against funds generated by a future tax on real estate development (see Volume 2, Page 40).

Working with the TTC.

Sidewalk Labs proposes that light rail infrastructure, vehicles, and service remain publicly owned and operated by the TTC, and that a non-profit or government entity manage funds and transfer them to the TTC (see Volume 2, Page 40).

Using parking fees for maintenance.

Sidewalk Labs proposes that demand-based parking fees contribute to the maintenance of infrastructure (see Volume 2, Page 86).

Proposing holistic transportation management. In accordance with the recommendation that a mobility management system oversee design and operations in Quayside, Sidewalk Labs proposes that a public entity called the Waterfront Transportation Management Association coordinate the transportation system (see Volume 2, Page 86).

Torontonians explore the 307 main hall exhibits — including the modular pavement demonstration — during the first Open Sidewalk, on June 16, 2018. Credit: David Pike

Engagement spotlight



The Sidewalk Toronto Fellows suggested that the project use the type of bike path foot rests they found during a research trip to Copenhagen, Denmark. Credit: Sidewalk Labs When the Sidewalk Toronto Fellows presented their findings at the end of 2018, Sidewalk Labs Director for Streets Willa Ng was in the audience, paying close attention. As the Fellows discussed their many takeaways from their travels around the world, they began talking about Amsterdam and Copenhagen, cities that make cycling not only safe, but easy and delightful. They showed one small example: a foot railing that cyclists could rest upon at red lights.

The idea of having foot railing had also come up a few weeks before, at a project design jam focused on the theme of "People on Wheels." Willa had heard that feedback, too.

"It's so beautiful in its simplicity," she says. "It just goes to show that ideas don't always have to be technological — innovation comes in a lot of forms." Sidewalk Labs intends to include foot railings in future street designs, and these simple amenities will hopefully be a daily reminder that, in Quayside, cyclists and pedestrians come first. By providing a broad menu of affordable options for every trip, this comprehensive plan reduces the need to own a car and sets a bold new course for urban mobility.

Part 2 Public Realm

The following summary describes feedback related to the **public realm** and how Sidewalk Labs has responded in its proposed plans.

> As part of its public engagement process, members of Sidewalk Labs' planning and innovation teams talked to thousands of Torontonians — including members of the public, expert advisors, civic organizations, and local leaders — about their thoughts, ideas, and needs across a number of topics.

1 Create a sense of belonging through participatory design, accessible amenities, and diverse programming

What we heard

Participants urged Sidewalk Labs to make public spaces as inclusive as possible, no matter a person's background or ability. Participants in co-design sessions noted that all public spaces should be built with people with disabilities in mind and should relay information in multiple modes (haptic, visual, audio). Visitors to 307 wanted to see spaces for diverse cultural practices as well as food stores that cater to diverse cultures. And multiple participants raised the importance of critical amenities, including accessible non-binary washrooms, places for changing diapers or breastfeeding, and affordable retail space.

Participants were particularly enthusiastic about a ground-floor strategy that could provide affordable space for vendors, small businesses, and social enterprises. The experts who attended one workshop on mass timber buildings were similarly enthusiastic about the strategy's potential; however, they urged Sidewalk Labs to consider the governance and management of the space, asking questions like: how would leases or occupancy be ensured, and how would the balance between retail and community use be determined?

Various participants also recommended that inclusion extend to the design process itself, asking that Sidewalk Labs bring community members, especially Indigenous voices, to the planning table. Design excellence need not sacrifice the accessibility or inclusivity of the public realm.

Public Engagement

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Two visitors embrace as they view RWDI weather-mitigation visuals in the main hall of 307. Credit: Jenna Wakani

How we responded

Emphasizing inclusion.

Sidewalk Labs has incorporated an expansive, diverse network of open spaces into the plan for Quayside, and followed design principles focused on inclusive, participatory programming (see Volume 2, Page 178).

Incorporating accessibility.

In keeping with Sidewalk Labs' accessibility principles, all public spaces would incorporate responsive sounds and tactile pavement. Sidewalk Labs plans to continue working with the community to ensure that public spaces are accessible to all (see Volume 2, Page 106).

Making space affordable.

Sidewalk Labs proposes to include adaptable retail spaces, flexible lease terms, options for co-tenancy, and operating tools and services that tenants can use to reduce the upfront and ongoing costs of occupying ground floor spaces. This mix of offerings would make it financially feasible for community, cultural, and smaller businesses to set up shop (see Volume 2, Page 164).



Expanding opportunities.

Sidewalk Labs plans to offer a small business incubator program that would encourage diversity by both providing space at below-market rents and offering shared equipment and facilities for ground-floor tenants, helping those without access to capital open up shop (see Volume 2, Page 166).

Engaging Indigenous groups.

The Brook McIlroy Indigenous Design Studio has created a framework for Indigenous engagement and project development - including principles for Indigenous design - based on aspirations of the Indigenous community and the desire for common ground. Sidewalk Labs is committed to continue to engage with these principles and Indigenous communities throughout the planning process.

2 Emphasize connections to nature and water

What we heard

Participants across public engagement events and co-design sessions were incredibly enthusiastic about the potential for plentiful green public spaces that can better connect people to nature, especially water.

Participants from the design jam on "Water Connections" and the Residents Reference Panel were particularly emphatic on this point: water should be both a destination feature and an accessible, everyday amenity. As one panelist explained, "I make great use of the parks around me. ... I hope Quayside, and the eastern waterfront, will have that same kind of easy access to park space. There needs to be a reason for people to go there other than to live or work. And Lake Ontario is majestic."

Some visitors to 307 recommended that the public realm design reduce the impact of the Gardiner Expressway and mitigate noise pollution. And Roundtable 4 participants asked about how the community could be more self-sustaining, potentially with urban agriculture, green roofs, and food gardens.

A crowd gathers to hear remarks at the opening of 307 on June 16, 2018. Credit: Sidewalk Labs



How we responded

Expanding green space.

Sidewalk Labs proposes to reclaim significant street space for the public realm and tree plantings by narrowing lanes, reducing vehicle lanes, and eliminating curbside parking. It also proposes to leverage a digital planning tool to identify opportunities for more high-quality parks, maximizing access to green space (see Volume 2, Page 128).

Infusing greenery.

Sidewalk Labs proposes to plant far more greenery than most cities do today. Greenery sequesters carbon, mitigates the urban heat island effect, reduces the risk of flooding, and promotes the health and happiness of residents and workers. For example, the proposed Queens Quay East could host 95 trees per hectare, roughly double the current coverage on boulevards (see Volume 2, Page 135).

Incorporating water features.

Sidewalk Labs proposes that Parliament Plaza include water features, such as a splash pad for children and mist machines for public art installations (see Volume 2, Page 146).

Connecting to the lake.

Sidewalk Labs proposes to deploy a series of barges in Keating Channel designed for community water-based programming across the seasons, from a waterfront classroom to an aquaponics farm to a cafe (see Volume 2, Page 149).

> Two 307 visitors spend time in the Learning Garden, developed in partnership with Bowery Project. Credit: **David Pike**

Public Engagement

Accommodating marine uses.

Sidewalk Labs proposes that Parliament Slip accommodate a variety of marine uses, from personal watercrafts to water taxis to kayaks, allowing for marine transit to the inner harbour and islands. These uses would be linked to, and supported by, the neighbouring Bayside Community Centre (see Volume 2, Page 148).

Integrating gardens.

As the designs for Quayside are refined, Sidewalk Labs plans to explore the integration of community gardens as key amenities.



3 Invite participation to a lively, flexible, delightful public realm

What we heard

Participants were excited by the possibility of a flexible, lively public realm that could accommodate a diverse number of uses and needs. Torontonians wanted public spaces that are active with events and programs – that are delightful, playful, and inviting. As the Sidewalk Toronto Fellows put it: "Equip public spaces to become an extension of a front and backyard."

Many participants urged Sidewalk Labs to create spaces that could be enjoyed all year, especially in winter. One 307 visitor pen-named "Cold Australian" asked for "year round comfort in public spaces because Toronto's weather is inhibiting," adding: "I want to live life to the fullest."

Specific ideas for uses that could be accommodated ran the gamut, from dog parks, to spaces for creating and learning, to playgrounds, to outdoor swimming pools. Participants made multiple requests that Sidewalk Labs create opportunities for youths and the arts community to be more present in public space.

While many Torontonians were excited by the flexibility of the spaces proposed, which would give them greater agency over their environment, participants wanted to ensure that flexibility would never preclude accessibility. Some co-design session participants suggested that spaces leverage technology to inform users, in real-time, about the status and layout of these dynamic spaces.

How we responded

Incorporating flexibility.

Sidewalk Labs proposes to create flexible designs for parks, plazas, and open spaces that better accommodate the diverse needs of an expanding population while preserving accessibility. Such spaces would be multi-purpose and could be quickly reconfigured by day or season. Silo Park, for example, should be able to accommodate at least three sports; one "play" feature; space for food and beverage; and recreational spaces designed to be active and accessible all year (see Volume 2, Page 145).

Mitigating weather.

Sidewalk Labs proposes to deploy an outdoor comfort system that can respond to real-time weather patterns, providing protection on rainy, snowy, or windy days and shade on sunny days. Residents or businesses could reserve these tools for gatherings or events (see Volume 2, Page 167).

Sharing infrastructure.

Sidewalk Labs proposes to equip public spaces with shared physical infrastructure (such as projectors or power outlets) to encourage users to program these spaces themselves (see Volume 2, Page 184).

Encouraging arts and culture.

Sidewalk Labs proposes to encourage and celebrate arts and culture through the provision of rotating installations, affordable production space, and a Civic and Cultural Assembly with shared fabrication equipment and a room for exhibits and teaching (see Volume 2, Page 183).

Emphasizing accessibility.

In keeping with its accessibility principles, Sidewalk Labs plans to work with the accessibility community to ensure the accessibility of flexible spaces, including installing options such as wayfinding beacons (see Volume 2, Page 106).

4 Pursue governance models that ensure safe, well-maintained public spaces over the long term

What we heard

The Public Realm Advisory Working Group urged Sidewalk Labs to consider an innovative governance model for public space and to work with the City of Toronto's Parks, Forestry, and Recreation department to structure a sustainable management and funding plan that would ensure public ownership of parks while allowing for innovation in programming, operations, and maintenance.

Participants were similarly concerned about maintenance, wondering how public spaces would be "future-proofed" and how safety would be ensured.

How we responded

Proposing the OSA.

To sustain high-quality open spaces over the long term, Sidewalk Labs proposes the creation of the Open Space Alliance as a non-profit entity that could deliver local programming, operations, and maintenance in Quayside. The OSA could also create mechanisms for sustainable funding, staffing, and oversight that ensure the long-term viability of public spaces (see Volume 2, Page 178).

Empowering the community.

Sidewalk Labs has partnered with Park People and the Gehl Institute to prototype CommonSpace, a tool that makes it easier to collect reliable data on how people use public spaces, enabling space managers to see patterns, generate insights, and develop evidence-based approaches to advocating for change (see Volume 2, Page 183).

Sidewalk Labs' Craig Nevill-Manning teaches young children how to adjust the lights in the 307 Dynamic Street prototype. Credit: David Pike

Leveraging technology.

Sidewalk Labs proposes to create a real-time map of park assets, from drinking fountains to garbage bins, that can help managers operate and maintain public spaces (see Volume 2, Page 186).

Reimagining pavement.

Sidewalk Labs proposes to deploy a novel system of modular pavers that would lower maintenance and repair costs of hardscape in the public realm (see Volume 2, Page 139).

Planning for safety.

Sidewalk Labs incorporated safety into every facet of its planning process and plans to design spaces that promote safety - for example, by including lighting in the public realm that would ensure the appropriate visibility at all times.

Engagement spotlight

Leading Toronto accessibility organizations showcase their work at 307 for Open Sidewalk: The Accessible City. Credit: Jenna Wakani In developing ideas for the future city, Sidewalk Labs has been interested in exploring a system of prefabricated modular pavers that would enable curbless streets and be easy to maintain and repair. Modular pavers also allow for the embedding of new technologies, such as heating elements to melt snow and ice, LED lighting to communicate new street uses, and permeability to improve stormwater management.

Over the past year, Sidewalk Labs has been prototyping and testing these pavers, and sharing its progress with a variety of groups. At the design jam, "People on Wheels," accessibility advocates were enthusiastic about the pavers, as road maintenance, ice, and snow present some of the biggest challenges for accessibility. But they pointed out an important flaw: the pavers were the same width as wheelchairs, meaning that when crossed at the wrong angle, wheels could catch in the gaps.

It was a crucial insight that took the planning team back to the drawing board. As a result, the team is testing a design of pavers that are now 20 percent wider and — thanks to those co-design participants — would create a more accessible public realm for all. An expanded public realm, activated by communitydriven programs and responsive maintenance, would serve as the foundation of a great neighbourhood.

Part 3 Buildings and Housing

The following summary describes feedback related to **buildings and housing**, and how Sidewalk Labs has responded in its proposed plans.

As part of its public engagement process, members of Sidewalk Labs' planning and innovation teams talked to thousands of Torontonians — including members of the public, expert advisors, civic organizations, and local leaders — about their thoughts, ideas, and needs across a number of topics.

1 Truly affordable housing for lowerand middle-income Torontonians

What we heard

From the very first Sidewalk Toronto Town Hall, true housing affordability — especially for lower- and middle-income households — was top of mind for participants. Roundtable 4 participants particularly urged Sidewalk Labs to be ambitious with its affordable housing program. They felt units in Quayside should be lived in, rather than being luxury investment pieces.

Torontonians want Quayside to include diverse populations, with the buildings and neighbourhood representing a mix of incomes, ethnicities, and backgrounds. As one Reference Panel participant put it: "Issues of housing costs, community cohesion, making space for new arrivals — these are all really important in today's world. Toronto has a reputation for inclusiveness. I hope it stays that way." Participants emphasized the importance of providing a mix of housing options in Quayside, including significant numbers of rental units.

Participants were open to new models for the financing and operating of housing that could stand the test of time and encourage innovation. But Roundtable participants and the Residents Reference Panel wanted more clarity on building ownership and governance and the maintenance of buildings and appliances. The Housing Advisory Working Group generally supported the proposed affordable housing program, the shared ownership model, and the housing trust concept; it

also encouraged the exploration of a digital affordable housing application and suggested that Sidewalk Labs find ways to empower and partner with nonprofit housing organizations, without burdening them. Members of the Sidewalk Toronto Residence Reference Panel discussing content for their interim report, published in September 2018. Credit: David Pike

How we responded

Raising the bar.

Sidewalk Labs proposes that 40 percent of housing be below market, including new rental units specifically for middle-income residents. Sidewalk Labs proposes that 20 percent of all housing be affordable, consistent with the City of Toronto's definition of "affordable" housing as anything 100 percent of AMR and below (see Volume 2, Page 269).

Incorporating deep affordability.

Sidewalk Labs proposes that at least a quarter of affordable units go towards deep affordability for lower-income households at or below 60 percent AMR (see Volume 2, Page 269).

Collaborating with non-profits.

Sidewalk Labs plans to work with experienced non-profits to deliver the deep affordability component of its housing programs, inviting these organizations to participate in an exclusive proposal process and bringing them into the design process to help ensure that deeply affordable units meet the needs of inhabitants (see Volume 2, Page 273).

Supporting middle-income households.

Sidewalk Labs proposes that 20 percent of housing go towards middle-income households (100-150 percent AMR), creating new options for households currently left behind by the Toronto market but who do not qualify for affordable housing (see Volume 2, Page 270).

Helping families build equity.

Sidewalk Labs proposes a shared equity program that would enable middle-income households to own part of a unit (facilitated by a non-profit housing organization), reducing down payment costs and providing a more affordable path to home ownership. Five percent of all units would be earmarked for this program (see Volume 2, Page 274).

Providing rentals.

Sidewalk Labs proposes making half of all housing in Quayside purpose-built rental housing, improving long-term affordability for the city (see Volume 2, Page 269).

Enhancing applications.

Sidewalk Labs proposes to work with the City of Toronto to develop a new digital affordable housing application that could provide real-time transparency into the application process (see Volume 2, Page 277).

Expanding funding sources.

Sidewalk Labs proposes new financial and design tools that would help the private sector support government in delivering an ambitious affordability program, including value unlocked through factory-based construction techniques, a condo resale fee, and efficient unit design. Additionally, it proposes a new entity called the Waterfront Housing Trust to assemble public and private funding sources, "lock-boxing" them for below-market needs. (Sidewalk Labs would not play a part in the trust's governance.) (See Volume 2, Page 280.)

Public Engagement

2 Explore innovative building designs

What we heard

Roundtable participants were enthused about mixed-use buildings and open to innovative construction and design. As one visitor to Sidewalk Labs' Toronto headquarters, 307, said: "Every time I go to a meeting, it's been the same design for buildings in the last 30 years. It seems you have the capacity and the interest to push for new innovation and that's exciting."

Torontonians want the neighbourhood to feel human scale (no super high-rises) and be accessible for those with limited mobility. They were also supportive of healthy, natural building materials; they generally liked the biophilic, low-carbon nature of timber, although they expressed concern about the safety, durability, and toxicity of the material.

Participants in the tall timber industry events similarly questioned the longterm maintenance of the material and the extent to which the industry will buy-in and be able to respond to this new demand. But overall, they were excited about the potential of prefabricated timber construction to increase efficiencies, decrease costs, improve and speed up assembly, and generate safe, high-quality buildings.

The Housing Advisory Working Group was similarly excited about the potential of modular housing, while also questioning its viability and cost. They recommended that Sidewalk Labs work closely with the city on zoning regulations to make the mixed-use vision a reality.

Sidewalk Labs plans to include a loft-style approach to buildings, with floor plans and spaces that can be easily adapted for occupancy with many different types of uses, reducing the time and cost of renovating a space (see Volume 2, Page 246).

Sidewalk Labs plans to create a pre-designed library of parts for construction that would reduce time spent on designing and sourcing materials, improving cost and time predictability while still enabling design excellence (see Volume 2, Page 220).

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How we responded

Enabling mixed-use.

Sidewalk Labs proposes to use and require a real-time building code system that could enable a mix of residential and non-residential uses without sacrificing safety or quality of life (see Volume 2, Page 251).

Designing for adaptability.

Creating modularity.

Building green.

Sidewalk Labs commits to using formaldehyde-free glues for its mass timber elements, and to pursuing glues and finishes that are Cradle-to-Cradle certified (see Volume 2, Page 212).

Ensuring safety.

To ensure the safety of all structures in Quayside, Sidewalk Labs plans to work with Equilibrium, a Vancouver-based structural engineering firm experienced in timber construction; Aspect Structural Engineers, a firm based in Vancouver; Michael Green Architects; CHM Fire Consultants, based in Ottawa; Vortex Fire Consulting, a global fire-code consulting firm with offices in Toronto; Gensler Architects, with an office in Toronto; Golder Associates LTD, based in Toronto; and Integral Group, a building system engineering firm with an office in Toronto.

Scaling for people.

While zoning for the Quayside site permits taller buildings, Sidewalk Labs plans to limit its buildings to around 30 storeys to create a more human-scale neighbourhood (see Volume 2, Page 231).

Incorporating accessibility.

Following its accessibility principles, Sidewalk Labs plans to design buildings that make threshold moments accessible (such as using automatic doors) and, when possible, make walkways wide enough for people to talk to each other while signing (see Volume 2, Page 106).

Engaging partners.

Sidewalk Labs created a forum for a wide array of players from the mass timber industry - including contractors, designers, manufacturers, and union leaders - to discuss the technical challenges of building with the material, develop potential solutions, identify opportunities for collaboration, and support the growth of this local industry (see Volume 2, Page 217).

Attendees of the "Open Sidewalk: Nature and the City" event explore a mass timber exhibit at 307. Credit: Jenna Wakani

3 Create units that can adapt over time and encourage neighbourliness

What we heard

Participants were enthusiastic about flexible unit designs that could adapt according to different life stages; they also expressed interest in larger units (two bedrooms or more) that could accommodate growing families and generations living together. The Family Lifestyles Research also illuminated some of the challenges facing families, who often desire (but cannot find) apartments with ample kitchens or living rooms, multiple bedrooms, and storage solutions.

Many Torontonians were generally open to sacrificing some square footage within their individual units for shared amenities, spaces (like communal kitchens, laundry rooms), and goods (like strollers or tools),

especially as this sharing could generate more community bonding. Participants in the Seniors Workshop liked the idea of having multiple generations, and an active community, in one's building. As one senior requested: "Create a porch condition outside my front door."

Of course, even with a strong community, in-unit storage and enough space for personal expression is crucial, as visitors to the Efficient Unit Prototype at 307 noted. Prototype visitors also recommended making units more accessible by integrating adjustable counter and appliance heights. Others recommended ensuring that finishes are customizable and that partitions are genuinely easy to remove, so tenants can have more agency over their homes.

How we responded

Facilitating expansion.

Sidewalk Labs plans to implement a flexible interior wall system, where sections of walls can be easily clipped into place or removed, thus making renovation (expansion or contraction) easier and more affordable (see Volume 2, Page 246).

Welcoming families.

Sidewalk Labs plans for 40 percent of total units to have two bedrooms or more, creating new options for families (see Volume 2, Page 253).

Designing flexibility.

Sidewalk Labs has worked with nArchitects to explore efficient unit designs globally and with Toronto-based gh3 on a unit prototype to explore how effi-

needs of shifting demographics in Toronto. This research, coupled with feedback on the Efficient Unit Prototype, would inform final unit design. Current designs include multi-purpose tables that could be raised or lowered when not in use, lofted beds located up short staircases that could double as storage drawers, and countertops that could serve as cutting boards (see Volume 2, Page 255).

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Optimizing storage.

Sidewalk Labs proposes efficient units be designed to have less in-unit storage space than a market comparison apartment, compensated with free in-building storage and additional off-site storage with low-cost, on-demand delivery (see Volume 2, Page 255).

Exploring co-living.

Sidewalk Labs plans to provide a co-living option (efficient units with shared building amenities and community programming) for residents who prefer more communal living (see Volume 2, Page 260).

Strengthening community.

Sidewalk Labs plans to create abundant public space and allocate 90,000 square feet to social infrastructure, providing the spaces and programming tools to inspire a stronger community (see the "Quayside Plan" chapter of Volume 1).

Incorporating accessibility. In keeping with its accessibility

principles, Sidewalk Labs commits that 20 percent of units would have accessible fixtures and pledges to meet the evolving and growing housing needs of seniors.

Engagement spotlight

Community members share feedback during the "Re-Imagining Homes for Seniors" workshop. **Credit: Sidewalk Labs**

In September 2018, Sidewalk Labs convened individuals from 17 non-profits including leaders in social service provision and housing for women, Indigenous communities, and homeless populations - for a roundtable. Sidewalk Labs Associate Director of Development Annie Koo was eager to learn from these leaders about how best to work with them on a deeply affordable housing program.

Initially, Annie had been considering a kind of non-profit bootcamp or fellowship program – a kind of incubator to which non-profits could apply and then receive funding or support. But one participant explained that the time commitment of such a program – while well-intentioned – would be particularly onerous for resource-strapped non-profits.

"So we course-corrected," says Annie. "We heard loud and clear. We want to partner with you, but don't add to our challenges. Meet us where we are." In response, Annie and her team simplified the concept to be a proposal process - exclusive to nonprofits - for organizations to design and deliver the deep affordability component of housing at Quayside.

Part 4 Sustainability

The following summary describes feedback related to **sustainability**, and how Sidewalk Labs has responded in its proposed plans.

As part of its public engagement process, members of Sidewalk Labs' planning and innovation teams talked to thousands of Torontonians including members of the public, expert advisors, civic organizations, and local leaders — about their thoughts, ideas, and needs across a number of topics.

1 Be ambitious with sustainability, in Quayside and beyond

What we heard

At each Sidewalk Toronto public engagement event, participants were passionate about the urgent need to address climate change and invest in cutting-edge, sustainable technologies and infrastructures. As one Residents Reference Panel participant explained: "If we continue at the pace we are going, it will be devastation for everyone. So you have to think about things like renewable energy, like the use of plastic, like prefabricated materials for building. We have to think about a lot of things for the future that we did not think about before."

Sidewalk Labs was especially encouraged with positive responses to its proposed sustainability priorities — particularly its goal to reduce per capita carbon emissions in Quayside by 85 percent and to achieve climate positivity within the IDEA District. Other areas of strong support included proposals for building performance, thermal energy infrastructure, and stormwater.

Participants of the sustainability breakout session at Public Roundtable 4 further validated Sidewalk Labs' ambition for the project to be carbon positive via thermal grids, clean electricity, and other sustainable technologies. Residents emphasized the importance of thinking at scale and ensuring that solutions were not just for one neighbourhood but could be replicated across neighbourhoods to have significant impact. They encouraged Sidewalk Labs to work with the province and existing Toronto-based companies to make this goal a reality.

Sidewalk Labs Director of Sustainability Charlotte Matthews addresses the Sidewalk Toronto Residents Reference Panel about the project's emerging sustainability plans. Credit: David Pike

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How we responded

Thinking holistically.

Sidewalk Labs proposes a comprehensive package of innovations that together cut carbon emissions in Quayside to 0.9 tonnes of GHG a year per capita from the city's average of 6.3 tonnes (see Volume 2, Page 301).

Exploring scale.

The Sidewalk Toronto project can dip below the carbon-neutral line and into climate-positive territory by scaling its sustainability initiatives; Sidewalk Labs proposes implementation across a larger development area in the IDEA District to achieve this goal (see Volume 2, Page 302).

Investing in infrastructure.

Sidewalk Labs proposes to create a thermal grid that would draw energy from a variety of natural and waste heat sources, including geothermal and building wastewater, to provide affordable, fossil fuel–free heating and cooling (see Volume 2, Page 334).

Advancing electricity.

Sidewalk Labs proposes to create an advanced power grid that could provide an alternative source of clean electricity when the main Toronto Hydro power grid is at peak capacity (see Volume 2, Page 324).

Working with others.

Sidewalk Labs has been in discussions with governmental agencies (including the City of Toronto and the Ontario Ministry of Energy) and private companies throughout the creation and development of its sustainability plans, and would continue to collaborate with the private and public sectors.

Reducing waste.

Sidewalk Labs proposes to divert at least 80 percent of recyclable or compostable material from landfills (see Volume 2, Page 344).

Optimizing energy.

Sidewalk Labs proposes to deploy digital energy management systems that could help buildings operate in the most efficient way possible (see Volume 2, Page 316).

2 Empower people to live more sustainably

What we heard

While recognizing that sustainable systems often require automation, participants encouraged Sidewalk Labs, whenever possible, to empower individuals to act more sustainably in their daily lives.

Participants were particularly excited by the role technology could play in raising awareness and gamifying positive environmental initiatives, such as dynamic signage or other kinds of "nudges" that could customize recycling feedback. Participants and experts also emphasized the need for jargon-free education, fee structures, and design.

As one Residents Reference Panel resident explained: "My condo building is only 10 years old, but it hasn't been designed to encourage energy conservation or recycling. ... It's an additional hassle, and not a lot of people do it. But if you can design the building to make it easy to do, and even provide a tangible benefit like a rebate on condo fees, they'll do it. That's how people change."

Residents also emphasized the need for sustainable actions to be accessible to elderly residents and to be affordable, so as not to "hinder lower-income residents from practising sustainable behaviours." The Sidewalk Toronto Fellows went even further, encouraging the adoption of a system that would allow residents to visualize and manage local neighbourhood energy production and consumption.

How we responded

Setting budgets.

Sidewalk Labs' proposed Home Scheduler would work within a household's monthly power budget to operate systems, devices, or appliances when costs are low and clean energy is available. The tool would also generate a data feed for homeowners to understand the actions being taken and to actively manage them, if they wish (see Volume 2, Page 330).

Encouraging accountability.

Sidewalk Labs proposes to implement a pay-as-you-throw model of waste that encourages households to reduce overall waste, as well as a modest recycling charge to help discourage "wish cycling" (see Volume 2, Page 350).

Informing decisions.

Sidewalk Labs proposes to run a recycling education pilot in multi-residential buildings in Toronto that are interested in helping residents improve sorting and recycling practices by using real-time feedback. This pilot partnership could help inform dynamic recycling signage in Quayside (see Volume 2, Page 345).

A Toronto resident considers the content of the Residents Reference Panel interim report, published in September 2018. Credit: David Pike

Maintaining affordability.

Sidewalk Labs supports a more distributed, resilient, and transparent economy underpinned by 100 percent renewable energy. The proposed advanced power and thermal grids would be designed to serve the community transparently and provide tools to make the right decisions around cost and carbon (see Volume 2, Page 324).

3 Be a steward of the environment

What we heard

The importance of environmental stewardship was a common theme at many public engagement events. Sidewalk Labs was urged by participants in the Indigenous Design Consultation to not only support the land and water ecology of the eastern waterfront but also to revitalize the plant life that originally thrived in the area. Members of the Sustainability Advisory Working Group also encouraged Sidewalk Labs to ensure sustainable forest management practices.

The Residents Reference Panel and participants at Public Roundtable 4 emphasized the need for climate change resiliency, particularly when it comes to creating functional, beautiful, and future-proofed stormwater infrastructure. The residents wanted to see an increase in focus on "softscaping" over "hardscaping." As one visitor to 307, Sidewalk Labs' Toronto headquarters, put it: "I see the waterfront as a unique and beautiful resource that should be primarily designated as parkland for the use of all Torontonians. I believe that as concerns about climate change rise, the importance of open green spaces, which can serve to mitigate extreme weather events like floods, will become ever more important."

How we responded

Integrating greenery.

Sidewalk Labs proposes a public realm in which parks act as green stormwater infrastructure, retaining and filtering stormwater through natural means (see Volume 2, Page 360).

Managing stormwater.

Sidewalk Labs proposes that green infrastructure would work in tandem with a digital management system that could, when needed, empty stormwater tanks or cisterns in advance of storms (see Volume 2, Page 362).

Planting native.

Sidewalk Labs plans for its plantings to be native wherever possible, with plant life chosen for its capacity for salt mitigation, resilience, evapotranspiration rates, and biodiversity (see Volume 2, Page 360).

Ensuring resiliency.

Sidewalk Labs plans to meet and surpass the City of Toronto's resiliency framework for flood management, as well as for and building services when power is lost.

Engagement spotlight

In early 2018, the sustainability team at Sidewalk Labs was brainstorming ways to help Toronto divert as much waste from landfills as possible. One big challenge the team identified is that even when consumers want to recycle, they often struggle to recycle correctly because they do not know what goes where. The team had an idea: What if people could just throw everything in one place, and robots in a waste or recycling plant could take care of the rest?

When the team presented this idea to the Sustainability Advisory Working Group, the group cautioned against the tactic for two reasons. The first had to do with contamination at the source: no robot can stop an open can of soup from contaminating and destroying what was once perfectly recyclable newspaper. The second reason was that the City of

Toronto's entire system is designed to encourage consumers to separate materials; if one neighbourhood were different, it could confuse consumers and jeopardize the real progress being made, invalidating much of the time, energy, and resources the city and other non-profit organizations had expended in educating the public.

The Sidewalk Labs sustainability team went back to the drawing board and decided to ask a different question: How could technology help people to recycle correctly? Taking inspiration from the city's Waste Wizard app, the team developed a real-time feedback concept for multi-residential buildings that could let communities know how effectively they are sorting, empowering them to recycle better.

> Visitors discuss conceptual visualizations of Quayside in the main hall of 307. Credit: David Pike

Part 5 Digital Innovation

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The following summary describes feedback related to **digital innovations**, and how Sidewalk Labs has responded in its proposed plans.

> As part of its public engagement process, members of Sidewalk Labs' planning and innovation teams talked to thousands of Torontonians including members of the public, expert advisors, civic organizations, and local leaders — about their thoughts, ideas, and needs across a number of topics.

1 Protect people's privacy and use data to serve the public good

What we heard

Throughout the public engagement process, Torontonians were loud and clear: data privacy matters. Residents were wary about third-party access to data collection and the commercial sale of data. The Data Governance Advisory Working Group recommended that "Privacy by Design" principles be incorporated into the project. The Sidewalk Toronto Fellows advised Sidewalk Labs to ensure that, as a first principle, data be collected and used with the public good in mind.

Public Roundtable 4 participants who took part in a data-focused discussion were particularly helpful in defining the use cases they were comfortable with. For example, as long as data was de-identified, residents felt comfortable with data being collected and used for transit and mobility purposes. As one Reference Panel resident said: "Cities need aggregate data. ... They need to know which modes of transportation people take when it's raining. They need to know how many people went through an intersection, not who went through it. And if they can legitimately anonymize the data they collect then I would accept that."

The Residents Reference Panel had many datarelated concerns, including the need to ensure that algorithms would not perpetuate existing biases. They also wanted to ensure the cyber-security of this tech-enabled neighbourhood would be state of the art.

How we responded

Designing for privacy.

For all its projects, Sidewalk Labs plans to incorporate Privacy by Design, an approach that requires thinking about potential privacy impacts at the very start of a project lifecycle and proactively embedding privacy measures into the design of a project (see Volume 2, Page 424).

Creating a steward.

To protect personal privacy and the public good, Sidewalk Labs proposes the creation of an independent entity called the Urban Data Trust to oversee digital matters and approve (or deny) proposals to collect or use urban data in the IDEA District (see Volume 2, Page 420).

Establishing guidelines.

Sidewalk Labs proposes that the Urban Data Trust establish a set of RDU Guidelines that apply to all parties engaged in the collection and use of urban data in the IDEA District. These guidelines would build on the strong existing framework of Canadian privacy laws (see Volume 2, Page 424).

Increasing transparency.

Sidewalk Labs proposes that all entities complete RDU Assessments with any proposal to collect or use urban data to ensure that digital services abide by the RDU Guidelines. RDU Assessments would be filed and publicly registered with the Urban Data Trust before a project or service could launch (see Volume 2, Page 429).

Benefiting people.

Sidewalk Labs commits to applying Canadian values of diversity, inclusion, and privacy as a fundamental human right to its digital projects, providing a clear purpose and benefit to any proposed collection and use of urban data. No data for data's sake (see Volume 2, Page 424).

De-identifying by default.

Sidewalk Labs proposes that one of the RDU Guidelines state that personal information must be de-identified by default at first use, so it cannot be traced back to any individual (see Volume 2, Page 424).

Enhancing security.

Sidewalk Labs proposes to deploy a new security approach called "software-defined networks" capable of detecting security compromises and isolating impacted devices from the network (see Volume 2, Page 392). Sidewalk Labs also proposes to base all security and reliability standards on best practices and to emphasize resiliency across its systems (see Volume 2, Page 408).

Being proactive.

To establish a proactive approach to security, each digital system Sidewalk Labs proposes would use a preparedness assessment to provide clear answers to key questions on threat modelling and response readiness (see Volume 2, Page 412).

Protecting from ads.

Sidewalk Labs commits that it would not sell personal information to third parties or use it for advertising purposes. To encourage such behaviour from other companies or entities operating in the IDEA District, Sidewalk Labs proposes that the Urban Data Trust place greater levels of scrutiny on projects wishing to use personal information for ad purposes, including the need to justify this decision and to obtain explicit consent from users (see Volume 2, Page 425).

2 Earn public support through transparent policy, clear language, and data education

What we heard

Participants were concerned that Torontonians needed more education to advance their data literacy and that companies and organizations needed to be more transparent in the ways they collect data. They wanted to know more about how data collection would happen in a place like Quayside.

The Sidewalk Toronto Fellows, Reference Panel residents, and Roundtable participants urged Sidewalk Labs to proactively disclose when (and what kind of) data is being collected and used in clear language. As one roundtable participant noted: "Data privacy and responsible data use needs genuine commitment – that includes being specific and transparent about how it will be used."

Participants also wanted to ensure ways to consent or opt-out of data collection and use, especially in public spaces, where meaningful consent is a challenge. The Data Governance Advisory Working Group suggested that signage alerting the public to what data is being collected and how it is being used could be helpful.

How we responded

Being transparent.

Sidewalk Labs proposes that all projects aiming to collect or use urban data must inform individuals of how and why their information is being collected and used, and do so in a way that is proactive, clear, and easy to understand - not written in legalese (see Volume 2, Page 424).

Providing clarity.

For the collection of urban data in public spaces, where meaningful consent cannot reasonably or reliably be achieved, Sidewalk Labs proposes that entities provide clarity of usage through efforts such as physical signs notifying people of a data device or informational websites describing a service or program in greater detail (see Volume 2, Page 424).

Improving design.

Sidewalk Labs released via Github a draft of new design patterns co-created with more than 100 participants from several cities worldwide. The goal of the new patterns was to build on the consent and notice requirements that exist under current privacy laws in a way that increases digital transparency and helps people quickly get a sense of the privacy implications associated with responsible urban data collection.

Registering devices.

Sidewalk Labs proposes that the Urban Data Trust not only approve the placement of data-collection devices but also publish and maintain an online registry and map of device locations, with easily accessible information on what kind of data is being collected, why, how, where, and by whom (see Volume 2, Page 433).

Supporting literacy.

In Quayside, Sidewalk Labs proposes to establish a Tech Bar that would provide community members with small-group or one-on-one assistance with digital tools, with the goal of improving digital literacy among the local community.

> Attendees of the "Digital Transparency in the Public Realm" workshop are hard at work. Credit: Sidewalk Labs

3 Tech should be an enabler and an accessible amenity

What we heard

Residents were excited about the opportunity for Quayside to be a world leader in urban technology and to encourage and enable future tech innovations.

Torontonians hoped the Sidewalk Toronto project would improve existing public services, potentially by leveraging technology. As one Reference Panel resident explained: "The challenge is to find ways for technology to help foster a sense of community. That seems utopian but it's possible... I think Toronto can be a global model for a new kind of technology that helps keep us human." Participants were also open to new tools or options that would give community members more of a voice in decisions on programming and services.

Other residents were excited by new potential services, such as enhanced Wi-Fi connectivity. Still others wanted to see technology that would make Quayside more accessible, such as customizable tech that could be experienced in multiple ways.

The Data Governance Advisory Working Group encouraged Sidewalk Labs to pursue open data whenever possible, and the Sidewalk Toronto Fellows recommended that Sidewalk Labs develop an open data portal to encourage innovation for the public good.

How we responded

Connecting people.

Sidewalk Labs proposes to create a super-fast, ubiquitous connectivity network that would provide residents, workers, and businesses access to their own secure, personal high-speed network – no matter where they are – at an affordable cost (see Volume 2, Page 384). For people without smartphones or computers, devices and Wi-Fi kiosks would be available and free to use in communal spaces.

Standardizing data.

Sidewalk Labs plans to publish data in standard formats and via well-defined, public APIs. Where standards do not exist, Sidewalk Labs plans to work with companies, researchers, and standards bodies to create those standards (see Volume 2, Page 405).

Opening data.

To encourage innovation, Sidewalk Labs plans to make publicly accessible all urban data that could reasonably be considered a public asset. Sidewalk Labs plans to work with organizations and companies that are already building open data portals to provide access to this data, and also proposes that the Urban Data Trust facilitate integration with existing open data portals and tools (see Volume 2, Page 406).

Opening code.

Sidewalk Labs plans to make software source code public under free software licences and to encourage other entities creating services in the IDEA District to do the same (see Volume 2, Page 406).

Avoiding lock-in.

Sidewalk Labs proposes that any digital infrastructure it deploys be open to competition and alternatives. As one example, it proposes to deploy a new type of standardized mount that would make it easier for cities to swap in new digital tools and avoid relying on proprietary services (see Volume 2, Page 380).

Prioritizing accessibility.

In keeping with its accessibility principles, Sidewalk Labs commits to offering technology in multiple modes and maintaining best accessibility practices. (For further reading on accessibility, see Volume 1.)

Supporting inclusive usability testing.

Sidewalk Labs is currently funding GRIT Toronto, a program founded by Code for Canada that incorporates community feedback into the creation of new digital services and products, helping to ensure these tools reflect the needs of the populations they are intended to support (see Volume 2, Page 443).

Enabling civic engagement.

Sidewalk Labs is developing a prototype with Digital Public Square called Collab that would allow community members to propose ideas for events in their neighbourhood. The tool is designed to walk users through the tradeoffs associated with various proposals, including how their individual choice would impact the community (see Volume 2, Page 446).

Sidewalk Labs' Director of Design Michelle Ha Tucker describes the co-design process during a "Digital Transparency in the Public Realm" workshop at 307. Credit: Sidewalk Labs

4 Establish an ethical data governance model for the long-term

What we heard

The Sidewalk Toronto Fellows recommended that Sidewalk Labs establish an independent entity to ensure data stewardship, and the Residents Reference Panel suggested that, when possible, data be stored, regulated, and analyzed in Canada.

Residents wanted to know more about the Civic Data Trust initially proposed by Sidewalk Labs in 2018, including how the trust would integrate into existing legal and regulatory frameworks and ensure compliance for all. (The entity has now become the Urban Data Trust; see Page 423 for details on this shift.)

Residents also wanted to better understand the data-governance model overall - including how long-term data management and storage would work – and how the government could provide appropriate oversight over the project.

How we responded

Implementing an entity.

As noted earlier, Sidewalk Labs proposes the creation of an independent entity called the Urban Data Trust with the capacity to approve all proposals for use and collection of urban data and with a mandate to balance the public interest and the need for innovation (see Volume 2, Page 420).

Building on laws.

Sidewalk Labs proposes that the Urban Data Trust coordinate with privacy regulators and that the responsible data use process build on (not replace) existing privacy laws (see Volume 2, Page 419).

Ensuring accountability.

Sidewalk Labs proposes that the Urban Data Trust uphold data agreements through contracts that are legally enforceable and actionable (see Volume 2, Page 421).

Thinking long-term.

Looking long-term, Sidewalk Labs puts forth that the Urban Data Trust could be ultimately transformed into a public-sector agency or a quasi-public agency, either of which could give it more long-term viability or broader coverage (see Volume 2, Page 422).

Localizing data.

Sidewalk Labs commits to using its best efforts at data localization, as long as there are Canadian-based providers who offer appropriate levels of security, redundancy, and reliability. To the extent that it is deemed infeasible to store data solely in Canada, Sidewalk Labs would be transparent about such a decision (see Volume 2, Page 412).

Engagement spotlight

Attendees talk during the first "Digital Transparency in the Public Realm" workshop in Toronto. **Credit: Sidewalk Labs**

Alyssa Harvey Dawson heads privacy and data governance for Sidewalk Labs. When she first started at the company, she knew that the challenges facing a company whose mission is radically improving urban life through the use of technology would be unique. This realization came into greater focus in conversations with the Data Governance Advisory Working Group.

The working group pushed Alyssa and her team to consider how data privacy, use, and management take on new meanings when the source of that data is the public realm. "You can't just focus on personal information, which is where most privacy laws begin and end," says Alyssa. "The scope of data that could be collected from a private actor in public spaces, where you don't have all the usual protections, makes the concerns much more heightened. You have to think more broadly about the impact on people."

In response, Alyssa and her team coined a term, "urban data," that refers to aggregate, non-personal, de-identified, or personal data gathered in the physical spaces of a city, including its public realm, its publicly accessible spaces, and even some private spaces. They then proposed the creation of an independent entity that would represent the public interest and serve as the steward for the collection and use of all urban data across the IDEA District.

With these proposed initiatives, Alyssa and her team hope to advance the conversation about responsible data use in cities in new directions and inspire local solutions to this critical - and growing - challenge.

Endnotes

- 1. Sidewalk Toronto, Feedback Report: Sidewalk Toronto Community Town Hall Held on November 1, 2017. December 2017. See also Sidewalk Toronto Community Town Hall (11/1). Sidewalk Toronto YouTube Channel, November 2, 2017. A total of 5,053 views as of May 1, 2019.
- 2. Sidewalk Toronto, Hello! How to get involved and help us imagine-Toronto's newest neighbourhood. February 2, 2018.
- **3.** Details on each of the programs, meetings, and milestones held as part of Sidewalk Toronto's participation plan can be found on the Documents page of the project website: sidewalktoronto.ca.
- 4. Sidewalk Toronto Residents Reference Panel, Final Report and Recommendations. May 2019.
- 5. For more details about 307's exhibits, programs and partners, visit the Sidewalk Toronto website at sidewalktoronto.ca.

- 6. For more details on these consultations, see SE Futures, Re-imagining Homes for Seniors Workshop Summary. Report prepared for Sidewalk Toronto, December 19, 2018; "Students co-designing their dream neighbourhoods" (June 25, 2018) and "School Co-Design Activity Results" (July 30, 2018), Co-Designing Inclusive Cities blog, cities.inclusivedesign. ca: and Sidewalk Labs. Accessibility Principles Draft #1. December 2018.
- 7. Idea Couture, Living Well on the Waterfront: Imagining the Future of Community Health. Report for Sidewalk Labs, January 2019.

Sidewalk Labs is honoured to present this MIDP, and to work towards advancing the plan for the benefit of Toronto.