WATERFRONToronto

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Public Meeting on Sidewalk Labs' Proposal for Quayside

Volume 2: Urban Innovations

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Volume 2: Room and Discussion Topic Guide

Volume 1: The Plans	Volume 2: Urban Innovations	Volume 3: The Partnership	Digital Innovations, Digital Governance & IP
The Quayside and River District Plans	Mobility	IDEA District	Digital Innovations
Social Infrastructure	Sustainability	Roles for SWL	Digital Governance and Privacy
Economic Development	Buildings	Transaction Economics	Intellectual Property
	Housing	Government Obligations	
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Volume 2: Urban Innovations

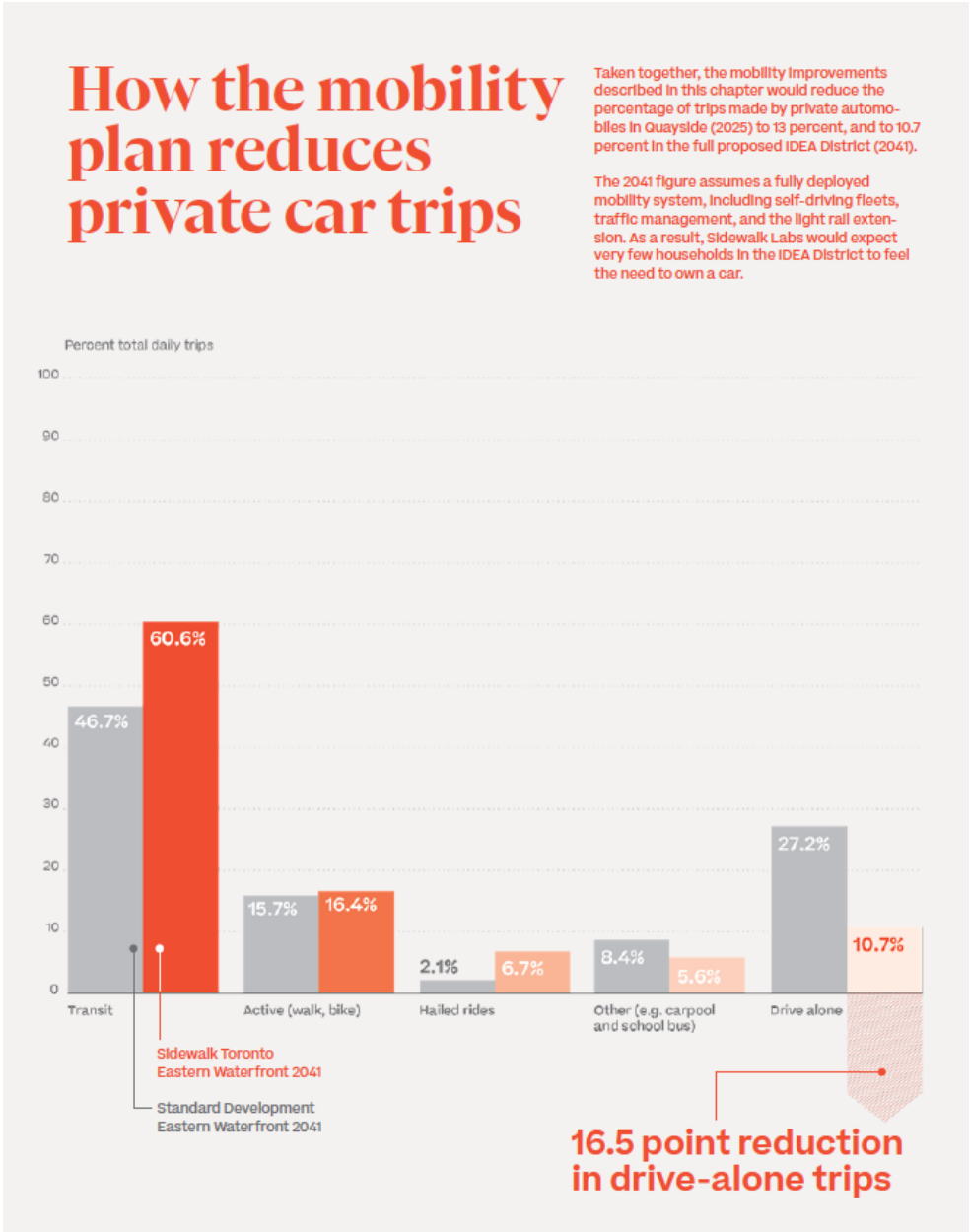
- Mobility
- Public Realm
- Buildings and Housing Affordability
- Sustainability

Mobility:
What Waterfront Toronto Asked For

- → **Convenient** and **efficient** transportation options for Quayside that could enable **low-carbon** and **affordable** mobility solutions
- → Innovative **funding strategies** that could leverage **public and private funding** to secure an implementable model for light rail transit along the eastern waterfront

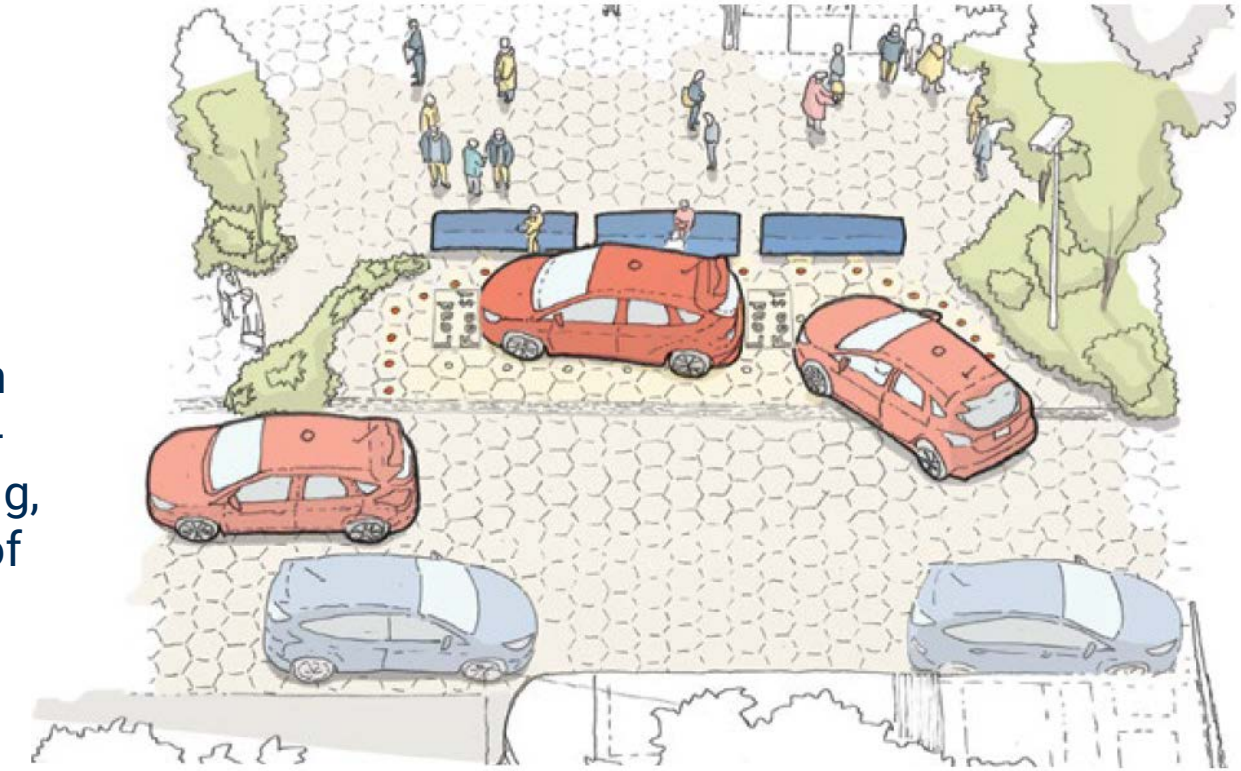
Sidewalk Labs' Proposal

- Reduce the need to own a car by providing safe, connected and affordable **options for every trip**
- "People first" streets that include bicycle paths and **prioritize sustainable modes**.
- Adaptable and curbless streets that include a "Dynamic Curb" to **optimize the use of road space** by expanding and contracting pick-up and drop-off zones to enable pedestrian use **based on demand.**
- **Pricing incentives** and active management of the mobility network with pricing applied in real time to **manage demand**.
- **Integration** of travel modes and optional app-based **mobility as a service** packages



Sidewalk Labs' Proposal

- **Underground tunnels** and delivery robots for freight and garbage
- **Heated pavement** to melt snow and ice
- Infrastructure for **electric vehicles**
- Establish **a new public-sector entity** called the Waterfront Transportation Management Association (WTMA) that would: collect revenues, manage a not-for-profit budget, set fees for parking and curb pricing, and invest in capital improvements and operations of mobility systems.
- Sidewalk Labs says they will not move forward with the development of Quayside without a public sector commitment to fund the City-approved LRT expansion along Queens Quay East. Sidewalk Labs has proposed an **optional method for financing the LRT** through a private consortium



An illustration of dynamic curbs from Sidewalk Labs

Public Realm:
What Waterfront Toronto Asked For

- **New methods** and **strategies** for enhancing the public realm.
- Potential benefits technology could bring to **augment public spaces** and **improve the quality of life**.

A Sidewalk Labs rendering looking south from Parliament and Lake Shore Blvd

Sidewalk Labs' Proposal

- A system of open spaces coupled with digital tools, including a platform **enabling people to reserve public areas.**

- Flexible interior space on the ground floor of buildings, called "**Stoa**". Its leasing and operations would be managed through a digital tool called **Seed Space**.
  - Volume 2, page 151,164

- To map underground infrastructure in 3D to **help with maintenance and repairs**.
  - Volume 2, page 187

- A heated, green, and lighted paving system that could **melt snow**, is **permeable**, and has LED lighting to **provide wayfinding**.
  - Volume 2, page 136

- Adaptable and curb less streets which include a **dynamic curb** that adjusts the pick-up/drop-off zone to enable pedestrian use based on demand.
  - Volume 2, page 131

- Outdoor comfort system to **increase usability of public realm** in shoulder seasons
  - Volume 2, page 167

- Sidewalk Labs proposes establishing a new, independent, not-for-profit organization called the **Open Space Alliance (OSA)** to assume responsibility for operations and maintenance of all public realm.
  - Volume 2, page 178

- The proposal for an OSA sees funding coming from the City of Toronto for **park operations, maintenance fees from ground floor tenants, sponsorship revenues, and concessions from events.** The OSA's proposed roles and responsibilities would replace certain roles of the City of Toronto, including **operations and maintenance**.
  - Volume 3, page 69 & ST.1

Buildings and Housing Affordability: What Waterfront Toronto Asked For

- → Innovative building technologies, systems, materials and design approaches that could set the global standard for low energy design.
- → A neighbourhood that could respond to current and future trends, including adaptive and inclusive places that respond to changing needs, while continuing to advance a sustainable built environment that exhibits design excellence.
- → Exceed the Waterfront Toronto requirement to set aside sufficient land to accommodate 20% of residential units as Affordable Rental Housing, in perpetuity.
- → A viable, replicable, and implementable delivery model and financing strategy for additional mixed-income housing that requires minimal government funding.

Sidewalk Labs' Proposal

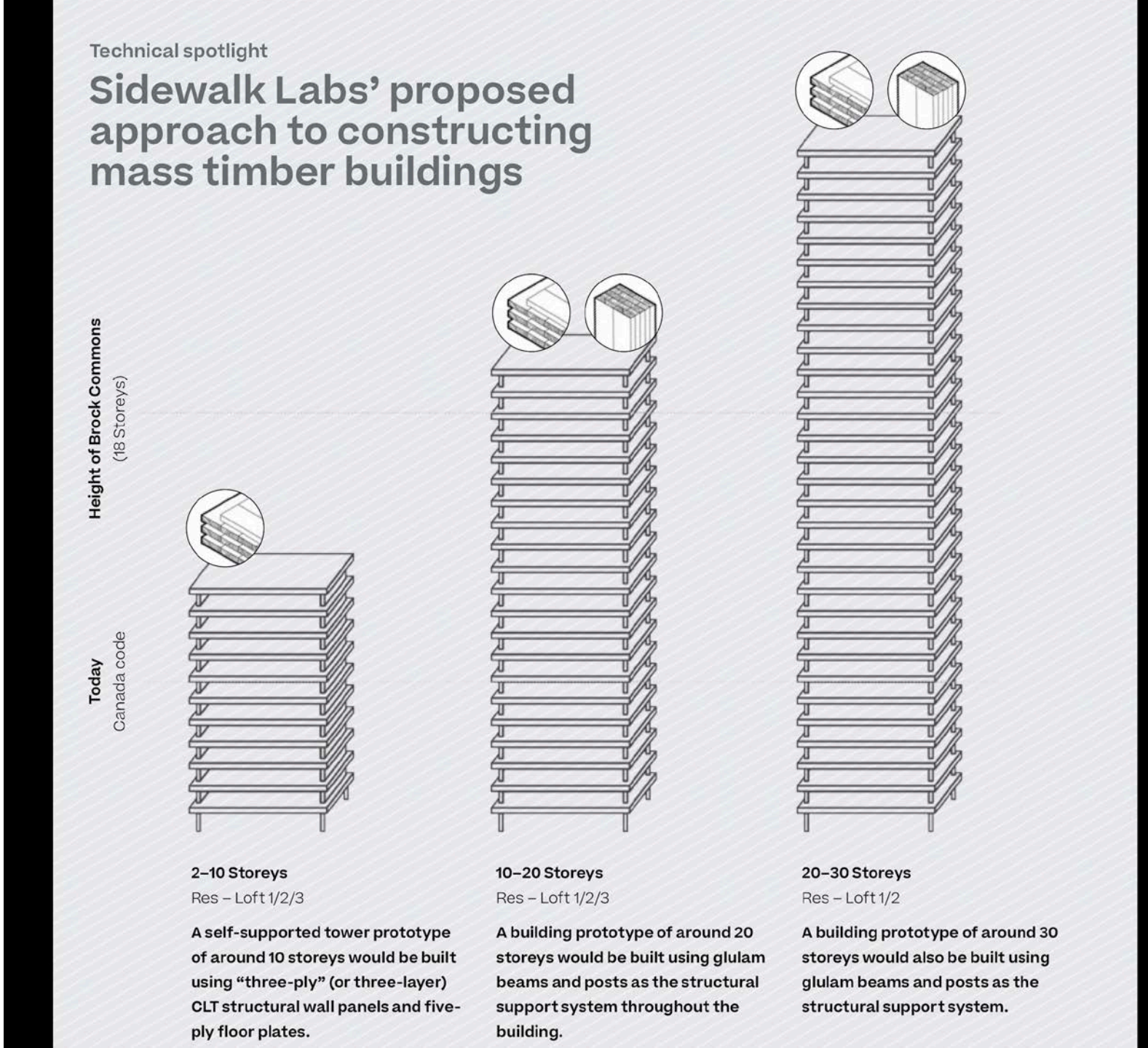


Illustration from Sidewalk Labs

Sidewalk Labs' Proposal

- **A mixed-use neighbourhood constructed with mass timber buildings**, which feature highly adaptable loft spaces with moveable walls to enable flexibility and adaptability over time.

- **Technologies to enable buildings to be highly adaptable and flexible**, including low-voltage (DC) power systems, mist-based sprinkler systems, and real-time building performance monitoring.

- **40% below-market housing program at Quayside with varied occupancy types**, split between Affordable Rental (i.e. at or below 100% Average Market Rent –AMR), mid-range rental housing (100-150% AMR) and a new hybrid ownership/ rental occupancy type called "Shared-Equity Housing," which would allow residents to own a percentage of their unit and pay rent on the balance. The below-market program would be comprised of Efficient and Ultra Efficient unit sizes.

- The housing program at Quayside is proposed to be comprised of:
  - 50% Rental:
    - 15% Market Rate Rental
    - **20% Affordable Rental (A quarter of this will be deeply affordable at or below 60% AMR)**
    - **15% Mid-range Rental (100-150% AMR)**
  - 50% Ownership:
    - 45% Market-rate ownership
    - **5% Shared-equity ownership**

Other elements of Sidewalk Labs' Proposal

- **Investment in a mass timber factory in Ontario**, contingent on sufficient demand.
- **Contribution of CAD$77 million** to support the below-market housing program at Quayside.
- **Establishment of a new public-private financing entity** to administer below-market housing, called the Waterfront Housing Trust (WHT).
- **Three sources of funding to support affordable housing:**
  - **A 1% market condo re-sale fee,** with the funds going to the Waterfront Housing Trust.
  - **Smaller, more efficient housing units,** referred to as Affordability by Design. A smaller unit size would allow for a greater number units within the same building footprint, improving the economics of below-market housing.
  - A mass timber supply chain and digital management system (that Sidewalk Labs asserts would **add value to public land** due to a reduction in construction time and higher project certainty for developers).

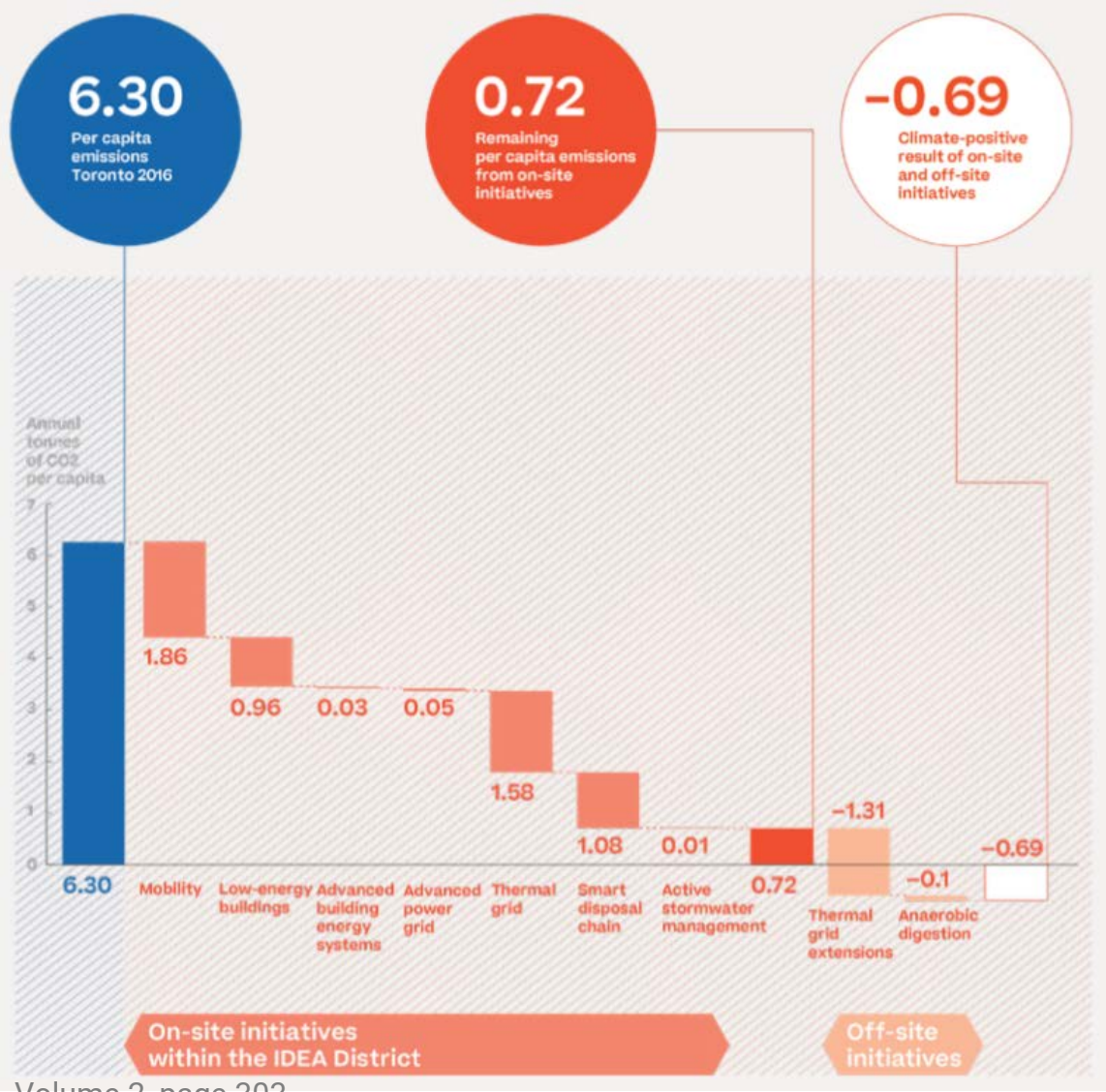
Sustainability:
What Waterfront Toronto Asked For

- A new model for urban development that could encourage market transformation towards climate-positive city building
- Pragmatic solutions to reducing greenhouse gas emissions

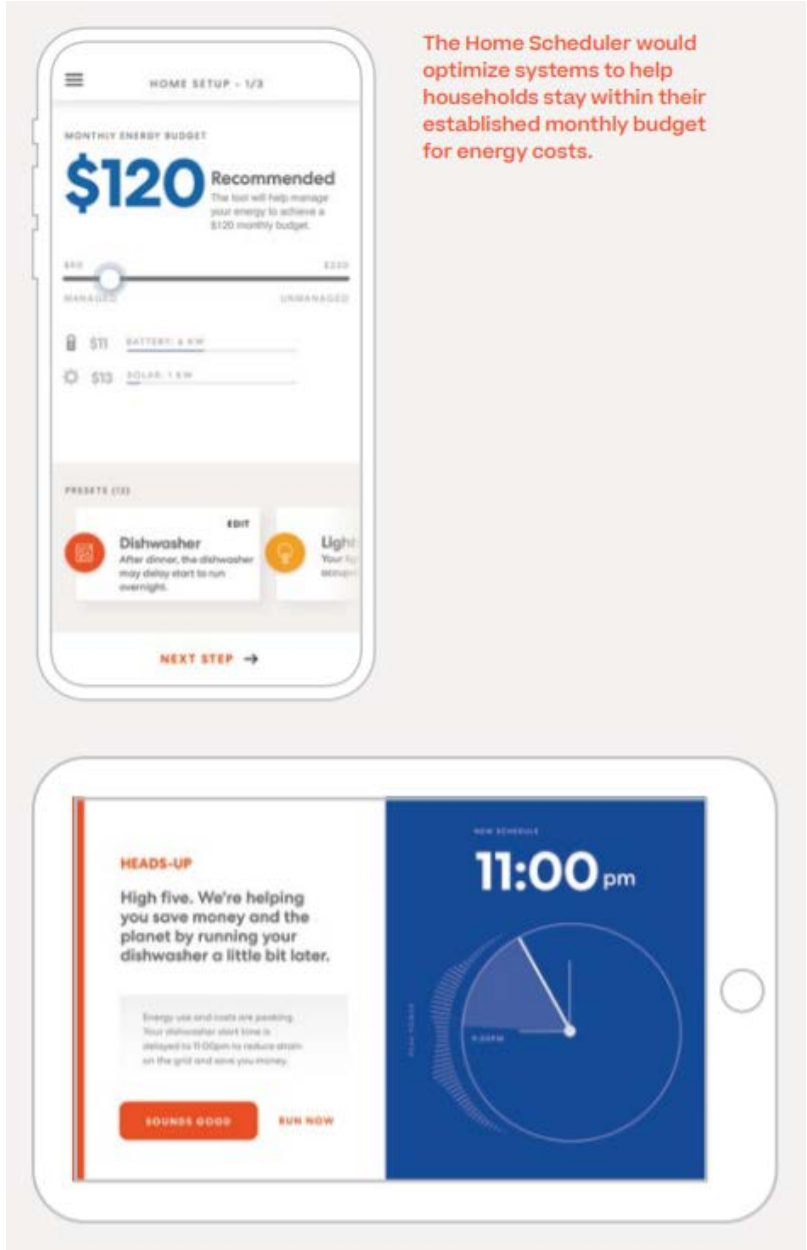
Sidewalk Labs' Proposal

- **The use of highly insulated and airtight buildings supplied with renewable energy.**
- **Active monitoring and management of energy consumption** in buildings, including using automatic schedulers to control blinds, lighting, and other systems.
- **A transportation system that reduces the use and emissions of personal automobiles**
- Advanced systems **to better manage stormwater** before entering municipal sewers.
- **A vacuum waste system to decrease solid waste sent to landfill** (paired with digital tools to encourage waste reduction and better sorting).
- **To capture sewer heat** from Ashbridges Bay Wastewater Treatment Plant to heat buildings without using fossil fuels and export excess waste heat to nearby neighbourhoods

Excerpts from Sidewalk Labs' Proposal



Volume 2, page 303



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Other elements of Sidewalk Labs' Proposal

- **Sidewalk Labs indicates its strategies would reduce per capita GHG emissions by 85%** at Quayside compared to the Toronto average and that these emissions could be reduced a further 4% if extended to the IDEA District.

- **The creation of a new public-sector management entity called the Waterfront Sustainability Association (WSA)** that would hold and enforce service contracts with operators of sustainability-related infrastructure systems, and report on sustainability performance.

- **Sidewalk Labs proposes they lead the preliminary design** of these advanced systems and subsequently undertake competitive procurement to solicit private third-party operators.

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