

street culture
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symbiotic urbanism masterplan : hastings corridor individual design

street culture

a micro-systems approach to activating public realm



the heights neighbourhood, burnaby BC

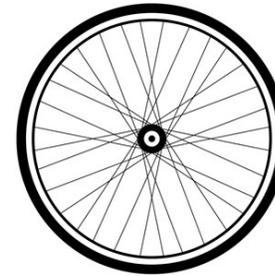
MICRO-INTERVENTION + THE PUBLIC REALM

What creates 'public space'? Technically, public space is that land owned by all city residents; any space falling outside of the private parcels of land development. The public realm transports us from one place to another, provides opportunities for interaction and recreation, and creates the shared resources that form each community or neighbourhood. Beyond 'space', however, is the creation of 'place': the layering of attributes to create a unique and dynamic environment, the 'sense of place' that forms the backbone of community identity. **Street culture** proposes that the creation of 'place' lies not solely in the realm of physical design, but through the implementation of policy and programming that recognize units of successful public realms at the microscale. This approach provides the opportunity to achieve place-making interventions over time, to implement small-scale changes to the public realm fabric for maximum place-making impact, and to breed a unique and successful public realm within the Burnaby Heights neighbourhood.

Through an examination of successful public realms focused on key programmatic potentials (designated as: modalities + movement, markets + microeconomies, spillover + spillover, art + individualization, green + open space, and productive landscapes), the project draws out key goals and objectives to be used in analyzing and establishing design interventions for a 50 year vision of 'The Heights'. The key to activating public space within the Heights lies not within large-scale physical design changes and monetary outlay, but in a fresh approach to examining and capitalizing on underutilized units within the existing public realm fabric. Branching from a study of public space units along the Hastings Street corridor, this project examines the potential to activate the Heights neighbourhood by thickening street interaction beyond the traditional role of the corridor as conduit. The project concludes with the establishment of key policy directions for implementation.

Far from a 50 year grand vision, The Heights holds all the potential for immediate public space activation within its current urban fabric.

programmatic potentials



modalities + movement



markets + microeconomies



spillover + spillover



art + individualization



green + open space



productive landscapes

redistributing movement

The keystone of the Bremen model is Intermodal Integration. The transportation system has 37 mobility stations which provide easy and convenient interchange between modalities; each mobility station contains secure bike parking, car-sharing, public transit, and access to taxis. The system runs on a multi-modal, multi-use card that functions as a transit pass, a reloadable debit card, and as keyless entry for car-sharing vehicles.

Streets off the major arterials operate as a series of traffic cells; Cyclists are given access to an open system (2-way traffic), while cars function within a closed system grid (1-way streets).

Through the use of this model, 60% of trips made within the City of Bremen are made by means other than the car: 23% are cycling trips, 17% are transit trips, and 20% are walking trips. The success of the Bremen model is rooted in a recognition of different modes for different journeys, as well as the role of integration between these modalities. It demonstrates the necessity for safe, pleasant, and functional transit systems, choices and facilities.

key lessons:

design transit systems for intermodal integration, provide opportunities for interchange between modalities, give priority to low-impact modalities.

Images: [1] changing modalities at Bremen's Central station; [2] Bremen's streetcar system and LRT system is comprised of 61km of track spread over 123 stations [3] Eierlegendewollmilchsau (egg-laying-wool-milk-sow), Bremen's 'one card fits all' multimodal transit pass; [4] Spatialization of intermodal integration at Central Station; .



art + individualization

Since 2001, the City of Melbourne has been repurposing urban alleys as nodes of art, commerce, and counterculture. In the early 1990's the City recognized the spontaneous commercization that had been taking over the north-south alleyways within the downtown. Restaurants and bars had repurposed the spaces into a series of small nodes for human interaction.

The city formalized the role of alleys as public space nodes by upgrading the spaces with improved paving, streetscaping, and street furniture. In addition, the City runs a yearly alley art initiative, where temporary art installations activate alley spaces around the city. Recognition of the role of alleys in the creation of downtown neighbourhoods has ensured that each alley is programmed to enhance the unique district in which it is situated.

Melbourne has coupled its physical design strategies with the development of an arts-supportive grant program run through the municipality, as well as the development of guidelines for street trading. These efforts, as well as the yearly programming by the city, serve to support and enhance the design-driven changes within these previously underutilized spaces.

key lessons:

recognize existing street activity, allow individualization of the public realm, support physical design objectives with programming and policy.

Images: [1] Back alley marketplace; [2] Graffiti Alley, an expression of Melbourne counterculture and alternative public space; [3] Alley club zone involves both indoor and outdoor programming; [4] Streetscape improvements formalize the public realm; [5] Temporary installations activate alley as public space.



cultures of exchange

The City of Curitiba, Brazil, has reconceptualized its streets into centres of exchange. Exchange cultures occur at many levels within the urban extents of Curitiba. A recognition that garbage pickup was impossible in neighbourhoods with steep topography and/or narrow streets led to the creation of exchange centres - a series of bi-weekly collection sites where residents can exchange 4lbs of trash for 1lb of fresh produce. More valuable recyclables, such as aluminum, can be traded for money at many of the exchange centres, while organics can be exchanged for bus tokens.

The system has created a microeconomy for the poorest sector of the city, where residents scavenge other neighbourhoods for valuable trash. Within the public realm, streets have been reclaimed as pedestrian-only spaces and programmed with a variety of public activities, including educational community gardens and city-wide art projects for children. Businesses located along the pedestrian zone have seen a substantial increase in business. The City uses its reclaimed streets to host a variety of festival events and marketplaces, demonstrating the role of streets in the exchange of goods and culture.



key lessons:

recognize and activate microeconomies, reclaim streets for people, program the public realm, create opportunity for modality exchange.

Images: [1] Reclaimed pedestrian streets provide sites of community exchange; [2] Streets reconsidered as public markets; [3] On-street transit tubes function as the sites of exchange between modalities; [4] Interventions in garbage and recycling create an on-street transparent system.

productive landscapes

The City of Montreal runs one of the most well established community gardening programs in North America. Borne out of the guerilla gardening efforts of Italian and Portuguese immigrants in the 1970's, the value of community gardening was recognized and formalized by the City in the 1980's.

Run through the City's Department of Recreation and Community, the allotment gardens are rented out to residents at a rate of \$5/year. Advertisements for the program are sent out with yearly hydro bills. The City re-zones community garden land as parkland, and leases out the plots on a long-term, 5 year lease. These actions provide stability in the system and ensure a sense of ownership for individual plots. The City supports the community garden programming through educational programming, including the services of a 'horticultural animator' to educate the gardeners.

Montreal also runs a rooftop garden project through the Alternatives group. Alternatives uses a university rooftop garden to experiment with hydroponic growing techniques, which are then exchanged with sister programs in Senegal, Morocco, Cuba, and Mexico. Produce grown through the program is used to support the meals-on-wheels program.



key lessons:

revitalize underutilized spaces for food production, capitalize on public-private partnerships, provide relevant educational programming

Images: [1] Community gardens provide opportunities for residents to interact with food production; [2] urban agriculture intersects with urbanism; [3] community gardens provide rejuvenating environments within the city.

indoor/outdoor interaction

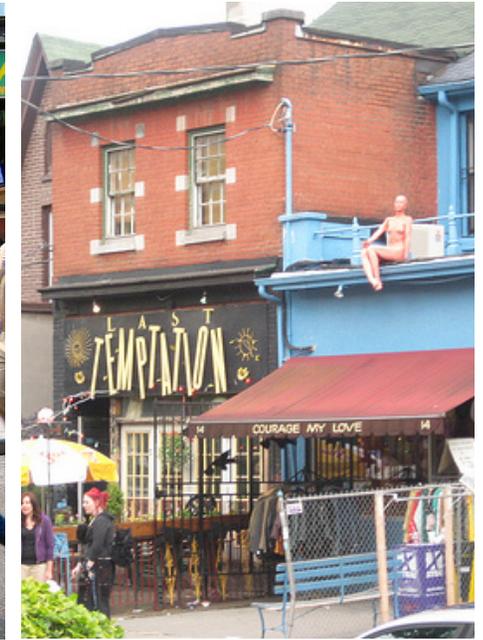
Toronto's Kensington Market has evolved over time to become a hub of counterculture within the city. The neighbourhood originally developed as a residential community in the late 1800's. Subsequent waves of immigration into the neighbourhood saw the transformation of some units into mixed-use, and the creation of a street market. Today, Kensington houses a diverse and dynamic mixture of commercial, residential, and institutional land uses.

By relaxing zoning regulations within the neighbourhood the City of Toronto has maximized indoor/outdoor interaction with the street in a number of ways. The non-conforming mixed uses create a fine-grained pattern of pedestrian experience throughout the neighbourhood. Many units have added non-conforming additions to the front of their units, creating spaces for patio definition or market spillout under rooftop cover. Finally, the City has recognized the neighbourhood's narrow streets as an asset. The neighbourhood is maintained as a primarily pedestrian and cyclist realm, with cars and service vehicles winding slowly down the narrow streets.

Socially, the City allows the market streets to be closed to traffic on Sundays, creating a pedestrian market and opening the street right-of-way to alternative activities.

key lessons:

reclaim the streets for people, recognize opportunities for temporal shifts in modal splits, relax zoning standards to create finely-grained interventions.



Images: [1] Streets are given new uses during pedestrian market days; [2] Relaxed zoning standards create spaces for spill-out and individualization; [3] Reclaimed streets enhance the meaning of 'public realm' and become outdoor living rooms.

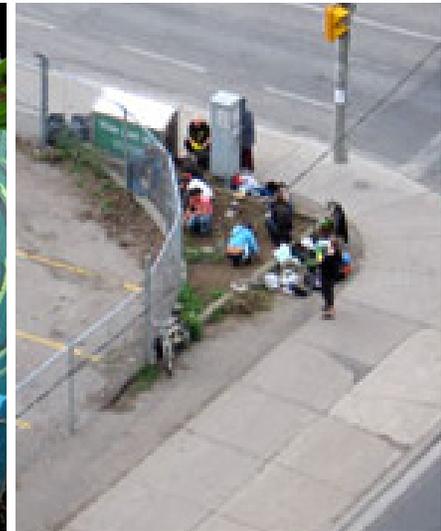
amp up the green

The Toronto Public Space Committee runs a guerilla gardening network to reclaim neglected public spaces.

Operating without permit or license, and often late at night, the organization claims that they 'vandalise the city with nature'. The mandate of the committee is to challenge the role of public space as a uni-dimensional unit of the city, and to reclaim that space as a productive multi-layered landscape.

The committee website offers lists of native plants, hardy plants and cacti, and planting tips to fellow guerilla gardeners, as well as lists of yearly planting events around the city. To ease coordination, the group is separated into 4 quadrants that correspond with the geographic districts of the city: (the downtown group, west group, annex group, and east group), each of which is headed by a different volunteer coordinator.

The Toronto Public Space Committee demonstrates the ability of public spaces to be transformed through grassroots action into productive, functioning pieces of earth.



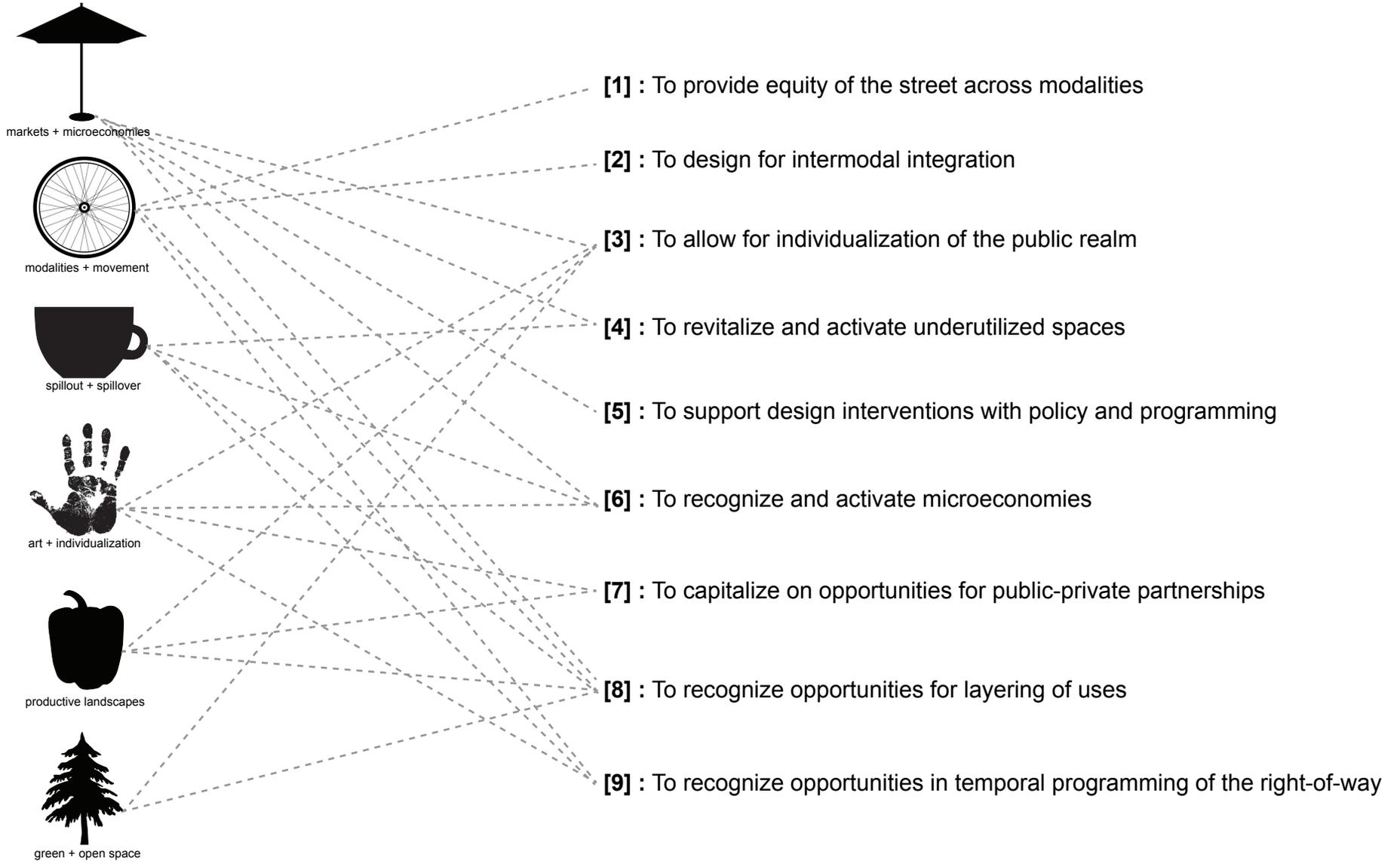
key lessons:

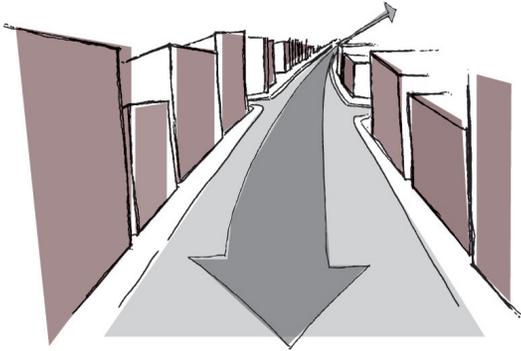
provide opportunities for the creation of productive landscapes, recognize layering potential in public space, let residents reclaim the local landscape

Images: [1] A finished guerilla intervention begs for attention; [2] reclaiming and beautifying neglected spaces; [3] recognizing structural opportunities for intervention; [4] small-scale interventions have a large impact.

objectives of the new street

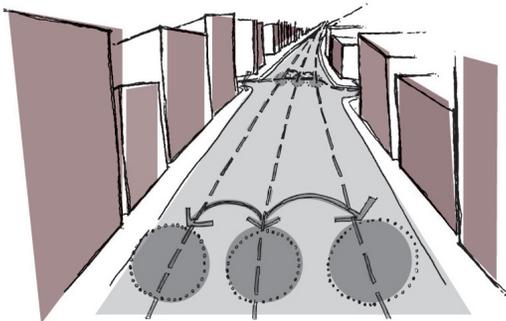
street culture





Recognize the Regional Role of Arterials

Hastings Street exists as part of a regional system of transportation and shipping. Recognize the functional role of the arterial within the system of Metro Vancouver, and maintain this functionality.



Integrate the Systems

Different modalities support different types of journeys. A successful sustainable system will provide integration between modalities, and equality within the right-of-way.



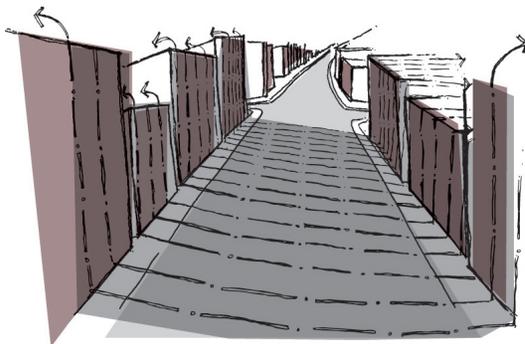
Interaction with the Street

Enhance opportunities for interaction with the street through building typologies, thickening of the street experience, and place-specific and revolving programming. Create opportunities for unique urban activity and unprogrammed spaces for spontaneity and change over time.



Activate Micro-economies

Recognize the opportunity for micro-economies to activate the public realm of the street. Unexpected economic activity builds sense of place, creates a constantly shifting urban experience, and enforces the creation of districts.



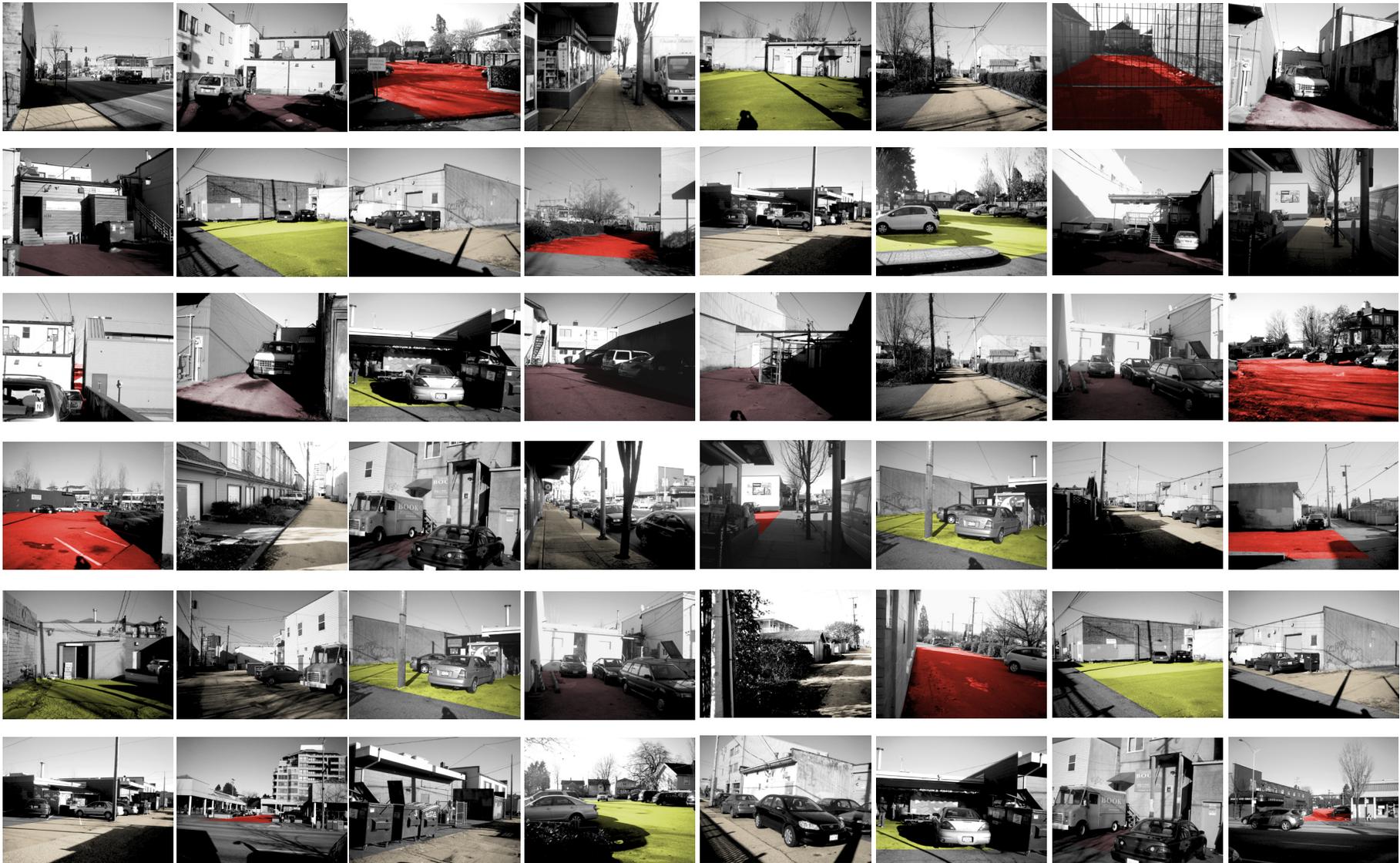
Context-based Corridors

Recognize the intrinsic qualities and potentials within existing neighbourhoods to create a distinct sense of place. Corridors should function not just as a linear conduit, but as a distinct public space district in themselves.



Individualism + Ownership

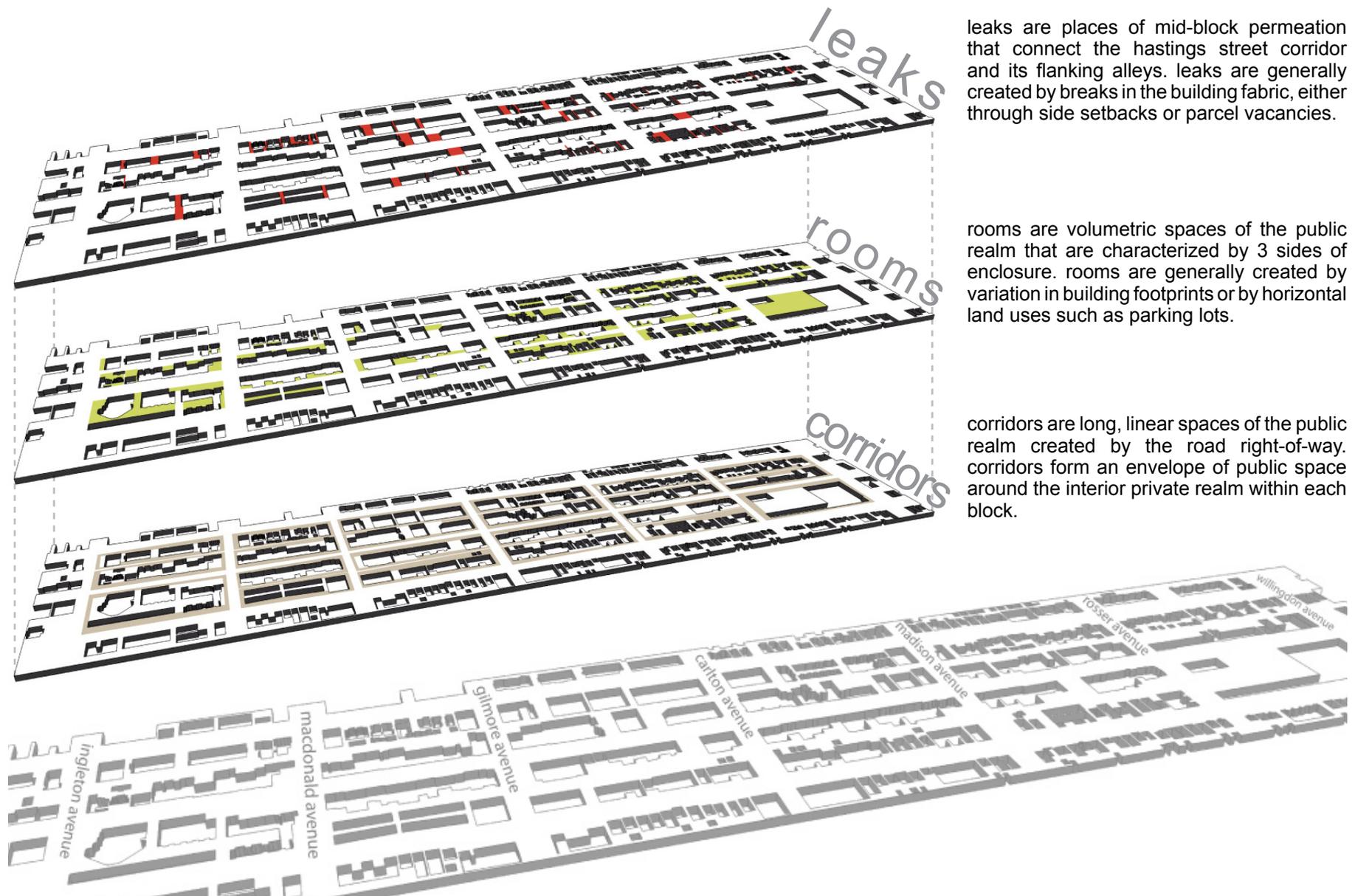
Create opportunities for individualization of the right-of-way, and recognize potentials within public space for counterculture development, social intersections, and individual expression.



ANALYZING SPACE OPPORTUNITIES: The urban equation allocates public + private lands to buildings, streets, utilities, + other infrastructure. This math, however, isn't perfect: once the land uses are balanced, pieces are left behind - decimal points that are lost when the land is rounded to the nearest whole unit. These under-utilized spaces hold the potential for activating the public realm within The Heights neighbourhood.

the heights : public space units

street culture

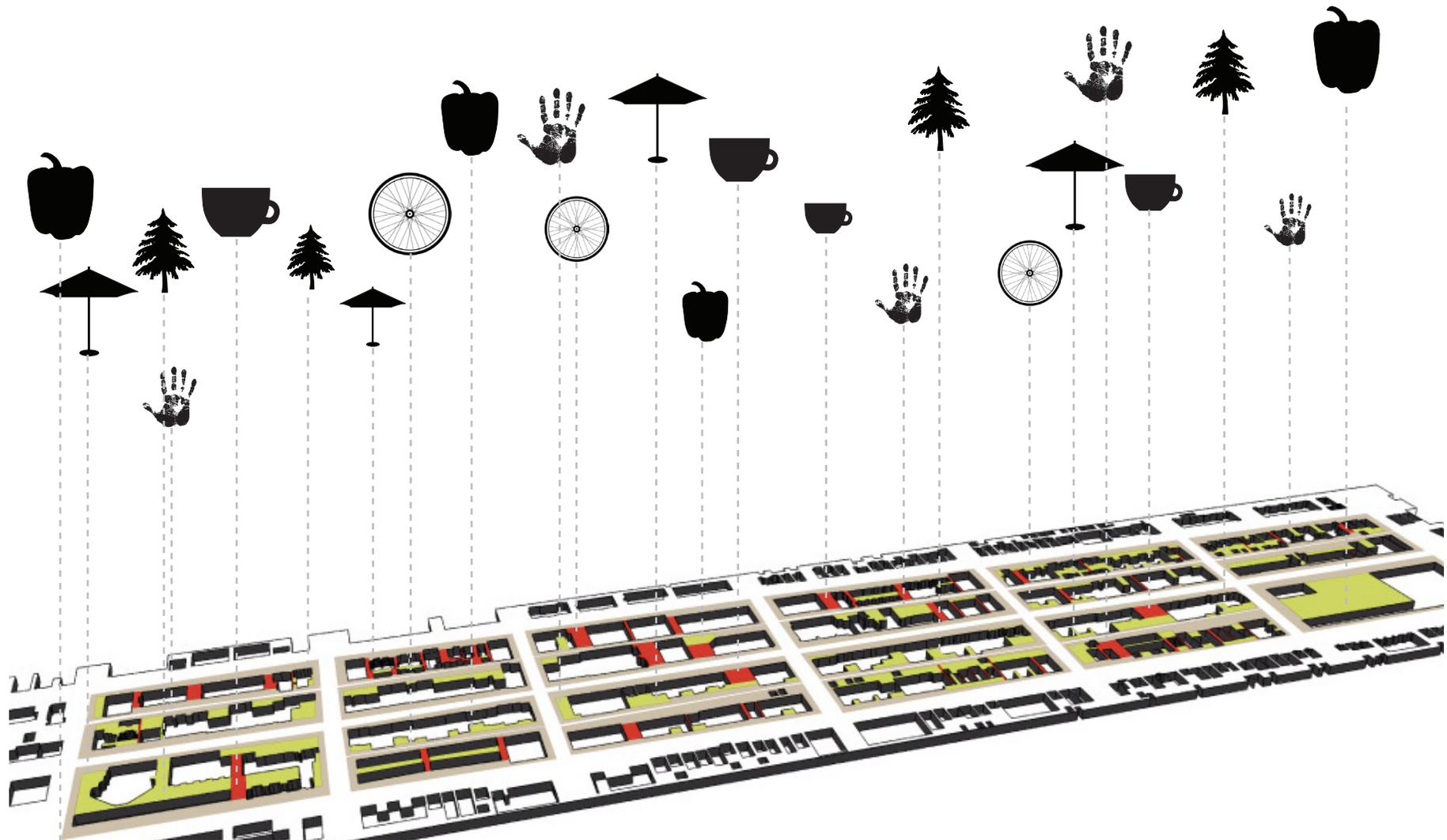


leaks are places of mid-block permeation that connect the hastings street corridor and its flanking alleys. leaks are generally created by breaks in the building fabric, either through side setbacks or parcel vacancies.

rooms are volumetric spaces of the public realm that are characterized by 3 sides of enclosure. rooms are generally created by variation in building footprints or by horizontal land uses such as parking lots.

corridors are long, linear spaces of the public realm created by the road right-of-way. corridors form an envelope of public space around the interior private realm within each block.

PUBLIC SPACE UNITS: Underutilized spaces in the Heights can be divided into three public space units: leaks, rooms, and corridors.



CREATING PLACE: The porous, under-utilized spaces within the urban fabric of the Heights become activated as a vibrant, productive, and multi-layered public realm when intersected with programmatic potentials. The rooms, leaks, and corridors that comprise the neighbourhood's neglected spaces provide a micro-approach to public realm activation.

 markets + microeconomies	<p>festival market international food fair farmers market</p>		<p>flea market street vendors artist exhibition sidewalk sale book exchange</p>
 art + individualization	<p>seasonal celebrations installation art</p>		<p>guerilla interventions street performers street furniture outdoor studio space art gallery grafitti art</p>
 productive landscapes	<p>community gardens edible public realm farmers market chicken coops</p>		<p>food corridor restaurant kitchen garden single-crop intensive</p>
 green + open space	<p>pocket park tai chi rain gardens greenway</p>		<p>community gardens pedestrian street streetscape</p>
 spillout + spillover	<p>courtyard cafe restaurant patio nightclub lane street cafe beer garden</p>		<p>outdoor pub street vendors corner cafe</p>
 modalities + movement	<p>bike storage pedestrian street</p>		<p>transit flex space bus station bikeway</p>

PROGRAMMATIC VARIATION: Density of programmatic permutations provide micro-scale public space activation with little structural intervention.



ALLEY ART GALLERY: Potential for an alley art gallery is created when individualization programming is inserted into a room unit. The ability of existing building units along the Hastings Street corridor to subdivide smaller alley-fronting units creates a small, low-overhead space for an alternative art gallery, while the existing shipping bay creates an area of temporal activation and an enhanced indoor/outdoor relationship.



ACTIVATED ALLEY: A number of new relationships inform the creation of an activated alley. A relationship between corridor space and movement programming creates a dedicated 3m bikeway. The remaining corridor space is temporally programmed with alley-facing spill-out and market vendors, retaining utility as a service conduit in off-hours. Art + individualization programming integrates waste management into the public realm through a dumpster graffiti program, while green programming allows for the creation of rain gardens.



TRANSIT FLEX SPACE: Movement programming overlaid with leak space creates the potential for transit flex spaces at key transit intersections. The flex space functions as a modal interchange point, with bike parking, scheduling services, and potential for the integration of bike and car rental programs. Services accommodated within transit flex spaces have the ability to grow and change over time as the movement system along the Hastings corridor matures.



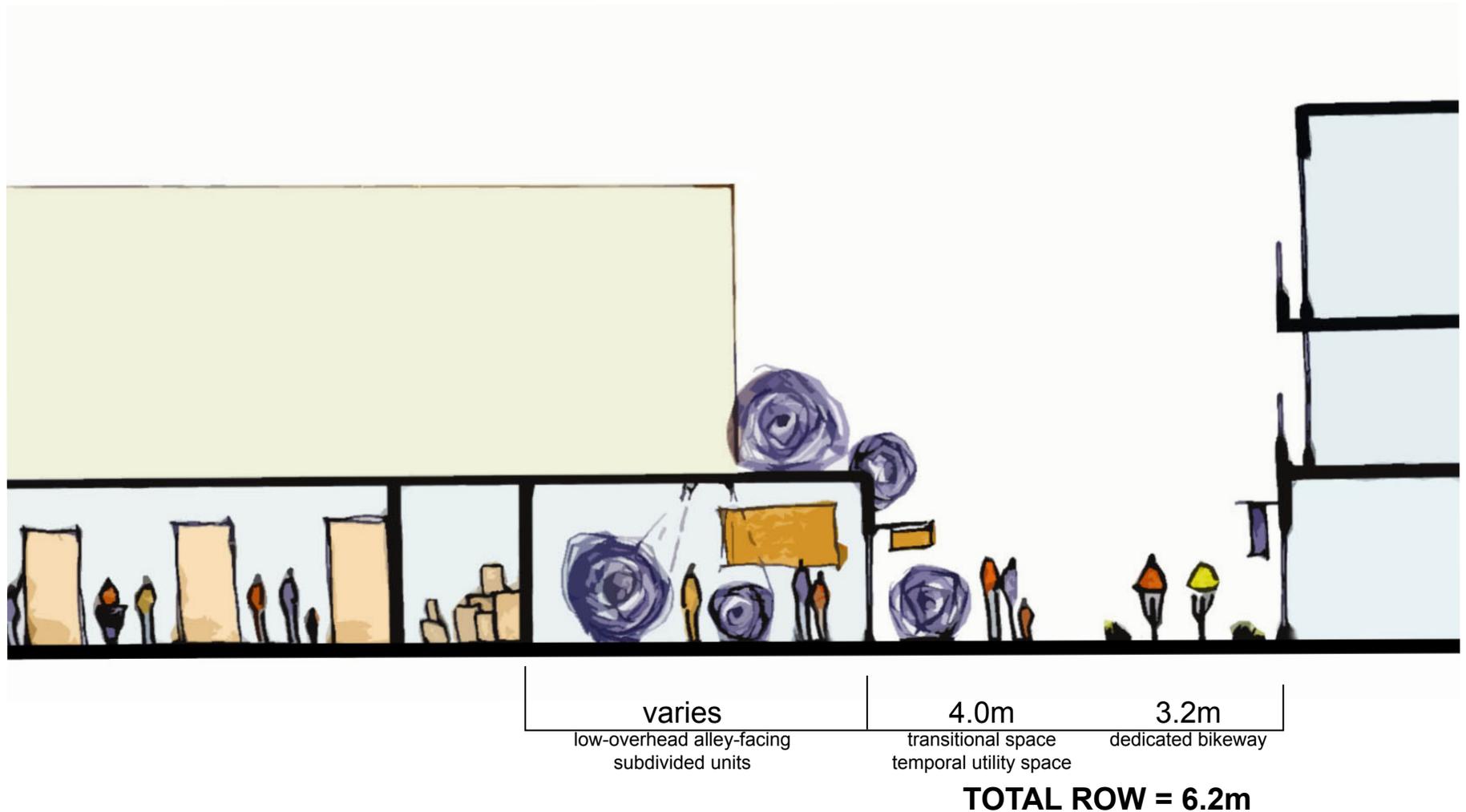
ACTIVATED CORRIDOR: The Hastings Street corridor becomes activated through an expansion of the pedestrian realm. The widened sidewalk creates the potential for an 'outdoor living room' in the community: the space required for programmatic development in markets + microeconomies and a strengthening of indoor/outdoor relationships. Hastings Street becomes further activated through art + individualization programming in urban street furniture design and other small corridor-based interventions.



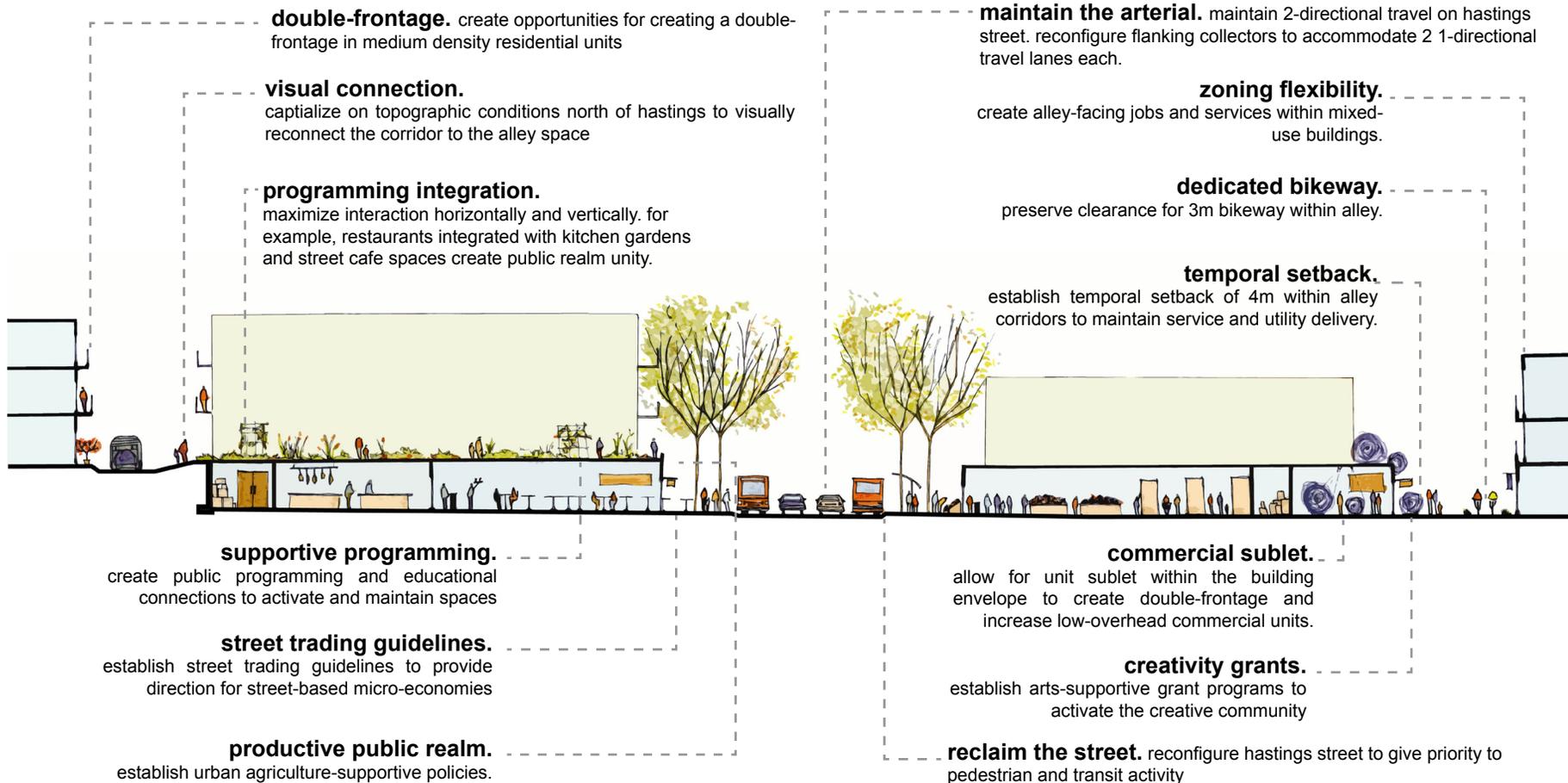
6.1m 3.2m 6.2m 3.2m 6.1m
expanded pedestrian realm bus/HOV lane 2-way travel lanes bus/HOV lane expanded pedestrian realm

TOTAL ROW = 24.8m

COMMERCIAL HIGH STREET: The Heights portion of Hastings Street becomes redesigned as a commercial high street. Two travel lanes are preserved in the centre of the section, with additional traffic accommodated on the flanking collector streets (each with two 1-way travel lanes). The pedestrian realm is expanded to accommodate and encourage public realm activation and strengthening of indoor/outdoor relationships.



ACTIVATED ALLEY: Alley spaces flanking the Hastings Street corridor become activated through programming and policy, and strengthened through minor structural changes. Zoning changes allow for commercial unit sublet, creating low-overhead, small, alley-facing commercial units. The income-earning potential of these units for existing commercial units further supports the maintenance of the Hastings Street corridor as an affordable place to run businesses and services. New development along flanking collectors allows for new alley-facing units to be developed in mixed-use buildings. Public realm activation is supported through a dedicated bikeway delineated with a change in paving material and grass infiltration strips. The remaining alley space is temporally activated with market stalls, art installations, guerilla interventions, and patio spaces. Each use is easily moveable to retain the ability of alley spaces to deliver services and utilities to homes and businesses.



POLICY + PROGRAMMING: Policy and programming actions are the fundamental component of public space activation within the Hastings Corridor. These policy and programming directions are necessary to implement the **street culture** vision for the Burnaby Heights neighbourhood.

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