

living together

revisiting
the sro +
new forms of
collectivity



unité d'habitation, le corbusier

A thesis presented in partial fulfillment of the requirements for the degree Master of Architecture in the Department of Architecture of the Rhode Island School of Design, Providence, Rhode Island.

By Elizabeth Parker, 2020

abstract

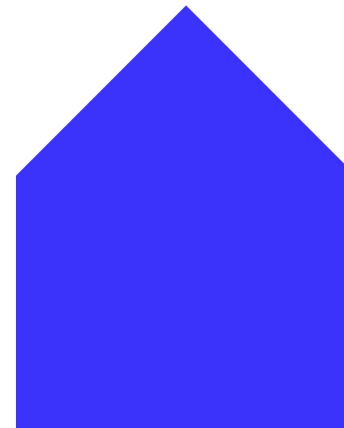
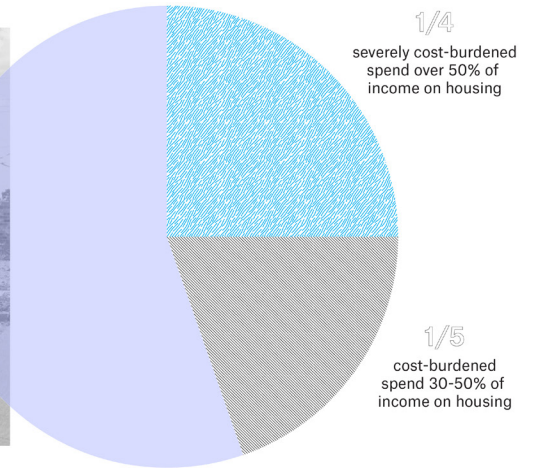
The current affordable housing crisis has reached a boiling point. Home prices are increasing at double the rate of wage gains, and almost half of all renters in the United States are considered cost-burdened (spending 30% or more of their income on rent). There simply isn't enough affordable housing available to meet the growing demand and people are being priced out. The housing market, as it stands, is in desperate need of re-examination.

Options that better reflect the demographics of growing cities and promote inclusion are of vital importance for a sustainable future.

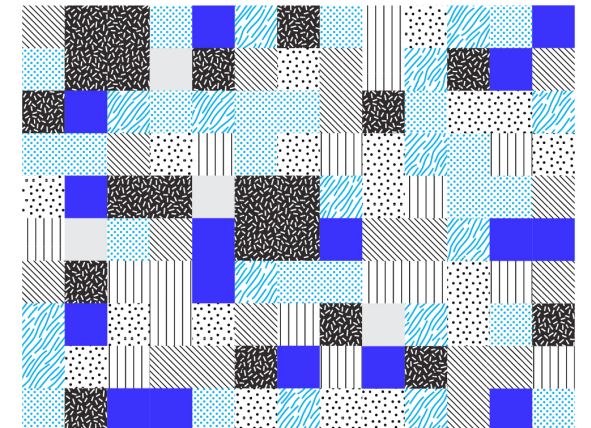
This directed research project responds to the universal need for thoughtfully designed affordable housing in current urban environments. It examines the often misunderstood SRO (single room occupancy hotel), taking lessons in efficiency and minimal living from this model and pairing it with an understanding of the

history and function of other marginal housing typologies, it synthesizes the greatest attributes and re-imagines the performance of housing in general.

By creating a new, inclusive model for collectivity and affordability that emphasizes smallness and togetherness, this typology addresses the issues that have plagued its predecessors and becomes a model for future development.



monofunctional



collective

understanding the sro

SRO hotels became popular in the early 1900s, providing minimal accommodations of private or shared rooms with communal kitchens and baths. A cheap and flexible housing option in growing cities, these units were functional and necessary, but not desirable. By the 1980s, over one million of these units were demolished or converted to high priced apartments, leaving many residents homeless as a result. Remaining SROs provide essential housing for low-income individuals and families in cities today, though very few are left and exist in varying states of disrepair.

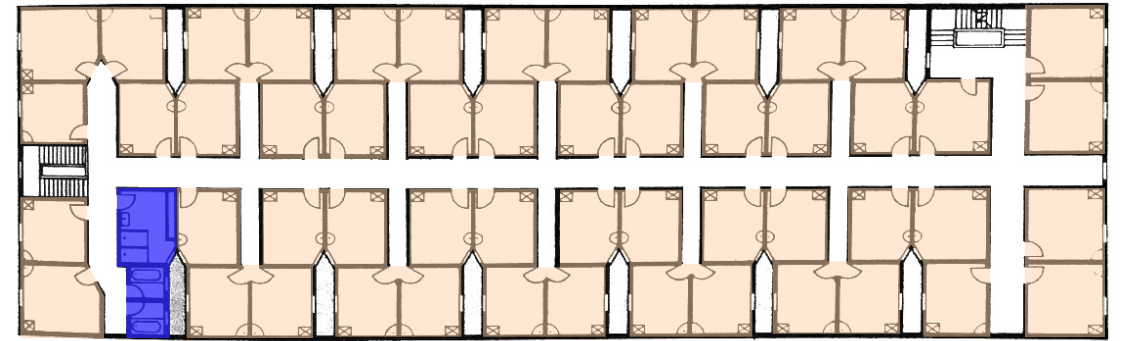
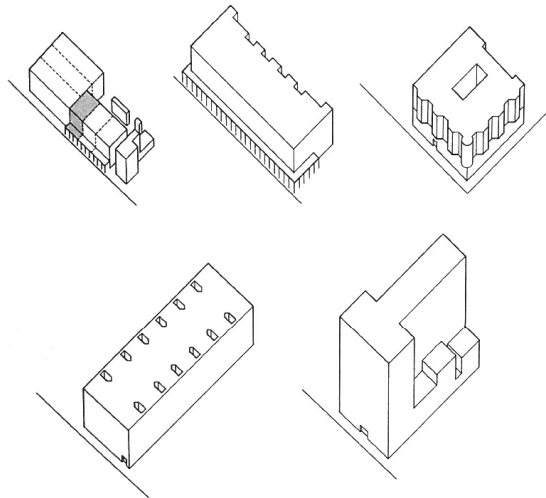
While these dwellings don't exactly promote the health and well-being of residents and have been socially stigmatized, they have played a vital role in the housing market for decades, and continue to do so. There is nothing else quite like them and I believe they deserve a revitalization in order to find a new footing.

“single room occupants are omitted in the language of housing legislation, written off in the minds of communities, ignored and rejected in urban development plans, and pushed from one area to another on the waves of fluctuating real estate markets.”

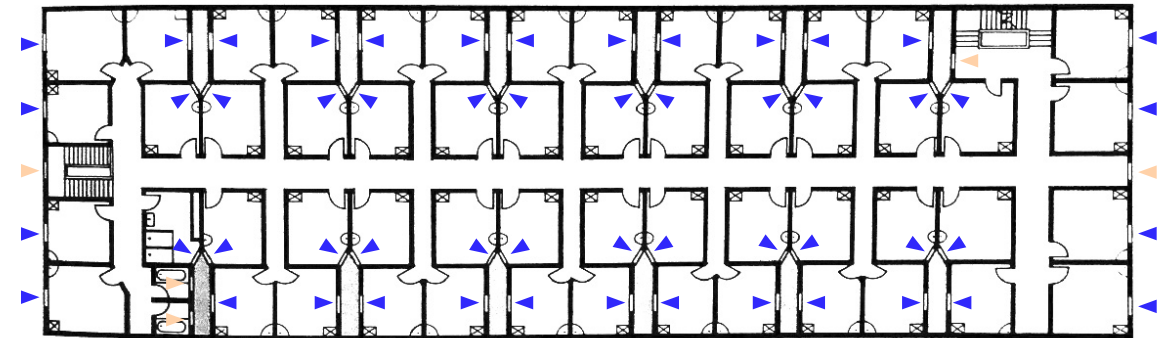
Ira Ehrlich, “Living Downtown”



Typical SRO design doesn't put residents' wellbeing at the forefront, prioritizing economy and efficiency instead. Units generally provide enough space for a single bed and minimal storage for personal belongings. They sometimes include kitchenettes, but bathrooms are almost exclusively a shared commodity. Light and fresh air are also considered premiums in these units, with most access provided by light-wells.



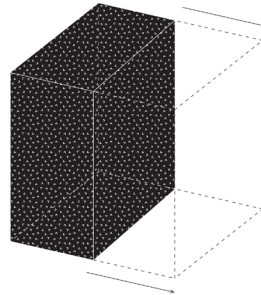
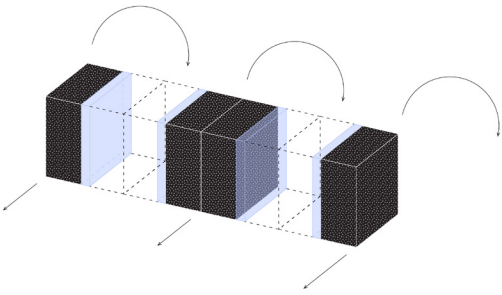
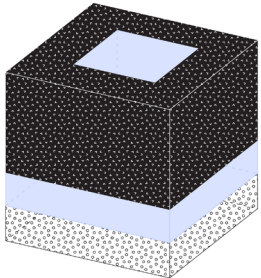
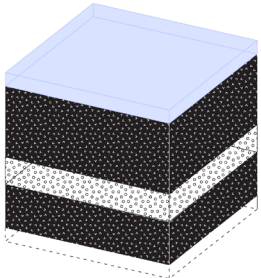
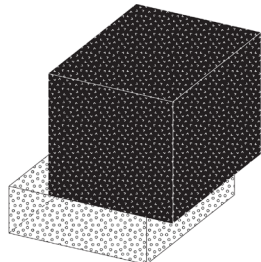
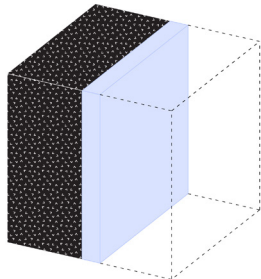
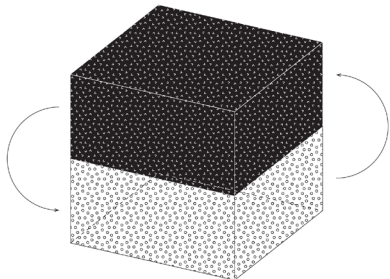
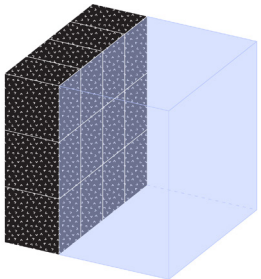
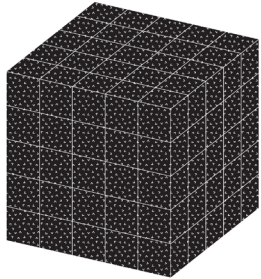
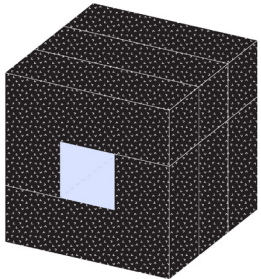
bathroom as commodity



light + air as commodity

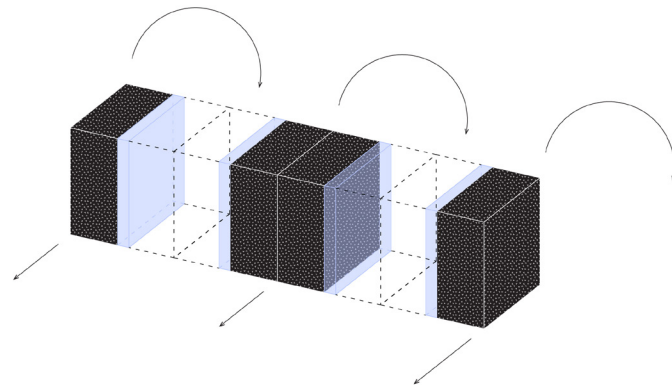
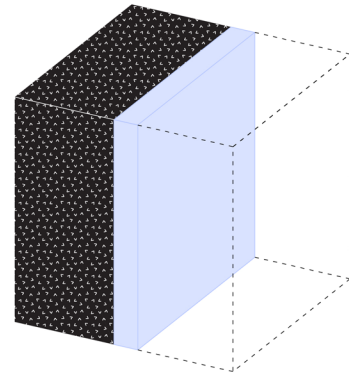
(left) typical rooming houses in san francisco, illustrations by dorotheé imbert

socio-spatial logic + methodologies

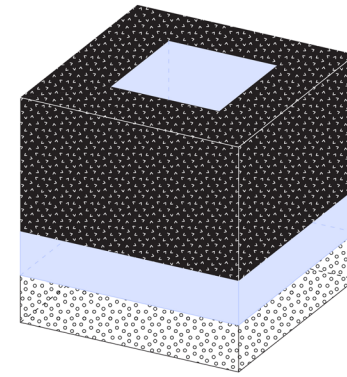


Analyzing a variety of collective and affordable housing projects, as well as residential hotels in terms of their spatial and social arrangements, I represented each project's logic in a simplified diagram. Broken down into the general components of private (black fill), communal (purple fill) and public spaces (white dot fill), these diagrams provided a method of thinking about organizing hybridized program when moving into the design phase.

wedging smaller communal, shared spaces between private residence blocks and large, open courtyards allows for a variety of social interactions at varying levels of privacy. this unit of wedging can be stretched and duplicated to increase occupancy.

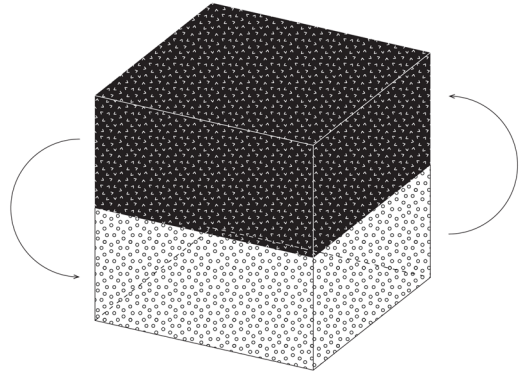


wedge



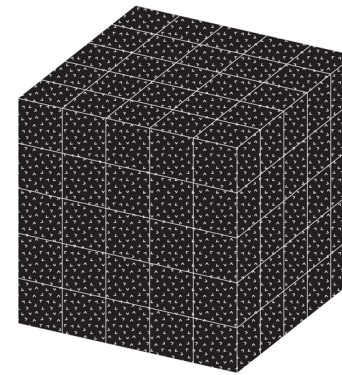
elevate

filling the ground floor with public program and creating a second "street level" for residents only promotes sociability and connection to the neighborhood while providing a bit of protection and privacy. this street level to rises up and spreads around, connecting the terraced residences to shared spaces, enhancing engagement between residents at all levels.



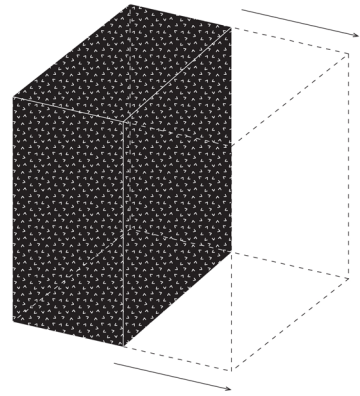
cycle

mixed programmatic elements with an underlying common interest creates the cyclical organization. with public space below and residences and common areas above, this mixed use model is quite recognizable - however it is the shared ethos of the building as a unit that creates this specific arrangement.



pack

this arrangement, perhaps the most utilitarian and of them all, places efficiency and economy above all else. by packing in as many residents as possible, occupancy is at a high and costs can stay lower. this approach neglects the value of public or shared spaces and provides residents with only the most basic components for domestic space.

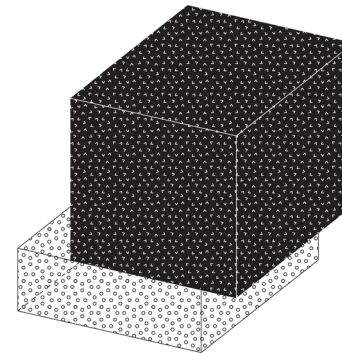


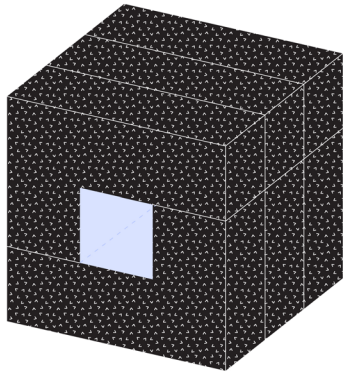
expand

building in phases and providing the infrastructure for expansion is both a physical and social model for housing. it allows for incremental growth that creates a healthier and more sustainable community that is not over-extended. a level of uniformity is created at the outset, while personalization is possible over time. this model focuses not only on the individual unit, but how they connect to create a greater network.

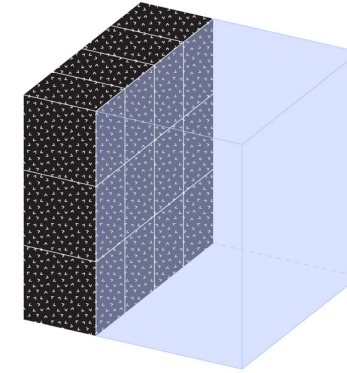
offset

balancing public and private programs with a slight offset creates a spatial hierarchy and powerful arrangement that differentiates the components of a mixed-use project. a multi-level base of public programs, from which residents directly benefit offers stability to the entire structure, both literally and figuratively.

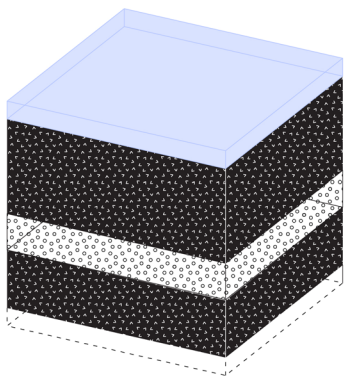




layer



share



mixing public and communal programs within the residential sections of a mixed-use project creates a unique relationship between users and spaces. providing a variety of amenities and services within the footprint of the building makes it function more as a compact city than anything else.

minimizing private spaces to include only basic necessities for personal use, and using all other square footage for shared programming, this model emphasizes the collective. all residents have equal domain and due to the smaller size of bedrooms, must use common space constantly. sharing is an integral part of how this model functions rather than a suggestion.

sro single room occupancy hotel; most inexpensive type of residential hotel

residential hotel hotel with rooms or suites for permanent residents who rent by the month; bathrooms are shared and in-room kitchenettes are scarcely provided

welfare hotel commercially owned hotel renting to individuals or families that receive some type of public assistance

light housekeeping room cheap apartment-style alternative to rooming house; typically one or two room suites with makeshift kitchenettes; bathrooms are shared and minimal furnishings are provided

organization boarding house / nonprofit lodgings old-fashioned boarding houses at a larger scale with more centralized administration; social group spaces and activities; supervision (and often, strict rules) for residents; generally sponsored according to ethnicity, race or religion; similar to dormitory, fraternity or sorority

collective housing housing model in which residents share communal areas such as kitchens, dining and living areas, and bathrooms

social housing houses or apartments owned by local government or by other non-profit organizations, and that are rented to low income individuals and families

affordable housing (low-income housing) housing which is deemed affordable to those with a median household income or below as rated by the national government or a local government by a recognized housing affordability index

subsidized housing government sponsored economic assistance aimed towards alleviating housing costs and expenses for impoverished people with low to moderate incomes

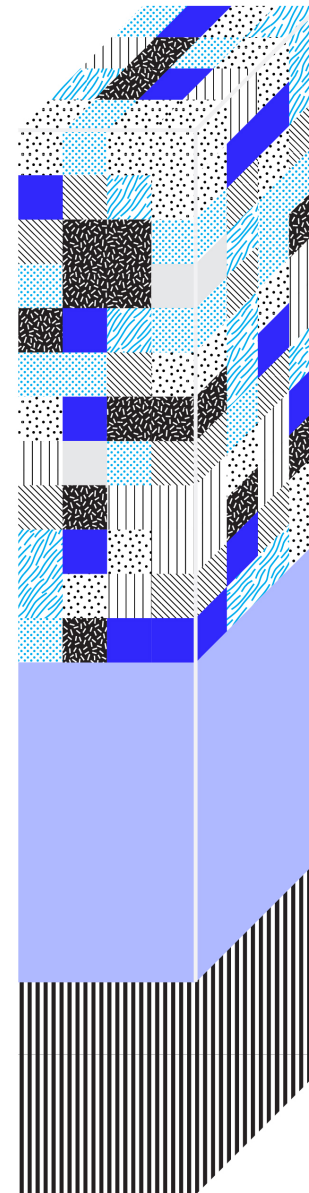
public housing housing that is funded, owned, and administered by government authorities and rented to eligible low-income families, the elderly, and persons with disabilities

mixed-income housing under a mixed-income system, public housing agencies grant density bonuses and financing incentives to private developers in exchange for including units with rents held below the market rate to people with qualifying incomes

combining typologies

Utilizing the SRO's efficiency and flexibility, and combining it with aspects of collective and affordable housing, I began to piece together a new proto-typology for urban housing. Based off of New York's 80/20 mixed-income housing program, which offers incentives to developers in exchange for making 20% of units in new projects affordable (or below market rate) - this new model is inverted, providing 80% affordability to better accommodate the needs of rent-burdened households.

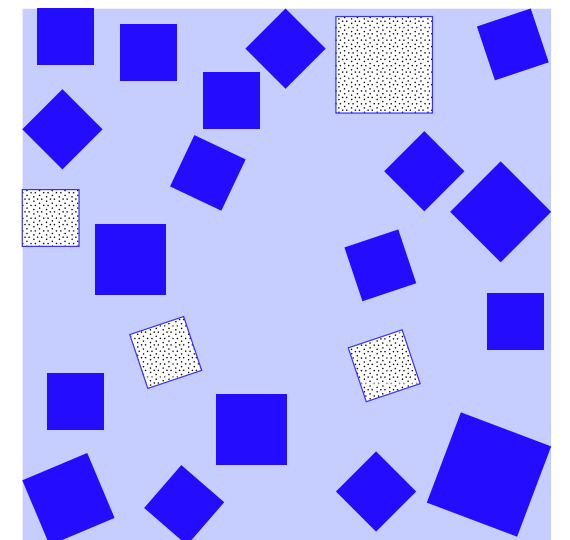
This model serves those who are typically left out of the housing market. Whereas most contemporary urbanism results in the segregation of certain demographics, these new experiments in micro-urbanism bring people of differing socio-economic statuses, cultures and ages together, pushing against gentrification and creating a diverse common ground.



50% private

30% communal

20% public



decommodifying housing

80/20 → 20/80

Taking the model of New York's 80/20 program, which states that 20% of units must be "affordable" to tenants who earn less than 50% of the Area Median Income (AMI) and flipping it, this new model can better accommodate the needs of low-income, rent-burdened individuals living in cities today.

developer funded

80/20 mixed income

80% affordable (up to 50% AMI)
20% market rate

- > tax-exempt financing to multi-family rental developments
- > market rate apartments subsidize affordable units

+

non-profit cdc

community development corporation acts as a developer with increased access to grants

- > raise grant money and subsidies
- > tax credit / bond programs
- > run by/office space rented by the non-profit (presence on site)

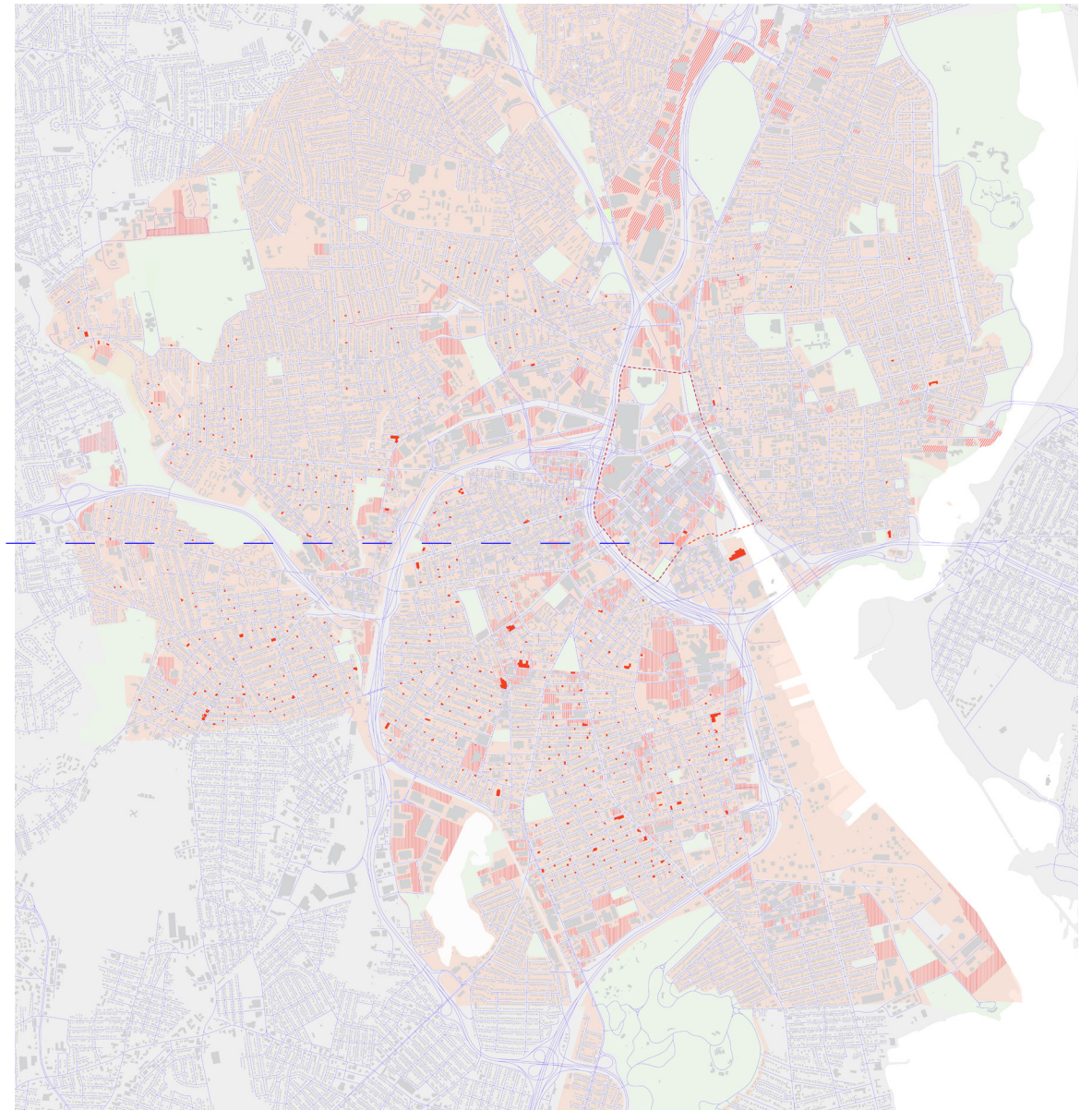
% of units work for trade

> work for the project (maintenance, management, communal/public programs)

% of units artists in residence

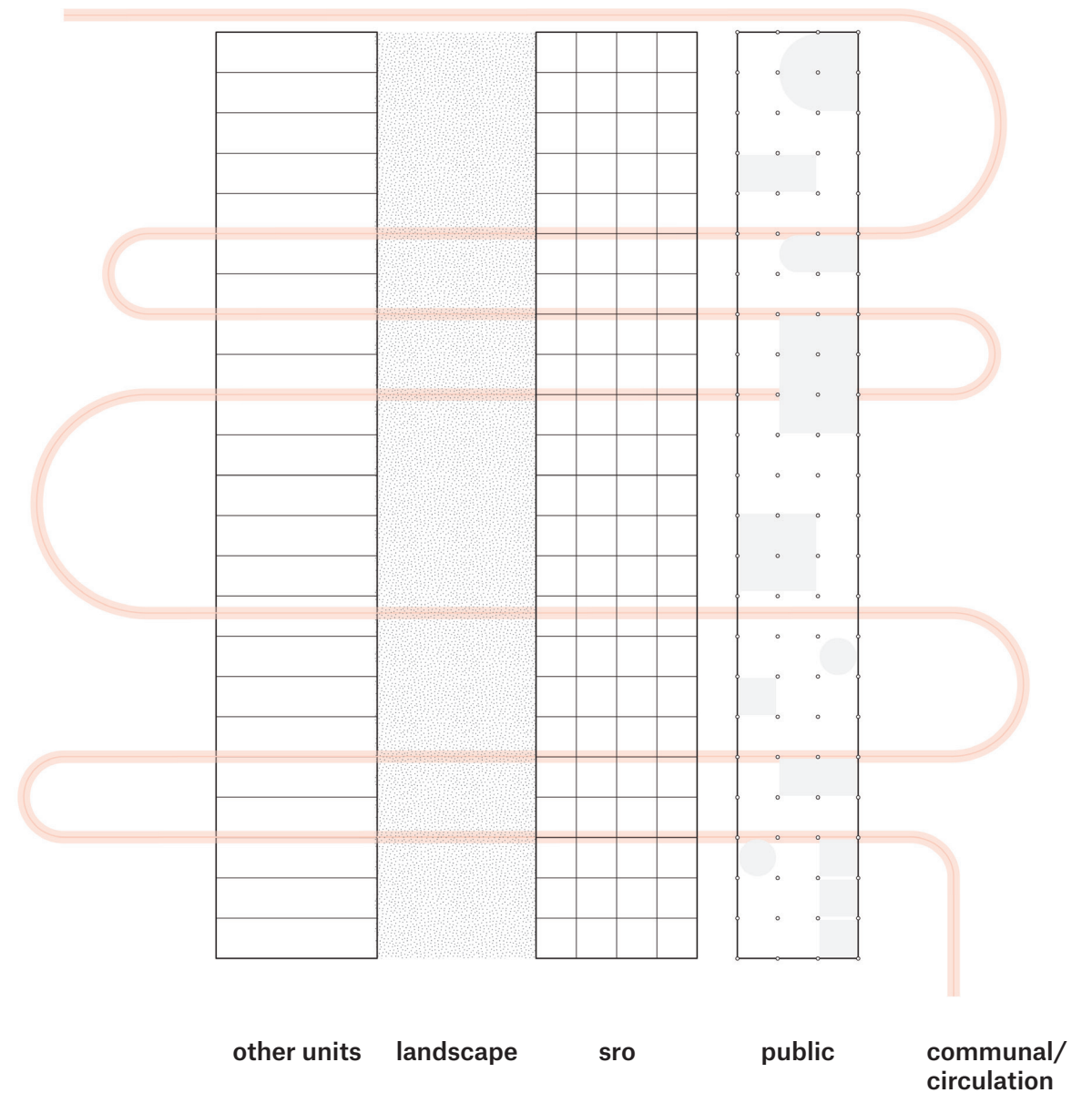
providence | post-industrial vacancy

Looking at Providence as a testing grounds for this new typology, I was interested in the spatial and social implication of a hybrid housing project in a post-industrial city dealing with high levels of vacancy. With many sites across the city that sit empty or abandoned, most notably in the downtown area, I felt that this urban condition would be an ideal backdrop for this experiment in micro-urbanism.

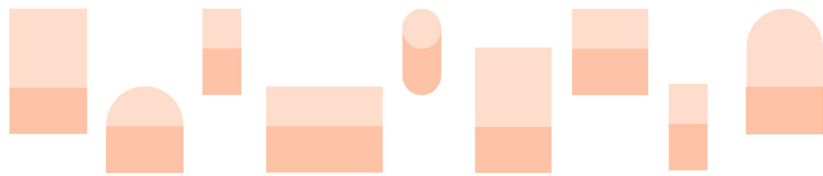


bands | mixing program

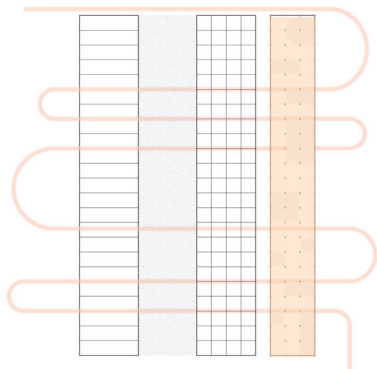
I wanted this new model to be completely aggregated - a true mix of programs, uses and people. However, rather than mixing at random, I realized that each category had its own unique spatial requirements and should be able to function independently, while tying into the larger system. Divided into four bands: two residential, and two public, the programs are woven together through the larger circulatory system and communal spaces.



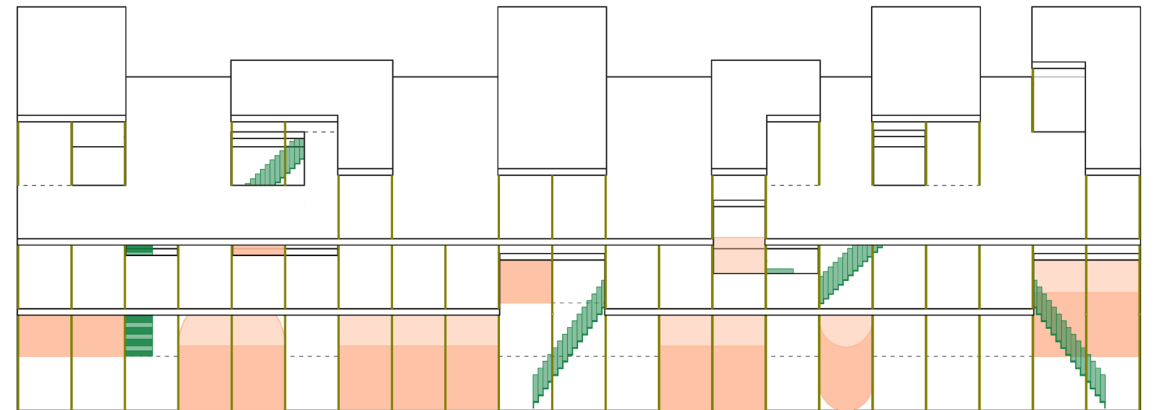
public



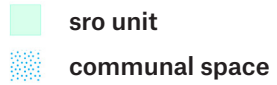
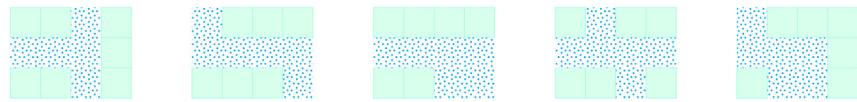
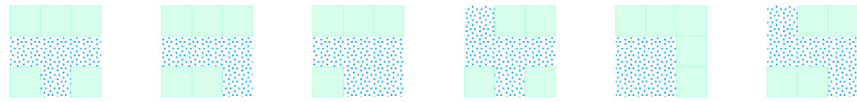
public program is arranged within a gridded layout, which provides both structure and flexibility



kiosks of varying sizes are aggregated throughout the grid, and can easily change and shift according to the needs of residents and the greater community

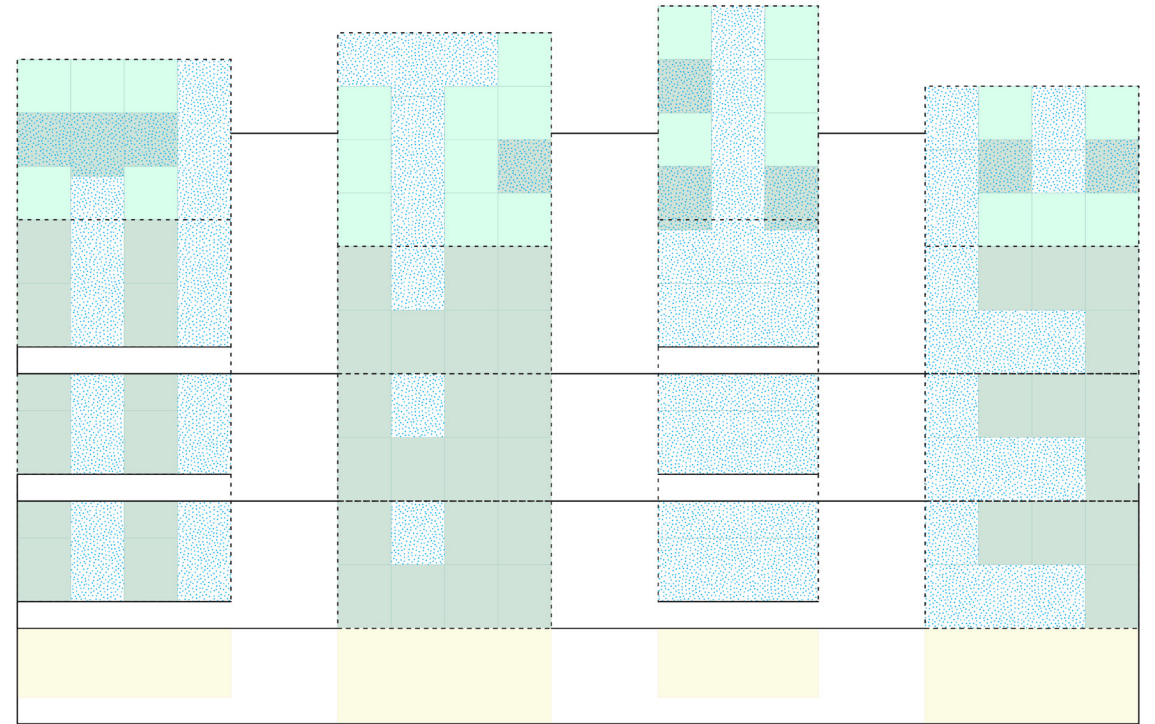
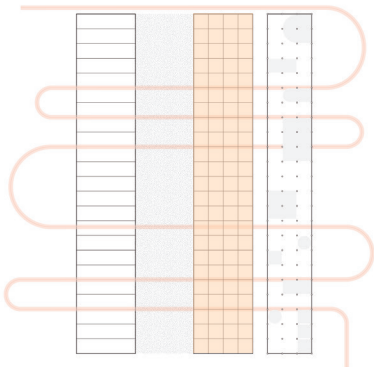


sro units

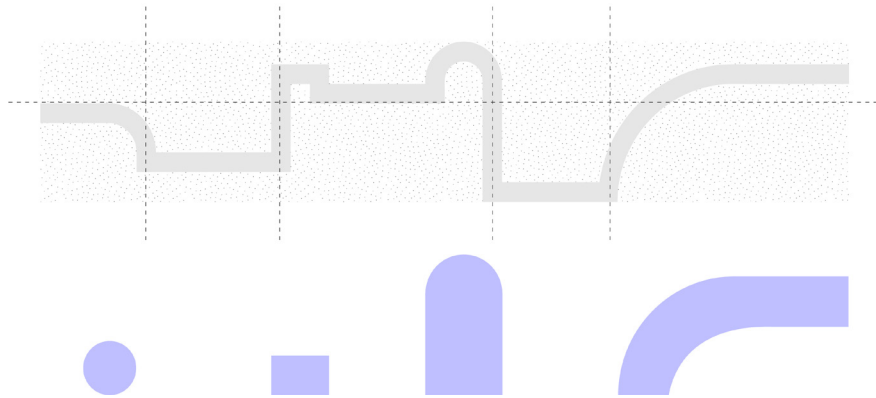


sro units cluster around shared spaces to create dynamic "micro-communities"

thesero "micro-communities" can be stacked in a variety of ways and linked together through communal, outdoor spaces

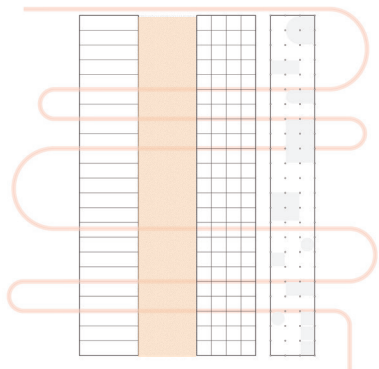


landscape

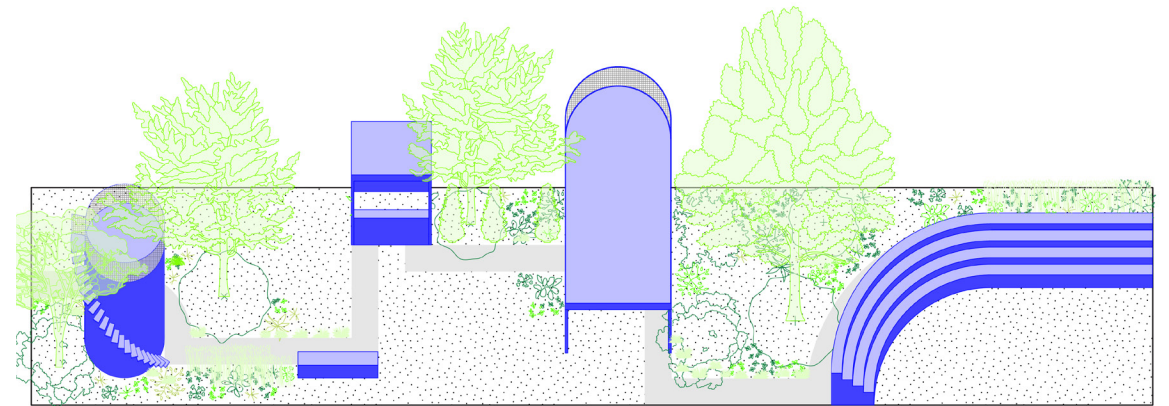


a path ribbons through this band, dividing it into different sized parcels.

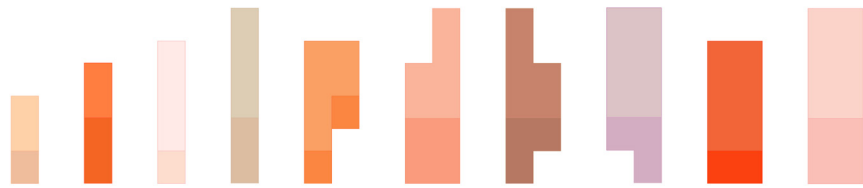
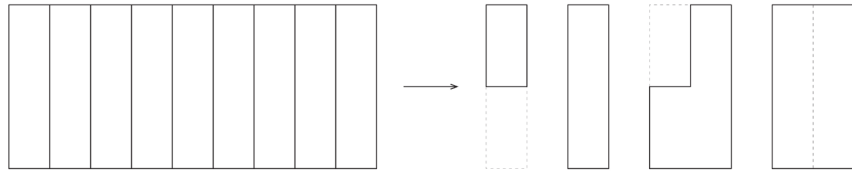
built elements are placed along the path, providing infrastructure for a variety of activities and events



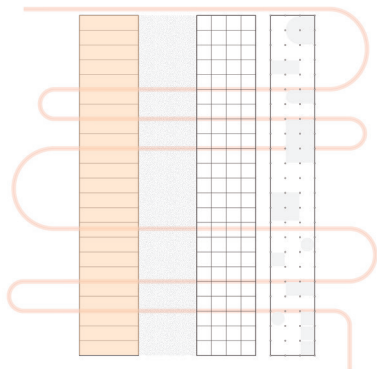
the space functions at multiple planes simultaneously, creating a dynamic recreation space unlike a typical park



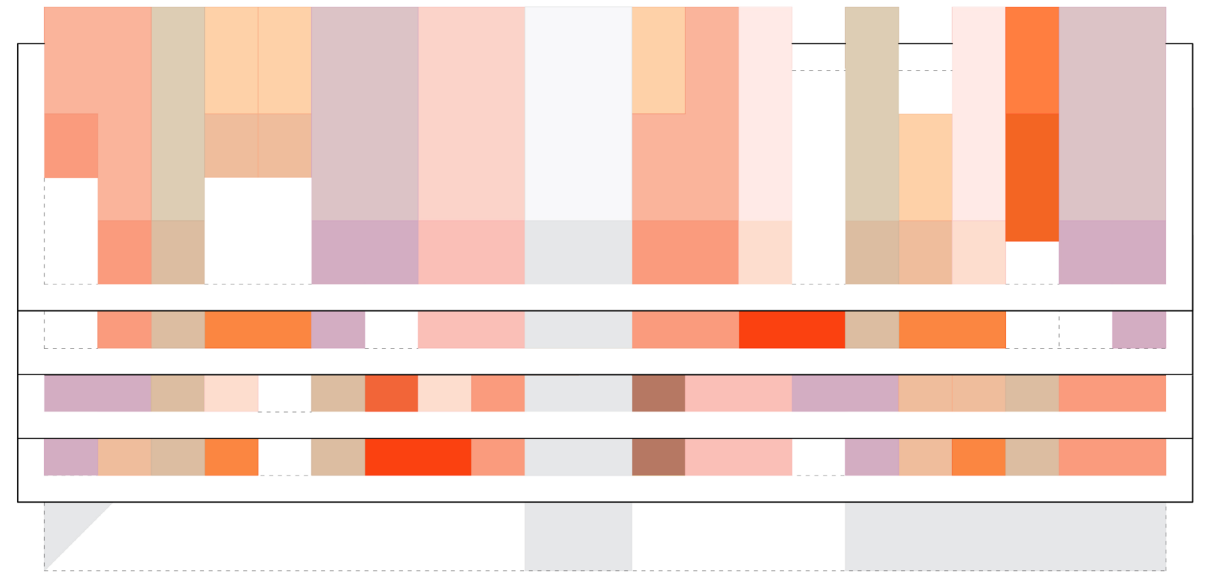
other units



to maximize space and add density to this band of housing, a narrow rowhouse-esque unit structure is used

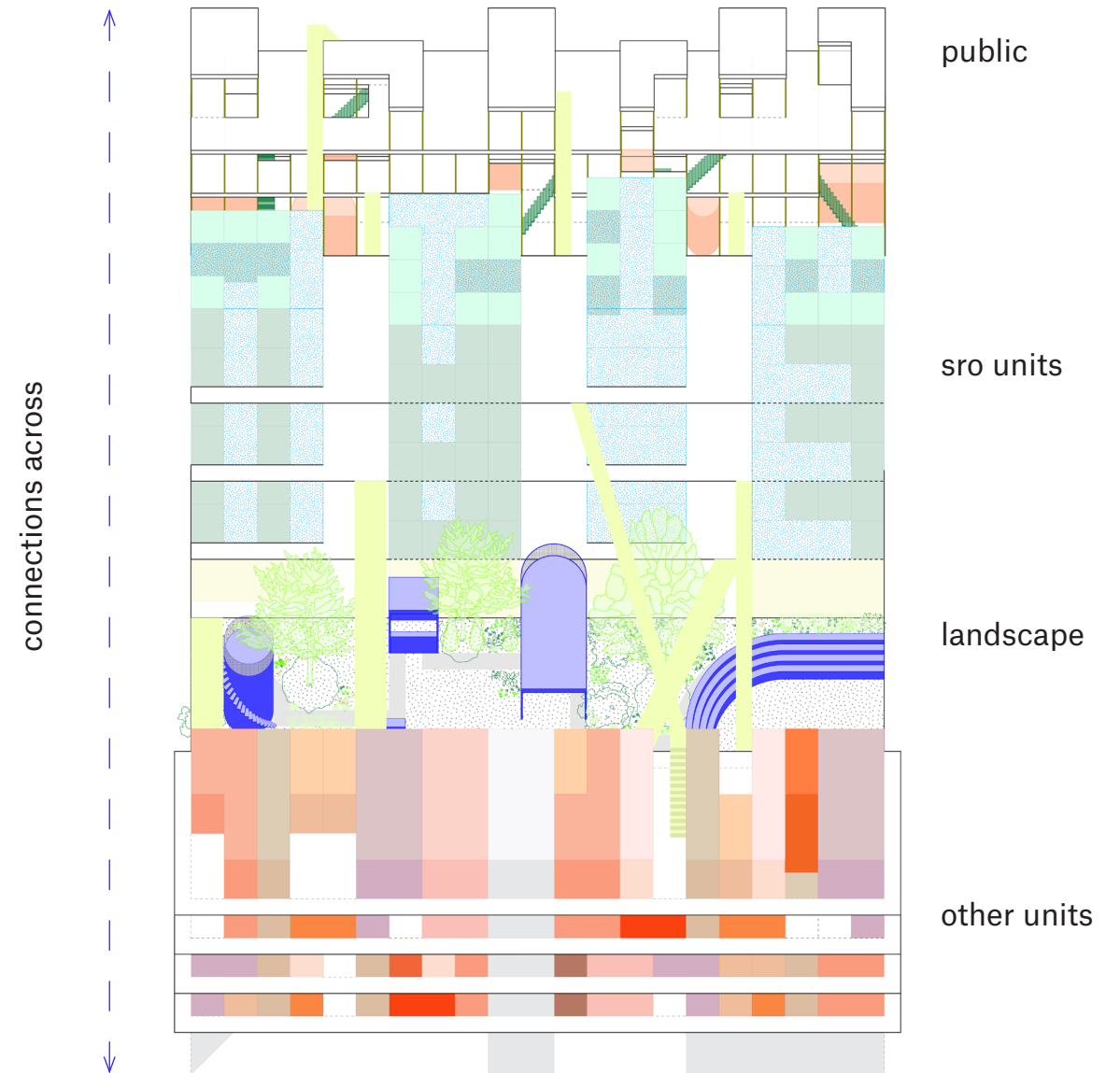


in order to create porosity and open up spaces for communal and outdoor use, the typical rowhouse unit is subdivided and the pieces are shifted around the footprint



the system | multi-directional reading

The bands are strategically arranged on the site to best address the needs of the residents and create a symbiotic relationship throughout. The public band faces the street for increased accessibility and foot traffic, acting as a screen for the more private spaces beyond. The SROs are placed in a more central location, increasing their accessibility to all resources, as these units are the most minimal and require more outside amenities. The landscaping serves as a buffer between the two residential bands - a generous backyard not typically found in urban housing. And finally, the larger, rowhouse units face the opposite street, a familiar and unassuming typology. The lower height of this band allows for southern light to permeate the site. A series of bridges - or elevated streets - link the bands together, enhancing the sense of community as a whole.

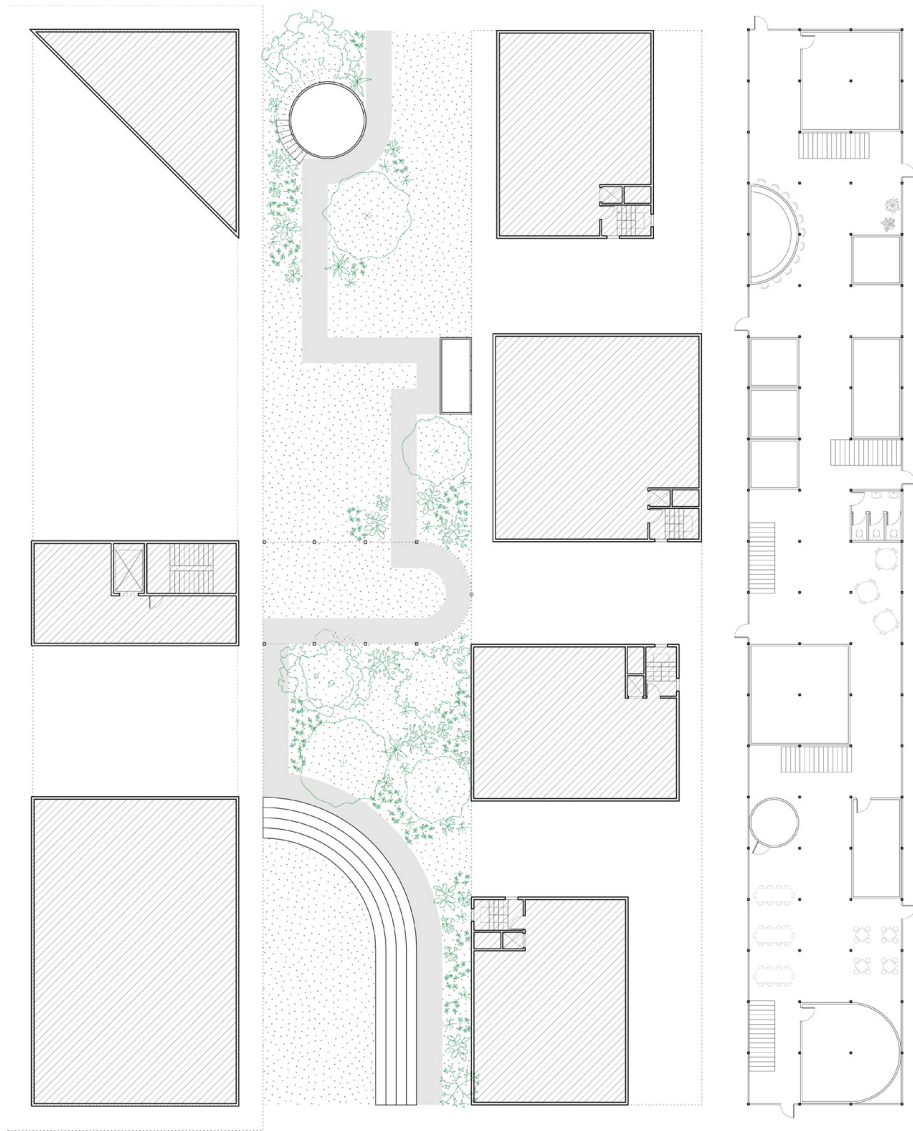


other units

landscape

sro units

public



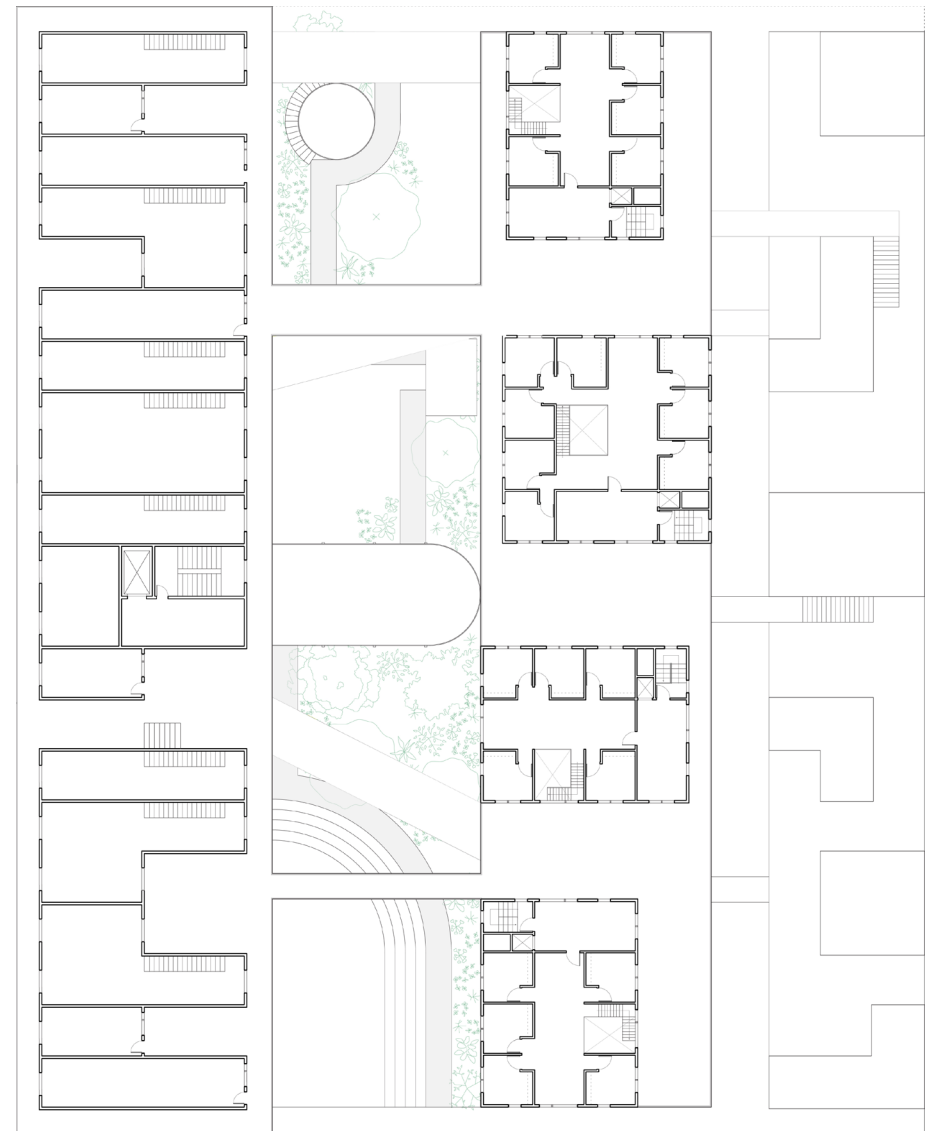
ground floor plan

other units

landscape

sro units

public



typical floor plan



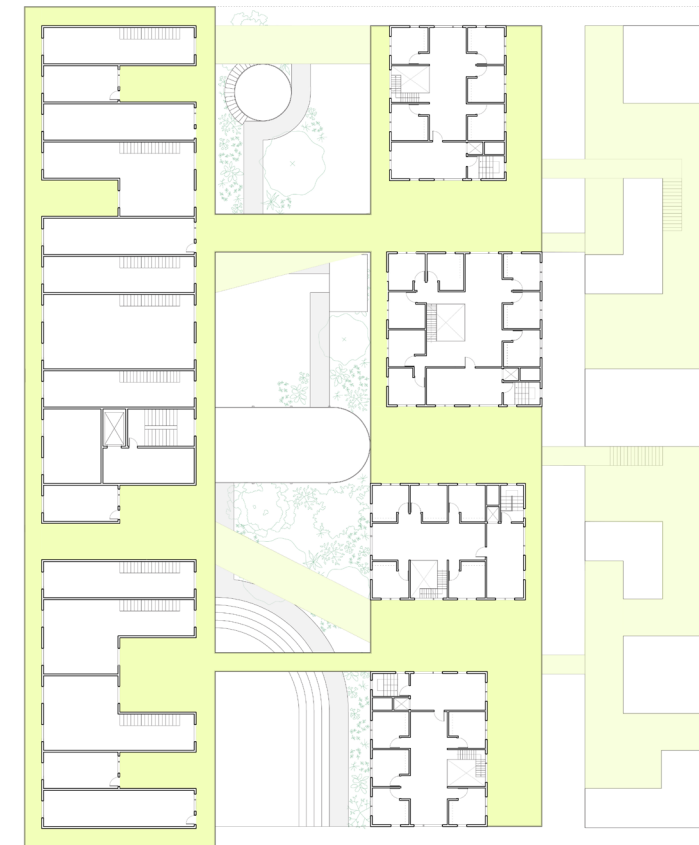
program overlays

The ground floor is the public domain - open and permeable, visitors can freely circulate around the site, utilizing the landscaped areas and public marketplace.

Residential units begin on the second floor, raised 15 feet off of ground level to promote privacy and security.

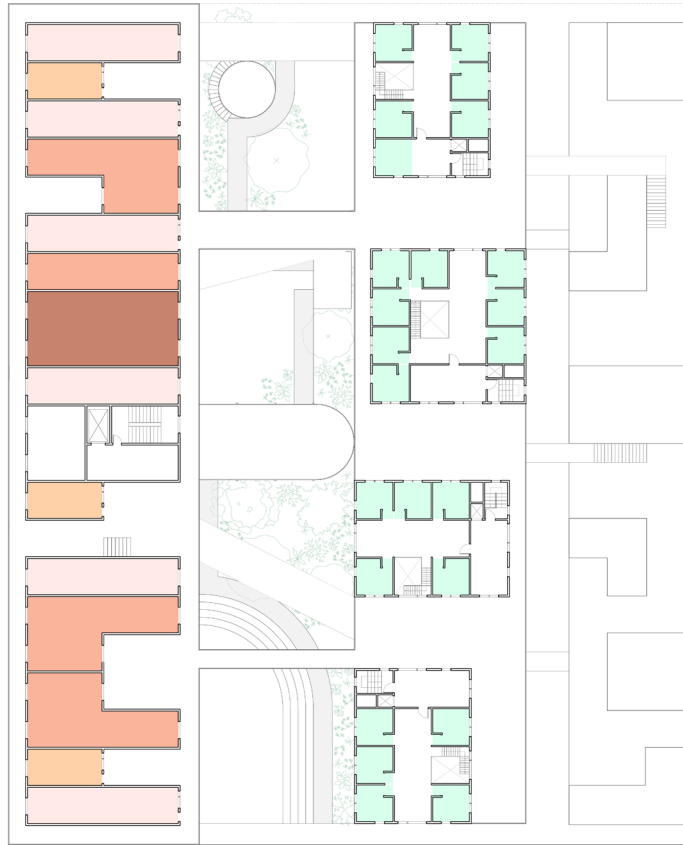
Ample communal outdoor spaces link together through multiple bridges, providing access across the site at different levels. Neighbors become highly connected, gathering in these spaces in-between.

With unit types ranging from the minimal SRO to a spacious 4 bedroom, at different measures of affordability, there is great opportunity for residents to shift around as their needs and means change, making this a long-term housing solution.



communal space +
circulation

■ communal space



unit types

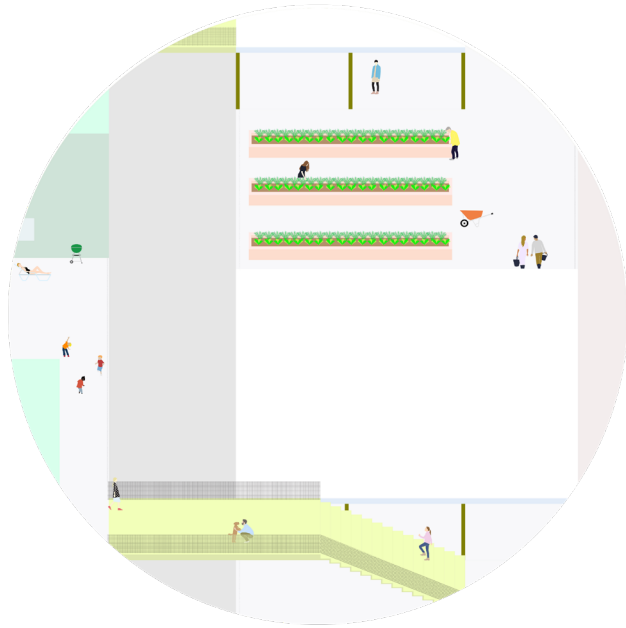
- sro
- 1 bedroom
- 2 bedroom
- 3 bedroom
- 4 bedroom



affordability

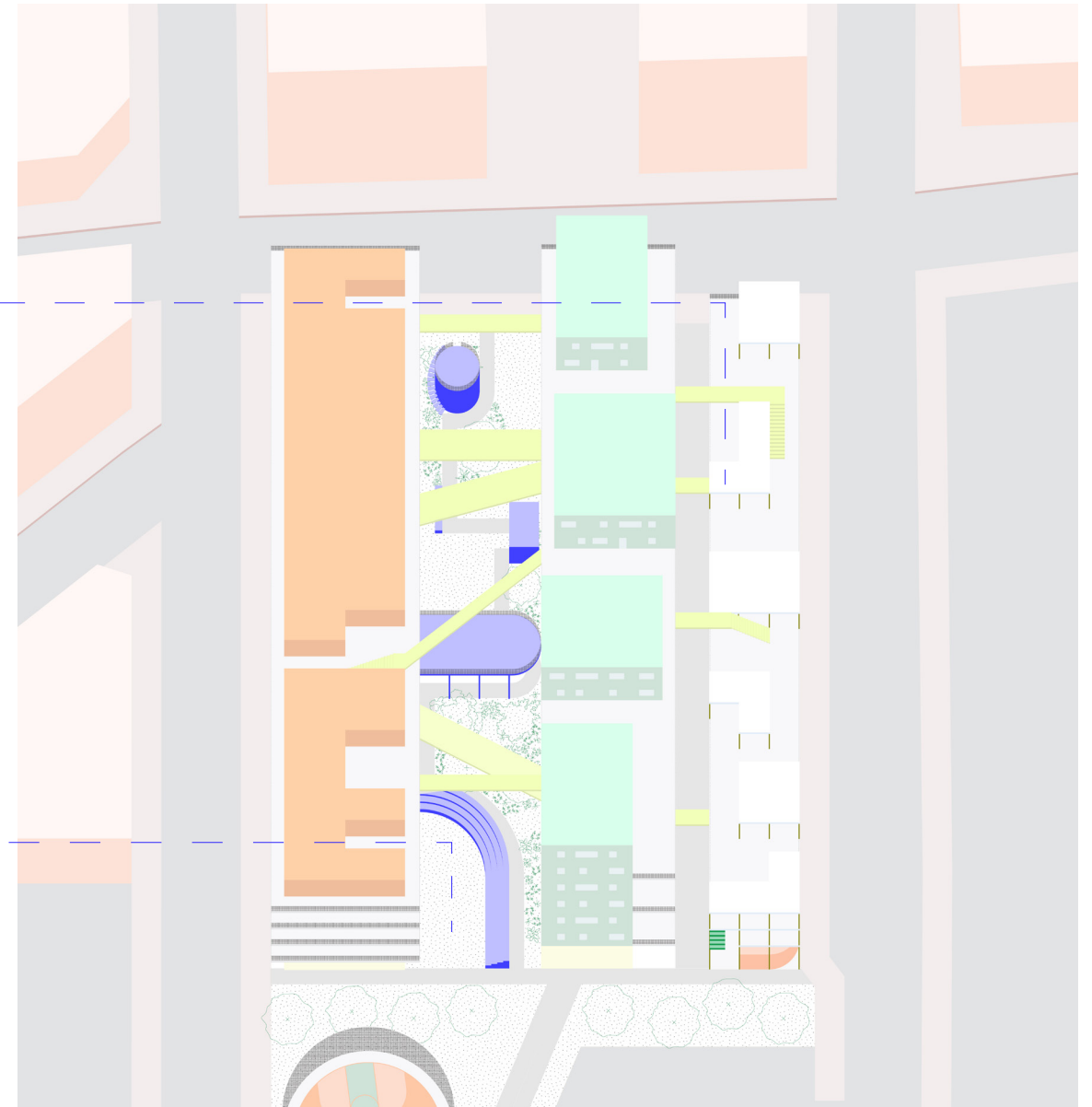
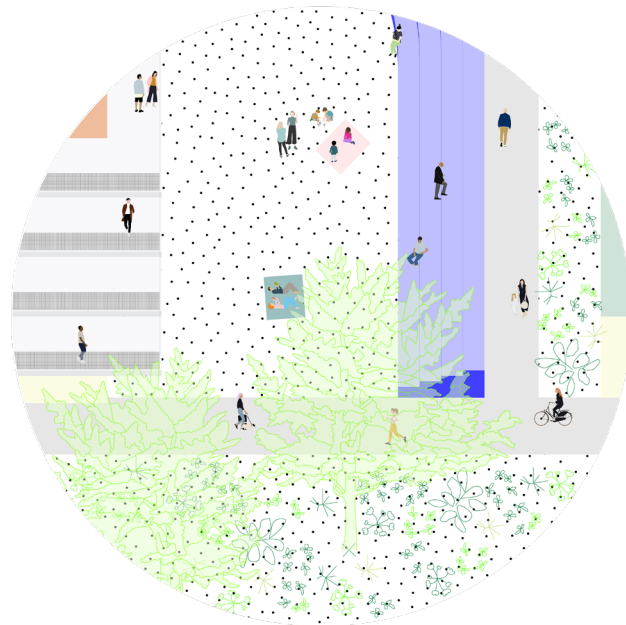
- market rate
- affordable

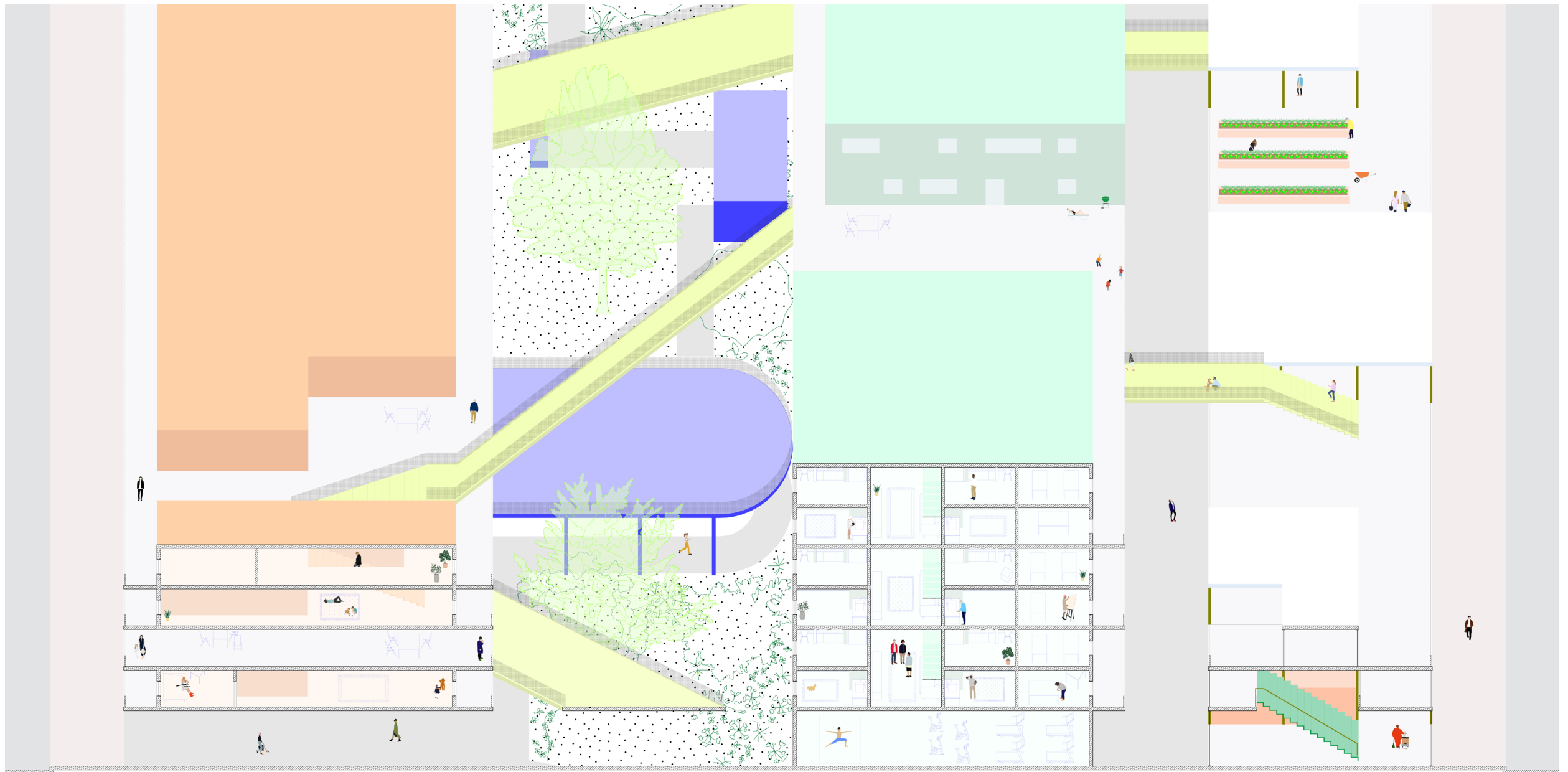
model for vacancy



This mix of demographics and socio-economic statuses creates a diverse community that share spaces and resources in the spirit of collectivity.

Here you see the bands of program on the site in Providence.



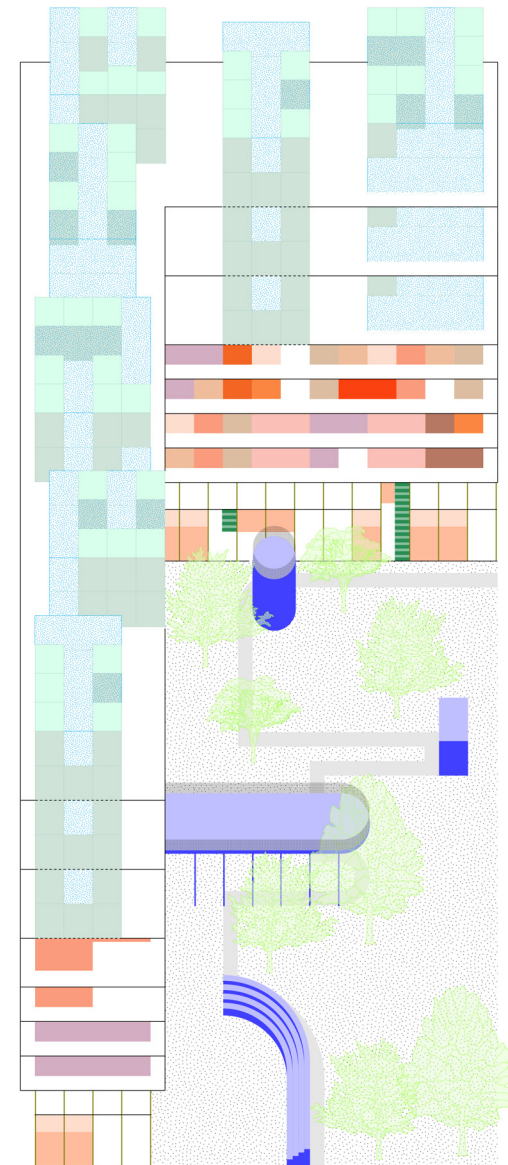


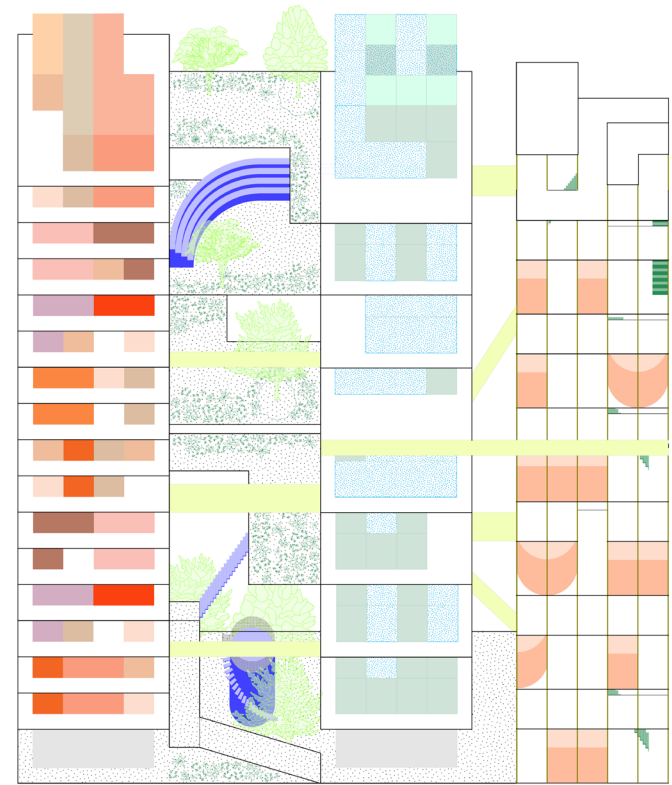
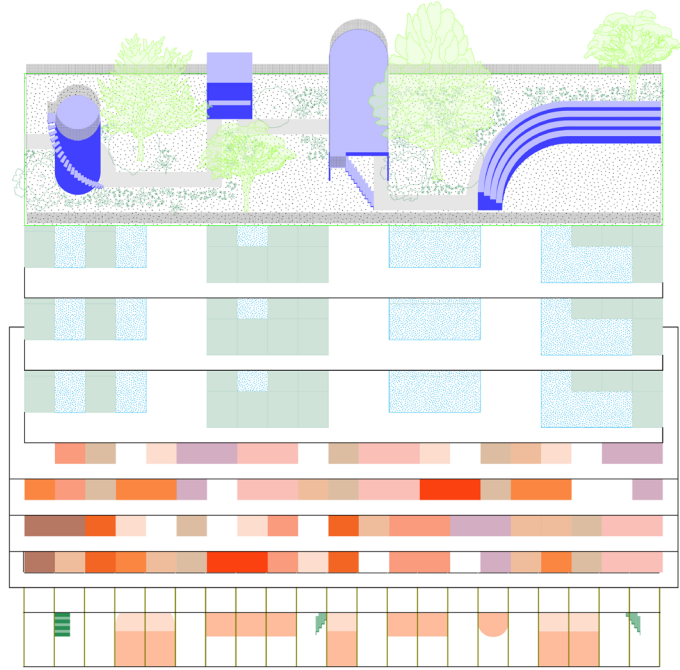
The mix of activity collapsed into one moment across a section of the site show the function of the project as a city within itself.

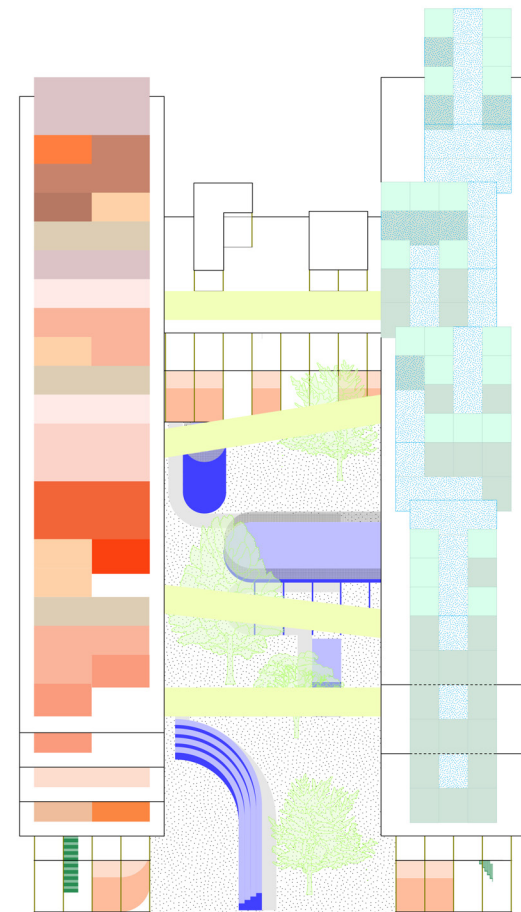
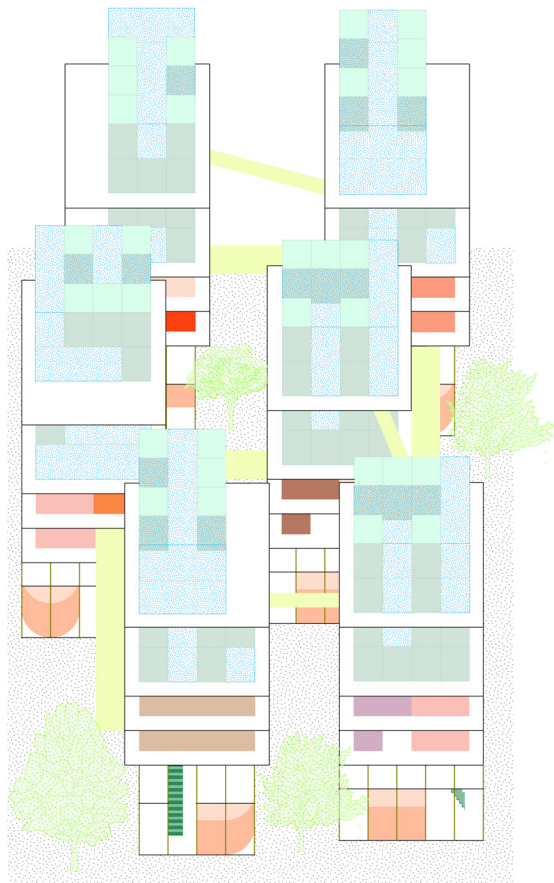
rearranging bands

This directed research project situates itself between spatial research and design. It develops a language and system that provides a degree of development without over-specification. While it addresses societal conditions that exist in many cities, acknowledging the importance of local social, political, and ecological factors, it emphasizes the systematic approach - the internal spatial logics of a new proto-typology.

Taking the socio - spatial principles developed in this Providence model, and applying them to different urban conditions - I have begun to look at other ways in which this proto-typology can be tested. As there are seemingly endless iterations, I look forward to developing many more models of these mixed-use, mixed-income proto-projects and re-imagining the potentials of living together.







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