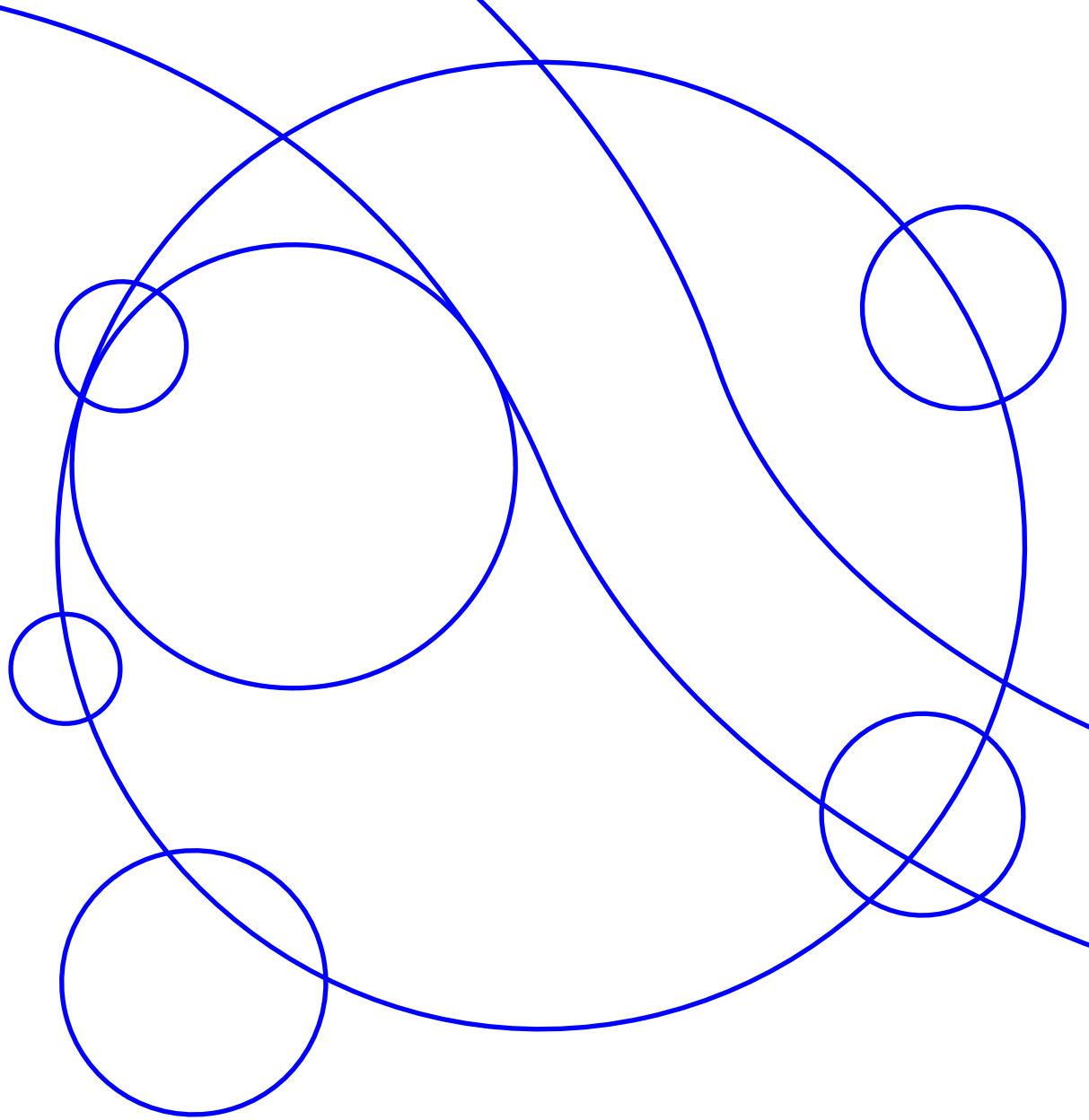


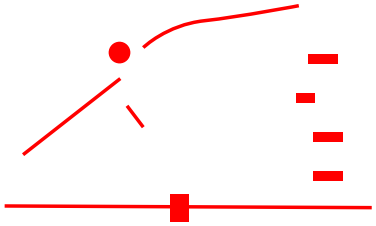
Circular Paternal

C40 CITIES

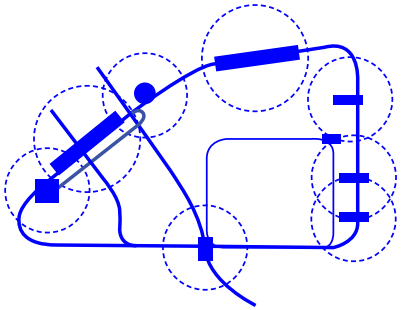
Students Reinventing Cities

Introducing Circular Paternal

Circular Paternal is a vision to integrate and renew the Paternal neighbourhood through movement. Our proposal addresses an area facing a complex set of challenges: an informal settlement adjacent to railroad tracks, limited pedestrian circulation and underutilised, industrial and abandoned buildings. The proposal centres around key intervention areas (subcircuits) to create a coherent activity circuit within La Paternal, building upon existing paths and mobility sites to enhance the area's vitality.



Current: Unconnected segments



Proposal: Circuits and places to stay



38,000m2 of new housing



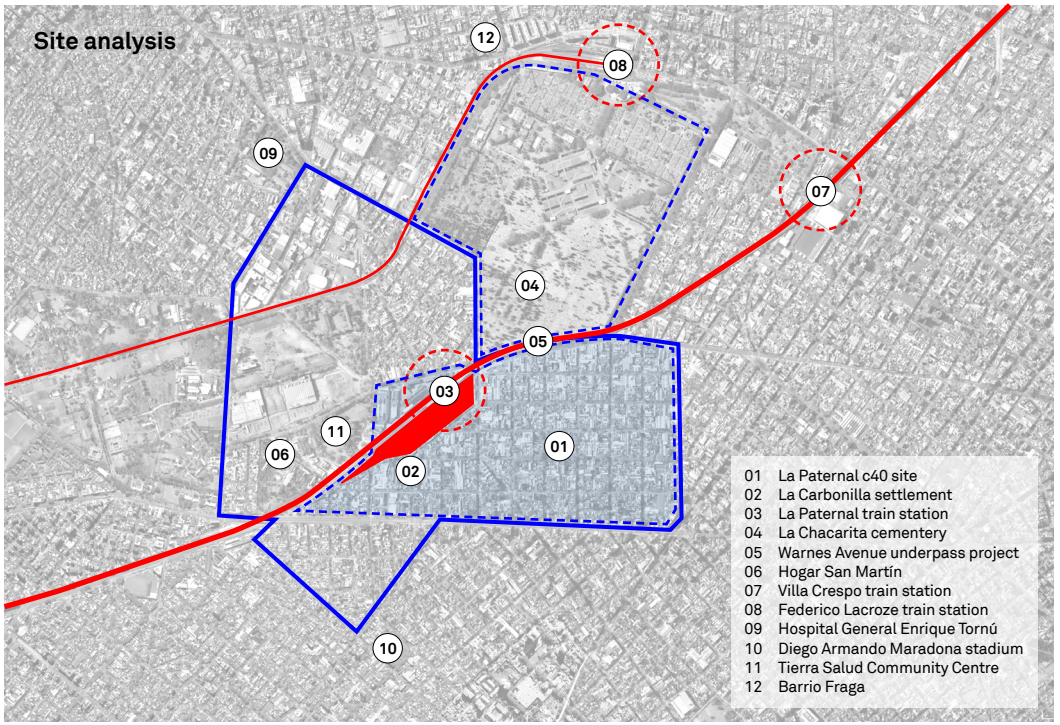
2,800lm of improved walkability



45,000m2 of new public space



1200 new trees



The circuit in La Paternal will embody Cerdá's urban duality philosophy (Cerdá, 1867) in a contemporary context. Cerdá proposed that spaces within the urban fabric provide two primary functions: areas where people move in and out (like streets and transportation hubs) and areas where people remain and linger (such as parks, plazas, and residential zones). By designing cities with abundant space types, Cerdá aimed to create a balance between mobility and livability, ensuring that urban spaces were functional and comfortable for residents. The proposed Paternal circuit includes public spaces of both movement and lingering through a network of pathways designed to rejuvenate the neighbourhood–integrating green spaces, community hubs, and innovative infrastructure. Each subcircuit within the project has aesthetic appeal and functionality, encouraging walking, cycling and rest. They feature greenery and gathering spots that foster community interaction and inclusion across demographic groups.



01 Train overpass on Warnes Avenue



02 La Carbonilla settlement



03 Warnes Avenue

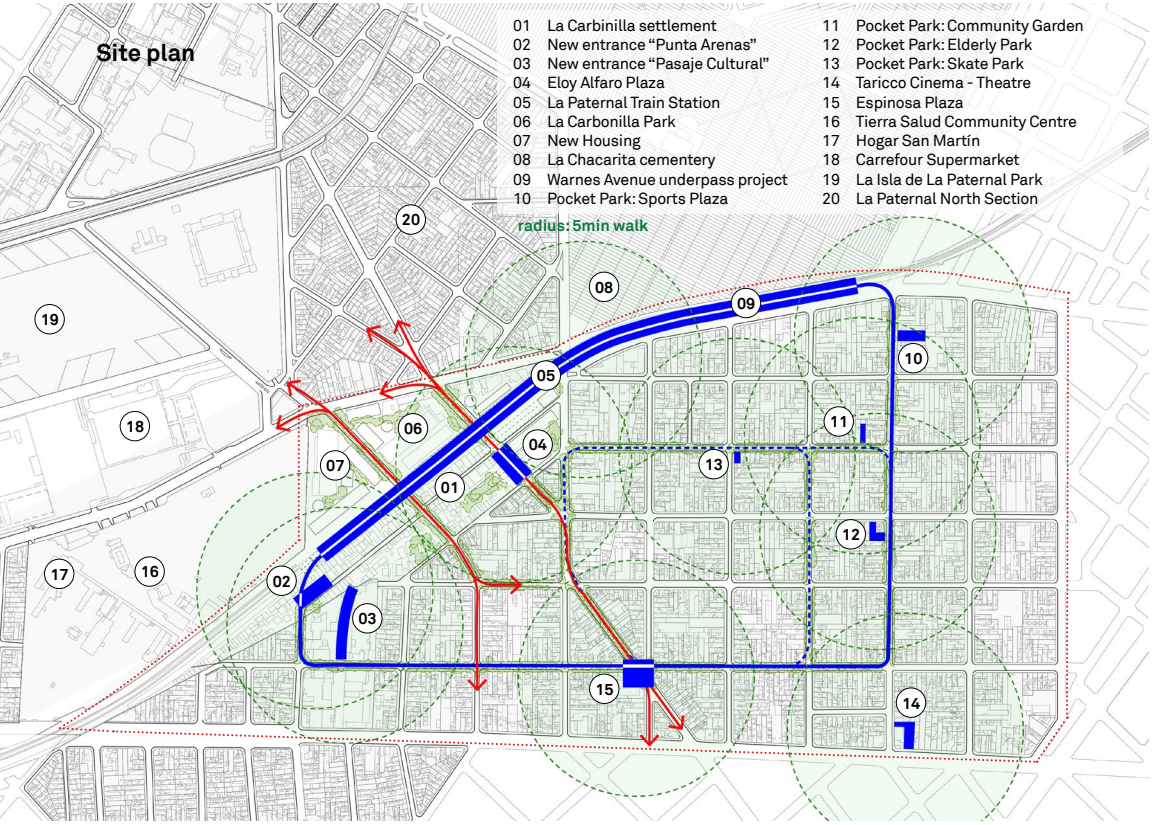


04 Nicasio Oroño street

Circular Paternal: Project Overview

These subcircuits connect residential areas, schools, businesses, and transportation hubs, facilitating efficient navigation across La Paternal. They aim to overcome urban barriers by creating safe, inviting public spaces that enhance community identity and pride. Through thoughtful design and community engagement, these pathways incorporate well-lit environments, with accessibility features, and green spaces to create the primary circuit–ultimately promoting integrated urban living in La Paternal. Critically, the circuit in La Paternal embraces the integration of informal settlements within the broader neighbourhood, which has been overlooked in previous projects. Greening and environmentally-friendly buildings throughout the circuit will contribute to the climate resilience of the neighbourhood and city.

The Circular Paternal proposal aims to increase circulation within and through the neighbourhood, activating key sites in the area that are currently underutilised or lacking vitality. These interventions integrate C40's principles for green and thriving neighbourhoods as well as existing frameworks put forward by the government of Buenos Aires. Tying the specific elements of the Paternal proposal to broader initiatives and goals means the approaches implemented here will be more replicable at local, national and international levels.



Paternal Circular will be achieved through three strategic intervention areas:

i. **Bridging** the borders of La Paternal
ii. Enhancing the **pedestrian experience**
iii. **Reimagining** under- and unused spaces

Paternal Circular particularly addresses the following C40 Principles:

a. **People-centred** streets and low-carbon mobility
b. A place for **everyone**
c. **Clean** construction
d. Green spaces, urban nature and **climate resilience**

Through these intervention areas, Circular Paternal addresses the key priorities established by the C40 Cities brief: integration of La Carbonilla, integration of existing industrial structures and infrastructure, and the livability and walkability of the neighbourhood. These interventions will impact core areas of resident life: housing, transportation, environment. Our approach balances the needs of all Paternal residents, though in some areas we pay particular attention to the challenges facing La Carbonilla residents. The proposal also prioritises the design of spaces for children and the elderly, and spaces to engage in art and culture.

01. Bridging the Borders of La Carbonilla

We recognize that despite its connectivity to public transportation, La Paternal is a neighbourhood clearly defined and fenced in by physical boundaries. A primary goal in our proposal is to bridge these borders, increasing mobility within La Paternal and knitting the neighbourhood to adjacent communities. This intervention component focuses on the site's western edge, where the General San Martin Railroad and La Carbonilla settlement currently bisect the north part of La Paternal from the project area. These physical boundaries limit mobility and circulation within the neighbourhood. It also is a place that residents of La Paternal think of as unsafe and avoid it. The intervention helps to overcome this urban disfunctionality and create a safer space for residents and bypassers.

01 La Carbonilla settlement
02 Álvarez Jonte street extension
03 New Plaza Eloy Alfaro
04 Perú Street intersection
05 La Carbonilla Park
06 Commercial area
07 La Paternal Train Station

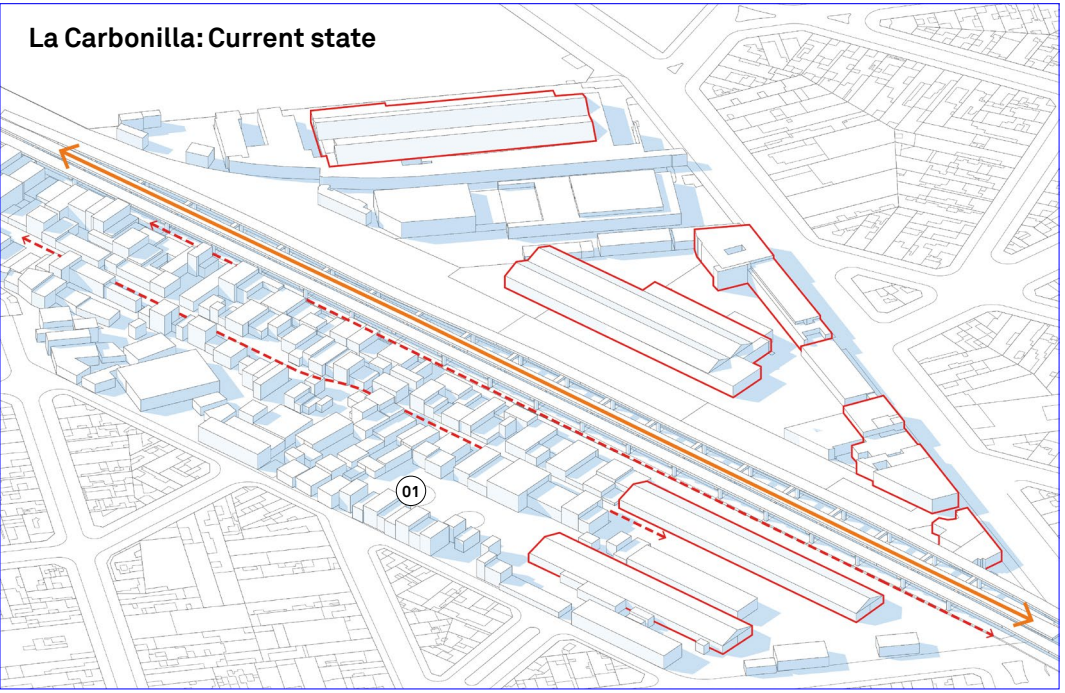
Green Street extensions
Elevated train way
Pedestrian Streets
Potential re-use sites
Existing informal roads

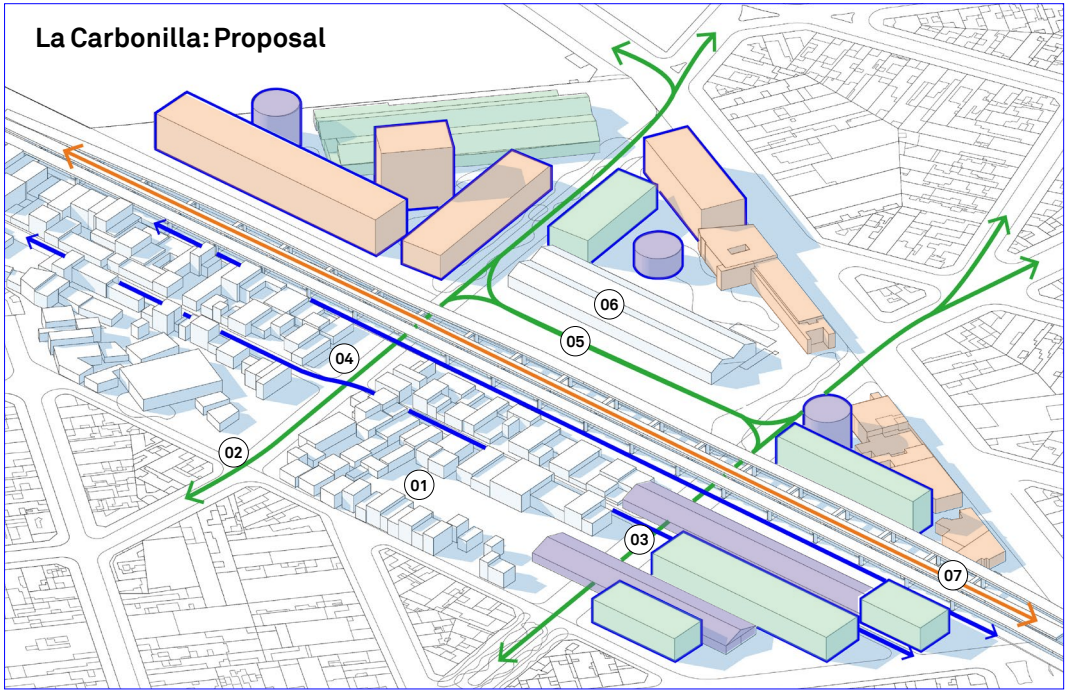
Affordable Housing
Market Housing
Community Areas

01.1 Street extensions

We propose extending Donato Álvarez & Álvarez Jonte streets northwest through the settlement, continuing underneath the viaduct, and connecting to existing streets in the north portion of La Paternal. Through conversations with residents, this northern section was repeatedly identified as "isolated" and "private" due to its physical separation. The recent elevation of the train line created opportunities for opening that border, improving accessibility and creating connections between neighbours. These streets will take advantage of the potential space under the train, turning what is now a harsh border into a space of pedestrian mobility.

The primary impact of this intervention will be the displacement of some La Carbonilla residents, as structures along the proposed path will need to be dismantled and cleared. The displacement of residents and opening of the streets will be reduced to the minimum necessary for a proper integration of the neighbourhood into the rest of the city. To minimise this impact, a key element of our proposal is **the development of affordable housing specifically for these displaced residents in close vicinity of their previous homes.** To that goal, 902 apartments will be built by a private developer with the urban code modification, and as a form of payment, 150 are going to be designated affordable housing for La Carbonilla residents.





01. Bridging the Borders of La Carbonilla

01.2 Formalising entrances to the settlement

La Carbonilla currently lacks sufficient formal entrances from the main vehicular streets of La Paternal. Potential entrance points that would be more direct have gone unrealized due to private businesses and properties. This is also evident in the long alleyway (pasaje) that functions as a primary entrance to the settlement from Espinosa Street. The alley has limited light and is especially narrow due to the informal structures built along the path as the settlement expanded.

Our proposal envisions **two redesigned entrances to La Carbonilla**. One will be created at the end of **Punta Arenas street**, where a cluster of privately owned properties and businesses blocks access to the settlement, separating it from the rest of Paternal. The second entrance will be a reimagined pasaje on the same site as the current entrance from Espinosa. In the **new *pasaje cultural*,** structures will be removed, and lighting will be added along the corridor to bring a sense of brightness and safety to the passage. The walls of the pasaje will become art space for murals, community installations, and other public art. This intervention draws on projects to improve the experience of public space through murals in La Boca (Gobierno de la Ciudad Autónoma de Buenos Aires, 2016).



Pasaje Cultural: a redesigned entrance to La Carbonila, will engage residents through public art and lighting that makes the passage secure and inviting throughout the day.



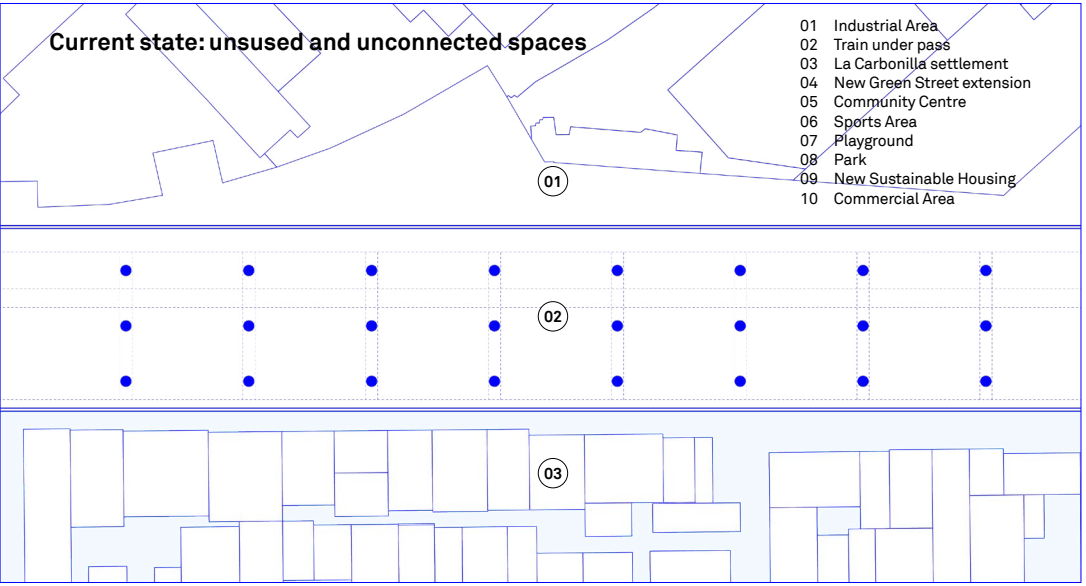
Perú Street: Under the elevated train a new space of movement and recreation will connect La Carbonilla with the rest of the neighbourhood. Covered seating and shade from the tree canopy make the space useful in any weather conditions.

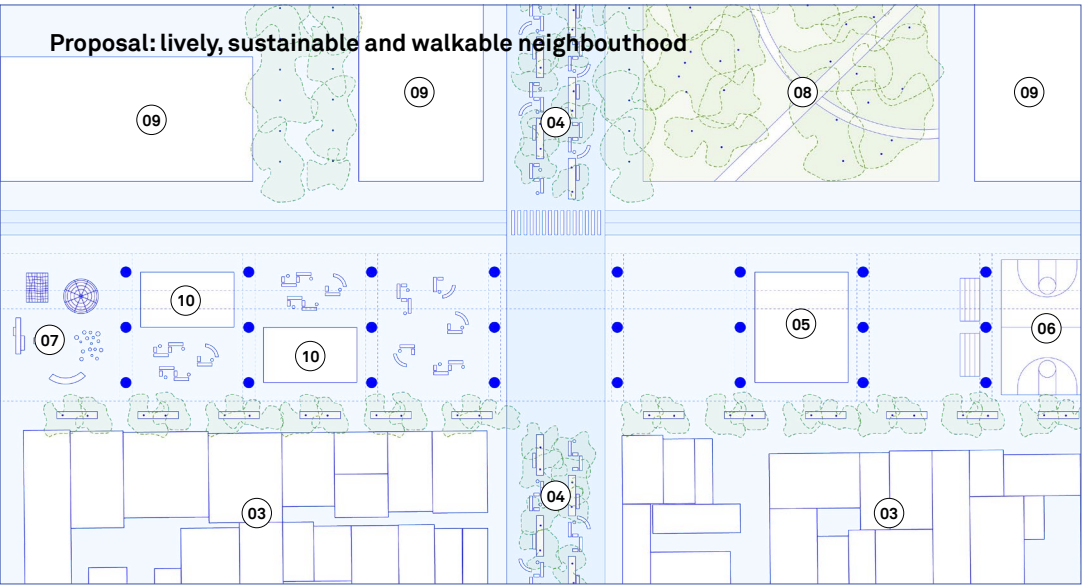
01.3 Reimagining Perú street

Honouring the significant Peruvian population of La Carbonilla, the primary road running alongside the settlement parallel with the train has been informally named “Perú”. While this name is recognised by residents and reflected in sites like Google Maps, it is superseded by another street named Perú elsewhere in the city. This presents a wayfinding problem as addresses typed into search engines or GPS apps will direct to the “official” Perú instead of Perú in La Carbonilla.

We propose **renaming this street through a participatory process** with local residents to resolve this issue. This process will enable residents to propose and vote on a new, unique street name for the central thoroughfare of La Carbonilla. Our goal is to celebrate La Carbonilla’s residents while solving a logistical issue and lending more legitimacy and legibility to the site. We also propose enhancing the street by **reinforcing and improving existing recreational** uses along the site. These include a football court near La Paternal station and children’s playground near San Nicolás.

01. Bridging the Borders of La Carbonilla





01.4 Generating economic activity and opportunity

We will also bridge socioeconomic borders and barriers, creating economic opportunities and activity, through a **new commercial area under the viaduct along Perú street**. This area will feature stalls with subsidised rent for local business owners and additional spaces for various commercial uses.

Inspired by the recent Mitre Viaduct project, we aim to transform the underutilised space beneath the viaduct into a vibrant commercial hub. The Mitre Viaduct successfully integrated public spaces with retail and service areas, revitalising the local economy and providing a model for our project (VíaViva, n.d.). By offering affordable rental options, we will support local entrepreneurs and small businesses, fostering economic growth and community engagement. This commercial area will serve as a vital connector, bringing together residents, visitors, and businesses, and enhancing the overall appeal and functionality of the neighbourhood. And close proximity to the La Paternal train station will increase the accessibility of the area to the broader Buenos Aires region.

After primary investments are made in pedestrian circulation and street level mobility and greening, we propose a second phase of the project focused on public utilities and structural improvements. Based on the studies done by La Defensoría del Pueblo (Defensoría del Pueblo, 2023) major improvements need to be done, connecting residents to electricity, water and sewage systems, internet, and waste management. We understand this needs to be done in order to further integrate La Carbonilla to the rest of the city and to improve quality of life in the settlement.

01. environmental assessment

Increasing urban greenery with drought-tolerant trees will enhance CO_2 absorption and reduce heat islands. The creation of green streets and linear parks will promote walking, reduce vehicle use, and lower greenhouse gas emissions. These improvements will enhance air quality, increase stormwater absorption, and provide safe, accessible public spaces.

Green Principles: Complete neighbourhoods (1), Smart and connected neighbourhoods (3), People-centred streets & low carbon mobility (2), A place for everyone (4)

BA Climate Action Plan 2050 pillar, action, target:

An inclusive city -> Integrating neighbourhoods

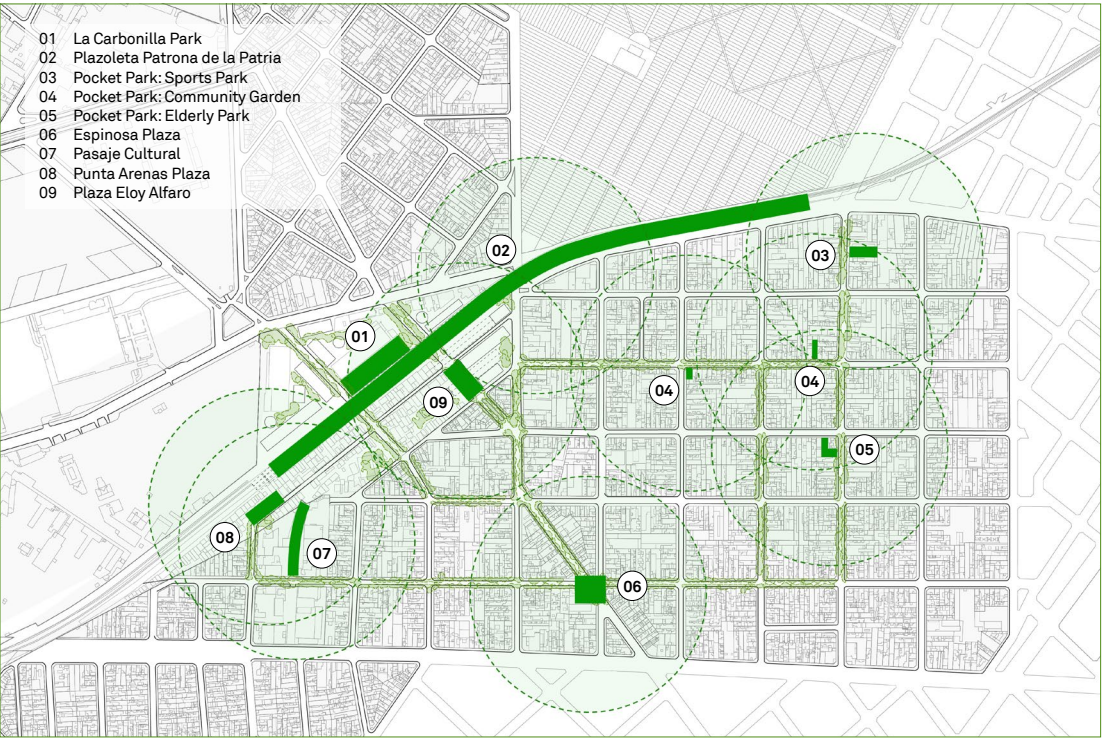
02. Enhancing the Pedestrian Experience



Almirante F. J. Seguí Street



Nicasio Oroño Street



The subcircuits in La Paternal will be connected through investments in pedestrian mobility and the creation of green streets linking areas of intervention in the eastern and western sides of the neighbourhood. We propose to improve the walkability of La Paternal through street greening, linear parks and curb extensions. The pilot streets for these efforts will be **Donato Álvarez, Espinosa and Añasco streets** which are currently high-traffic streets that are unpleasant for pedestrians. Additional greening in the form of linear parks will be developed along Seguí and Nicasio Orono as part of generating a children's district.

02.1 Green streets for children

Drawing upon successful initiatives in Paris (Rue des Écoles) and Buenos Aires, we propose transforming the eastern portion of La Paternal into a children's district. Given the existing volume of schools and generously wide streets, this area is well-suited to house multiple linear parks, similar to a successful project on Avenida Honorio Pueyrredón (Buenos Aires Ciudad, n.d.). **Replacing street parking with greenery and widened sidewalks**, two primary streets in the district (**Almte F.J. Segui and Nicasio Oroño**) will become spaces of safe recreation and movement for children and families. Similar improvements will be made along Añasco as part of the greening effort, connecting the district to La Paternal Station and enabling safe commuting for families.



Almirante F.J. Seguí Street: Tree plantings and public seating turn already-wide streets into avenues of pedestrian mobility. Red foliage and flowers in planted species celebrate the team colours of Argentinos Juniors.

02. Enhancing the Pedestrian Experience

02.2 Planting with purpose

Along the green streets and linear parks, we propose planting species approved in the current Buenos Aires city plan (Gobierno de la Ciudad Autónoma de Buenos Aires, 2023), prioritising fast growth of trees for canopy coverage with pollution and drought tolerant species for year-round ground cover. Tipa trees (Tipuana tipu) will be planted along the green streets and linear parks in the children's district, providing abundant shade and aesthetic continuity with the rest of the city. To celebrate the team colours of the local football club, Argentinos Juniors, species with red flowers and leaves will be planted along the streets, creating "red streets". Shorter, ornamental trees bearing red flowers (Erythrina crista-galli and Sesbania punicea) will sit amongst the Tipas and Bauhinia forficata, adding variety and visual interest at street-level.

Curb extensions will calm traffic and create safer, shorter crosswalks for pedestrians. These extensions will also create new spaces for pocket parks and recreational use of the sidewalks.

02. environmental assessment

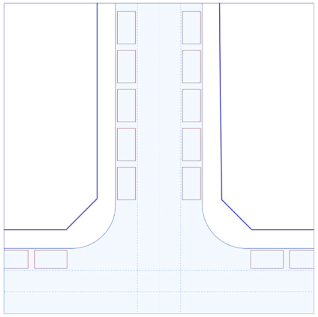
Increasing urban greenery with drought-tolerant trees will enhance CO_2 absorption, reduce heat islands, and prevent floods by improving soil stability and increasing stormwater absorption. The creation of green streets and linear parks will promote walking and reduce vehicle use, lowering greenhouse gas emissions. These improvements will enhance air quality and provide safe, accessible public spaces.

Green Principles: Complete neighbourhoods (1), Green Spaces, Urban Nature, and Climate Resilience (8), People-centred streets & low carbon mobility (2), A place for everyone (4)

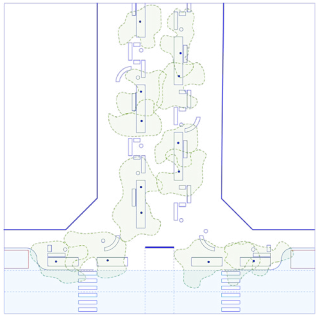
BA Climate Action Plan 2050 pillar, action, targets:

A prepared city -> More and better trees, 100,000 more trees by the year 2025
A city that prioritises proximity to local amenities -> Calles de encuentro, having a pedestrian street in every one of the city's 48 neighbourhoods

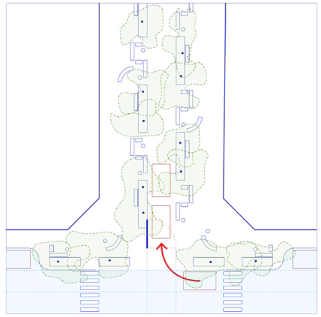
01. Current street type in La Paternal



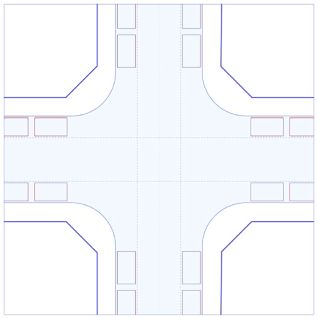
02a. School street (closed to cars)



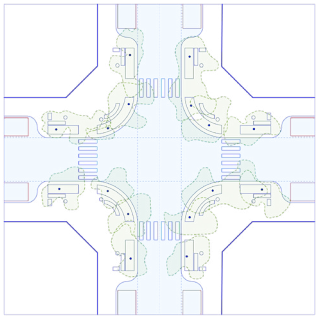
02b. School street (open to cars)



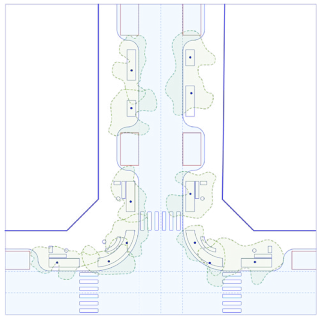
03. Current crossing type in La Paternal



04. Proposed curb extension crossing



05. Green Streets



Ceibo: Erythrina crista-galli



Pezuña de vaca: Bauhinia forficata



Ceibillo: Sesbania punicea



i. AAAJ "Tierra de Dios" street art



ii. AAAJ "Tierra de Dios" street art



iii. AAAJ "Paternal Tierra de Dios" street art



03. Redeveloping under- and unused sites





A mural honoring local women health care workers demonstrates existing community strength and initiative. Proposed sites will provide formal venues for creativity and representation.

Previously an area active with industrial uses, La Paternal has several potential sites for redevelopment within its borders. Former industrial spaces and land are located around the La Carbonilla settlement on both sites of the train line. There are historical buildings lining Avenida Warnes with untapped potential to celebrate the legacy of the area. Some abandoned structures have already been appropriated as artist collectives (C40 Cities, 2024), indicating interest in finding new lives for these spaces. The redevelopment of these sites will serve two primary uses: **affordable housing** and the creation of **public plazas and parks**.

Nicasio Oroño and Maturín Street: Pocket parks create variety in the urban landscape and provide sites to stop and linger throughout La Paternal.



Nicasio Oroño and Maturín Street: A garden and community space will provide raised beds to grow vegetables and hands-on engagement for local children, transforming an empty lot into a safe green space for exploration and gathering.



Añasco Street: Distributing accessible spaces throughout the eastern portion of La Paternal will improve resource equity for elderly residents not currently served by the senior centre near the area's western border.



Añasco Street: Increasing the number of recreational spaces in the area will support La Paternal's elderly population, creating opportunities for socialization and rest.



03.1 Generating activity in unused lots

At the intersection of Espinosa and Donato Álvarez we will expand an existing triangular space into a large public plaza, which will serve as a central green meeting space for the neighbourhood. Several abandoned buildings will be demolished to create public plazas specifically designed for children and the elderly. These plazas will be integral parts of the "stay" areas within the circuit. They will provide resting places, foster community gatherings, enhance safety, and be rest-points to the overall movement within the circuit.

The rehabilitation of the now-abandoned **Taricco Cinema-Theatre** will create new spaces for art, cinema and other cultural activities. The ground floor interior of the theatre will also include a public "living room" to function as an interior leisure space during adverse weather. The rehabilitated Taricco and the pasaje cultural in La Carbonilla will create key sites of creativity and representation, building off of existing public art developed by the community.

03.2 Giving new life to existing structures: affordable housing

The north part of the La Paternal Railroad tracks is a key development focus. This area contains three pre-1941 buildings that lack historical protection, making it ideal for the project's centrepiece. Currently, the urban code designates this area for future urbanisation. We propose a redevelopment through a public-private partnership to introduce affordable housing for local residents. Proximity to the train station means this area is ideal for transit-oriented development, so we propose creating a mix of housing types including a high rise apartment building specifically designated for the displaced residents of La Carbonilla. Industrial buildings will be transformed into low rise housing targeted for students and other residents of La Paternal struggling with rising rent prices.

03. Redeveloping under- and unused sites

Engaging in a strategy of public-private partnership will reduce the financial burden of state in implementing integration efforts, promote economic development, and create jobs in the private sector. This funding mechanism will allow for higher-quality building methods and standards. Due to increased rent prices and energy costs, the housing will incorporate the highest design standards for energy consumption.

We understand that the construction of the new housing, although necessary, will also contribute to the emission of greenhouse gas emissions. As such, the project will be constructed following sustainability rules based on two manuals of the Argentinian presidency: Manual de Vivienda Sustentable (2019) and Propuestas de Implementación de Energías Renovables en viviendas sociales para la generación de energía eléctrica distribuida y solar térmica (2019). From the start of the project, public consultations and participatory workshops will be held with future residents to ensure that the design and features of the project meet their needs and expectations. It is important to note that these measures will also improve the quality of life of the residents through more comfortable dwellings and reduced maintenance costs.



Industrial redevelopment and new affordable housing blocks will increase the livability of La Paternal and generate vitality in a previously deserted portion of the neighbourhood.

Site plan 06

03. environmental assessment

Redeveloping under- and unused sites in La Paternal enhances urban greenery and provides energy-efficient affordable housing, both through transforming existing structures and constructing new buildings with PV systems. This reduces energy consumption and greenhouse gas emissions. Creating public plazas and parks mitigates the urban heat island effect, improves air quality, and offers safe, accessible community spaces, supporting socioeconomic integration.

Green Principles: Complete neighbourhoods (1), People-centred streets and low-carbon mobility (2), Green Spaces, Urban Nature, and Climate Resilience (8), A Place for Everyone (4), Clean construction (5), Green energy and buildings (6)

BA Climate Action Plan 2050 pillar, action, targets:

An innovative and low carbon city -> Towards clean energy, 30% residential rooftops with solar PV use by 2050

A prepared city -> More and better trees, 100,000 more trees by the year 2025

Project sustainability guidelines:

01 Initial site evaluation to minimize long-term costs, identifying topography, land and solar orientation.

02 Designs take advantage of natural sunlight and cross-ventilation, reducing the need for artificial heating and cooling and reduce energy consumption, improving comfort and residents' quality of life.

03 Surveys undertaken to identify local materials and techniques. One example of this is the new housing development in Fraga. There dwellings were initially going to be painted white, but after some neighbours voiced their opinions, they opted for exposed brick, a look closer to the original house facades.

04 Natural insulators such as cork and cellulose will be implemented to improve the building's energy efficiency.

05 Photovoltaic solar panels for electricity generation and solar thermal systems for water heating will be installed.

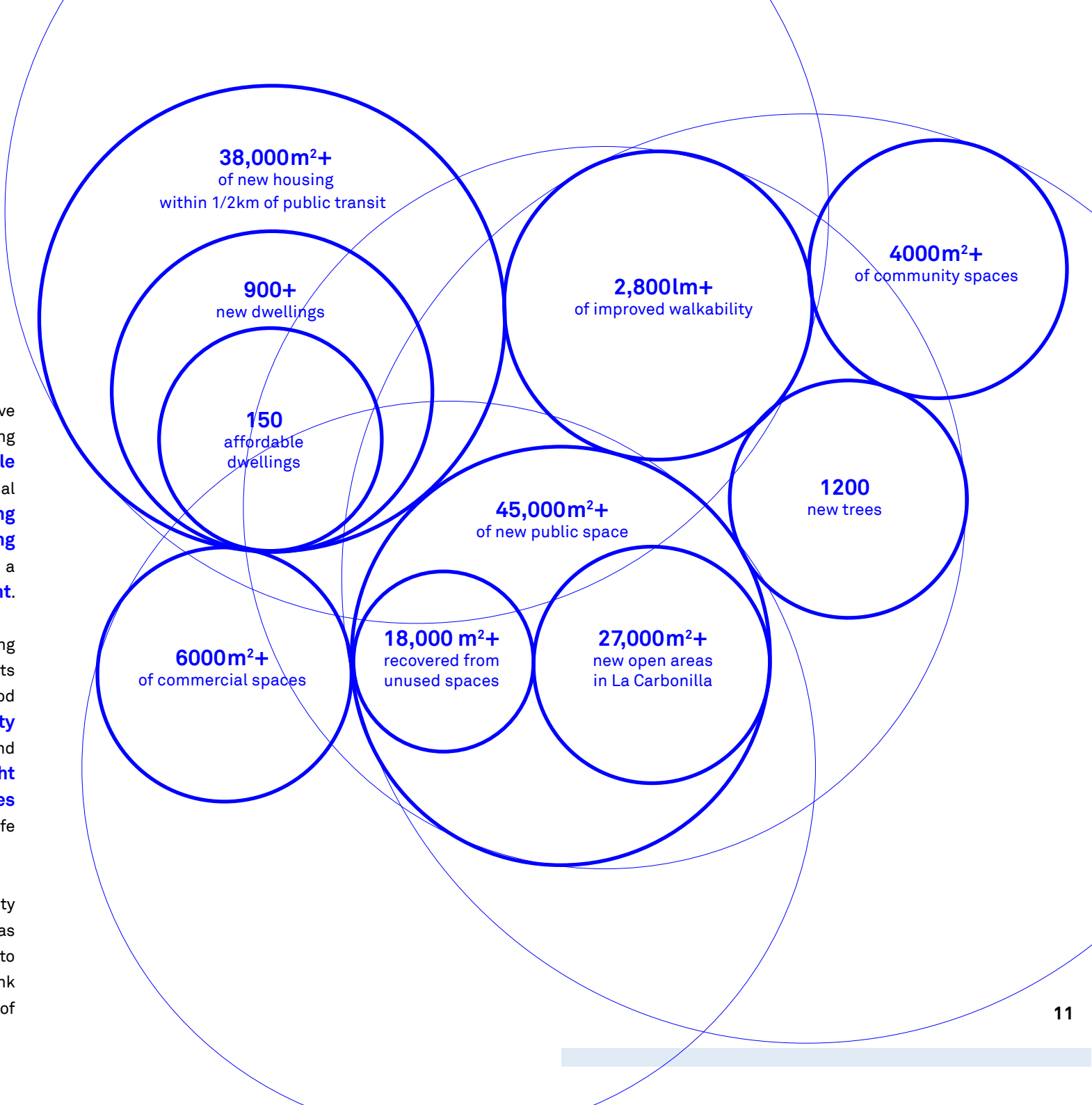
06 Collection and storage systems for rainwater will be installed, which can then be used for irrigating green areas and cleaning.

Conclusions

In closing, **Circular Paternal** offers a transformative vision for La Paternal and its residents—prioritizing **mobility, community integration, and sustainable development**. By bridging the physical and social boundaries within the neighbourhood, **enhancing pedestrian experiences, and revitalizing underutilised spaces**, our proposal aims to foster a vibrant, **inclusive, and resilient urban environment**.

The proposed interventions were inspired by the strong community in La Paternal. Conversations with residents and site visits reinforced that the neighbourhood has a promising foundation: **engaged community members**, spacious streets, a mix of residential and commercial spaces. Our goal has been to **highlight efforts that can enhance all the valuable qualities La Paternal already has**, improving the quality of life for existing residents and drawing others in the city.

We express our deepest gratitude for the opportunity to contribute to the future of urban development as students. This project has provided us new insights into the complexities and rewards of city planning. Thank you for allowing us to play a part in shaping the cities of tomorrow.



appendix

References

Buenos Aires Ciudad. (n.d.). *Calle verde Honorio Pueyrredón*. Buenosaires.gob.ar; Gobierno de la Ciudad Autónoma de Buenos Aires. Retrieved June 29, 2024, from https://buenosaires.gob.ar/calles-verdes/calle-verde-honorio-pueyrredon

C40 Cities. (n.d.). *Guidance to Design a Green and Thriving Neighbourhood*. Retrieved June 29, 2024, from https://www.c40reinventingcities.org/data/uni-competition_3ef69/categorie/6/eng_guidance_to_design_a_green_and_thriving_neighbourhood.docx_e2aa5.pdf

C40 Cities. (2024). *Students Reinventing Cities* - Buenos Aires Site Form. https://www.c40reinventingcities.org/data/uni-competition_3ef69/fiche/602/eng_students_reivnenting_cities_buenos_aires_site_form_.docx_1_c3f04.pdf

Defensoría del Pueblo. (2023). Monitor de Servicios Públicos en Villas Barrio La Carbonilla. In calameo.com. https://www.calameo.com/defensoriacaba/read/0026823991538d6f9a847

Defensoría del Pueblo. (2022). Censo Barrio La Carbonilla: Informe de veeduría. In calameo.com. https://www.calameo.com/defensoriacaba/read/0026823996320d5942cd5

Gobierno de la Ciudad Autónoma de Buenos Aires. (2016). *El antes y el después de un barrio intervenido por el arte*. Buenosaires.gob.ar. https://buenosaires.gob.ar/noticias/el-antes-y-el-despues-de-un-barrio-intervenido-por-el-arte

Gobierno de la Ciudad Autónoma de Buenos Aires. (2023). Plan Maestro para el Arbolado Público Lineal de la Ciudad Autónoma de Buenos Aires. In https://buenosaires.gob.ar/sites/default/files/2023-08/Plan%20Maestro%20de%20Arbolado%20Tomo%20I.pdf.

Presidencia de la Nación. (2019). Manual de Vivienda Sustentable.

Presidencia de la Nación. (2019). Propuestas de implementación de Energías Renovables en viviendas sociales para la generación de energía eléctrica distribuida y solar térmica.

VíaViva. (n.d.). BMA. Retrieved June 29, 2024, from https://bmaestudio.com.ar/proyectos/viaviva/

Citizen Participation

One of the main things we all agreed on as a group in the beginning of our project was the importance of citizen participation in the making of urban interventions. This is why, following some group discussions about possible interventions and objectives for our proposal, and conducting several site visits, we engaged in qualitative research involving the residents of La Paternal.

Our goal was to gather insights to understand their opinions, desires, things they wish to change, and aspects they love about living in La Paternal. We interviewed approximately 20 people, both formally through a questionnaire and informally by participating in community activities, such as cooking meals for people in need.

We recognize that the opinions expressed by these people are not even close to representing the entirety of La Paternal. However, we included this as part of our proposal to emphasize the importance of community engagement in urban projects.

These are the questions we asked as part of our qualitative research:

01. What do you like the most about living in La Paternal?
All interviewees highlighted the calmness of the neighborhood.

02. What improvements would you like to see in the public spaces of La Paternal?
Everyone expressed a desire for more public green spaces, emphasizing the need for equipment for children and dogs. Additionally, two participants mentioned the need for more cleaning around the trash cans.

03. What type of housing do you think is most needed in La Paternal?
Responses varied widely, including housing for people in need, housing for young people, and mixed-use buildings where markets can be put in place.

04. What additional services would you like to have near your home?
The most common answer was cultural spaces, such as libraries, cultural centers, theaters, and cinemas. Two participants specifically mentioned the Cine Taricco.

05. What mobility improvements would you like to see in La Paternal?
Participants expressed satisfaction with the availability of public transport on nearby avenues. However, many were concerned about the high volume of car traffic and the number of cars parked on the streets.





