

# The Barrio Catalysts



Gran San Blas - Madrid

C40 Students Reinventing Cities

## Agenda

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3. Transport & Mobility
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  - 3.2 Emission Reduction
4. Buildings & Energy Efficiency
5. Public Spaces & Tactical Urbanism
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Annex

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# 1.

## OVERVIEW

Based on a SWOT analysis and the requirements provided by C40 and the city of Madrid, different areas of improvement were identified.

The 19 hectares of the San Blas J district are densely populated. An abundance of concrete and a lack of green spaces can be observed throughout the district. For a dense urban neighbourhood, the proportion of private car ownership is high; the number of cars matches the number of households, despite being embedded in the Madrid metro network. Thus, the image of parked cars is a reality on most streets of the district. Socially, the district is challenging due to its lack of operating shops and the lack of opportunities to engage in social life. Presumably, these problems were further facilitated by COVID-19. Zones of different height levels and unlit passages create a closed feeling and are perceived as unsafe and inaccessible, especially by older people and women. Throughout the district, unused areas and fences create borders; this is also the reason that different parts of the district are poorly interconnected.

Despite being a challenging district, San Blas J offers multiple opportunities for improvement. Underused squares, especially the large Calle Argenta, have the potential to be transformed into socially inclusive spaces. There is a large potential for the implementation of greenery throughout the district. Public facilities, such as schools, sport courts and a library are located in the proximity. This makes the area potentially attractive for families with children. By reducing car ownership in the long term, the two cross routes could be utilized to connect parts of the district with bicycle infrastructure, as well as generate open space for pedestrians and dwellers.

A brief outline for the structure of the subsequent chapters. After a broad presentation of our goals for the district, four topics are covered in detail. The first chapter is dedicated to transport and mobility. Here the issue of parking space will be of central importance. Secondly, buildings and energy efficiency. Public spaces and tactile urbanism. Lastly, notions of social participation and economic revitalization will

# 2.

## GOALS

Our conceptual ideas for the future can be divided into six categories, which are linked to each other.

The transport and mobility goals focus on a reduction of individual traffic and open street parking. We aim to create inner-block car-free zones which require a well-connected public transport system. Therefore we want to include the TOD- and last mile approaches and a safe bike and pedestrian infrastructure. Encouraging shared mobility may be a key to reduce the amount of cars.

An important aspect is also social inclusion. It is essential to boost local initiatives and participation formats to increase the urban identity. We aim to promote educational integration and cultural activities. In order to establish these interrelationships, open multiuse public spaces are needed to be a part of the area. Especially at this time during the Covid-19 pandemic, it is of great importance to create public spaces which are inclusive and accessible for everybody. This includes the improvement of the sport courts and playgrounds in the area. This leads to our ideas in the field of land-use and public spaces. We aim to implement a multifunctional, human scale design while targeting the revitalization of commercial groundfloor usage and the urban voids.

Furthermore it is essential to include more urban green in combination with the concept of urban gardening. This is where we plan to create a local project which has also a positive effect on reducing the heat island effect.

The existing built-up areas are the key to our idea of an energy efficient building design and a renovation together with new, flexible uses which are needed. Solar roofs or roof farming may be possibilities to ensure improvements.

We want to focus on the security including a gender-equitable, barrier-free area. Through lighting and vegetation we want to create safe public spaces and COVID-19 resilience.

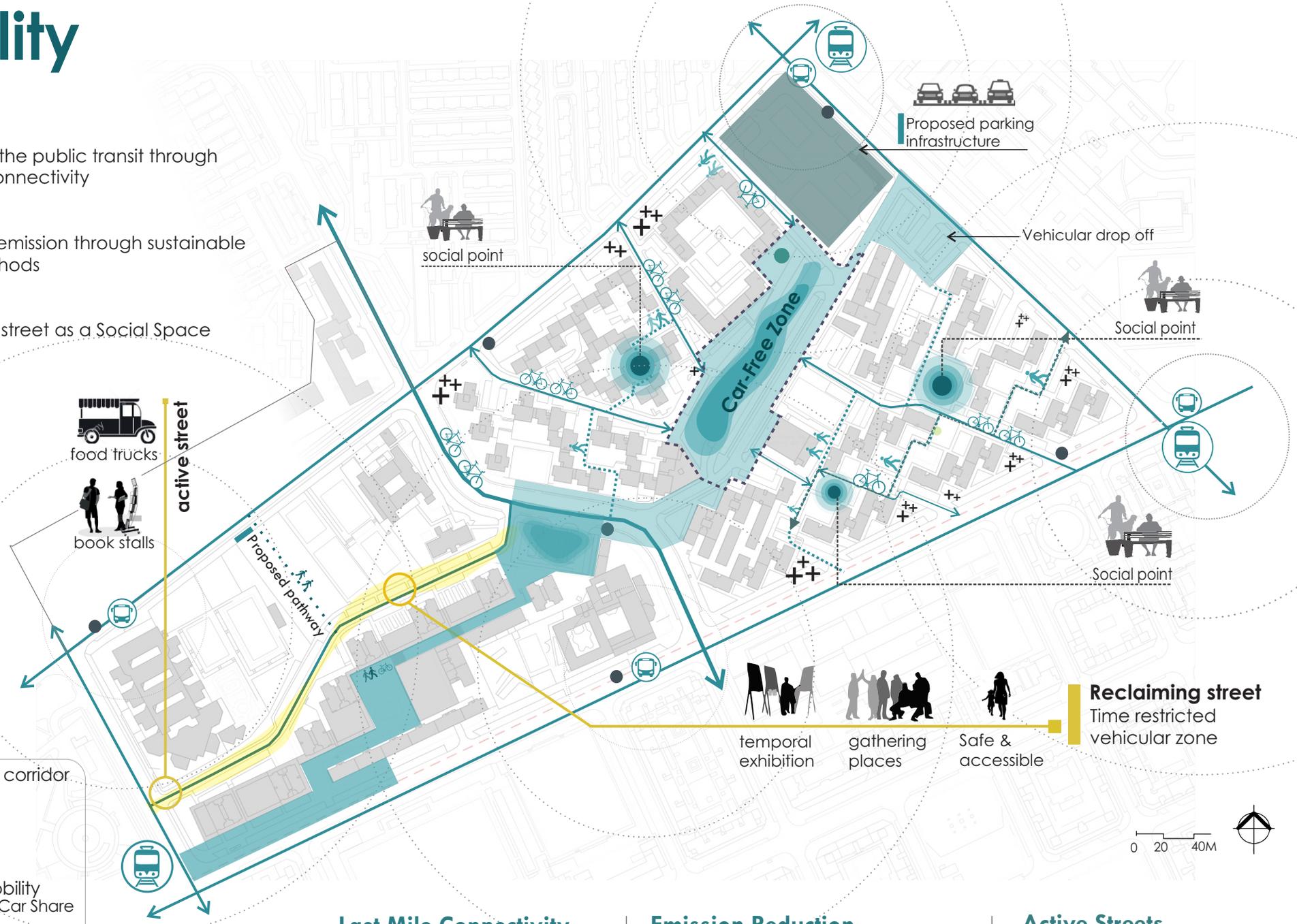
Especially the economic potentials are a major aspect. The possibility to improve the local economy with small scale economic initiatives has a positive effect on creating jobs and increasing the economy.

All together our vision for the future is a sustainable holistic approach for the area of the Gran Blas Sur in which the development takes place from the inside out. The categories for the conceptual ideas are strongly connected to each other.

# Mobility

## Vision

- 01 Improving the public transit through last mile connectivity
- 02 Reducing emission through sustainable transit methods
- 03 Activating street as a Social Space



- Pedestrian corridor
- Pathway
- Bike route
- Shared mobility  
Bike share | Car Share
- Metro Station
- Bus Station
- Green Parking

**Last Mile Connectivity**

- promoting bicycling infrastructure
- creating pedestrian-safe junctions
- encouraging car & bike sharing

**Emission Reduction**

- prioritizing pedestrian movement over vehicular movement
- strengthening public transit by developing last mile connectivity

**Active Streets**

- developing car-free zones to revitalise the area for various activities
- ensuring safe and accessible streets
- improving economy through activities



## 3.

# TRANSPORT & MOBILITY

**GOAL:** Create last mile connectivity & enable a shift from private to public transport in a sustainable way



## 3.1 LAST MILE CONNECTIVITY

As the public transport maps of Madrid show, the district of Gran San Blas is surrounded by two Metro stations from line 2 (Alsacia and Av. de Guadalajara) as well as one station which is a little bit further from line 7 (San Blas). Furthermore the district has several bus stops at its disposal. Any person can reach one bus stop within a maximum of 7 minutes walking and a metro station within a maximum of 10 minutes walking. Even though this shows a proximity of public transport, our questionnaire as well as the high amount of cars underline the fact that taking the own car is often preferred over public transport.

In order to enable the people to use more public transport and move securely in the neighborhood, the first priority was to develop a walkable and bicycle-friendly neighborhood. Therefore, the first

aspect to be considered is decreasing the number of cars in the streets and shifting them into multi level parking. The multi level parking will be constructed in the corner of Calle de Arcos de Jalón and Calle de la Albericia. The sport courts that are in that corner at the moment will be maintained and put on top of the parking. The sides of that parking will contain elements with plants. The multi level parking will provide 600 parking spots. All the parking from Calle Argenta will be removed and the whole street will be reconstructed as a pedestrian zone with bicycle lanes.



Between Av. de Guadalajara and the street Arcos, the pedestrian zone from Calle Argenta will continue, crossing Calle de Amposta safely moving towards the Campo Municipal San Blas. The crossover with Calle de Amposta will be constructed with elevation elements and giving pedestrians and cyclists the absolute priority before cars. In the street Arcos, the parking will be removed from one side of the street to create space for bicycle lanes.

Policy incentives should be implemented in order to motivate the inhabitants to use public transport. For example, inhabitants that bring their waste to a disposal location and separate in a correct way can get a certificate for that and consequently get a discount on their public transport ticket. Further wishful behaviour can be rewarded with discounts in the public transport ticket.

## 3.2 EMISSION REDUCTION

When it comes to meeting the Sustainable Development Goals with regard to the reduction of emissions, several factors have to be taken into account.

First of all, the shift from private to public transport that was mentioned in 3.1 is important as well as creating a walkable and bicycle-friendly city. Therefore the pedestrian zone will be implemented and all streets will have bicycle lanes. The space between the Fundación Goyeneche and the María Moliner Colegio Bilingüe will be without a fence, so that it is possible to cross from Arcos to Calle de Arcos de Jalón.

Furthermore, a bike sharing station will be set up in the area where Calle de Amposta and Calle Argenta cross and where there is a parking space at the moment. Additionally, bike sharing stations will be set up next to the metro stations and the main bus stops, so that people who do not have a bike can take one and move to the public transport. The bike use can be managed with an application which in return gives a reward in the public transport ticket for its usage. At the bike stations there will also be some tools that will serve as a bike repair station.

Moreover, parking for e-vehicles and car-/bike-sharing will have priority at all parking areas and stations.

## RECOMMENDATIONS

- *Create incentives for public transport*
- *Gradually reduce parking*
- *Create safe and accessible pathways for pedestrians and cyclists*
- *Prioritize e-vehicles and sharing solutions*
- *Transform the street to a social and safe place*

# 4. BUILDINGS & ENERGY EFFICIENCY

## ENERGETIC REHABILITATION OF BUILDINGS

**Goal:** Reduce overall energy consumption of the buildings in the neighborhood by 80%.



The community of Madrid already offers incentive programmes to subsidize energetic building rehabilitation. In the case of the PREE program, building owners can get subsidies of 35% of eligible costs, with the option of additional funding for certain urban areas or social housing. We recommend an additional funding opportunity to promote ground floor parking or commercial use (in dedicated areas), since many structures in the neighborhood already have an open ground floor, that could be easily converted.

To reach our ambitious goal of reduction in energy consumption, it is necessary that all buildings are being retrofitted. Given the large number of different owners and ownership associations in the neighborhood, it will be a challenge to convince them all to participate in this effort. Therefore, information and communication strategy is a priority in this regard.

We propose the installation of a 'Transition Office', a physical structure staffed (at least part-time) with an informed city official or specially trained individual. Being located centrally in the neighborhood, the Transition Office is the first point of contact for all questions and concerns regarding the transformation process.

For building owners specifically, there will be information on the goal of energetic rehabilitation, recommended measures and opportunities for financial support. The employed contact person can share contact information of local architects and building companies that have registered their interest in this project with the municipality. Additionally they can provide assistance with application for municipal support programs.

For renters, building retrofitting can cause existential threat if it results in sharp rent increases. To prevent displacement, a strict policy should be implemented to limit rent increases to a certain level, accommodating the interests of renters and owners, while balancing the increase in rent against the savings in utility cost. The Transition Office will be a point of contact for all parties, but with specific services also to renters, who can voice their concerns and get assistance calculating and monitoring their apartment-related expenses.

To promote energetic retrofitting among homeowners and residents, a pilot project should be implemented, showcasing the opportunities and advantages. Ideally the selected building should be located in a prominent location with high visibility and include all recommended measures of rehabilitation. The retrofitting process should be done in two stages, first improving the building envelope to increase energy efficiency, and second exchanging the heating devices and other technical equipment to sustainable technologies.

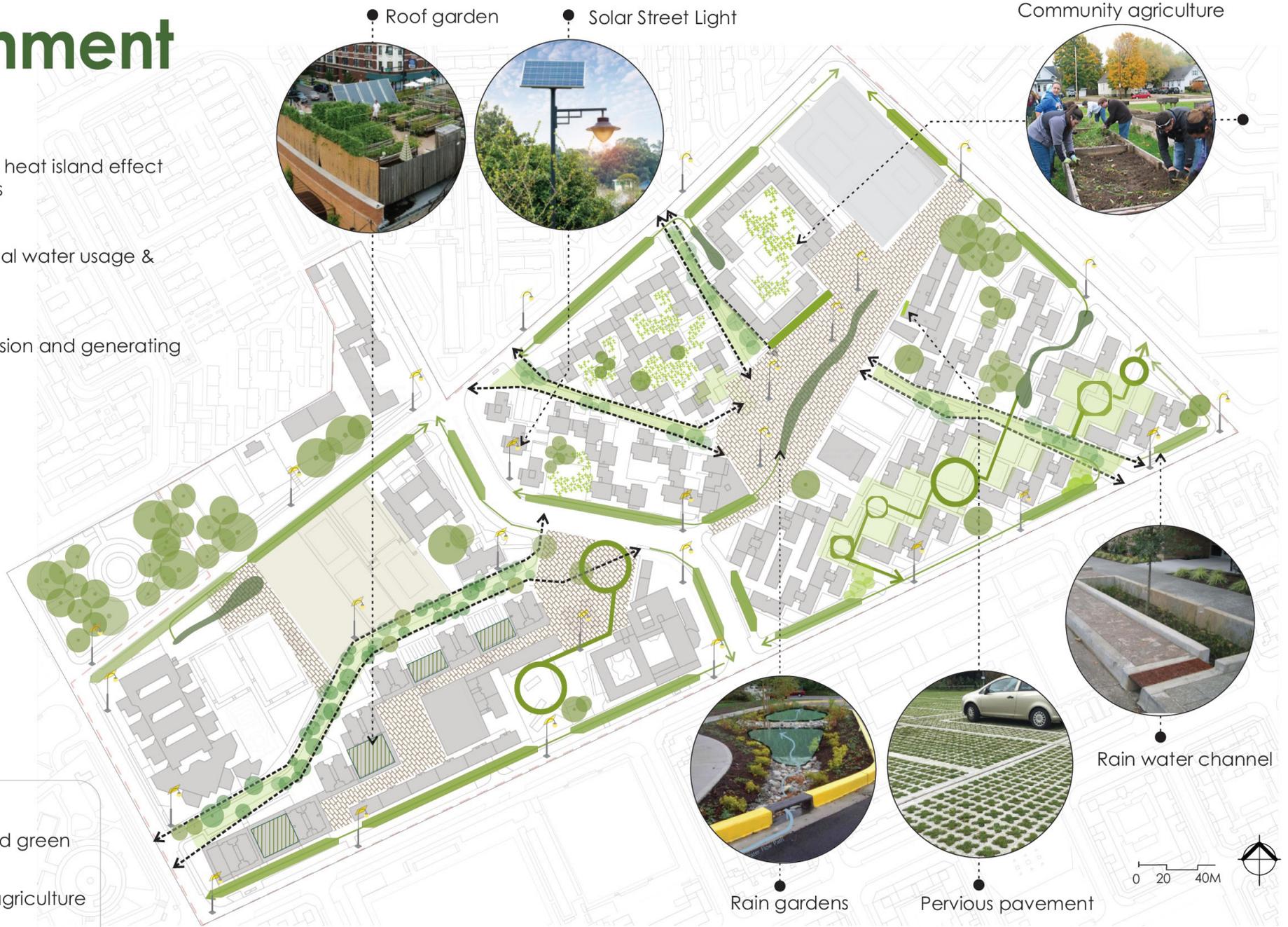
We recommend a scientific monitoring of the retrofitting process in the pilot building, including an energetic analysis of the current state and continuous measurements after the interventions. In cooperation with local universities or research institutes, the efficiency of the proposed measures can be proven, and reliable data can enable even better efficiency in the further rehabilitation of the neighborhood, including better estimates of actual energy consumption for sizing of new heating devices and calculation of individual utility costs. For all buildings, the following interventions should be considered:

<i>Building component</i>	<i>Recommended</i>	<i>If applicable</i>
Outer walls	Thermal insulation	Solar energy (for south oriented facades)
Windows	Double glazed windows with integrated ventilation	Triple glazing (if additional sound protection is necessary)
Flat roof	Extensive green roof	Intensive green roof (if compatible with building structure)
Inclined roof	Solar energy (except north oriented roofs)	
Ground level	Entrance redesigning (security and openness)	Commercial spaces (in dedicated zones) Parking (in open ground levels)
Heating Device (individual)	Solar thermal energy	Biomass (if district heating is not suitable)
District Heating	Geothermal (combined heat and power generation)	Biomass (combined heat and power generation)

# Environment

## Vision

- 01 Counter urban heat island effect through greens
- 02 Promote optimal water usage & conservation
- 03 Reducing emission and generating energy



### Green Habitat

- promoting green corridors and walls
- facilitating urban farming for locals
- decentralizing parking and pathways

### Water Conservation

- developing bio-swales & rain gardens
- promoting water conservation tanks
- providing pervious sidewalks

### Energy Generation

- solar panels for street lighting
- utilizing rooftop solar panels for energy generation
- utilizing green and vernacular structures for natural cooling



# 5. PUBLIC SPACES & TACTICAL URBANISM

## 5.1 ACCESSIBILITY, SAFETY & SECURITY

Goal: To Improve quality of life of the community by providing an Inclusive, safe and accessible Neighbourhood.



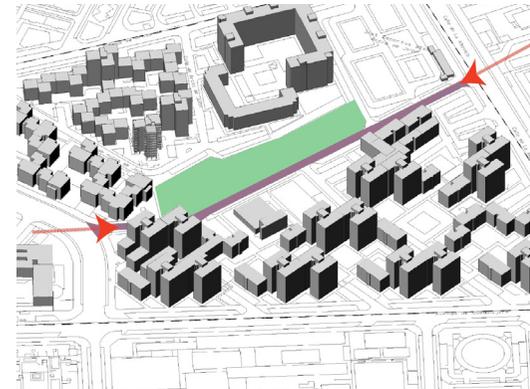
As an additional feature of the pilot project, a mural should be realized in cooperation with local artists to create a symbolic image for the future transformation of this neighborhood.

### RECOMMENDATIONS

- *Create an integrated communication and information strategy*
- *Install the Transition Office as a local point of contact*
- *Implement a pilot retrofitting project, ideally with scientific monitoring and symbolic value*
- *Create a catalogue of recommended interventions and the applicable options for financial support*
- *Adjust existing funding programmes for measures of indirect energy savings and sustainable spatial planning*
- *Create a binding timeplan for retrofitting publicly owned buildings*
- *Adopt a social policy to prevent dramatic rent increases and displacement due to retrofitting and public space improvement*

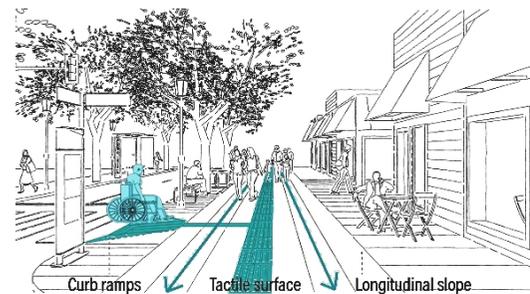
### Access points

- **Number:** Provide more than one access point to the public space.
- **Location:** Identify pedestrian routes leading to the public space, and provide the access in the meeting point between the route and the place.
- **Appearance:** Make the access points appealing, visible and easy to identify.
- **Size:** Provide adequate width for daily users, and also emergency vehicles.
- **Slope/Levelling:** Provide ramps with adequate width and slope, and materials for people physical-ly and



### Movement

- **Network:** Develop a consolidated, well-distributed network of pathways that provides alternative routes and enables access to all parts of the space.
- **Slope:** Provide a network of trails of adequate slope (wheel chaired) with tactile surfaces (for blind) that enables vulnerable groups' equal opportunities to enjoy the public space.
- **Materials:** Adequate construction materials that encourage use, are easy to maintain and replace, with minimum impact to the environment.



## Sightlines

- Visual access from the surrounding areas: Create visual connection between the public space and the surrounding areas through attractive and inviting views.
- View ahead/ Entrapment places : Enable clear view ahead and around



## SECURITY

Goal: The neighbourhood shall be protected through the concept of Crime prevention through environmental design (CPTED)



## Natural Surveillance

Surveillance or the placing of legitimate 'eyes on the street' increases the perceived risk to offenders. This increases visibility with landscaping in conjunction with proper lighting.

- Provide appropriate and uniformed lighting
- Fencing / shrubs should be low height or see through
- Remove / redesign the areas that offer concealment such as blind corners, shrubs or trees and walls.



## Natural access control

Natural Access Control is the physical guidance of people coming and going from a space by the placement of entrances, exits, fencing, landscaping, and lighting.

- Clearly define entrances and exits by providing minimize uncontrolled movement and well lit for greater natural surveillance.
- Security fencing, gates, and hostile vegetation decreases the criminal element's accessibility and keeps people on the designated path.
- Way finding throughout the community by marking community activity spaces, buildings, and clearly identifiable walkways with direction.
- Layers of security mechanisms such as primary locks on doors / windows and secondary locks on door and window locks, securitysystem,and surveillance system

## Territorial Reinforcement

- Territorial Reinforcement creates a clear delineation of space and separates your space from non-legitimate users
- Accomplished with landscaping, hardscaping, fencing, signs, flags, artwork, and

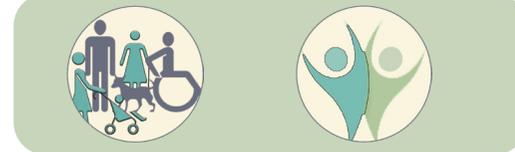
## Activity Support

Activity Support places any activity in a location so that individuals become a part of the natural surroundings, creating "natural surveillance."

- An active place that is enjoyed safely, increasing the use of the activity space, adding value to the space, and discouraging actions of non-legitimate users.
- Passive - design elements that make area appealing and safe , such as parks, pools, playground, community rooms.Active - scheduled events or steps taken to attract users to the area, such as picnics, community and sporting events, concerts, play groups.

## INCLUSIVENESS

Goal: To provide an Inclusive and resilient public space for all.



## Principles

Universal design follows 7 Principles which aim to guide the design of environments, products and communications:

- Equitable Use: Design that is useful and marketable to persons with diverse abilities.
- Flexibility in use: Design that accommodates a wide range of individual preferences and abilities.
- Simple and intuitive use: Design that is easy to understand, regardless of the user's experience, knowledge, language skills, or concentration level.
- Perceptible information: Design that communicates apt information effectively to the user, regardless of ambient conditions or the user's sensory abilities.
- Tolerance for error: Design that minimises hazards and the adverse consequences of accidental or unintended actions.
- Low physical effort: Design that can be used efficiently and comfortably and with a minimum of fatigue.
- Size and space for approach and use: Design that provides appropriate size and space for approach, reach, manipulation, and use regardless of the user's body size, posture, or mobility.

## URBAN ELEMENTS

- Lighting: Lighting as key factor to the perception of safety. E.g. Automatic solar powered street lights, lights of residential and commercial building.
- Barriers: Introduce urban elements that provide safety to the public space. E.g. barricades, traffic cones, planter beds.
- Storage: Provide storage space. E.g. A storage room for storing movable elements such as movable furniture, tools for maintenance etc are stored.
- Security and surveillance: Introduce adequate public spaces. Avoid blind spots, negative endings, walls without windows. Eg. CCTV, panic button (SOS), Video analytics, mobile applications (citizen engagement)
- Signage: Provide informative and way finding, direction signs. E.g. emergency points, information office, access ramps for people with disabilities, toilet. Signage for infrastructures
- Seating: Seating furniture that fosters different kind of uses and experiences.
- Other urban furniture: Improves the level of comfort. E.g. bins, toilets and water taps.

## 5.2 THE STREET AS A SOCIAL SPACE

Conventionally, streets have been considered as a space for vehicular movement. But recently, many cities are starting to identify streets as the most important and ubiquitous form of public space. Streets can be considered as the stage upon which the drama of urban life unfolds every day.

Thus, it is crucial to look at streets as places where people walk, talk, cycle, shop, and perform the multitude of social functions that are critical to the health of cities. For this purpose, the concept of “Active Streets” has been considered for two streets. On Calle Argenta, the entire parking area will be cleared and a car-free plaza will be developed, as defined in the mobility concept plan. The street running in parallel between Av. de Guadalajara and Calle de Arcos de Jalón will be developed as an Active Street with various social activities such as temporal exhibitions. It will have time restricted entry for vehicles and it will be a prominent gathering space while also providing space for food trucks and local stalls. Key consideration will be given to street furniture, landscaping, functionality of spaces and safety. It will not only be crucial for revitalising an unsafe

# 6.

# SOCIAL PARTICIPATION & ECONOMIC REACTIVATION

## 6.1 COMMUNITY ENGAGEMENT

GOAL: Designing the district in a way that suits the local population fostering a stronger sense of community within the district



While the transition office will start out as a hub to accompany residents through the In order to create a strong community, space has to be designed in a way that is appealing to residents. Thus, it is crucial to engage residents already in the planning process. This will contribute to giving them a sense of agency as well as responsibility for what is happening in their district.

By conducting an online survey during the project phase, we were able to assess the needs of the local population from an early stage. Despite having received only 16 answers, the results show that – if a campaign is well-advertised – inhabitants are willing to share their experiences and therefore contribute to the design of their district. Within this survey we addressed problematic topics like car ownership, security and bicycle routes and adapted our strategy accordingly. The survey can be found in the annex of the report.

With the intention to guarantee public involvement also at future stages of the redevelopment process, we would like to utilize the platform [decide.madrid.es](https://decide.madrid.es). It is a useful online tool for public participation, in which stakeholders based in Madrid can voice their ideas and concerns in a democratic way. At this point, the platform is not sufficiently used; we assume that many residents of San Blas – but also of other areas of Madrid – are not aware of its existence. We would like to encourage the city of Madrid to fund a campaign to promote online participation tools within the district. While we would like to enhance participation online, we understand that on-site contact is important for residents without access to the internet. Therefore, we want to establish an on-site transition office, which should be located centrally, preferably in the proximity of the redesigned Calle Argenta.

For this, we propose a light construction, which reflects a contemporary aesthetic and emphasizes on the sustainable transition of the district. redevelopment process, it might be converted into a residents welfare association later. The office should employ a contact person, who is able to help residents with requests regarding the redevelopment process.

Our final submission contains flexible framework plans, which can be seen as a guideline, but which can also be altered in the participative process. These plans should be made available to residents online and in the transition office to decide together on adaptations throughout the process.

In regards to participation, the aspect of gender inclusion has to be highlighted. Especially women's needs have to be considered. Therefore, it is important to give female residents the opportunity to be in charge of decision-making.

As mentioned in the previous chapter, the design of the public realm shall invite residents to use it commonly. Additional to inclusive design, we want to promote a sense of community by offering shared activities and platforms for exchange. Some of these practices fall in the category of tactical urbanism. Tactical urbanism is a great tool to shape a district gradually from within the community. Some examples to involve residents are:

Unused courtyards could be transformed into small community gardens. In addition to communal farming, public fridges could encourage residents to participate in food sharing activities and could prevent food waste. Sharing creates trust and openness. Book exchange boxes are another way of encouraging residents to share their belongings; they are successfully implemented in many neighbourhoods around the world. The same notion of sharing applies to the aforementioned proposals of car- and bicycle-sharing stations (transport chapter).

We want to introduce daily activities for children, women and elderly people, for example outdoor sports classes and creative workshops. A youth club could offer a space to spend time with other youngsters; here, tutoring classes could be held weekly to help pupils to catch up on school topics in a less rigid environment. Additionally, regular career orientation courses could help young people with decisions regarding their future. Furthermore, we want to highlight the importance of street art. It contributes to a diverse and colourful neighbourhood. In regards to tactical urbanism, street art means engaging the residents in participative beautification of their district.



Additional to commissioning external contractors with construction and renewal work, we recommend to involve members of the local population in the physical redevelopment process.

Due to the multitude of greening works in the district, a gardening firm could employ members of the San Blas community who were formerly unemployed or who are interested in gardening work. For this purpose we want to reinstall the activity of the garden firm Los 8 Girasoles. Their business was formerly located in San Blas. Therefore, they are familiar with the area and offer a good local employment initiative with low entry requirements.

A common threat to residents of urban renewal projects is the risk of gentrification. We openly address this issue to encourage elected officials to take preventive measures in order to avoid evictions of residents during the redevelopment process; we want to ensure equitable neighbourhood change in San Blas. Thus, we recommend to protect residents by preserving existing affordable housing. For those who rent this could be done by either establishing maximum rent ceilings or by offering renters the financial opportunity to purchase their units. In case of demolition of buildings, we pledge for one-for-one replacement of public housing in the same footprint as the original development.

New employment opportunities within the district should be aimed at employing long-time, low-income residents.

A strong community has the ability to tackle gentrification together. Therefore, it is crucial to foster this sense of community in San Blas and to give the power of decision making into the hands of the local population. No resident should feel threatened to move away due to the revitalisation of their district.



## RECOMMENDATIONS

- *Give residents the chance to participate in the design of their district throughout the redevelopment process. In order to do so, utilize an online participation platform and set up an on-site transition centre*
- *Foster gender inclusion*
- *Offer activities for everyone: gardening, sports, art*
- *Prevent gentrification: preserve existing affordable housing and listen to the needs of the local population*

# Active places

## Vision

- 01 Creating safe and inclusive community space
- 02 Creating economic opportunities close to home
- 03 Opening space to diverse activities

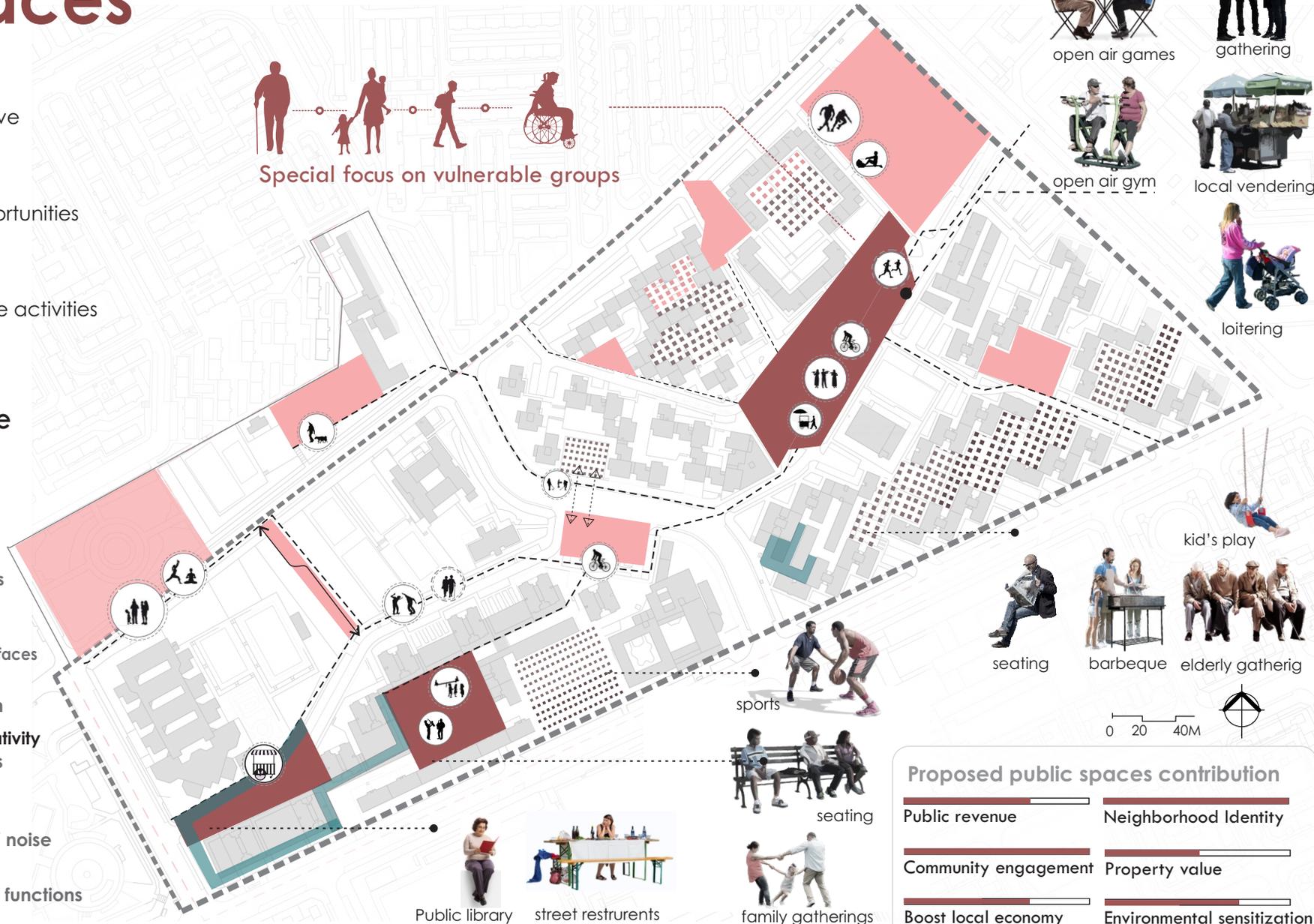


## Activating social place

- Human Dimention**  
scale, movement, size, behavior
- Climate and eco surroundings**  
sun/shade, breeze, vegetation
- Aesthetic and sensory**  
views and vistas, facade & Materials

- Inclusion**
- Invasion for walking/cycling**  
accessibility, no obstacles, quality surfaces
- Invasion for urban agriculture**  
suitability, proximity, association
- Invasion for local venders & creativity**  
inclusion, opportunity, resources

- Security**
- Security- vehicular traffic**  
No accidents/ pollution/ fumes/ noise
- Security against crime**  
passive surveillance, overlapping functions



- existing public - social
- reclaimed public - social
- semi- public social
- commercial area
- Proposed activity spots

## Community

- promoting social organizations
- increasing social accessibility
- opening public facilities to co-improve playgrounds and sports

## Economy

- promoting local business
- creating employment opportunity
- enable local supply of basic goods and services (15 minute city)

## Security

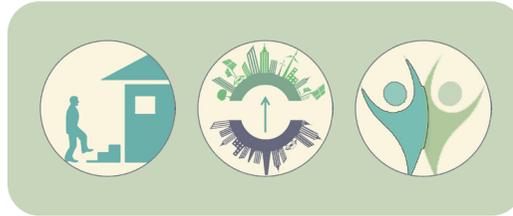
- increasing social control
- improve individual building entrance
- adjusting lighting & vegetation in public spaces

## Proposed public spaces contribution

Public revenue	Neighborhood Identity
Community engagement	Property value
Boost local economy	Environmental sensitization

## 6.2 GROUND FLOOR RE-ACTIVATION & SMALL-SCALE MANUFACTURING

Goal: Applying small-scale manufacturing with the dual opportunity of neighborhood revitalization & sustainable growth of the local business sector as an add-on to the economic development tool-box.



### Catalyzing local economic potential

Another important component of our strategy is the development of a holistic revitalization scheme for the district's ground floor spaces, complementing our approach towards multi-use public spaces. In this context, existing shops and cafés are designed as an integral part of shared community space with open facades and inviting outside seating areas next to traffic-calmed pedestrian and bicycle routes.

Regarding the reactivation of vacant and abandoned ground floor spaces, our central approach is to invite the “maker” economy into the district. Today, major changes in the way we produce and consume alter what is possible in manufacturing, and the current pandemic only accelerates the increase in demand for local products and handmade goods. So-called small-scale manufacturers encompass all producers of tangible goods that simultaneously represent on-site retailers. Products comprise clothing, food production and packaging, jewelry, craft supplies, decoration and furnishing, breweries and distilleries, kitchenware and alike. Typically, these micro-businesses depend on a range of revenue sources, namely online sales, business-to-business, special orders, and on the spot sales, making them more resistant and adaptable compared to standalone retailers. This type of manufacturing can thrive in locations that do not have top-notch retail storefronts, shapes or scales. This is why it can fill empty retail spaces that are difficult to lease elsewhere and attract walk-in customers in Gran San J.

### Benefits of small-scale manufacturing

Small-scale manufacturers create synergies from being concentrated in one place. Spillover effects come with sharing experience and knowledge, and working spaces and equipment can be used jointly. For example, shared kitchens can rent processing and storage space to multiple food producers and caterers, reducing the entry barrier and risk to launch especially for low-income business owners. Another possible application are makerspaces and shared workshop rooms with monthly and annual lease possibilities. They can offer a range of fabrication tools to work in e.g. wood, metal, textiles, electronics, and 3D printing in exchange for membership or class fees. Of course, production spaces could also be used for communal workshops, such as DIY scrap workshops or upcycling projects, and become a neighborhood focal point and community gathering space for adolescents and adults.

Business owners and workers of this kind often live inside the district themselves and identify strongly with the community; therefore, they are normally keen to keep money in the local economy for a longer period of time and prefer to hire as well as purchase supplies nearby. This local supply chain decreases the inner-city transport of goods and promotes a sustainable way of business. It stands to reason that local manufacturers should be welcomed to sell their products on the local public market as well.



Moreover, small-scale manufacturing creates a range of local job opportunities, catalyzing skills in the community, and empowers residents to make use of their talents. In fact, it holds a low entry threshold for workers of various educational, ethnical and gender backgrounds, and features a relatively high income for people with normal high school degrees especially.

Small-scale manufacturing is a valuable add-on for any common local economic vitalization toolbox that mainly focuses on retail, office and residential mixed uses. Production is compatible with neighborhood uses, an interesting eyecatcher, and fits into small spaces. In our vision hybrid micro-businesses are contributing to the uniqueness, appeal, and success of a walkable and lively neighborhood of Gran San J.

## RECOMMENDATIONS

- **Intensify public relations work to increase awareness about existing entrepreneurial programs, access to resources & assistance with the aid of contact points (provided by the local economic development department, chamber of commerce, on-site community development corporations or novel PPPs)**
- **Establish sufficient funding sources & provide support to find spaces, bear moving costs, first few rents or a major capital improvement to help newbies get settled**
- **Continuously support local business owners and encourage cross-sector partnerships in the long run**
- **Identify existing and/or potential small-scale manufacturers, reclassify land use types if they do not yet permit use as mixed production/retail spaces**

# SOURCES

## General

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## Transport & Mobility

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2. <https://data-crtm.opendata.arcgis.com/>

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## Bike routes

4. [https://geoportal.madrid.es/IDEAM\\_WBGEOPORTAL/visor\\_ide.iam?ArcGIS=https://sigma.madrid.es/arcgisportal/rest/services/OBRAS/MPOBRAS\\_BICI/MapServer](https://geoportal.madrid.es/IDEAM_WBGEOPORTAL/visor_ide.iam?ArcGIS=https://sigma.madrid.es/arcgisportal/rest/services/OBRAS/MPOBRAS_BICI/MapServer)
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1. 'Bringing local voices into community revitalization: engaged communication research in Urban planning', *Journal of Applied Communication Research*, 45(5), pp. 474–494. doi: 10.1080/00909882.2017.1382711
2. Villanueva, G. et al. (2017) 'Bringing local voices into community revitalization: engaged communication research in Urban planning', *Journal of Applied Communication Research*, 45(5), pp. 474–494. doi: 10.1080/00909882.2017.1382711
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2. [https://rems.ed.gov/docs/Mobile\\_docs/CPTED-Guidebook.pdf](https://rems.ed.gov/docs/Mobile_docs/CPTED-Guidebook.pdf)
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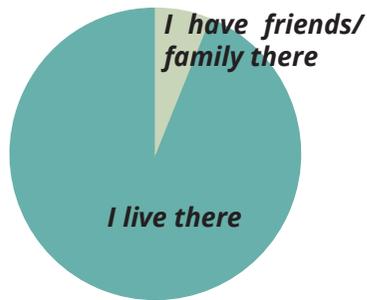
## Photos:

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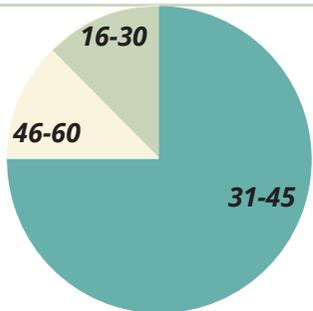
# QUESTIONNAIRE

**Conducted via:** Google Forms  
**Distributed via:** Facebook Group related to the neighborhood  
**Participants:** 16  
**Duration:** 5th - 20th of May 2021

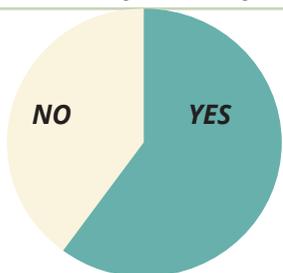
**Question 1:** How do you know the neighborhood Gran San Blas?



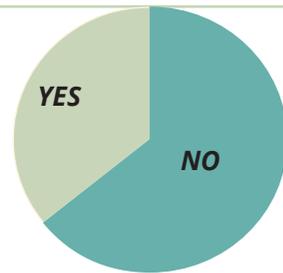
**Question 2:** How old are you?



**Question 3:** Do you have your own car?



**Question 4:** Do you have your own bicycle?



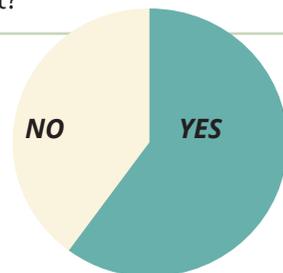
**Question 5:** In Gran San Blas there is a high quantity of parked cars. How would you change this to make the space usable for other activities?

53.3 % Have two parkings  
 36.7% Have one central parking  
 20% Remove all parking

**Question 6:** How do you go to school/work?

42.9 % Car  
 35.7% Metro  
 14.3% Bus  
 14.3% Bicycle  
 7.1% Walking

**Question 7:** Do you prefer to go to work with your own car instead of public transport?



**Question 8:** What keeps you from using the public transport more often?

Que prefiero la bici / I prefer bicycle  
 Poca frecuencia / Low frequency  
 En estos momentos coronavirus / At the moment the corona virus  
 Conexiones / connections  
 La gente / the people  
 Prefiero el transporte privado / I prefer private transport  
 Va mucha gente / Many people use it  
 El virus / The virus  
 No me gusta ir hasta arriba y casi siempre de pie / I don't like walking up to it  
 La cantidad de gente / the quantity of people  
 Aglomeración de gente/ Agglomeration of people  
 Me lleva mucho más tiempo que ir en coche / it takes much longer than going by

**Question 9:** Why do you prefer your own car over public transport?

38.5% The journey in public transport is longer  
 23.1% It is more comfortable  
 23.1% It is cheaper  
 7.7% Public transport is not safe  
 7.7% The timetables are instable

**Question 10:** If you could change one thing about Gran San Blas, what would it be?

Que se respetaran, por ejemplo las calles peatonales que bloquean aparcando / More respect, for example pedestrians by all the parked cars  
 Rehabilitar zonas abandonadas/viejas / revitalize abandoned and old zones  
 Más limpieza / More cleanliness  
 La limpieza de sus calles / cleaner streets

La limpieza / cleanliness  
 La sucia que es la gente / cleanliness of the people  
 La ocupación de pisos / occupation of floors  
 Más limpieza / more cleanliness  
 La suciedad del paraíso / dirtiness of the place  
 Los espacios entre bloques ahí veces que los barrenderos tardan en pasar muchísimo tiempo y ahí hierbas altas y las plazas de la f que las tienen abandonadas / the space between blocks where gangs spend their time and the places look abandoned  
 Las áreas infantiles están de vergüenza me preocupa más eso que el transporte / the areas for children are in a bad condition and should worry more than transport  
 Las aceras de la calle Gregorio López madera debido a las obras del polideportivo y Filomena, están completamente destruidas / the area near the street Gregorio López is completely destroyed due to construction work of the sportive center  
 Las casas viejas las arias más grandes / old houses, big spaces  
 Las cacas de los perros / dog poop

**Question 11:** Where in the neighborhood do you enjoy spending your time?

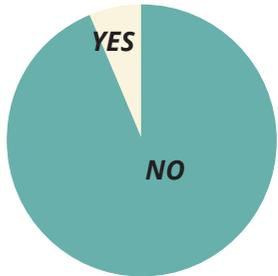
No paro en el barrio / I don't stop in that neighborhood  
 Parques, terrazas, carrefour / Parks, terraces, carrefour  
 Dando vuelta por el parque / Going for a walk in the park  
 Las rosas  
 En el parque / in the park  
 En la Quinta de los molinos Y parque paraíso  
 Parques /Parks  
 Todos / Everywhere  
 En el parque paraíso / In the park paraíso  
 En las plazas de la f y el parque paraíso / in the public space and park paraíso  
 En mi casa / in my home

Cerca de casa areas infantiles con mis hijos / near to children's places  
 El Paraíso  
 En el parque con mis niños / in the park with my children

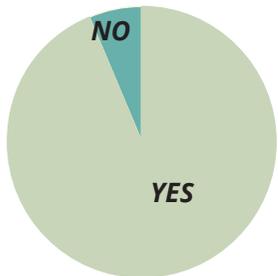
**Question 12:** What activities would you like to have in the neighborhood?

- 42.9% Social activities
- 42.9% Sportive activities
- 35.7% Markets
- 7.1% Activities for children
- 7.1% Bar with terrace in the park
- 7.1% Small markets

**Question 13:** Are you part of a neighborhood organization?



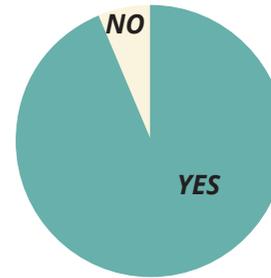
**Question 14:** Do you have enough sunlight in your apartment?



**Question 15:** How would you like the space between buildings to be? How would you improve it?

- No lo tengo claro / I am not sure
- Parque / Park
- Creando espacios verdes y poniendo bancos para poder ser utilizados / Create green spaces and put seating so you can use them
- Con zonas verdes / Green zones
- Parques / Parks
- Zonas verdes / Green zones
- Jardines o cementado para que no crezcan hierbas de mala manera / Gardens or a cementary so the plants grow well
- Areas de recreo y descanso / Areas of rehabilitation and relaxation
- Parques jardines / Parks, gardens
- Cuidándolo más / Taking care of the space
- Limpieza / Cleanliness
- Pub...primero tendrían que arreglar todo el suelo que esta levantado / First the floor that is lifting up has to be arranged
- No lo sé / I dont know
- Más limpieza / More cleanliness
- Quitando baldosas y poniendo parques / Put parks
- Zonas verdes / Green zones
- Cerrando céspedes y poniendo árboles pero claro si no los cuidan y se llenan de mosquitos en verano mejor todo cementado / put trees
- Mas bancos y ocio / More seating
- Con aceras transitables y limpias / transit and clean areas
- Lo primero arreglandolos ya quenos tienen abandona / Arrange
- Multando a los que dejan las cacas de sus perros / fine those who dont clean after their dogs

**Question 16:** Would you like to implement measures to reduce the costs of energy consumption like for example photovoltaic?



# ICON LEGEND



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