URBAN INTEGRAL PROJECTS - UIP - COMUNA 13
MEDELLIN, COLOMBIA - SOUTH AMERICA

**Definition**
The Urban Integral Project (UIP) is an urban intervention instrument that covers physical, social and institutional areas. It is a comprehensive and systematic intervention that aims to improve the quality of life in urban environments.

Between 2004 and 2007, Medellin’s Comuna 13’s (CU13) Comprehensive and Built Urban Integration (UIP) was carried out and the Comuna 13’s Comprehensive Urban Integration (UIP) was completed. The experience of Medellin’s Comuna 13 has generated an urban intervention strategy that can be implemented in other cities worldwide.

The rural-urban integration is an urban intervention that seeks to improve the quality of life in the urban environment. The Comuna 13’s Comprehensive Urban Integration Plan (UIP) has provided a model for other cities worldwide to follow.

**The Comuna 13 of San Javier**
Located in the metropolitan area of the city of Medellin, the Comuna 13 is one of the most densely populated areas in the world. This project was carried out in 2004 and aimed to improve the quality of life in the Comuna 13 area.

**Objectives**
The main objective of the Comuna 13’s UIP is to improve the quality of life for the community, which will allow for the transformation of the area into a residential and commercial zone. The project involved the improvement of existing infrastructure, the development of new public spaces, and the creation of community centers.

**The social conflict in the Comuna 13, 2009**
A group of residents of the Comuna 13, who were affected by the social conflict, are seen in the image.
Ethical norms and social equity

The social agreement processes with the community from the ideas regarding the plot, are part of the methodology (PLU). These stages are described as the development of the urban and architectural designs, which respect the place’s identity, and the collective memory of its inhabitants.

The activities with the community begins with the diagnosis of the needs and the perception of the place. The compilation of needs and wants turn to be the basis of the future Project. The local inhabitants participate during the design phase and finally during the realization of the end product.

The PLU’s methodology of intervention, variables the participation and agreement phases with the community as a fundamental part of the process. For the well-being of the Project is to be carried out.

The agreement in the final stage of the intervention process with the organized community. From a particular interest throughout a common core, under technical terms, efficiency and impact on the neighborhood.

The committee must apply all the principles of all levels and address for the development with the presence of the community. The participation is also important because it gives the community the means to make common decisions and includes them in the design process.

The methodology applied for the design and construction of a PLU has dependently on permanent communication and agreement with the community in all of its phases. Different methods have been applied: workshops, study groups and focus group committees. Achieving the information from the members of the community in the approval of the projects selected from the definition of the priorities during the day-to-day stages, will take part with the Municipal Development Plan proceedings.

The following are some of the activities that take part of the social proceedings:

- Technical methods for social intervention
- Preparation of a pedagogical proposal
- Definition of a proposal for social assistance
- Strengthening of committees
- Habitations for the good use and maintenance of public space and its equipment!
- A social participation map and guide
- Preparation of the document for the policy of employment
- Guide to training for employment
- Guide for the beginning of construction
- Visits to governmental institutions
- Definition of government’s arrangements regarding neighborhoods
- Application and conformations of Community committees
- Neighborhood routes
- Neighborhood assemblies
- Delivery of local news
- Methodological promotions of design, programming applications and tangible support of local workshops
- Training workshops for the community volunteers
- Local workshops for the approval of the PLU (COMUNA 13)
- The local workshops are held in the community with the neighborhood groups which gives the community the tools required to deal with all the problems of recreation and social investment, which has a geographical theory and with which it will solve, while sharing and enjoying a better life, the solution to the identification of events, the meeting of good use of spaces, the healthy appreciation of the new public spaces around the community.
- Foodstands, sharing the streets by means of communication media, all actions and the scope of the PLU (COMUNA 13) will be made public as well as an interaction with the city’s society.
- Socialization provides Community warm integration by means of games and cultural activities which involve cultural and artistic groups from the neighborhood. The objective is the coordination of the neighborhood and the PLU of the community.
- Training workshops that will ease the communication process in the neighborhood so as to build an adequate appropriation of the PLU with the community contributed with the past.

Ecológical and environmental quality

The landscape preserved in the slopes of the COMUNA 13, is that of a continuous urban backyard ready to be improved with the connections to be built towards the higher projects. The COMUNA 13 and the city of Medellín are, on external terms, defined in its hills and slopes in an urban sense, by the proliferation of multiple craves and streams. This diverse topographic characteristic comes along with great environmental and integrative complex problems.

Quite a few creeks and streams flow through the COMUNA 13 territory: La Landería, La Huerta, La Iguana, Ana Díaz, La Posada, La Salida, Los Soñudos, La Ladrillera, El Salado, La Buga, La Mina, Los Almacenes, La Mina, Poblado, El Paraíso, San Pablo, La Pintoresca, La Pintoresca, Los Bermejos, El Parque and Brocha Monserrate. Some of them drain from these limits until they reach the main natural agricultural network of the valley. The PLU turns them into green continuous environmental corridors by means of containing the water bodies and its surroundings, which have been occupied with non-legal houses, recovers the existing trees and plants new ones and creates new public spaces in urban balconies looking towards the city.

Another problem is in place, which has affected the COMUNA 13 for years, is the existence of a few industries for the exploitation of natural resources, as are Térmicas Monterrey, La Ladrillera, Arenas del Río, Arenas de San Juan, Finca Villa Elvira, Agroexport San Juan. Some of these industries threaten the priority of the territory and pollute the area. The absence of drainage systems turns the waterways into highly polluted watercourses.

The CULTURE OF WASTE DISPOSAL

The difficult accessibility to the territory and the absence of waste disposal units turns the COMUNA 13 into a permanent polluted urban area along with the visual contamination of streams and public spaces. The PLU intends to apply a gravity basin system for the construction of garbage from the higher grounds of the territory towards pick-up and recycle units in the lower grounds near main highways which will help in the disposal of the waste.

LINEAL PARK ALONG THE HUESCO STREAM

Located within the Edwards Santia, Antonio Nariño, El Salado and San Javier neighborhoods, the Huasco stream is the main water connector of the COMUNA 13 with the rest of the city. As most streams and creeks flow into it, it is of crucial priority to environmental recovery.

The spaces around this watercourse will be treated with bicycle routes and pedestrian walkways; the planting of new species of trees and the maintenance of gardens along with the building of places of rest, kiosks and pedestrian bridges will favor the continuity of the waterways.

NEW SPECIES OF TREES: local species of trees are the Cisco de Vacas, Quictiro, Alejandro, Alcove, Sawo de Monte, Miel, Chepo de Urraca, Pescueza, Pescueza, Jacaranda, Dale Cusco, Carabeneros, Aceraceo Amarelo, Guayacán Amarillo, Guayacán Rosado, Caoba, Felipe Pintado, Arceal Blanco, Guayacán Tricolor, Yare-Santa, Mingo, Enemigo, Guayacán, Náutico, Citrea de Cara and Pecarisca will be planted.

GROUND PLANTS: Mani, Fímporro, Ajo Ornamental, Areca, Macana, Alfajo, Oruga de Buero and Pelatoro seeds will be planted.

SOCIAL INTERVENTION AND SUSTAINABILITY METHODOLOGY

LINEAL PARK ALONG THE SALADO STREAM

Along the Salado stream, there are 4 streams to the Holcim stream, from the Independence river to the San Javier river, which the project seeks to build an environmentally protected pedestrian way along the waterway, which will work as connection of both sides, between the north and south sides of the COMUNA 13, helping the community to acquire an environmental conscience.

Length of intervention along the stream: 2,000.92 linear meters

Area of new public space: 47,605.98 square meters.
COMUNA 13 UIP MASTER PLAN

3 MASTER PLAN -UIP-
COMUNA 13

Economic output and compatibility

The master plan deeply impacts on the economic resources allocated by the government.

The investment of these resources depends on the PUI's development phases. All actions in the PUI will fall into one of two phases: the first phase will develop urban centers, the second phase will develop a system of connections between them and the rest of the city. By design, the first phase will directly influence housing development, while the second phase will indirectly influence it through its urban centers.

SOCIAL INVESTMENT FOR THE COMUNA 13 PUI

- Housing
- Commerce
- Sports and Recreation
- Access to basic services
- Education
- Public infrastructure
- Health

TOTAL INVESTMENT: $400,000 USD or equivalent

PUI components

- Community participation and communication enable the identification of the most important neighborhood aspects and opportunities to address. It helps to group ideas and techniques for the better development of the area.

- Inter-institutional and sectorial coordination helps include the participation of the private sector, the non-governmental organizations, and community-based movements, as well as the private sector, the non-governmental organizations, and community-based movements.

The Metrocable Transport System

This new system of public transport is the result of four years of work in collaboration with the local community. It is designed to improve mobility and reduce traffic congestion in the area.

- The system serves a large number of residents, providing an efficient and affordable way to get around.

- The system is designed to be integrated with other modes of transportation, making it easy for people to use.

- The system is environmentally friendly, reducing pollution and improving air quality.

- The system is designed to be accessible to people with disabilities, ensuring that everyone can use it.

- The system is designed to be affordable, making it accessible to people of all income levels.

The system is designed to be sustainable, ensuring that it is environmentally friendly and beneficial to the community.
Quantic and transferable change

The main objective of the COMUNA 13 Plan is to achieve community meeting spaces that will transform socially an area with high levels of crimes and to improve the quality of life and social inclusion by creating a safer public space.

An important aspect is the correct planning and following of the results, which at a quantitative level will allow the physical and social transformation of the area.

**Physical component**
- Projects proposed
- Projects being developed
- Projects to be developed

**Social component**
- Community workshops
- Surveys
- Meetings
- Workshops

**Inter-institutional component**
- Collaboration with other entities
- Management with other entities

CONNECTIVITY AS A PREMISE OF INCLUSION
COMUNA 13 AND THE CITY
LAS INDEPENDENCIAS CENTRALITY, COMUNA 13

LAS INDEPENDENCIAS CENTRALITY
Meeting point of the Comuna 13
Phase 1 projects: create spaces as meeting grounds for the community

Expanding the daily life to new public buildings and public spaces

La Divisa Sightseeing park

The project is aimed at creating a park for the La Divisa neighborhood, which is one of the largest in the city of Havana. The park is designed to be a meeting place for residents, providing a green area for relaxation and social interaction. The design includes a variety of indigenous plant species, creating a natural and welcoming environment. The park is also designed to be accessible to people with mobility issues, ensuring inclusivity.

Terrace park

This public space has been designed to cater to the needs of the local community. It features a variety of seating arrangements and shaded areas, making it an ideal spot for relaxation and socializing. The park is also equipped with lighting to extend its usability into the evening.

House of Justice, Comuna 13

The House of Justice is a public building that provides a space for justice and community. The building has been designed to be functional and accessible, with clear paths and ample seating areas. The design includes a roof garden, providing a green space for the community to enjoy.

Contextual response and aesthetic impact

Public space and architecture within the FUs seek for an image which denotes domesticity, sociality, efficiency during the building procedures, security and the use and diversity of the materials employed so as to physically preserve a common language for the maister plan which in turn, provides a landscape and spatial reference. The project's main objective is the application of optimum materials with the intention of creating a new and better spatial language.

In some cases, the project's formal evolution in each of the design phases will vary in the aesthetic forms provided by the experience acquired during the construction phase. The project's contextual scale bonds with the existing spatial conditions of height and proportion at the pedestrian and vehicular connections.

Apart from the selection of materials to be explored design criteria will be acknowledged. The details in diversity and irregularity of materials and spaces have demanded a methodological gate of which some details have been documented in Master's Public Space boom and other guides created by the CUTA.

MATERIALS

CONCRETE WALLS

Structural concrete walls poured on site with a smooth finish.

LIGHT BULBS MADE OF BRIQUE CLAY

Walls built with dull colored pressed bricks. Measures: 24.9 cm x 12.5 cm x 8.3 cm. Efficiency: 90 units per square meter.

CELLULOSE POLYCARBONATE

Self-mattress with a smooth surface similar to glass with good heat insulation properties, for outdoor use and easy maintenance qualities.

Measurements: 2.10 x 5.90 m and 2.10 x 11.80 m.

Color: Clear, brown, blue, white, and gray blue. Steel grey and green.

LINKED TAR

Constructs in galvanized 10 X 10 steel wire. Average height: 6.00 m for special finish; green spaces paint with a yellow anti-fall base.

PRESSED ED WALLS

Ducks finished with white pebbles and fixed with white mortar with a creased finish.

PERFORATED OUTDOOR CONCRETE FLOOR BLOCS

Blocs perforated according to architectural plans on top of a granular base.

OUTDOOR CONCRETE FLOOR BLOCS

Installed according to architectural plans on top of a granular base.

REFRACTOR-ED CONCRETE CEMENT

Concrete blocks in bright and lighted with a weight of 50 cm between them.

Measurements: 6.0 cm (thickness) x 1.90 x 0.60.

PERFABRICATED CONCRETE SLABS

Concrete slabs on site and installed with a width of 50 cm between them.

Measurements: 6.0 cm (thickness) x 1.90 x 0.60.

PERFABRICATED DOMED CONCRETE FLOOR BLOCS

Concrete slabs placed for the site.

PLASTIC WOOD

Porous and rich built with plastic wood tiles.

GABON TYPE WALLS

- 20 x 20 mm galvanized with galvanized 10 x 10 steel wire.
- Reference: T 100. 15 x 15 cm, eye and 4 mm steel rod.
- Measurements: 10 x 24 cm.

BOULDER STONE VONES

Walls and floors covered with 10 cm maximum diameter rounded stones and mosaic according to architectural plans and fixed with mortar.

URBAN FURNITURE

BENCH AND SEAT

Sensory and interactive furniture created in stone for use with wooden elements.

FURNITURE: EPOXY POLYURETHANE POWDER 
Color: light green ref. 1144.

LIGHTING

Simple and double arm light built in a galvanized metal sheet fixed to a grey concrete post.

NAME: 70 - 120 Watts

TRASH CAN

Stainless steel container tied to a metal sheet post and finished with electrostatically applied powder paint.

Color: light green ref. 1144.
The UIPs, a way to dream, lift pride and self esteem

Social inclusion spaces on the city's slopes

The comuna 13 landscape. A great back curtain of the city of Medellin

URBANO 35° Mobility as a strategy for intervention

One of the most interesting conditions of the territory being studied (Comuna 13) is the presence of significant areas of public space, which are, in general, subject to vandalism and negative use. The aim of the project is to maximize the potential of these areas, transforming them into safe, welcoming spaces for the community.

The project is focused on three main areas:

1. The Comuna 13 landscape: A great back curtain of the city of Medellin
   - This area is characterized by a series of urban green spaces and parks, which are currently underutilized.
   - The project aims to develop a series of interventions that will transform these spaces into vibrant community hubs.

2. Social inclusion spaces on the city's slopes
   - These spaces are located on the city's slopes, offering unique views of the cityscape.
   - The project will focus on developing these areas into places of social inclusion, promoting community engagement and cultural activities.

3. Las Independencias 2 Cul de sac
   - This area is characterized by a series of cul-de-sacs, which are isolated and underutilized.
   - The project will focus on developing these areas into community hubs, promoting social interaction and social cohesion.

The project is a collaborative effort involving the community, local authorities, and international partners.

The interventions will include the following:

- Green spaces and parks
- Public art installations
- Community gardens
- Social and cultural events
- Educational workshops

The project aims to create a sense of ownership and pride among the community, while also promoting social cohesion and inclusion.

The project is supported by the Medellin municipal government and the International Commission of Architecture.

The project is expected to be completed in 2023.