An aerial photograph of Medellín, Colombia, showing a dense urban grid, a river, and a large stadium. The entire image is overlaid with a semi-transparent blue color.

URBAN LABORATORY

EXPLORING MEDELLÍN

Seminar Week I Fall '19

ETH Zurich | DARCH | NSL | LUS
Chair of Architecture and Urban Design
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URBAN LABORATORY EXPLORING MEDELLÍN

Medellín, COLOMBIA
Seminar Week | Fall'19

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INTRODUCTION



Bird's Eye View from Medellín



Plaza Botero, Medellín, Antioquia

Image Source: www.Medellin.gov.co | 2019

Image Source: Medellín es Otra | Semana Magazine | June 2019.

INNOVATION FOLLOWS CRISIS / MEDELLÍN

Medellin presents a unique example of how a city has bounced back from notorious violence to success. A crisis that brought the city chaos, the horror of armed conflict and struggle, but also the cocaine money to build the skyline of empty towers and endless slums.

The city of Medellin stands for Urbanismo Social. A process-oriented, experimental movement of bold, charismatic political leadership, paired with a new generation of young entrepreneurs, architects and urban designers who realize a strategy of inserting in the city is rapidly growing fabric, sports- and cultural buildings like; Memory House, libraries, but also public spaces and new park and river access. A new Metro-line is running the lengths of the city. Cable-Car systems and escalators are climbing up the lush tropical valley to reach the slum zones with the settlements of the formerly most vulnerable population. We will visit together with our research partners a Medellin which is a world capital for urban innovation. Improvements through architecture have helped tackle security, develop the economy and improve its citizen's education, success and quality of life.

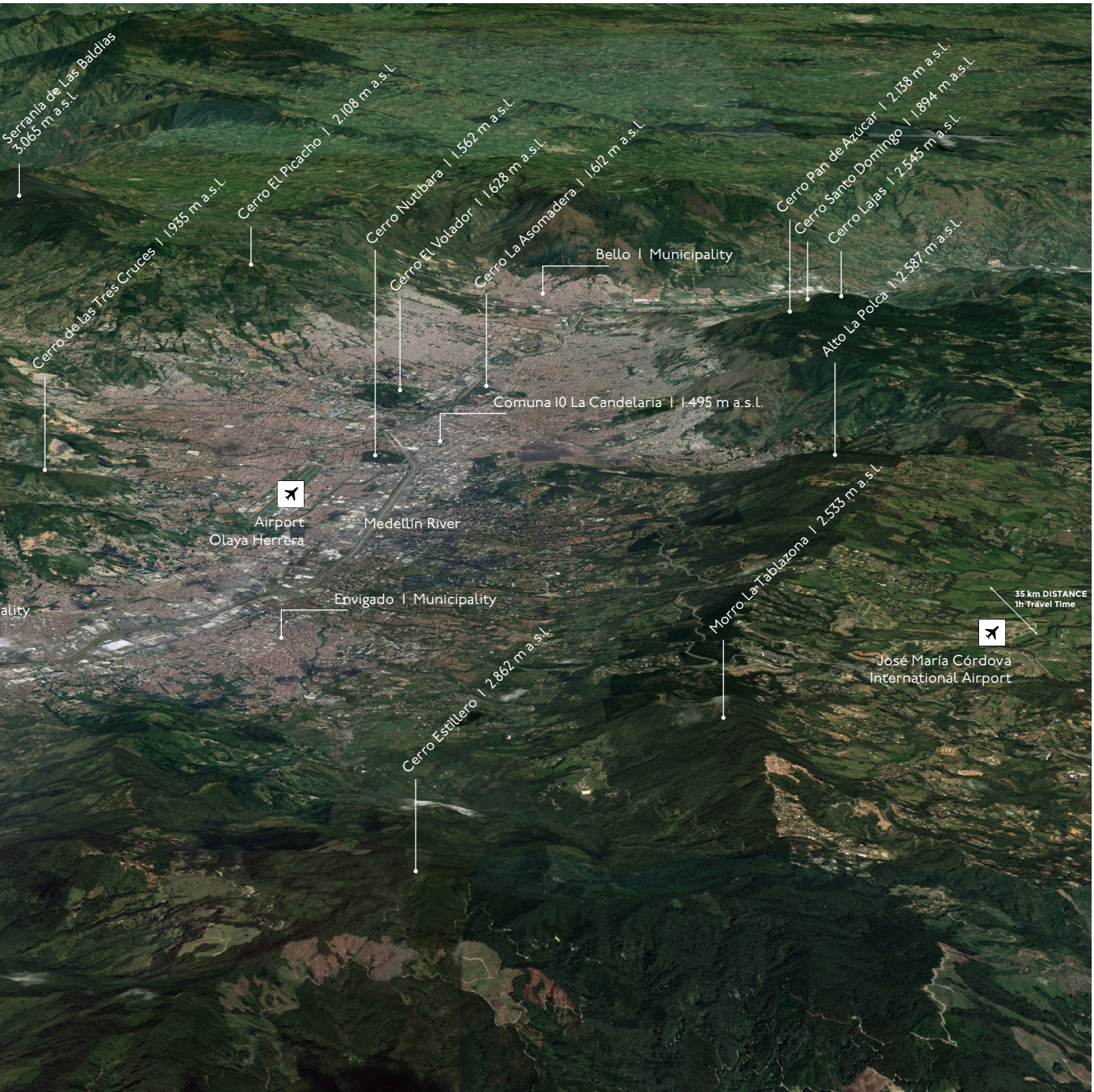
COLOMBIA

SITE CONTEXT

VALLEY OF MEDELLÍN



Map Source: Chair of Architecture and Urban Design | Prof. Hubert Klumpner | 2019
Google Earth | 2019



GEOGRAPHIC OVERVIEW

| | |
|-----------------------------|--|
| Capital | Bogotá |
| Major Cities | According to the 2005 census, the four cities with more than 1 million population are: Bogotá (4,300,000; Greater Bogotá, 6,776, 009), Medellín (2,223,078), Cali (2,068,386), and Barranquilla (1,380,437). These cities are also the four major industrial centers. |
| Size | The fourth-largest country in South America, Colombia measures 1,138,910 square kilometers. |
| Principal Rivers | Colombia has 20,000 kilometers of rivers. Its principal rivers are the Magdalena, 1,540 kilometers; the Putumayo, 1,500 kilometers; and the Cauca, 1,014 kilometers. |
| Climate | Climate: Mainly as a result of differences in elevation, Colombia has a striking variety in temperatures, with little seasonal variation. The habitable areas of the country are divided into three climatic zones: hot (tierra caliente; below 900 meters in elevation), temperate (tierra templada; 900–2,000 meters), and cold (tierra fría; 2,000 meters to about 3,500 meters). |
| Natural Resources | Colombia is well endowed with agricultural export products, energy resources, and minerals. These resources include coal, coffee, copper, emeralds, flowers, fruits, gas, gold, hydropower, iron ore, natural nickel (also known as Millerite, a compound that is a natural nickel sulphide), petroleum, platinum, and silver. Colombia ranks first in Latin America for its coal reserves, fourth for natural gas and sixth for oil. In addition, the country is second only to Brazil in hydroelectric potential. |
| Land Use | Colombia's arable land is located mostly in patches on the Andean mountainsides. In 2005 an estimated 2.01 percent of the total land area was arable (approximately 21,000–23,000 square kilometers). The amount of arable land has declined. |
| Environmental Issues | The 1991 constitution codifies new environmental protection legislation, including the creation of specially protected zones, of which Colombia had 443 in 2003, mostly in forest areas and national parks. Colombia has an extraordinarily high percentage of its total land area designated as a protected area (72.3 percent in 2003). As a result of soil erosion, 65 percent of the country's municipalities are facing water shortages. Only about one-third of Colombia's 1,098 municipalities have adequate Treatment systems for contaminated waters. |

Information Source: Country Profile: Colombia | Library of Congress | Federal Research Division | February 2007

MAJOR CITIES OF COLOMBIA



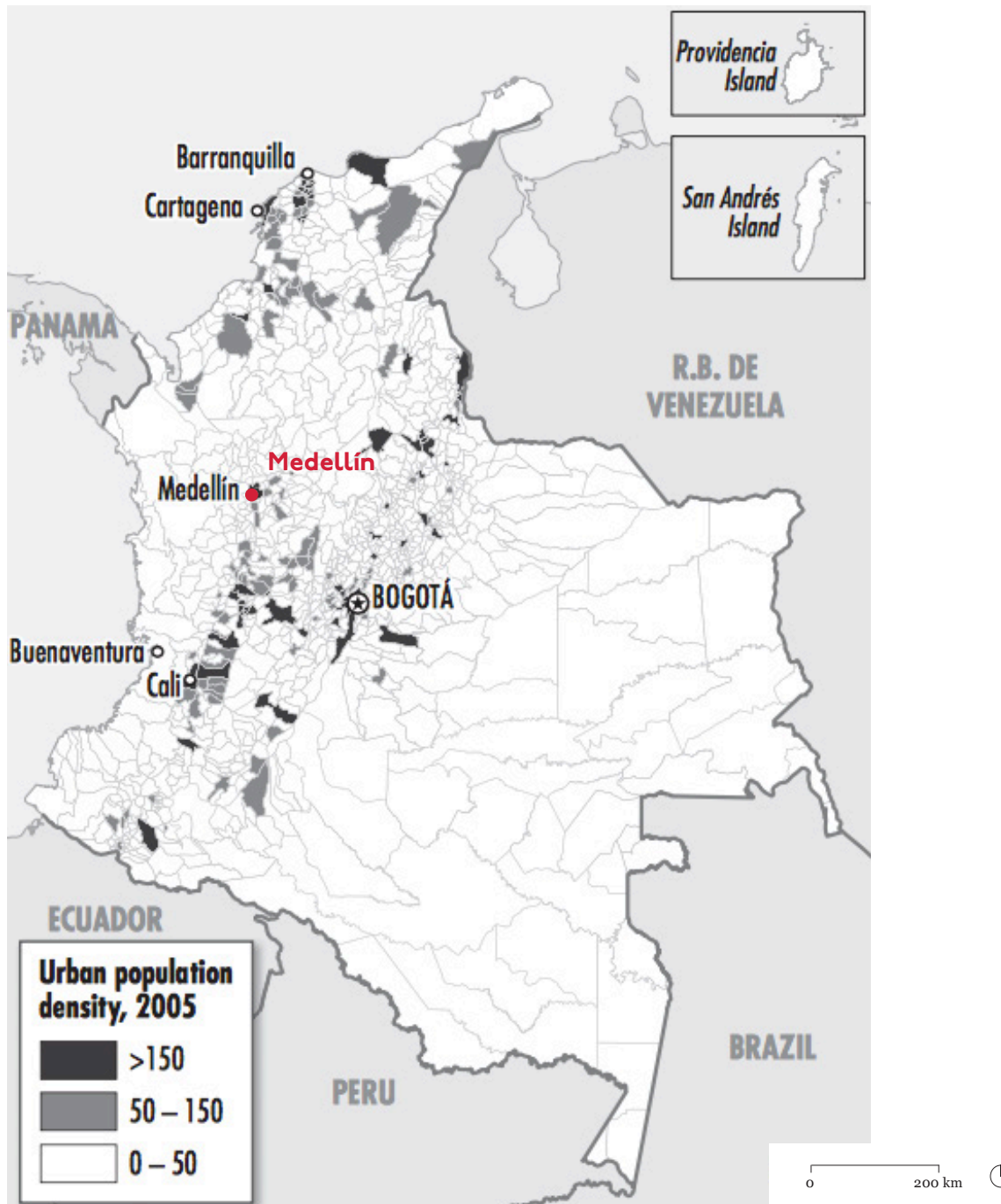
Map Source: Rodríguez Vitta | 2011

DEMOGRAPHIC OVERVIEW

| | |
|-----------------------------------|---|
| Population | 4.3 million. Colombia has a largely urban population. In 2005, the urban population reached 75 percent. About 35 percent of the total population is concentrated in four major cities. |
| Population Density | Estimates of population density (inhabitants per square kilometer) have varied, ranging from 37 in 2000 to 44 in 2005. |
| Migration and Displacement | The net migration rate in 2006 was -0.3 migrant(s) per 1,000 population. Migration from rural to urban areas has been prevalent. The move to urban areas reflects not only a shift away from agriculture but also a flight from guerrilla and paramilitary violence. According to the 2005 census, 1,542,915 Colombians were victims of forced displacement between 1995 and 2005, but the actual number may be between 2 and 3 million, according to NGO's |
| Demographics | Colombia has a relatively young population, with about 30.3 percent in the 0-14 age-group and about 80 percent of the population under age 45. |
| Birth Rate/Life Expectancy | 20.48 per 1,000 population. / 71.99 years (males, 68.15 years; females, 75.96 years). |
| Ethnic Groups | <p>The 2005 census defines ethnic groups as being the Afro-Colombian, indigenous, and gypsy populations. It defines the Afro-Colombian population as including blacks, mulattoes (mixed black and white ancestry), and zambos (mixed Indian and black ancestry) who account for 14% of the population. The "nonethnic population" (whites and mestizos—those of mixed white and Amerindian ancestry) constituted 86 percent of the national population.</p> <p>Class Factor: The upper class, constituting 5 percent of the population, is overwhelmingly white; the middle class, 20 percent, is mostly mestizo; and the lower class, 75 percent, is proportionately mestizo, Afro-Colombian, and indigenous who live in both urban and rural areas.</p> <p>Urban-Rural Factor: The populations of major cities are primarily white and mestizo. Most indigenous people and Afro-Colombians live in rural areas.</p> |
| Education and Literacy | The census data also indicated that 37.2 percent of the population had attained basic primary education; 31.7 percent, secondary; 7 percent, professional; and 1.3 percent, specialized studies (master's or doctorate). The percentage of the population without any education was 10.5 percent. |

Information Source: Country Profile: Colombia | Library of Congress | Federal Research Division | February 2007

URBAN DENSITY BY MUNICIPALITY IN COLUMBIA



Map Source: Rodriguez Vitta | 2011

ANDEAN REGION AND THE GOLDEN TRIANGLE

OVERVIEW

Overview

Because of its natural structure, Colombia can be divided into six very distinct natural regions. These consist of the Andean Region, covering the three branches of the Andes mountains found in Colombia; the Caribbean Region, covering the area adjacent to the Caribbean Sea; the Pacific Region adjacent to the Pacific Ocean; the Orinoquía Region, part of the Llanos plains mainly in the Orinoco river basin along the border with Venezuela; the Amazon Region, part of the Amazon rainforest; and finally the Insular Region, comprising islands in both the Atlantic and Pacific oceans.

Andean Region

The Andes mountains form the most populous region of Colombia and contain the majority of the country's urban centers. They were also the location of the most significant pre-Columbian indigenous settlement. Beyond the Colombian Massif in the south-western departments of Cauca and Nariño, the Colombian Andes divide into three branches known as "cordilleras" (from the Spanish for rope): the Cordillera Occidental, running adjacent to the Pacific coast and including the city of Cali; the Cordillera Central, running up the centre of the country between the Cauca amazonas river valleys (to the west and east respectively) and including the cities of Medellín, Manizales and Pereira; and the Cordillera Occidental, extending north east to the Guajira Peninsula, and including Bogotá, Bucaramanga and Cúcuta.

The climate and vegetation of the region vary considerably according to altitude. Hot land (1,000 to 2,000 m) and cold land (2,000 to 3,000 m) include the most productive land and the majority of the population. The alpine conditions are found on the forested zone (3,200 to 3,900 m), páramos (3,900 to 4,600 m) and frozen land (4,600 m and above).

The Golden Triangle

The golden triangle is a region between the largest economic centers in the country, Bogotá, Cali and Medellín. This place concentrates 76% of the national GDP and 56% of the total Colombian population. At the same time, the coffee triangle is the region made up of Risaralda, Caldas and Armenia, a global coffee epicenter and places of great impact on the transit, investment and economy of the golden triangle.

76%

Of the national GDP

56%

Of the Colombian population

ANDEAN REGION AND GOLDEN TRIANGLE



Map Source: Chair of Architecture and Urban Design | Prof. Hubert Klumpner | 2019
wikipedia.org | 2019

MEDELLÍN

FACTS AND FIGURES

| | |
|---------------------|--|
| Department: | Antioquia |
| Region: | Andean Region |
| Population: | 2.4 Mio (2013) |
| Foundation: | March 2, 1616 |
| Mayor: | Federico Gutiérrez (2016-2019) |
| City Area: | 380.64 km ² |
| Elevation: | 1,495 m |
| Geography: | Medellín is located at the base of the Aburra Valley and surrounded by mountains. In recent years Medellín has outgrown its small enclavement. |
| Demographics | The Aburrá Valley contains 58% of the population of the Department of Antioquia, and 67% of the Aburrá Valley population lives in the city of Medellín. Of the inhabitants of Medellín, 61.3% were born in the city, 38% in other parts of Colombia and 0.3% in another country. |
| Climate | The city of Medellín is often referred to as the “Ciudad de la Eterna Primavera” (City of Eternal Spring). Medellín’s location to the equator and higher elevation means that temperatures rarely fluctuate year-round, effectively achieving a constant “spring” feel. Daily temperatures range from a minimum of about 16°C to a maximum of 28°C. |
| Economy | Medellín is one of Colombia’s economic centers. Medellín’s main economic products are steel, textiles, confections, food and beverage, agriculture (from its rural area), public services, chemical products, pharmaceuticals, refined oil, and flowers. Fashion is a major part of the economy and culture of the city. Medellín hosts Latin America’s biggest fashion show, Colombiamoda. |
| Transport | Medellín has two airports, Olaya Herrera Airport (EOH), and José María Córdova Airport (MDE), which is located 29 kilometres east of the city of Medellín. Medellín has two transportation terminals, the North Transportation Terminal and the South Transportation Terminal. The city’s public transport system includes diesel buses, taxis, tram and an urban train referred as the Medellín Metro, the only metro system in Colombia. |

2nd

Industrial Center of the Country

6%

Of the national GDP

1st

Power Generator in the country

1st

Center for the Fourth Industrial Revolution of Latin America

Information Source: medellincolombia.co | 2019
bestday.com.co | 2019
wikipedia.org | 2019
Data Source: Medellín es Otra | Semana Magazine | June 2019

METROPOLITAN AREA OF MEDELLÍN



0 2000 m



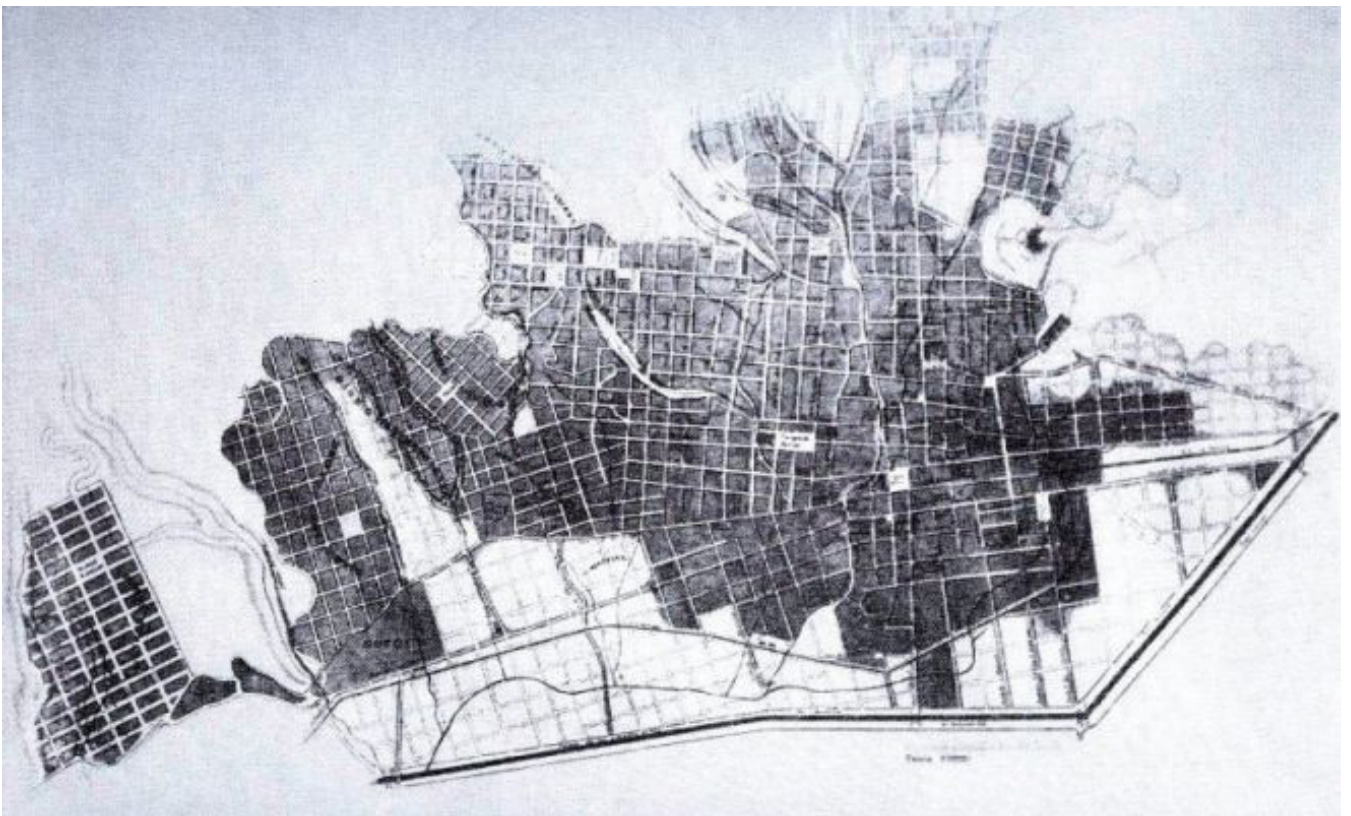
Map Source: *La Transformación de Medellín, Urbanismo Social* | Empresa de Desarrollo Urbano de Medellín | Alcaldía de Medellín | 2019

MAP OF MEDELLÍN 1875



Map Source: arquitectura.medellin.unal.edu.co/escuelas/habitat/galeria/displayimage.php?album=77&pid=1885#top_display_media | 2019

MAP OF MEDELLÍN 1923



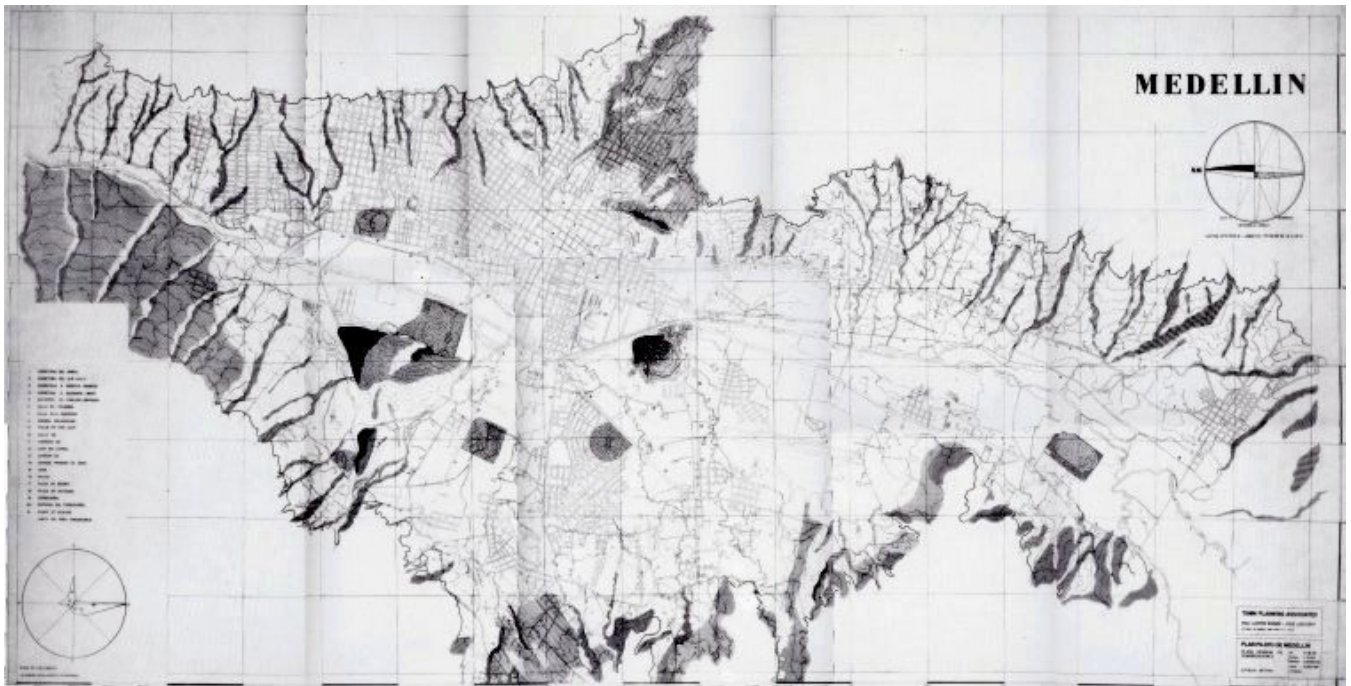
Map Source: arquitectura.medellin.unal.edu.co/escuelas/habitat/galeria/displayimage.php?album=77&pid=1885#top_display_media | 2019

MAP OF MEDELLÍN 1932



Map Source: arquitectura.medellin.unal.edu.co/escuelas/habitat/galeria/displayimage.php?album=77&pid=1885#top_display_media | 2019

MAP OF MEDELLÍN 1950

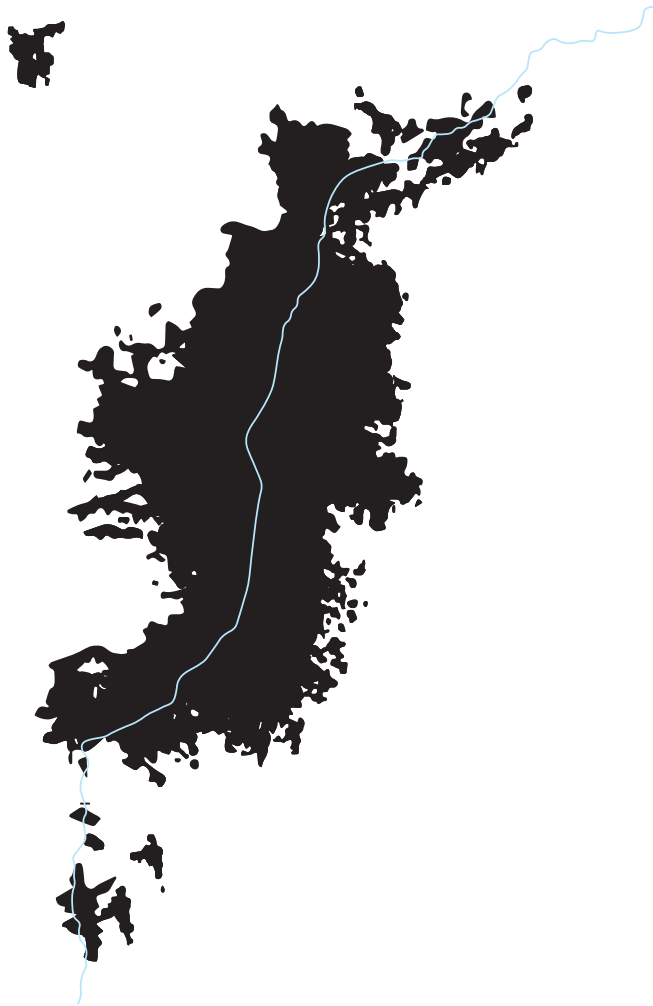


Map Source: arquitectura.medellin.unal.edu.co/escuelas/habitat/galeria/displayimage.php?album=77&pid=1885#top_display_media | 2019

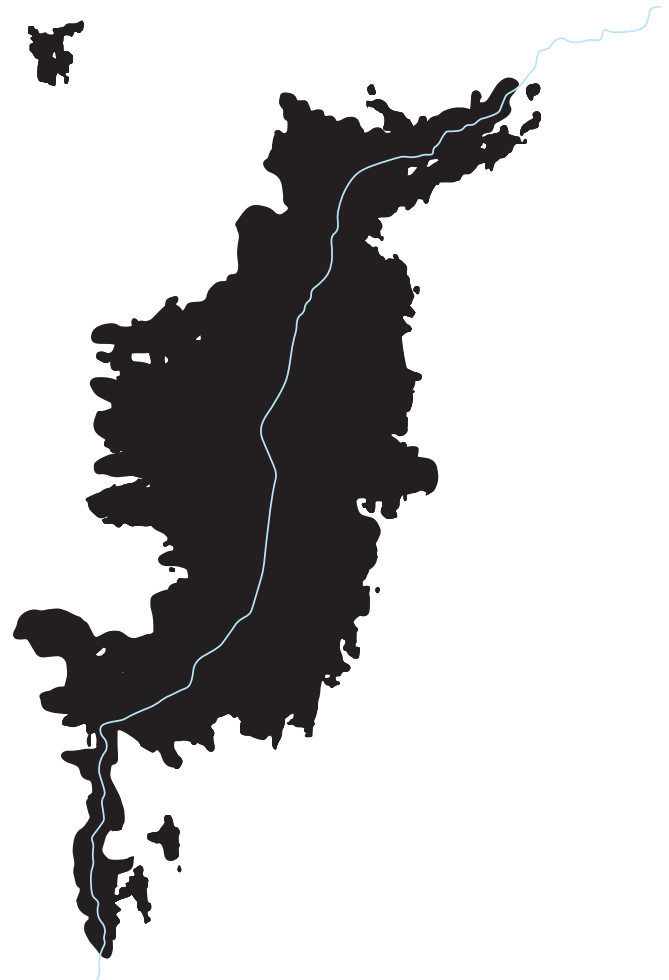
GROWTH OF THE CITY



Maps Source: *La Transformación de MEDELLÍN, Urbanismo Social* | Empresa de Desarrollo Urbano de Medellín | Alcaldía de Medellín | 2019



1996



2018

TRIP DETAILS



Graffiti culture



Demolition of Narcos Apartment

*Image Source: Toxicomano
Image Source: Telegraph*

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SCHEDULE

| | DEPARTURE FROM ZURICH | | | CICLOVIA / COMUNA 13 | | | CITY CENTER | | | PERPETUO/RIO MEDELLIN | | |
|-------|-----------------------|--|---------------------------------|----------------------|--|-------------------------|--------------------|--|----------------------------------|-----------------------|--|----------------------------|
| | SATURDAY, 19.10.2019 | | | SUNDAY, 20.10.2019 | | | MONDAY, 21.10.2019 | | | TUESDAY, 22.10.2019 | | |
| 7.00 | | | | | | | | | | | | |
| 8.00 | | | | | | Breakfast at Hotel | | | Breakfast at Hotel | | | Breakfast at Hotel |
| 9.00 | | | Meeting at the airport | | | Ciclovia | | | Market, Plaza Minorista | | | Perpetuo Socorro |
| 10.00 | | | | | | El poblado-Oriental TBC | | | Museo de Antioquia | | | Textile Industry |
| 11.00 | | | Flight IB 3477 | | | | | | Plaza Botero | | | |
| 12.00 | | | ZRH MAD 1150 1415 | | | | | | Theater Pablo Tobon Uribe | | | Parques del Rio |
| 13.00 | | | | | | Lunch | | | Lunch | | | Lunch |
| 14.00 | | | | | | Comuna 13 | | | Uva de la Imagination | | | Estadio Atanasio Girardot |
| 15.00 | | | | | | Graffiti tour | | | Casa de la Memoria | | | Coliseo Iván de Bedout |
| 16.00 | | | Flight IB 6589 | | | Biblioteca San Javier | | | Parque De Las Luces | | | Piscinas |
| 17.00 | | | MAD MDE 1600 1925 | | | | | | Alejandro Echeverri office visit | | | ETHZ CO office |
| 18.00 | | | | | | | | | | | | Connatural Taller Sintesis |
| 19.00 | | | | | | Dinner | | | Dinner | | | Dinner |
| 20.00 | | | Transfer to the Hotel The Somos | | | | | | | | | |
| 21.00 | | | Check-in at Hotel | | | | | | | | | |
| 22.00 | | | | | | | | | | | | |
| 23.00 | | | | | | | | | | | | |
| 24.00 | | | | | | | | | | | | |

- CITY VISIT
- SITE VISIT
- WORKSHOP
- LECTURES
- TRAVEL
- GROUP MEALS/RSV
- FREE TIME

| WORKSHOP | | | COFFEE TOUR / METRO CABLI | | | MORAVIA / J. BOTANICO | | | DEPARTURE FROM MEDELLIN | | | ARRIVAL TO ZURICH | | |
|-----------------------|--|---|---------------------------|--|--|-----------------------|--|---------------------------|-------------------------|--|-------------------------|--------------------|--|----------------------|
| WEDNESDAY, 23.10.2019 | | | THURSDAY, 24.10.2019 | | | FRIDAY, 25.10.2019 | | | SATURDAY, 26.10.2019 | | | SUNDAY, 27.10.2019 | | |
| | | | | | | | | | | | | | | |
| | | Breakfast at Hotel | | | Breakfast at Hotel | | | Breakfast at Hotel | | | Breakfast at Hotel | | | |
| | | Visit UPB | | | Coffee Tour | | | Moravia Tour | | | Free time | | | |
| | | Workshop at Ruta N Students from UPB | | | | | | Centro Rogerio Salmona | | | | | | |
| | | | | | | | | Jardin Botanico | | | | | | |
| | | Lunch | | | Lunch | | | Lunch | | | Transfer to the Airport | | | |
| | | | | | Metro Cable: Buenos Aires or Santo Domingo | | | Museu MAMM | | | Mirador Restaurante | | | |
| | | | | | | | | Jardin de Infancia | | | | | | Flight IB 3474 |
| | | | | | | | | | | | | | | MAD ZRH 1555 1815 |
| | | | | | Javier Vera / Plan b | | | | | | | | | |
| | | Lecture with City stakeholders | | | Housing Low cost | | | | | | | | | |
| | | Dinner ETHZ + UPB | | | Dinner | | | Dinner | | | | | | |
| | | | | | Prof. Hubert returns to Zurich | | | | | | | | | |
| | | | | | | | | | | | Flight IB 3477 | | | |
| | | | | | | | | | | | MDE MAD 2100 1255 | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

SCHEDULE MAP



DETAILED INFORMATION

Flights:

Departure | Arrival

From Zürich to Medellín:

Iberia Airlines

| | | | | |
|-----------|-------|---------|-------|-------|
| IB 3477 Q | 19OCT | ZRH MAD | 11:50 | 14:15 |
| IB 6589 Q | 19OCT | MAD MDE | 16:00 | 19:25 |

From Medellín to Zürich:

| | | | | |
|-----------|-------|---------|-------|-------|
| IB 6582 A | 26OCT | MDE MAD | 21:00 | 12:55 |
| IB 3474 A | 27OCT | MAD ZRH | 15:55 | 18:15 |

Hotel:

The Somos Medellín
incl. breakfast

Calle 10A No.40-19
El Poblado, Medellín
Colombia

Tel.: +57 310 7487855
E-mail: medellin@thesomos.com
www.thesomos.com

DAY TO DAY SCHEDULE

Sunday, October 20, 2019



Image Source: Bureau Medellin | 2011

9-12h Ciclovía

14-19h Comuna 13
Grafitti Tour
Biblioteca San Javier



Escalator Comuna 13



Biblioteca San Javier



DAY TO DAY SCHEDULE

Monday, October 21, 2019



Images Source: Photo Essay | Juan Franco and Simon Saldarriaga | 2019

Image Source: Centro de Medellín

9-12h Market, Plaza Minorista
Museo de Antioquia
City Hall Presentation
Plaza Botero
Teatro Pablo Tobón Uribe

14-19h Uva de la Imaginacion
Museo Casa de la Memoria
Alejandro Echeverri lecture



Museo de Antioquia



Plaza Botero



Uva de la Imaginacion



Casa de la Memoria

DAY TO DAY SCHEDULE

Tuesday, October 22, 2019



Image Source: Youtube | Harold Ortiz

Image Source: Colombiatex | Medellín | 2019

Image Source: Comunidad.Suelourbano

Image Source: Plataformaarquitectura | 2010

9-12h Perpetuo Socorro Textile Industry
Parques del Rio

14-19h Estadio Atanasio Girardot
Coliseo Ivan de Bedout
Piscinas
Taller Sintesis & Connatural lecture



Perpetuo Socorro



Textile Industry



Parques del Rio



Ivan de Bedout Arena

DAY TO DAY SCHEDULE

Thursday, October 24, 2019



Image Source: Colombia Coffee Tour
Image Source: Metro Cable | Medellín

9-12h Coffee Tour (TBD)

14-19h Metro Cable Buenos Aires or Santo Domingo
Housing Low Cost lecture



Coffee Tour



Metro Cable

DAY TO DAY SCHEDULE

Friday, October 25, 2019



Image Source: Medellin.gov

Image Source: Plan B Architects

Image Source: Redit | Museum of Modern Art Medellin

Image Source: Plan B Arquitectos

9-12h Moravia Tour
Centro Rogerio Salmona (Moravia Cultural Center)
Jardin Botanico

14-19h Museo MAMM
Jardin Infantil Pajarito la Aurora



Moravia



Jardin Botanico



Museo MAMM



Jardin Infantil

NOTES AND THOUGHTS

NOTES AND THOUGHTS

NOTES AND THOUGHTS

NOTES AND THOUGHTS

NOTES AND THOUGHTS

NOTES AND THOUGHTS

IMPRESSUM

ETH Zurich | DARCH | NSL | LUS
Chair of Architecture and Urban Design
Prof. Hubert Klumpner

Organization

Prof. Hubert Klumpner
Melanie Fessel
Diogo Figueiredo
Michael Walczak
Diego Ceresuela Wiesmann
Alejandro Restrepo-Montoya
Daniel Zuluaga

Reader/Research

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Print

ETH Zurich
October 2019

