# Quitumbe, Quito-Ecuador

Students
Reinventing
Cities

The Metropolitan District of Quito is located 2,850 meters above sea level. It has a population that exceeds 2.5 million and a total area of 423,073 hectares. Quitumbe is one of the 8 zonal administrations, located in the far south of the central plateau of DMQ.

Quitumbe is a critical district in that it provides important services and facilities for the city. Most significant is the Quitumbe Terrestrial Terminal, which is a multimodal station of the integrated transport system with connections to the BRT corridors and the Quito Metro in the near future.

The site selected for this competition is the wider area surrounding the Quitumbe Terrestrial Terminal. This area is high in density and offers residential and employment opportunities, community facilities and retail activities. These, accompanied by its proximity to a major transport facility means it presents an opportunity to accommodate further urban growth and become a key metropolitan area.

However, the infrastructure associated with the Quitumbe Terrestrial Terminal, as well as the sewage treatment plants mean the area contains a lot of concrete walls, little vegetation and wide roads. This creates a hostile, sparse and unattractive space for pedestrians and cyclists and provides little opportunity for recreational activity. This impacts the quality of life of residents.

This project provides an opportunity for students to reimagine the area in a way that provides new public spaces for people. It should produce a high level masterplan or framework for the area – focusing on the street corridors. Some more specific examples or details may be provided for certain sited.

The framework should focus on reallocating space away from vehicles to pedestrians and reintroducing nature back into the district. The framework should specifically consider opportunities to reduce GHG emissions associated with its construction and use.



Approx. site area: 89 ha

<u>Demographics:</u> Quitumbe (parish) has a total population of 39,458 inhabitants with a population growth of 13.50% to 2020. Most residents are under the age of 40.

## **Priority areas & main City expectations:**

The occupation of large areas or lands for the implementation of local and interprovincial

transport systems, generate long pedestrian routes next to walls that do not take into account the public space and do not deliver positive social and commercial outcomes. The proposals will be able to take advantage of the wide roads in the area to consider how space can be equitably redistributed to deliver a vibrant urban environment and promote sustainable outcomes for the city.



## Presentation of the site



Figure 1 Site border for compettion - Quitumbe

Quitumbe is an important area within the Metropolitan District of Quito. It is home to the Quitumbe Quitumbe is a critical district in that it provides important services and facilities for the city. Most significant is the Quitumbe Terrestrial Terminal, which is a multimodal station of the integrated transport system with connections to the BRT corridors and the Quito Metro in the near future.

The site selected for this competition (shown by the red border above) is the wider area surrounding the Quitumbe Terrestrial Terminal. The area has a high population density (200-250 hab/ha) with mainly residential uses besides the facilities that represent an important area in the site. The employment opportunities are not high compared to other near centralities, so the proposal should look to include commercial activities that complement the existing residence and facilities. Key roads where activities occur are Av. Guayanay and Mariscal Sucre where multiple uses are promoted. The update of the Land Use and Management Plan hopes to strengthen this centrality as a metropolitan area. The Atacazo park ravine is an important green space in the site. The morphology the ravines provide natural character to the neighbourhood. However, pedestrian and cyclist access and connections to this site are limited.

Its proximity to a major transport facility means it presents an opportunity to accommodate further urban growth and become a key metropolitan area. Within the site area are other key pieces of infrastructure including the sewage treatment plant. These major pieces of infrastructure mean that today the site is dominated by large concrete walls, wide road corridors, little vegetation or spaces for relaxation and play. Some of the roads are dangerous and dominate by car.





Figure 2 Sewage Water Treatment Plant – Quitumbe

This project provides an opportunity for students to reimagine the area in a way that provides new public spaces for people. It should produce a master plan or framework for the area – focusing on the street corridors, public spaces and existing facilities. Some more specific examples or details may be provided for certain sited, that can be replicated. The framework should focus on reallocating space away from vehicles to pedestrians, including non-motorcycle infrastructure and reintroducing nature back into the district. The framework should specifically consider opportunities to reduce GHG emissions associated with its construction and use to deliver on the outcomes of the Quito Climate Plan.

## City climate priorities and specific environmental issues to address

Quito is committed to becoming a model and leader in the implementation of the New Urban Agenda, and to continue developing a sustainable city for all. This is aligned with the assumed local responsibility in the implementation of the Sustainable Development Goals, particularly Goal #13 "Climate Action". In this context, the city just completed its Climate Action Plan (CAP), with a 2050 vision of carbon neutrality, resilience to climate risks and climate justice and inclusivity. The Climate Action Plan will be available in the dataroom.

Quito's CAP has prioritized several mitigation and adaptation actions, which will have a direct impact and benefits on urban populations and should be considered in the site response. The city's main climate priorities are summarised below.





 Sustainable and eco-efficient buildings for carbon footprint and risk reduction

Sustainable land management and provision of ecosystem

- Climate compatible urban standards
- Eco-efficient neighborhoods and parks
- Energy decarbonization
- Land use aligned with climate

## Integrated water managment

- Adaptative water management
- Infrastructure to increase climate reslience

#### **Environmental services**

- Initiastructure to increase climate resilence

servicesResilience to Forest Fires

# Sustainable Agriculture



- Climate monitoring and data
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- Climate change investigation and governance

Agriculture and sustainable consumption

- Circular an integrated waste management
- Zero waste, and waste reduction for climate neutrality
- Organic waste management
- Landfill biogas capture

## **Sustainable Mobility**

- Zero emissions public transport
- Zero emissions historic centre
- Integrated and efficient public transport
- Active mobility
- Charging stations for electric mobility

One of the major environmental issues of the site results from years of environmental degradation. Unplanned development and uncontrolled urban expansion on the hillsides and ravines that surround the site have deteriorated natural drainage systems and increased the risk of landslides and flooding, as well as the damages that these types of events have caused. Students should look for opportunities to restore natural ecosystems to reduce risk and increase the resilience of both existing and future residents and infrastructure to these events.

Additionally, this site at certain hours reports low standards of air quality. This is due to the high traffic congestion related to the bus terminal and that main roads into the city centre, used by light and heavy duty transport, traverse the site. Students may look for innovative ways to help reduce the emissions associated with these activities, and the exposure of residents to them. Nonetheless, overall the air quality in the site falls within national air quality standards.

# Other expectations for the site's redevelopment

The area faces issues with providing job opportunities and commercial activities that strengthen the presence of one of the main multimodal stations in the city. Although the facilities guarantee access by public transport, the site presents difficulties for pedestrians and cyclist, with insufficient infrastructure which is non-existing in some cases (sidewalks, cycle paths). The presence of large lots such as the



terrestrial terminal, Metro station, Metro car garage and sewage treatment plant generate long and dangerous pedestrian paths. Students should look for opportunities to overcome this and provide improved connections and amenity between commercial activities and public space.

A key priority for the area is developing a strong sense of ownership and pride in the area for residents, with proposals that may be replicated in other areas of the city with similar characteristics. The development of meeting spaces that promotes cultural and educational opportunities for all ages could support this. Consideration should be given to how public space can be given back to people and reintroducing natural topography such us ravine in the urban area. Proposals can look for opportunities to take advantage of the wide roads and look to redistribute spaces for pedestrian mobility and diverse activities.

# Specific city planning rules and regulations

There is a range of plans and standards students could consider as part of their competition entry. These are summarised below:

- Metropolitan Development Plan (Plan Metropolitano de Desarrollo y Ordenamiento Territorial –PMDOT) is the strategic plan for the Metropolitan District of Quito that governs from 2015- 2025 and aimed at improving the quality of life of those who live in this territory based on the concept of sustainable development. This plan proposes a polycentric city model.
- Land Use and Management Plan (Plan de Uso y Ocupación del Suelo PUOS) is the territorial component of the PMDOT that aims to regulate the land uses, occupation and building based on a desired territorial model.
- **Urban and architectonic Standards:** consist of technical minimum rules of architecture and urbanism that seek to improve the habitat and functionality of urban spaces and buildings.
- Special plans for development in the area: (Plan Especial Quitumbe) the area adjacent to the site has a current special plan regulation as a promotion zone (ZC) that does not establish minimum divisions but rather a consolidation through the territorial unit.

## **Environmental regulations (Municipal Code which includes all city regulations)**

Since the Municipality is updating its plans (PMDOT – POUS) the students can innovate and go beyond the rules established in the current pacification

Municipal Code which includes all city regulations)

# **Language Requirements**

The documents for the registration and presentation of the final project can be presented in English or Spanish.