

7%

of all commutes
are by bike

50%

Bogotá's Long
Term Goal

Issue

- Most cyclists are in estratos 1 & 3
- Disproportionate hotspots of crashes involving cyclists are in lower estrato areas
- The city aims to promote sustainable transportation

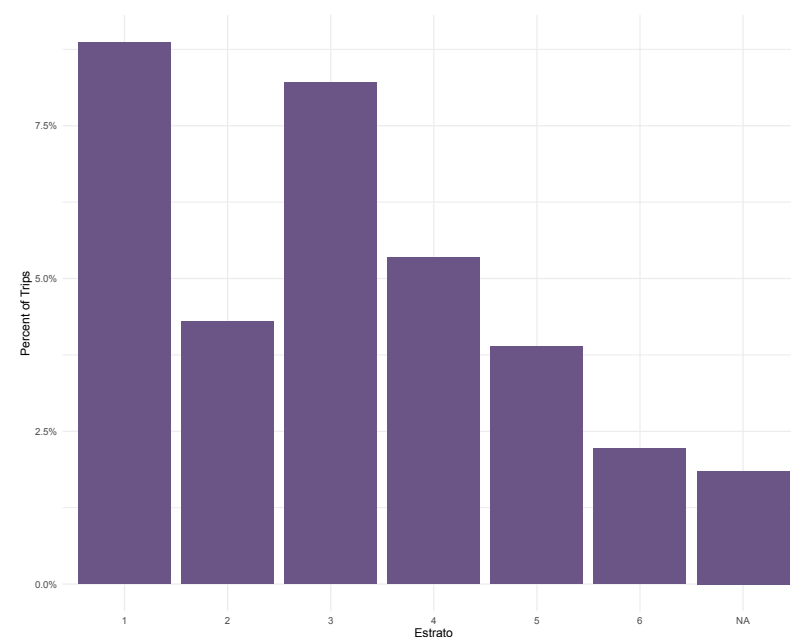
Goals

- Provide safe infrastructure for cyclists to access TransMilenio corridors either for cycling or for easy transfers
- Accelerate Bogotá's mode-share goal and get more people biking
- Improve cyclist experience to attract all users

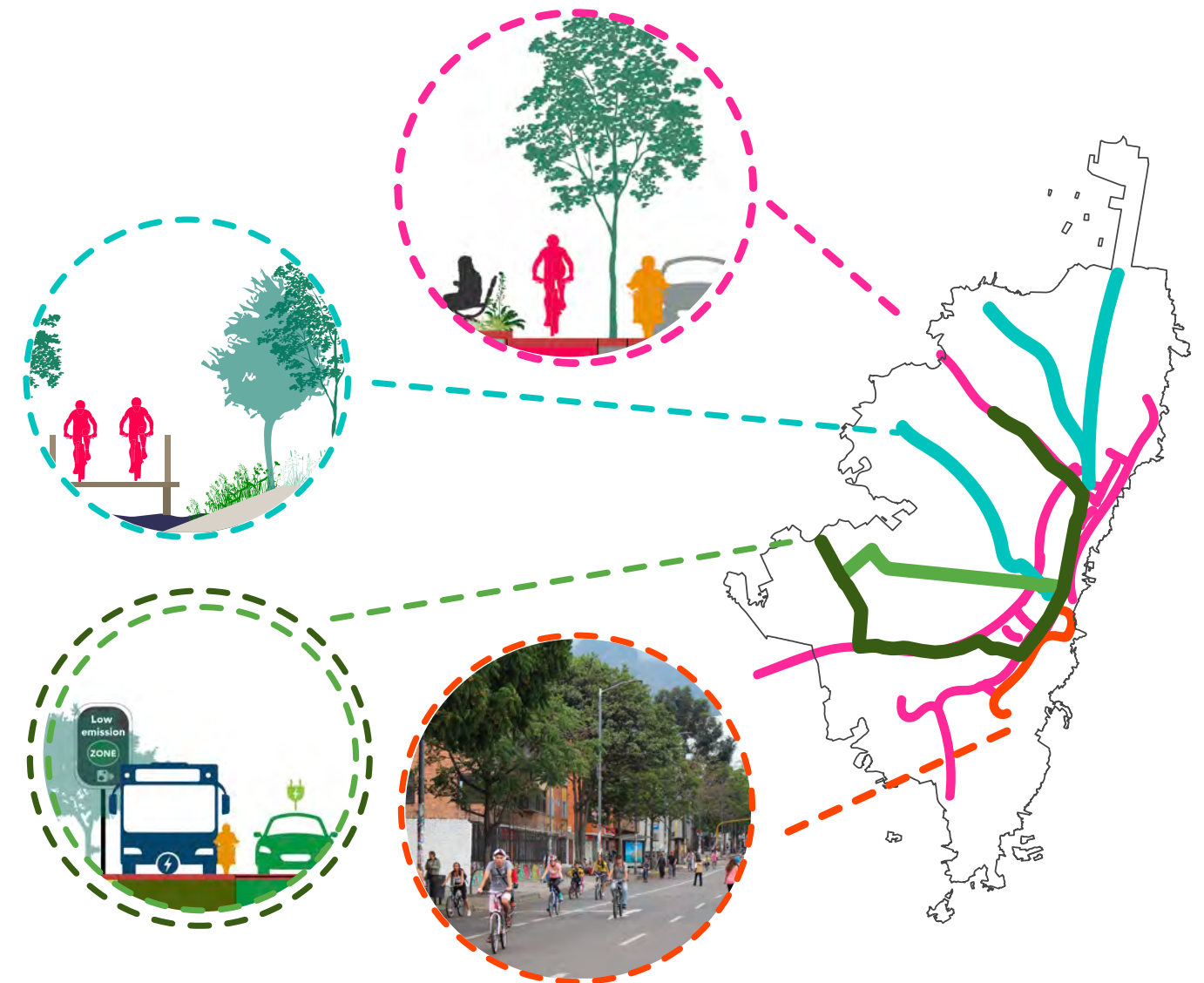
MiCicleta

Integrating Bicycle
Infrastructure with High
Capacity Corridors

Beyond the identified low-emission corridors, we have developed a long-term city-wide vision for high capacity corridors to provide better infrastructure for some of the lowest emission modes - bicyclists. A high quality bicycle network can connect high capacity corridors to affordable housing on the urban periphery and lower income residents to safe, affordable, and sustainable transit city-wide. Bogotá has been lauded as a leader in bicycle infrastructure, but safety and access disparities persist across socioeconomic divides.



Cyclists by Estrato



There are four strategies to more cohesively integrate bicycle & bus rapid transit infrastructure.

1. **Develop** low emission corridors to foster the cleanest possible air quality
2. **Retrofit** existing corridors to accommodate buffered, comfortable space for cycling
3. **Expand** and making more **permanent** the incredibly popular Ciclovía program
4. **Establish** greenways along underutilized center medians

24%

of cyclists are women

1.8

Meters to be minimum space for cyclists as required by a newly adopted Complete Streets Policy & Public Space Manual

16%

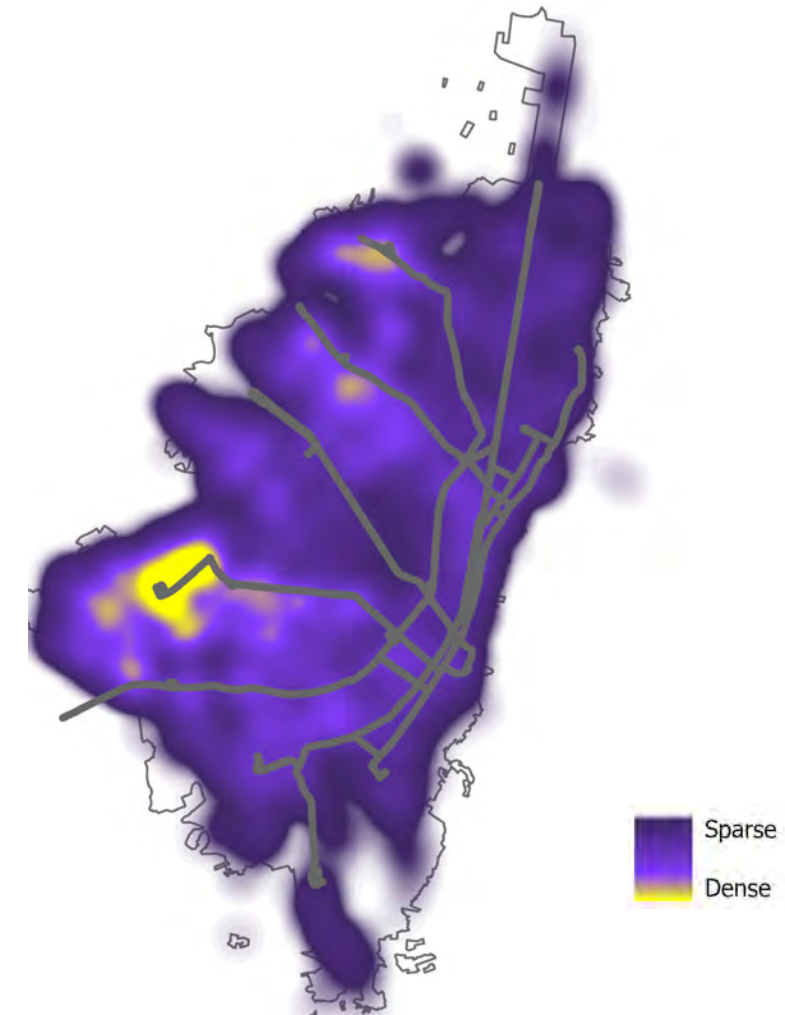
of all crashes involving cyclists are on just 3% of Bogotá's roads, along TransMilenio corridors

Focusing on bicycle infrastructure along bus rapid transit corridors offers a variety of opportunities centered on equity & safety.

Bogotá has ambitious mode share goals to expand bicycle mode share of commutes from its current 6 - 7% to 50%.

The city also has plans and complete street policies to allocate more roadway space to bicycle citywide.

Expanding bicycle infrastructure can benefit lower income residents living on the outskirts of the city, since most cyclists are residents in estratos 1 and 3. By providing an integrated network, cyclists can access more jobs, services, and amenities in the rest of the city. Cycling infrastructure can be a **vehicle for economic mobility**, especially for women who make up a smaller proportion of cyclists and experience harassment on public transportation.



Concentration of Crashes Involving Cyclists (2015 - 2023)

Lower estrato cyclists living on the outer areas of Bogotá face a disproportionate share of traffic violence. Many of these crashes take place near TransMilenio terminals, especially near Portal de las Americas. A concentration of crashes near terminals may indicate that a wide variety of road users are trying to access TransMilenio and facing higher conflict rates.

From our site visit, we observed disparities in bicycle infrastructure along high capacity

corridors. Although there are many cyclists using these corridors, facilities vary in quality and vary among estrato areas, likely resulting in inequitable crash outcomes.

Existing Infrastructure

The State of Bicycle Infrastructure Today

Insufficient
green space

Vibrant
culture of
biking

Competing
space with
pedestrians

Challenging
intersections
& narrow
crossings

Isolated
networks

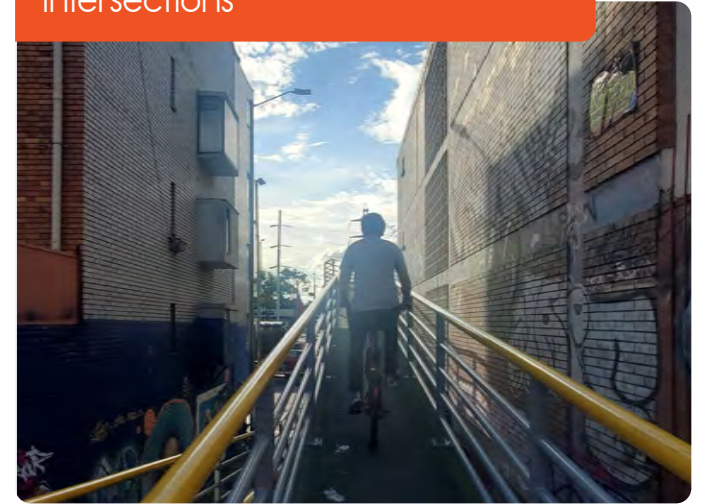
A majority of TransMilenio corridors have off-road paths at level with pedestrians. Along other corridors, there are no designated facilities and cyclists mix with regular vehicle traffic. Cyclists trying to cross the wide roads have to share narrow pedestrian ramps intended to access median transmilenio stations. There are very few on-road cycle tracks or greenways.

While some of the mega developments have implemented bicycle infrastructure, many of them are isolated networks without city-wide connectivity. At the same time, Ciclovía is one of the most successful street closure programs in the world. On Sundays, hundreds of thousands of people take to the streets along BRT corridors.

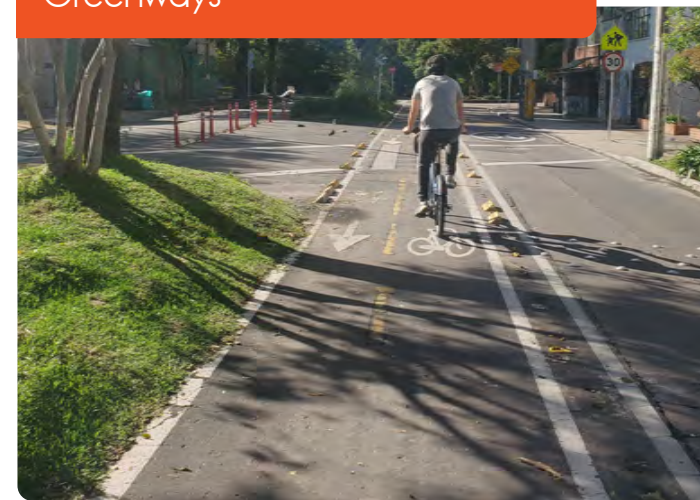
Off-Road Path



Intersections



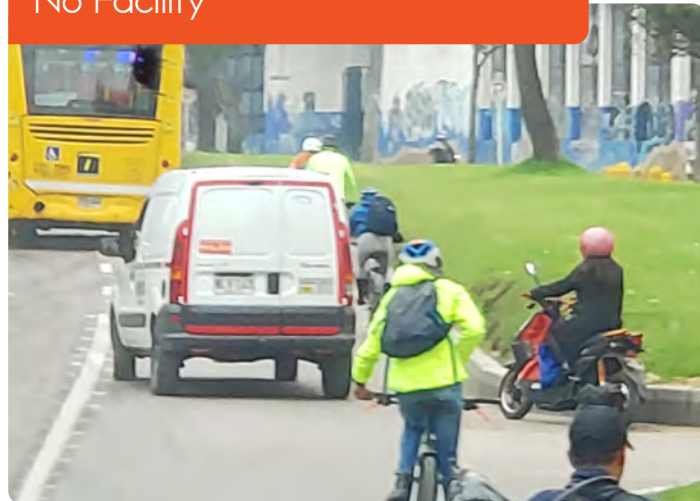
Greenways



Mega Developments



No Facility



Intersections



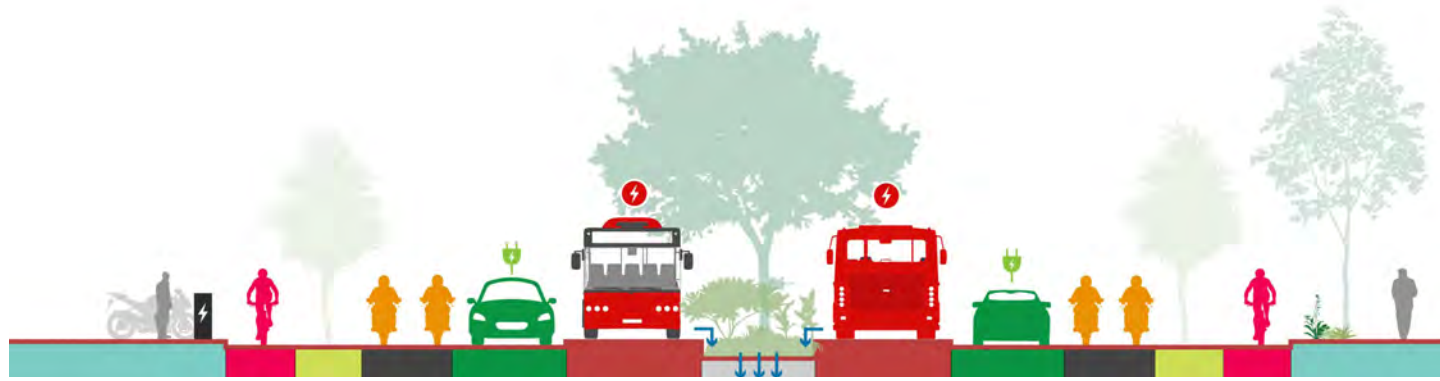
Off-Road Path



On-Road Cycle Track



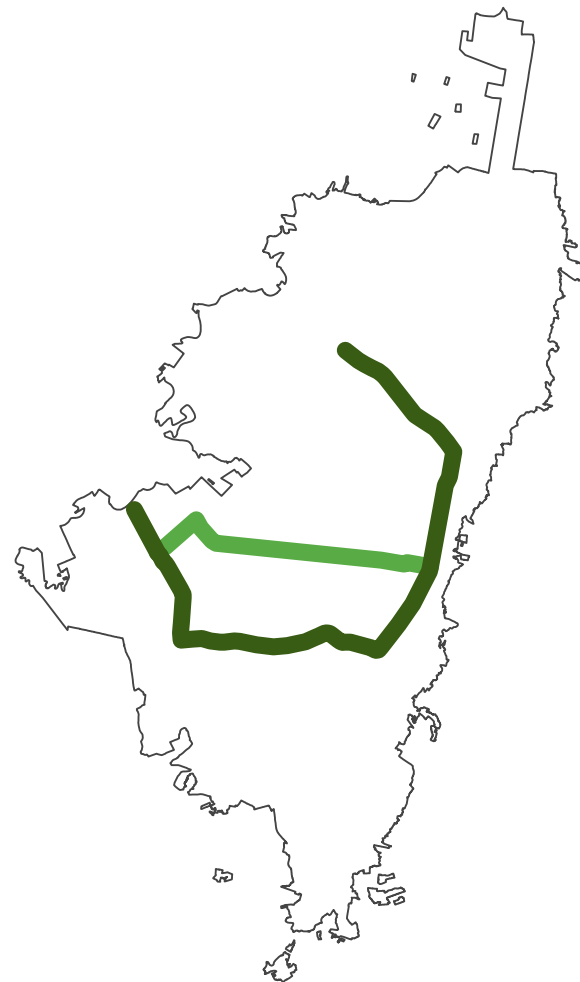
Typology 1: Low Emission Corridor



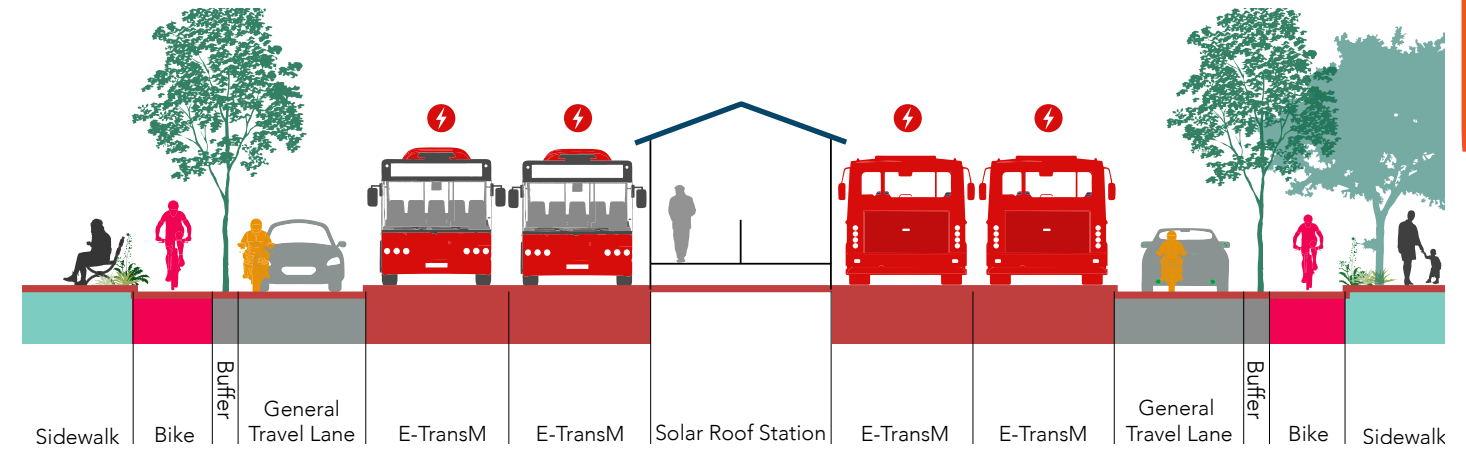
A low emission corridor offers the following benefits to cyclists:

- Better air quality and improved health outcomes
- Less noise pollution & more pleasant experience for all ages of cyclists

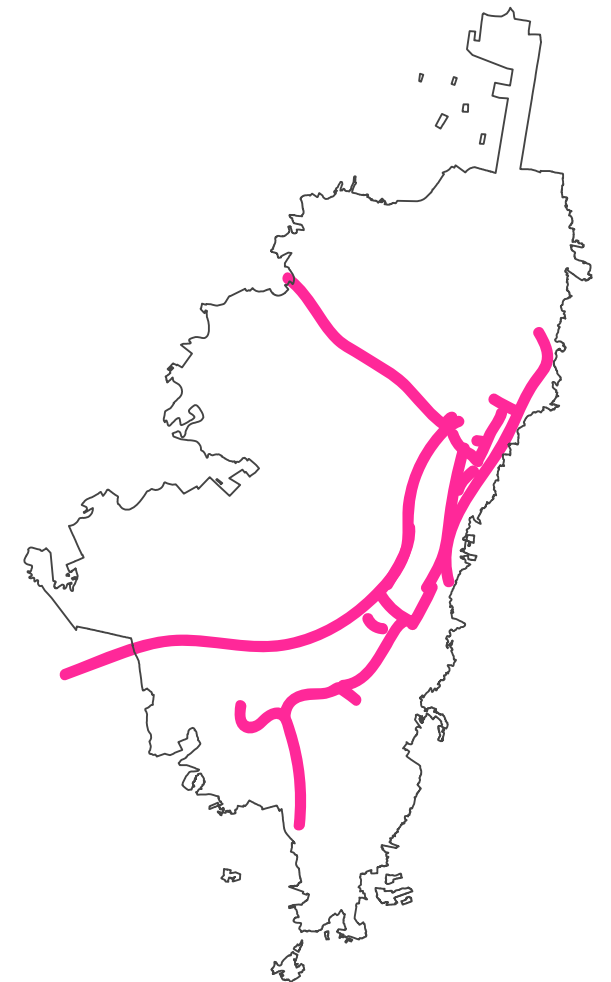
Restrictions for gas-powered vehicles has a directly positive impact on cyclists by allowing them to enjoy reduced air polluted corridors. It is not feasible that every household in Bogotá will have access to a private vehicle, electric or gas-powered. Therefore, ensuring that these low emission corridors are not exclusively for EVs but for the lowest emitting modes of travel like biking, walking, and public transit will make it an equitable low emission corridor.



Typology 2: Retrofit Corridor



A simple retrofit of a majority of corridors reclaiming a general travel lane for cycling infrastructure can provide a basic level of service across the network where none currently exists. Reallocating more space to biking & walking can reduce conflicts while improving access to businesses. Additionally, the inclusion of a planted bike buffer as standard on BRT facilities is critical to improve not just the air quality, but provide a physical protection to cyclists. An analysis of crashes involving cyclists reveals that overtaking closely and failure to maintain safe distances are the top two causes of crashes involving cyclists. Therefore, physical barriers can reduce these outcomes while improving overall cycling confidence. A safe experience makes biking a dignified mode of transportation for all people of all socioeconomic backgrounds.



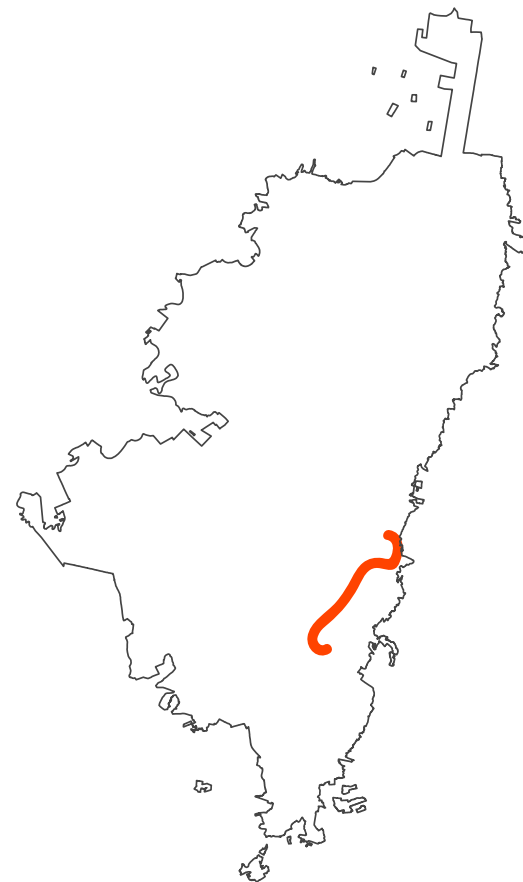
Typology 3: Permanent Ciclovía



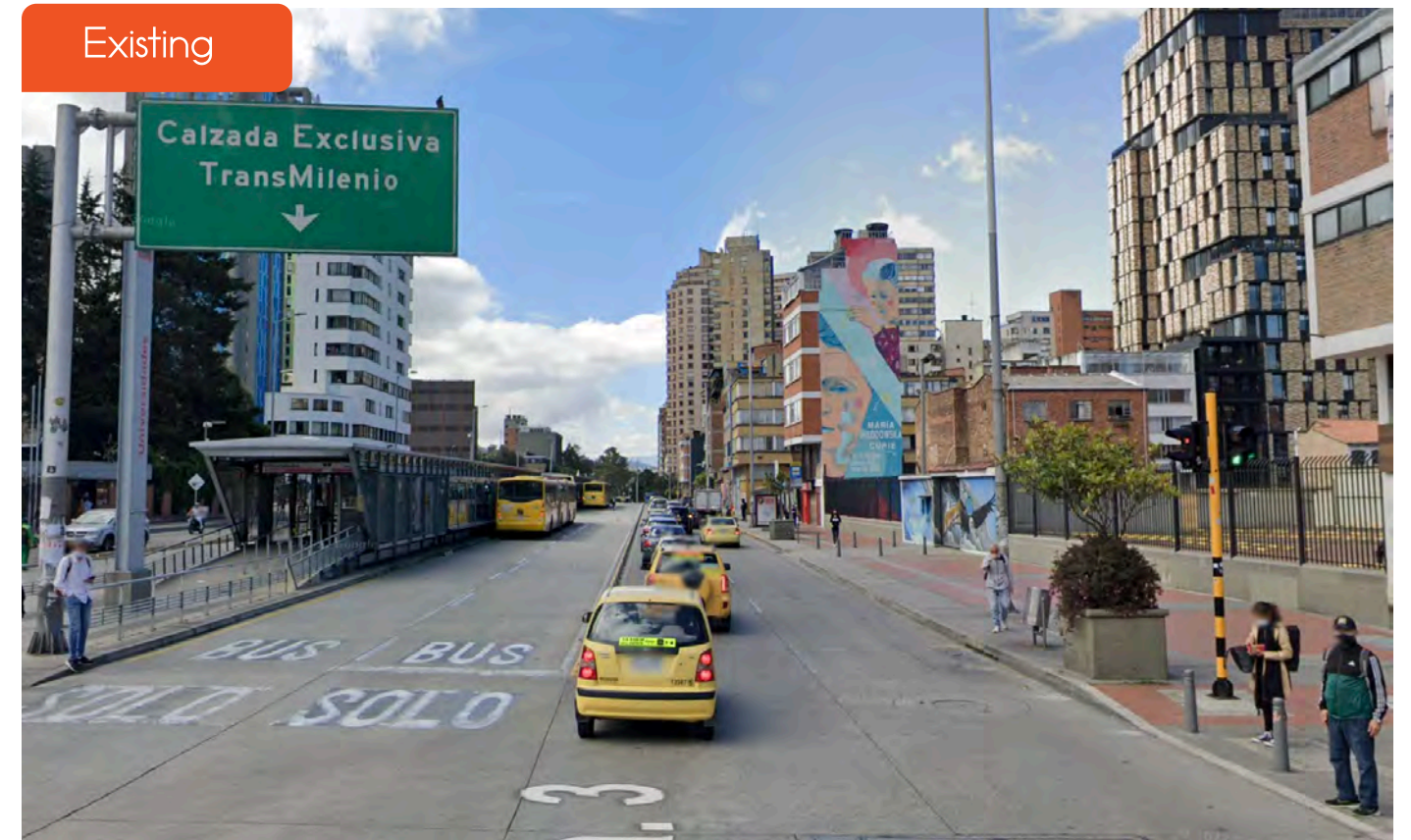
Ciclovía is an incredibly successful program that has been replicated worldwide where every Sunday & holidays, major TransMilenio corridors are transformed into vibrant spaces where hundreds of thousands of people walk or bike. This program should become **permanent** in the densest parts of the city where single-occupancy vehicles are moving a small portion of people.

With this intervention, the streetscape will be improved and circulation will be maintained via the TransMilenio, walking, biking, and the future Metro. The ciclovía program can be alternated on every other block to keep some vehicular traffic accessing businesses as a phase-in plan.

Up to 1.4 million people participate in Ciclovía weekly



Existing



Proposed

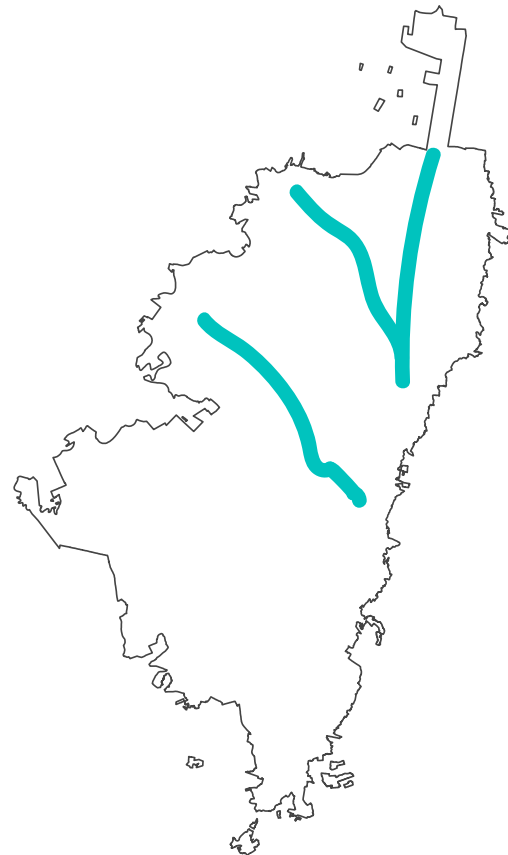


Typology 4: Greenway

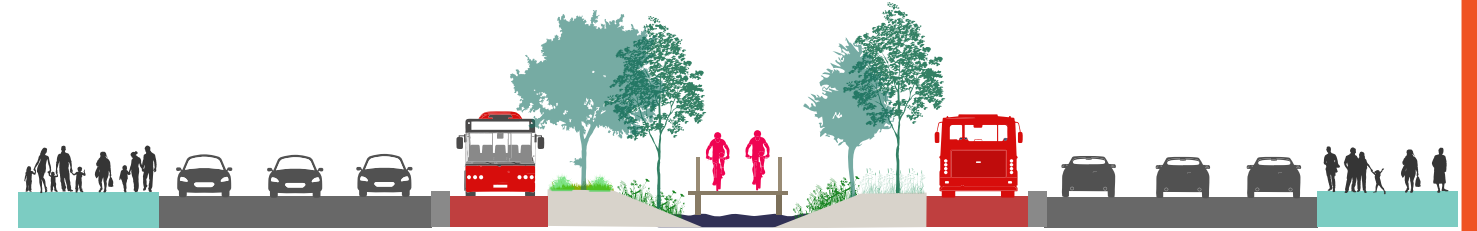


Finally, an inventory of the corridors revealed that there are three major corridors with underutilized green space or channelized rivers. These spaces can be reclaimed from unused space into public amenities while providing eco-benefits. A path like this already exists along the corridor to the airport, but it could be expanded and provide improved station access.

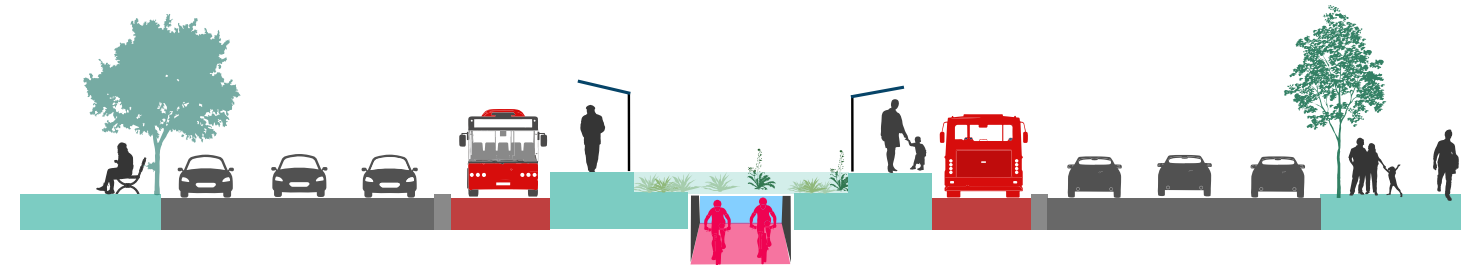
Providing separate entrances to TransMilenio for pedestrians and cyclists is a model that should be built upon and expanded, improving bicycle circulation & speed, access to TransMilenio, and reducing conflicts with pedestrians. By routing the path under the stations but providing dedicated access points, cyclists can access transportation and a city-wide cycling network.



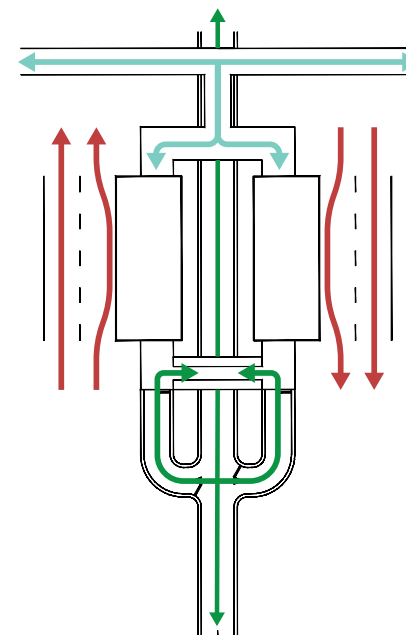
Typical Section



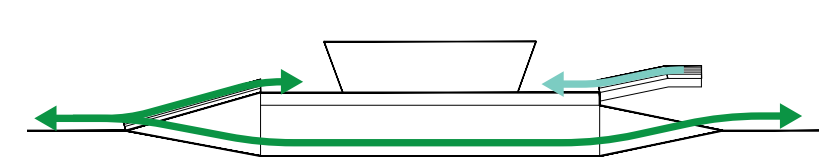
Station Section



Station Plan



Station Section



Pedestrian Flow

TransMilenio Flow

Bicycle Flow