

Asuncion
Green City
of the Americas
Pathways to Sustainability



BEST PRACTICES AND LESSONS LEARNED ON THE

PATHWAYS TO SUSTAINABILITY

CO-DESIGNING A BICYCLE NETWORK

A PARTICIPATORY PROCESS

Starting the conversation

Baseline: existing lanes

Legal framework analysis

Designing a network

Moving forward



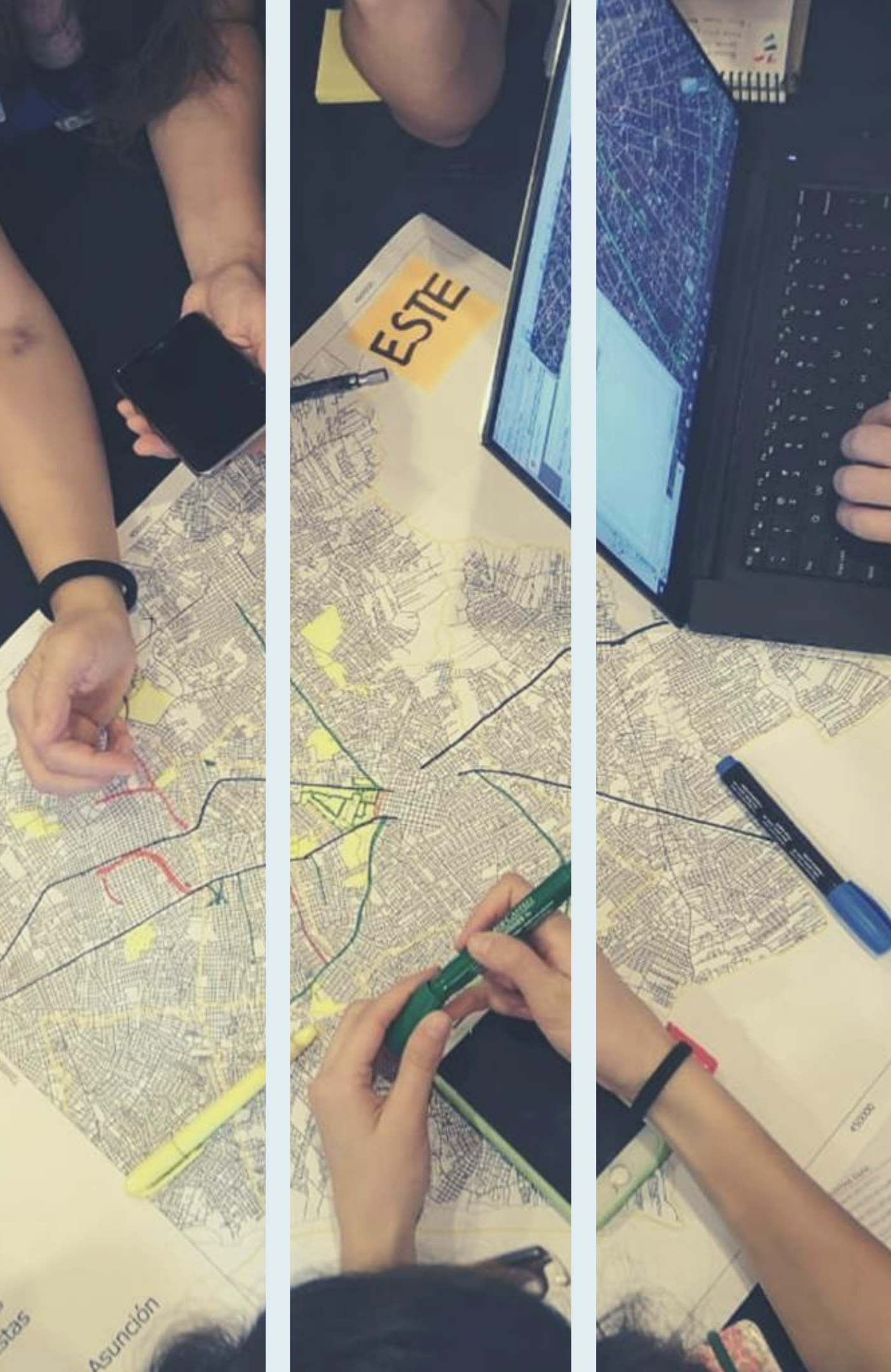
STARTING THE CONVERSATION



ENGAGING STAKEHOLDERS

We sought to design a bicycle network for the Metropolitan Area of Asuncion (AMA), to promote the use of bicycles as a mean of sustainable transportation that is both inclusive and safe.

We invited the Municipalities, the Central Government, the private sector and the civil society to actively participate in the design process, through three workshops.



BASELINE: EXISTING LANES

WORKSHOP 1

In the first workshop, participants were asked to identify and characterize the existing bicycle lanes, and propose the criteria to design the network.

Working in groups, they divided the Metropolitan Area of Asuncion (AMA) in four main zones:

AMA North: Mariano R. Alonso, Limpio, Luque.

AMA East: San Lorenzo, Capiatá, Fernando de la Mora.

AMA South: Villa Elisa, Ñemby, San Antonio.

Asunción and Lambaré.



MAIN RESULTS FROM WORKSHOP 1

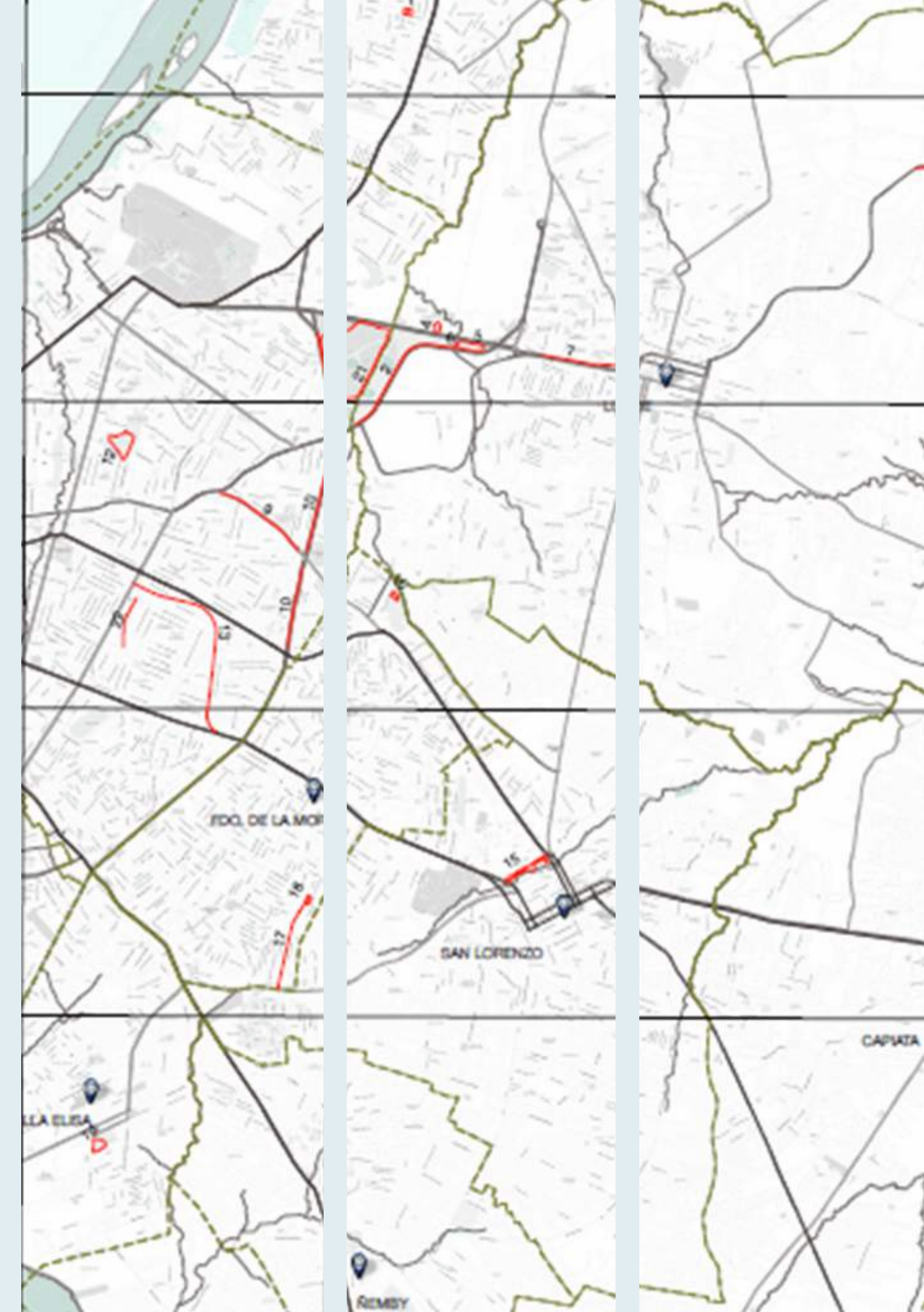
RESULT 1

A map of existing bicycle lanes, identifying a total of 45.7 Km in the AMA. Main criteria suggested for the design of the network: **functionality, safety, education and awareness raising, inclusion, integration of neighbourhoods.**

RESULT 2

Criteria for a "**Best Practices Manual for the Design of Bicycle Networks**":

- General aspects: differences between bicycle paths, cycle routes, typologies, benefits.
- Design guidelines and criteria.
- The bicycle network as a multimodal and intermodal transport option.



"We asked ourselves: how do we convince citizens that bicycle lanes can be a mean of transportation? We can plan and build them, but if they are not used it will not have the impact the city needs."

GUILLERMO GONZALEZ

MINISTRY OF PUBLIC WORKS AND COMMUNICATIONS



LEGAL FRAMEWORK ANALYSIS

WORKSHOP 2

Participants were asked to analyze the legal framework, reviewing Law 5430 “Which promotes the circulation of bicycles and creates the national network of preferential bicycle lanes”

The groups identified responsibilities, resources, objectives and indicators for the following:

- **Definition of bicycle lanes.**
- **Location of bicycle lanes.**
- **Circulation and networks.**
- **Education and awareness raising.**

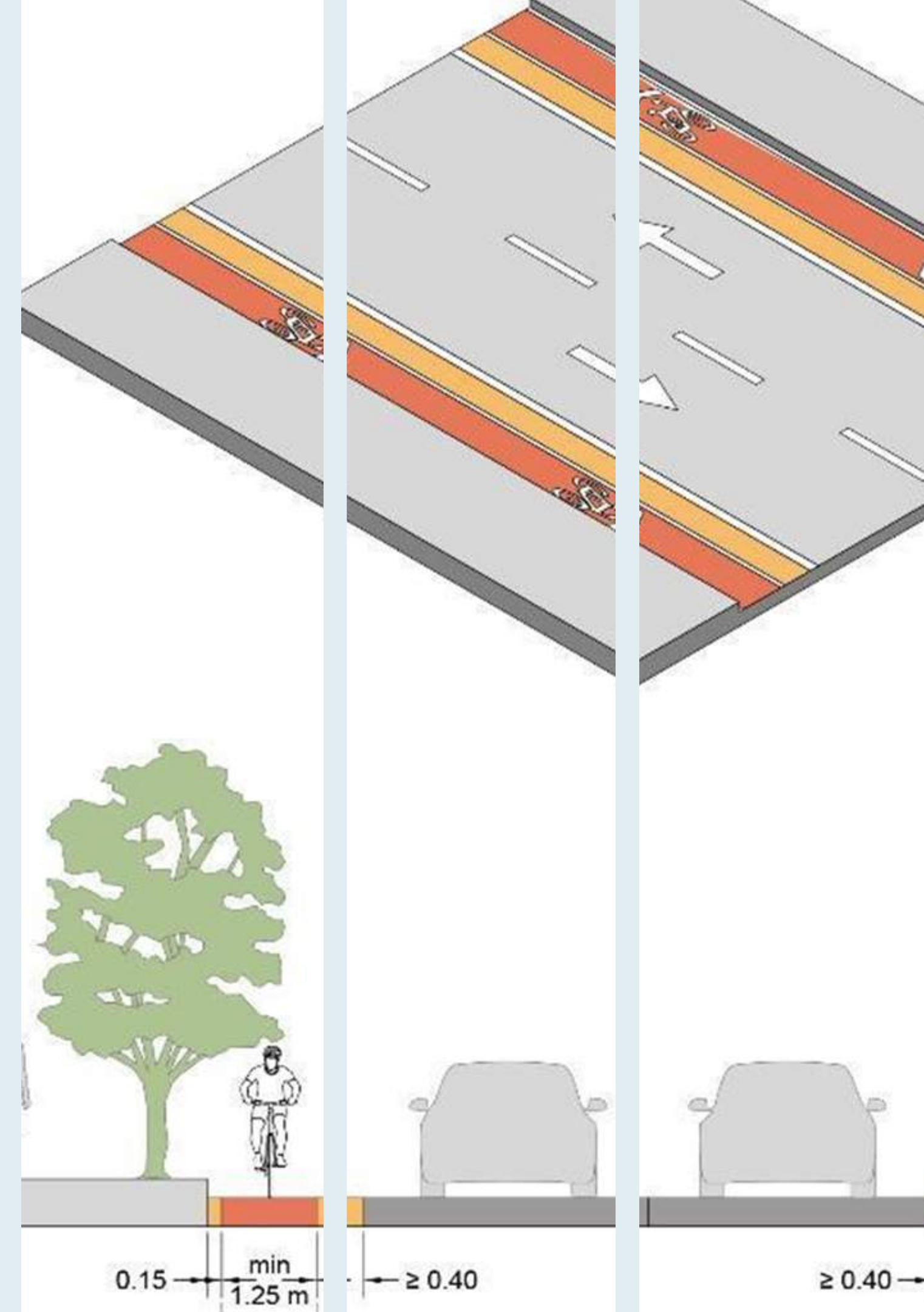
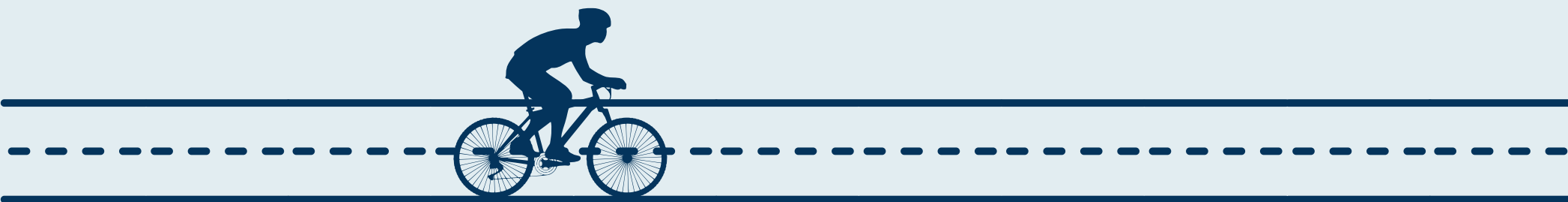



MAIN RESULTS FROM WORKSHOP 2

RESULT 3

Participants concluded that a revision of some definitions is necessary, as there are different nominations used indistinctly.

They made suggestions to modify all revised articles of the Law 5430 “Which promotes the circulation of bicycles and creates the national network of preferential bicycle lanes”





"The participation of future users and beneficiaries of the project in the design of the bicycle lanes is essential, since they are the ones who will know what type of infrastructure is practical and useful or not."

ROSE MARIE LEFEBVRE

ASSOCIATION OF URBAN CYCLISTS OF PARAGUAY



DESIGNING A NETWORK

WORKSHOP 3

Participants were asked to validate the design and integrate gender equality, safety, connectivity and inclusion concepts.

The working groups revised the proposed network, identifying possible connections between the main bicycle lanes and roads, as well as main bus stops and stations and connections to projected transportation systems such as the BRT.

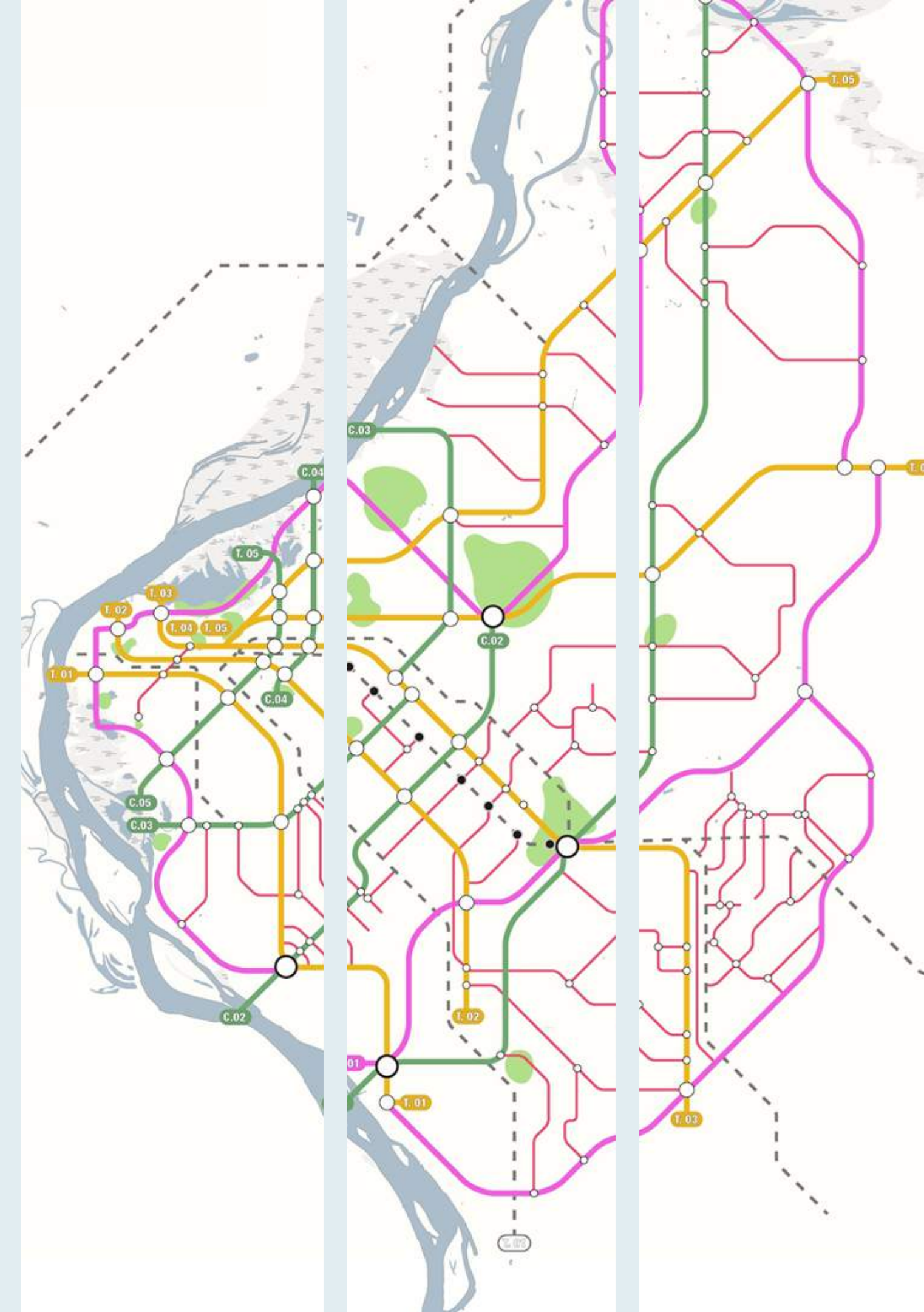


MAIN RESULTS FROM WORKSHOP 3

RESULT 3

Total network of 600 Km designed, incorporating suggestions from workshops 1 and 2:

- Bicycle lanes integrated to green areas.
- Interconnecting lanes.
- Lanes parallel to urban streams.
- Lanes connecting to main transport systems.
- Neighbourhood lanes.



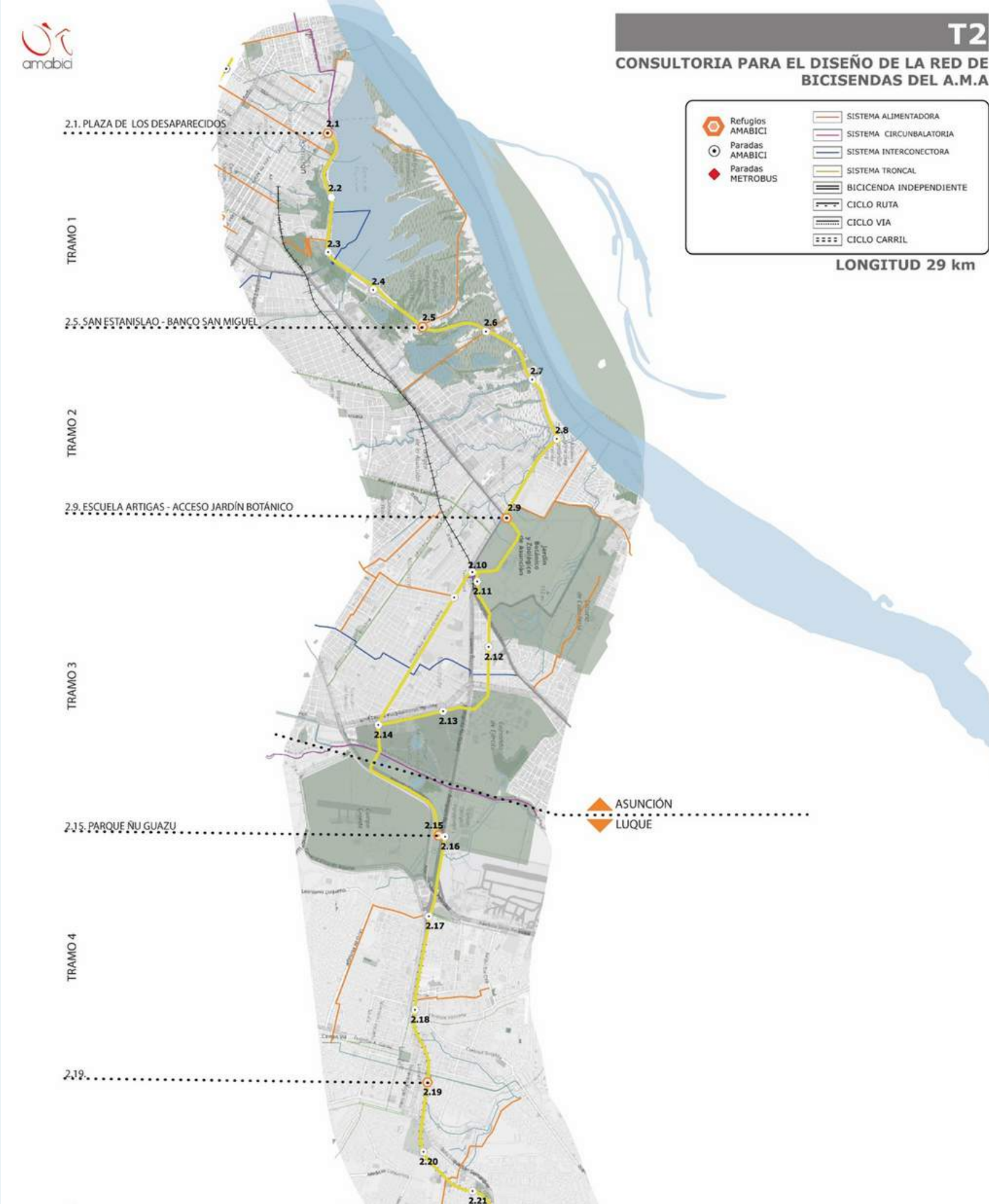
MAIN RESULTS FROM WORKSHOP 3

RESULT 4: PROJECT OF 60 KM

Length: 29 km

Integration of four key urban areas:

- Natural reserve Banco San Miguel
- Botanical Garden
- Guasu Metropolitan Park
- Ñu Guasu Park and Ñu Guasu Reserve.



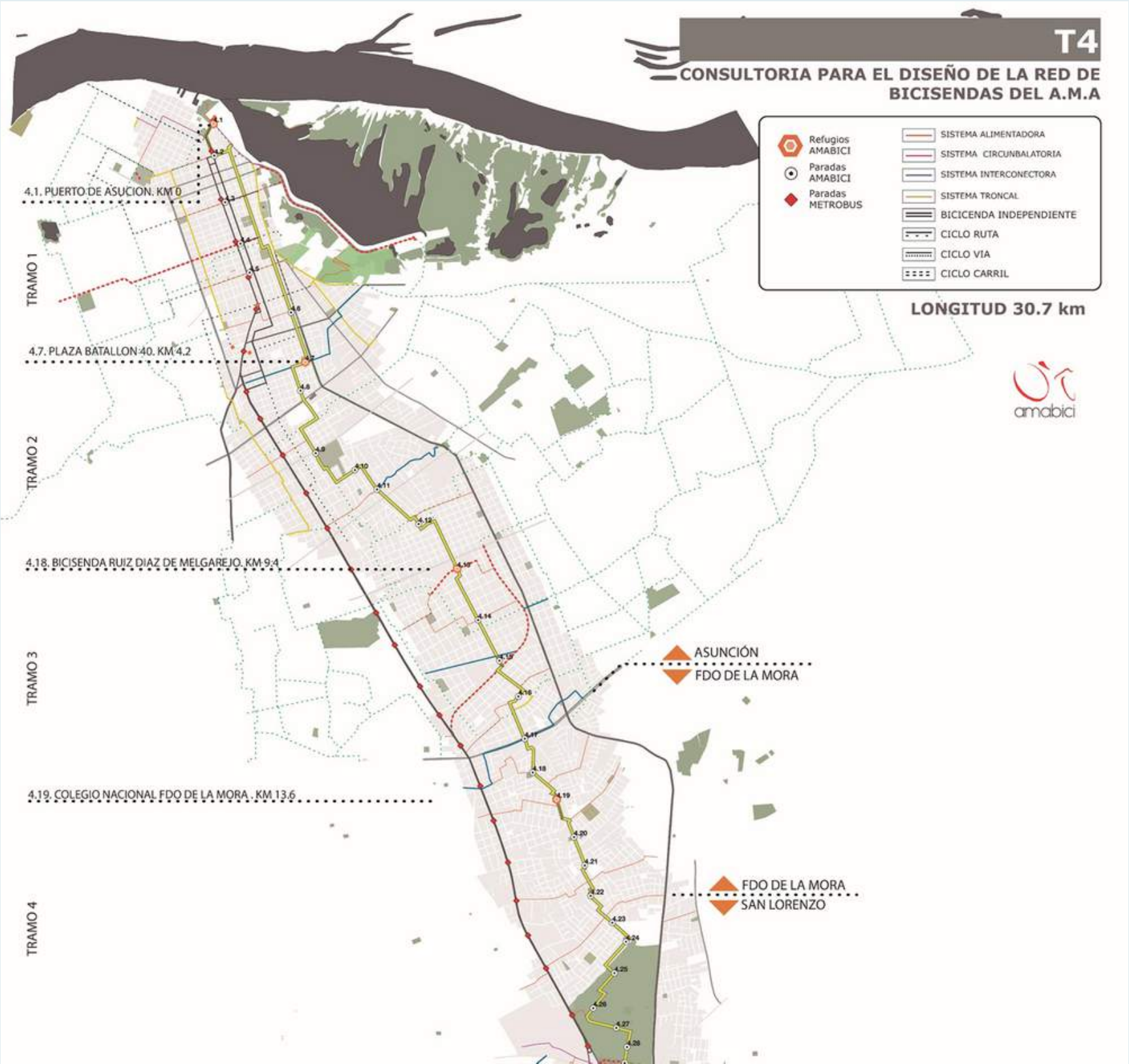
MAIN RESULTS FROM WORKSHOP 3

RESULT 4: PROJECT OF 60 KM

Length: 30.7 km

Connecting the city centre with residential neighbourhoods and the national university of Asuncion.

Parallel to the projected BRT.



"Having a space to debate and exchange ideas with people who live the process of creating urban settings is an opportunity to carry out projects that positively impact the urban environment and society, benefiting more people."

ROLANDO GONZALEZ

VICEMINISTRY OF TRANSPORTATION



MOVING FORWARD

CONCLUSIONS AND NEXT STEPS

Throughout the participatory process, stakeholders felt empowered and connected with the resulting project.

Next steps include the pilot for the first 18 km of bicycle lanes connected to green areas. The co-design process also resulted in a model for bicycle stops and stations.



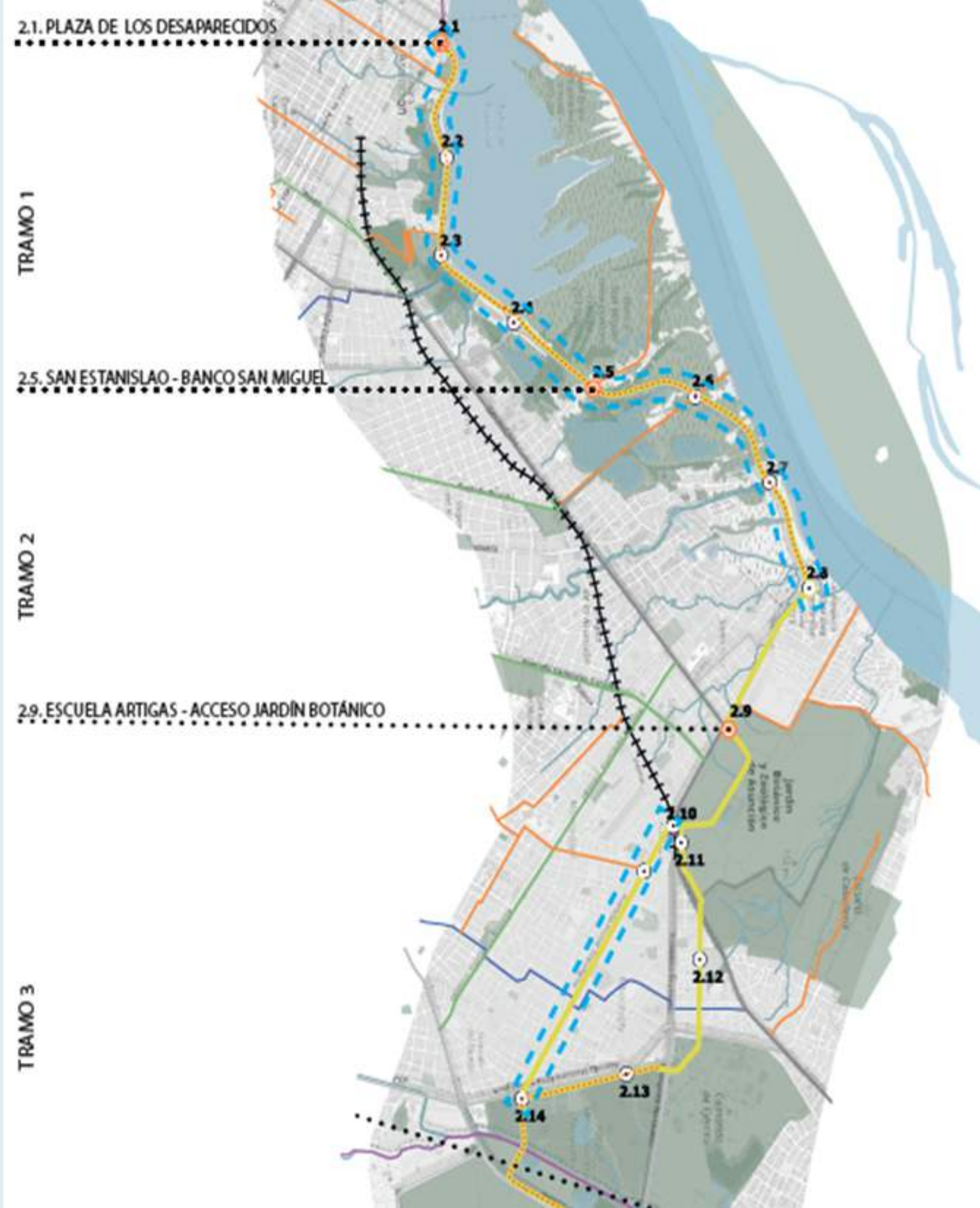
PILOT

Length: 18.4 km.

T2: Waterfront avenue

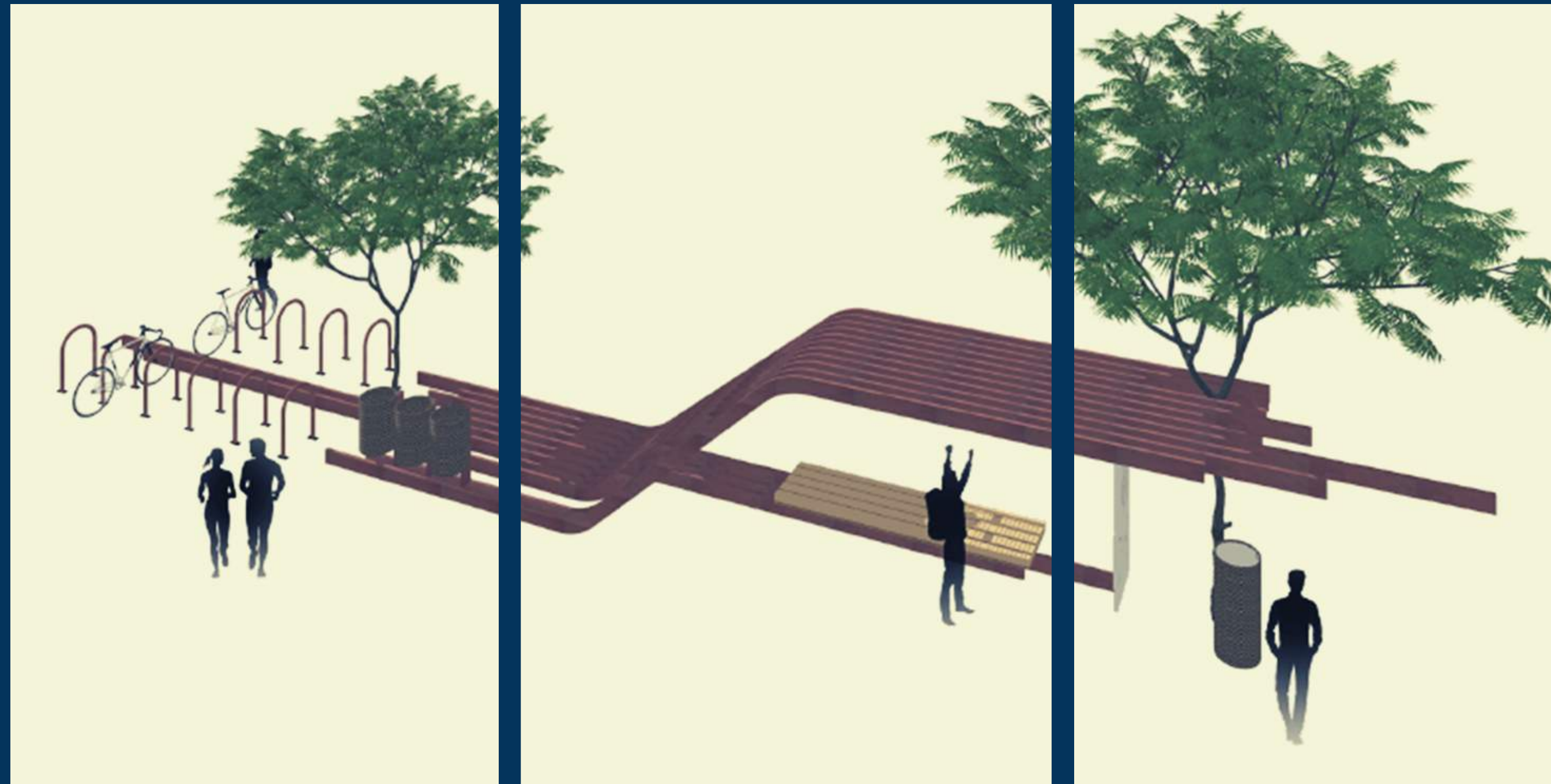
T2: Avenue Primer Presidente

T4: Asuncion's Port to Seminario Park



Bicycle Stop:

Stop equipped with information about the bicycle network, stations and stops, bicycle racks, bins and roofs and trees to provide shelter and shadow.



Bicycle Station:

Station equipped with information about the bicycle network, stations and stops, bicycle racks, bins, seating and roofs and trees to provide shelter and shadow.



Asuncion Green City of the Americas Pathways to Sustainability



FONDO PARA EL MEDIO AMBIENTE MUNDIAL



Al servicio
de las personas
y las naciones



TEKOHA HA
AKÁRAPU'Ā KATUIRĀ
Motenondcha

Ministerio del
AMBIENTE Y DESARROLLO
SOSTENIBLE

TETĀ REKUÁI
GOBIERNO NACIONAL

Paraguay
de la gente

#ASUNCIÓN
EN ORDEN



TETĀ REMBIAPO
HA MARANDU
Motenondcha

Ministerio
OBRAS PÚBLICAS
Y COMUNICACIONES



TAVAPY ÑEMOHENDA,
OGA'ĀPO HA TEKOKHA
Motenondcha

Ministerio de
URBANISMO
VIVIENDA Y HÁBITAT



PYTYVŌ
PYA'ERĀ
Sámbyhyha

Secretaría de
EMERGENCIA
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