

Examining the Development of Nature-Urban Routes in San José, Costa Rica



A city better connected to nature and to its people.

Image courtesy of Rutas Naturbanas, 2016

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Purpose

Did you know?

- In San José, Costa Rica only 5.6% of space is designated as parks, playgrounds, plazas, and stadiums (Rutas Naturbanas, 2016)
- One of the city's major rivers is contaminated at more than 17,000 times the sanitary limit (Calvo & Mora, n.d.)
- The third leading cause of death in San José is vehicular accidents (Informe, 2011)

Every day, the people of San José – especially those living in the city's more marginalized communities – must contend with the negative impacts of insufficient public space, highly contaminated waterways, and inadequate transportation infrastructure. Our sponsor, Rutas Naturbanas, wants to collectively address these challenges by creating nature-urban routes along two of San José's rivers, the Río Torres and the Río María Aguilar. These routes would encompass 25 kilometers, connecting dozens of communities to nature and to each other. By coming to Costa Rica, we hoped to make people's voices heard in a project that is meant to benefit them. Through our efforts, we found a number of potential ways to keep the communities of San José represented and engaged in the establishment of these nature-urban routes.

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Background

In the midst of a bustling urban setting, green spaces such as parks and gardens can serve as ecological refuges for both wildlife and people alike. Green spaces are commonly used for a variety of recreational and cultural purposes and can transform an urban area characterized by gray infrastructure into a beautiful and welcoming environment. Green spaces also provide a number of benefits for people, the environment, and the economy.

Improving the city's access to nature could positively affect its economy by creating opportunities for urban ecotourism. Ecotourism is an important source of revenue for Costa Rica. Tourists are typically interested in the country's biodiversity, which accounts for 4% of the entire world's biodiversity



Tour of the María Aguilar river basin

(Biodiversity, 2014). Within the city of San José itself, however, the natural beauty of the country is not always evident.

San José is home to a number of marginalized communities that often suffer from a lack of access to large urban parks. Connecting green spaces would encourage more active means of transportation, such as walking, running, and cycling. It would also pro-

vide safer routes for these activities, which is important since one in three people in San José do not use bicycles to get to work because they believe the current infrastructure is unsafe (Encuesta, 2015). The implementation of nature-urban routes to connect green spaces and encourage physical activity could drastically change the state of the city.



Parque La Sabana

Project Objectives

We aimed to assist Rutas Naturbanas in the establishment of safe and sustainable nature-urban routes that encourage community engagement in the city of San José. In order to achieve this goal, we satisfied four objectives:

1. Identify and consider the concerns of marginalized communities along the Río Torres and Río María Aguilar regarding the routes;
2. Examine the scope of crime and violence both in communities along the proposed routes and in San José as a whole;
3. Explore how to foster a symbiotic relationship between the routes and their surroundings by determining potential positive and negative environmental impacts of the routes;
4. Investigate ways to encourage community participation throughout the design, use, and maintenance of the routes.

Methods

To gather the opinions of local people, we conducted anonymous surveys with park-goers and community members on topics such as public safety, the environment, and community engagement. We visited 5 different urban parks in order to gather responses from a more diverse set of park-goers, and we visited the marginalized communities of La Carpio and Cristo Rey to gather the perspectives of lesser-heard voices. Since the proposed nature-urban routes will pass near these parks and communities, it was valuable to understand the needs of these areas so that Rutas Naturbanas could better plan the routes.

While public opinions are important to consider, we also obtained information from people who are experts in their fields: local activists and professionals from the Municipality Police, the University of Costa Rica, and several non-profit organizations. Finally, to supplement the information we gathered from our surveys and interviews, we examined a variety of relevant aca-



Interview with Beatriz Fernández de Hütt at Polideportivo Aranjuez

ademic and governmental materials.

Outcomes

Safety: Through our 43 community and 50 park-goer surveys, we discovered that people's perceptions and the actual realities of crime in San José closely align. Fortunately, the generally positive relationship between police officers and residents of San José creates opportunities for collaboration to make the nature-urban routes

safe spaces. The presence of police, in addition to other security features, may improve feelings of safety among route visitors.

Environment: We found that the highly contaminated states of the Río Torres and Río María Aguilar contribute to community skepticism of the proposed nature-urban routes. Additionally, implementing the routes may exert pressure on the local environment through the disturbance of natural habitats, intensi-

fication of sound pollution, and implementation of artificial lighting. However, we did discover that the proposed nature-urban routes would reduce reliance on motorized transportation throughout the city and prompt the cleaning of the rivers.

Community Engagement: We learned that a considerable amount of people in San José are interested in helping maintain the routes and would like to use them for cultural expression. This interest could encourage individuals to become involved with the work of existing community organizations. Additionally, the proposed routes would



Surveying in La Carpio

bring public green spaces to urban areas that currently have few to none. Lastly, the routes could provide nearby businesses with more customers. In these ways, the routes could act as catalysts for socio-economic growth and community engagement throughout the city.

Recommendations

Through careful analysis of our outcomes, we formulated five key recommendations for Rutas Naturbanas:

1. Include ample police presence, lights, and emergency call boxes for security purposes along the routes. Com-

munity members and park-goers ranked police personnel and lights as their two most valued safety features of a public space, and incorporating emergency call boxes along the routes would provide a greater sense of security for route visitors.

2. Collaborate with local organizations to increase community engagement in the cultural purposes of the routes. Working with organizations that promote community engagement, such as GAM Cultural, SIFAIS, and Río Urbano, would help connect Rutas Naturbanas with com-

munity members and facilitate the use of the routes for musical and artistic purposes.

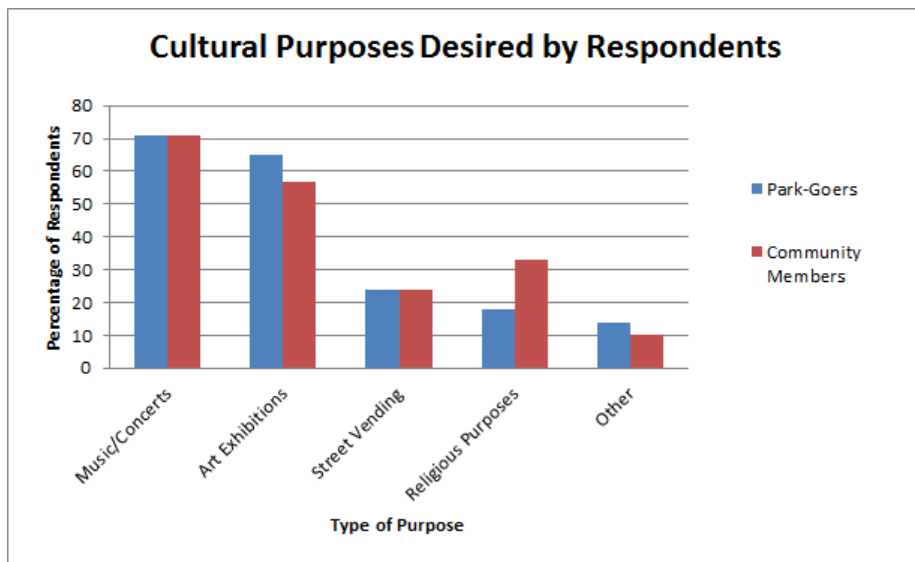
3. Begin a bicycle-sharing system along the proposed nature-urban routes. Many survey respondents said they would use the nature-urban routes to commute through the city. A bicycle-sharing system could facilitate this, thus reducing reliance on motorized transit in San José. Therefore, Rutas Naturbanas should partner with bicycle companies and organizations in the area, such as Chepe-Cletas to explore the feasibility of such a system.
4. Partner with the Public Transport Council and the Ministry of Public Works and Transportation to create new bus stops at key locations along the nature-urban routes. Fewer people may use the routes to commute if they do not live and work within walking distance of them. Creating bus stops at key locations along the routes would connect people to the routes and facilitate their use for commuting pur-



Emergency Call Box

poses by city residents.

5. Establish an “Adopt A Route” program to help fund route maintenance and promote local businesses and organizations. Not all route maintenance activities will necessarily be performed by community members who volunteer their time. By establishing an “Adopt A Route” program that allows for the sponsorship of specific segments of the routes in return for advertising on route signage, Rutas Naturbanas could acquire funds to pay for additional route maintenance.



Bar graph from survey results



Mural in La Carpio

Conclusion

Through the expansive urban development of San José, people across the city have lost connection with nature. To this end, we examined aspects of the proposed nature-urban routes such as public safety, environmental impact, and community engagement to help Rutas Naturbanas address several challenges that the city currently faces.

By coming to Costa Rica, we hoped to make people's voices heard in a project that is meant to benefit them. It is our hope and the hope of Rutas Naturbanas that, one day, the people of San José will live better connected to each other and nature. The nature-urban routes cannot solve the city's problems alone, but, through our work and the work of Rutas Naturbanas, they will serve as the foundation for many other positive environmental and social changes in the future.

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