

BELIZE CITY & CLIMATE CHANGE: PLANNING BRIEFS

URBANIZATION

**Belize City is facing a shortage of affordable housing, and climate change will very likely make this worse.**

Given its location as a low-lying peninsula, Belize City has a shortage of land, which can make housing more expensive. Further, low-rise, single-family homes are the most common housing type, which limits the number of units on the market. Climate change is poised to worsen this situation. More than 40% of Belize City's housing is lower-quality and vulnerable to becoming uninhabitable or being destroyed in the event of severe weather. Competition for the least flood-prone land will also likely drive up prices in some areas, potentially pricing out lower-income households. Already, the city's high cost of living is propelling rapid population growth in commuter towns along the north and west highways. Meanwhile, Belize City is losing population, and the once lively downtown has become dull and unsafe.

Unplanned development is destroying ecological areas that are essential for flood protection.

Development throughout the Belize City metropolitan region is pushing into ecologically sensitive, low-lying natural areas, including mangrove forests. Much of this is low- and middle-income homes, which are being built despite the heightened flood vulnerability. Further, in Belize City proper, informal settlements are springing up in environmentally important mangrove forests and swampy marshlands. Homes in these communities are built from scrap materials, making them extremely unsafe during storms. In addition to their flood risk and climate change vulnerability, many residents of informal settlements are also socially vulnerable. This group includes many recent migrants, single mothers, and families who have been displaced by violence or poverty.

Critically, the mangrove forests, though unsuitable for housing, are extremely important for climate resilience. Mangroves serve as buffers against heavy winds and storm surge. They are also natural drainage basins that absorb water and ease the strain on stormwater infrastructure. As these areas are destroyed by development, the Belize City metro region becomes increasingly susceptible to flooding, which will also worsen with climate change.

The city's natural areas are neglected and underutilized.

Belize City offers many natural attractions, including Haulover Creek, mangrove forests, marine and coastline areas, and public parks. However, the city is not well known for its natural beauty, in part because these areas are not well-maintained or access points are limited. Many of the city's parks also have poor lighting and inadequate pedestrian access. As a result, they are not well used and may even feel unsafe, particularly for women and children. Additionally, the city's natural areas and green spaces are underutilized in their potential to contribute to flood protection and the city's broader climate resilience.

Travel in, out, and around Belize City is challenging.

There is no efficient mass transit connecting Belize City to the growing suburban commuter towns. As a result, the city is seeing a spike in congestion and chaotic traffic. This is dangerous because the congested highways must also serve as evacuation routes in the event of severe flooding, which will become increasingly common as sea levels rise and storms become more severe. Additionally, there is no unified transit system within the city. Bus service and schedules across the private lines are inconsistent. Some areas of the city are not served by the buses at all. There are also reports that drivers may not allow proper time for seniors and riders with disabilities to board, or simply may not stop for them.

Planning for future development—and climate change—is insufficient.

There is weak local control over urban development and housing regulation. Because of this, Belize City has many homes and buildings that are not suited to sustain repeated flooding and severe storms. While enforcement of existing building guidelines is poor, the guidelines are also not designed with climate change in mind. Regional growth is also not being addressed comprehensively, and there is poor coordination between Belize City and the suburbs. Finally, though Belize City has a master plan, it has shortcomings. Notably, it does not address comprehensive zoning, which limits the city's ability to increase affordable housing.

URBANIZATION IN BELIZE CITY

PLANNING GUIDANCE

Housing affordability and climate resilience can both be strengthened with zoning and infill development.

Belize City's low density is contributing to a shortage of housing and higher costs. One path forward is promoting infill development. This will add new housing units in areas that are less flood-prone and keep construction out of natural areas and other low-lying land. Infill can also increase the number of smaller homes or multi-unit buildings, which tend to be more affordable for lower-income households. To promote infill, Belize City needs comprehensive zoning, which can also help drive development to less vulnerable and underutilized areas. For example, the declining downtown could be targeted for new housing, such as adding affordable apartments above shops. Zoning can also ensure a diversity of sizes and prices for housing units. Increasing the amount of affordable housing is an essential first step to moving populations out of the dangerous informal settlements, while still keeping these residents in the city and close to economic opportunities.

A coordinated and efficient transit system is needed to improve mobility and congestion, especially along evacuation routes.

Reducing the volume of car traffic on the northern and western highways will improve mobility and efficient evacuation, when the need arises. The number of daily commuters coming into Belize City suggests there is sufficient demand for express bus service to connect the commuter towns with the city core. However, comprehensive transit planning is needed to prioritize the buses, so that commuters are incentivized not to drive. Within the city, standardizing bus routes, stops, and schedules across private companies will help the buses better serve all residents. This is especially critical so that seniors and riders with disabilities have more equitable access. A centralized fare collection system, such as a refillable transit card, would also make it easier for commuters to utilize different bus lines. Finally, establishing schedules for fast connections between local and regional bus lines will make the system more attractive to both commuters and tourists going from the Phillip Goldson International Airport to areas of Belize City.

Planning for the historic downtown should prioritize new housing, circulation, and climate change.

Revitalization of properties and public spaces in the historic downtown is currently underway through the "EcoMuseum Zone" project. While this initiative is largely aimed at tourism, broader planning efforts can expand on the project to make downtown better serve all Belize City residents. For one, adding new apartments to downtown would help with the affordable housing shortage, and also create a new customer base for businesses and keep the area lively throughout the day. Adding new biking and walking paths throughout downtown, and especially corridors that connect to the W Collect Canal bus terminal, would draw in both commuters and tourists to shops and restaurants. However, if downtown is to be revitalized as a hub of new development, long-term planning must also consider the effects of climate change. Belize City Council should begin planning now to reduce future flooding and storm impact on this revitalization project.

Improving access to natural areas can help better protect them while also celebrating their beauty.

Preserving and restoring Belize City's natural areas is critical for climate change resilience. In addition to moving populations out from sensitive mangrove forests, the city needs to work to restore these spaces to their original density, while also incorporating them into the urban fabric. This should include development restrictions and eco-restoration, but also improved access points for leisure and tourism. The installation of boardwalks, river walks, and other water access points for the mangroves and Haulover Creek could turn these neglected spaces into beloved attractions that are part of the city's identity. Such efforts can also educate Belizeans on the role of the natural areas in reducing flood risk and climate change impacts.

Green design elements can improve flood protection and also activate public spaces.

The flood protection offered by natural ecosystems, like the mangroves, can be augmented with green infrastructure elements. This could be as simple as adding increased vegetation, bioswales, or rain gardens to streets to help control water. These new features could also be paired with a broader campaign to improve streetscapes and safety through new bike lanes and sidewalks. Parks should also be revitalized to make them safer and more attractive, including through new lighting and pedestrian access. Simple design elements such as sunken plazas, rain storage tanks, native plants, and wetland areas, can be added to aid in flooding defenses.

Planning and coordination across jurisdictions will be key to creating a resilient metropolitan region.

Regulatory tools like comprehensive zoning and updated building standards can help guide growth, and protect vulnerable areas and people. To further increase its resilience, Belize City will also need to gather as much information as possible about its unique climate challenges. Community-led surveys and vulnerability mapping can help identify areas where government assistance and planning should be targeted. Critically, increasing cooperation between the city and the suburban governments, as well as the city and national government, will be necessary to properly address transportation, substandard buildings, climate resilience, and other challenges. The creation of formal bodies, such as a metropolitan planning commission, can help spearhead comprehensive regional planning.

ABOUT BELIZE ASSOCIATION OF PLANNERS

Belize Association of Planners is a proactive professional planning organization committed to assuring social justice and promoting sustainability in the natural and built environment. We work to address relevant planning and development issues in Belize by working in partnership with the public and private sector and civil society organizations, and the people of Belize through research, education, advocacy and action. For more information, visit belizeplanners.org.

These planning briefs were made in partnership with students from New York University's Wagner School of Public Service.